



URBAN  
SOLUTIONS

**simon**



URBAN  
SOLUTIONS







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# WHY CHOOSE URBAN SOLUTIONS BY SIMON?

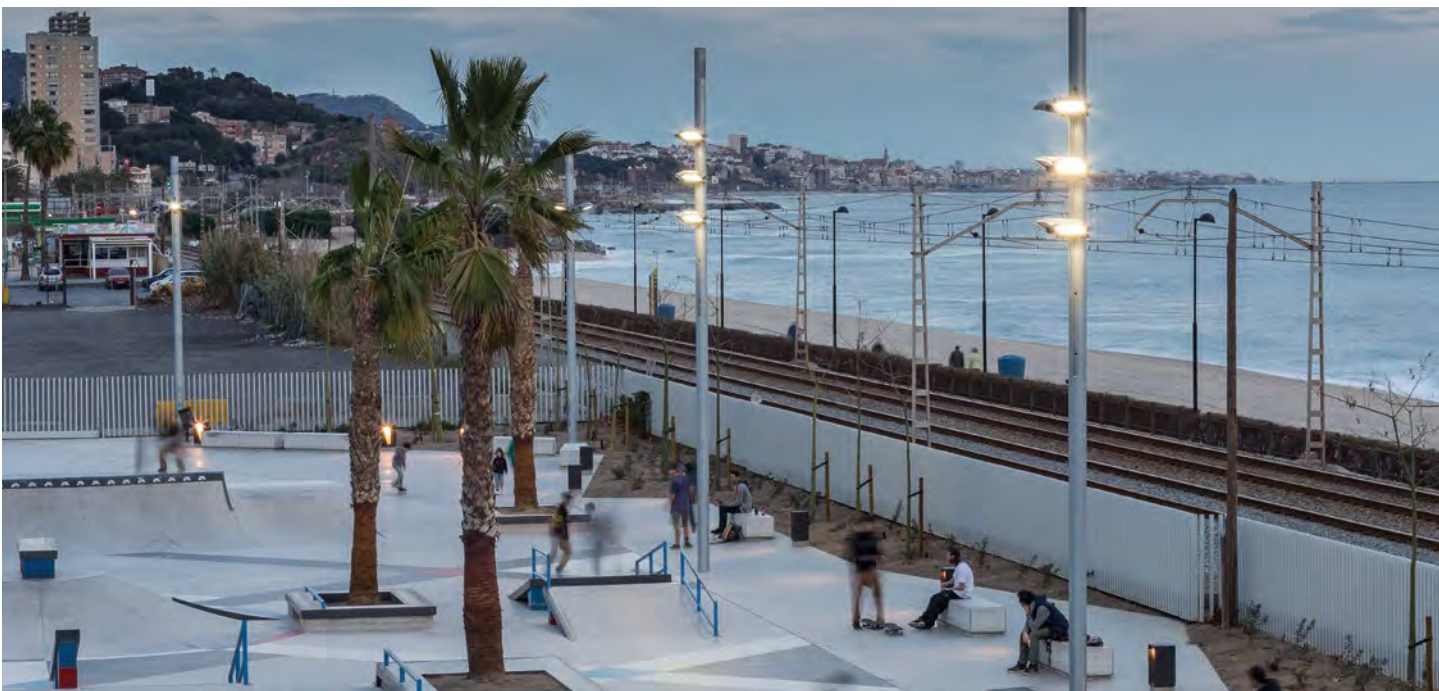
## 100 YEARS ILLUMINATING CITIES

After over 100 years of illuminating cities, Simon has become an urban lighting specialist with a strong industrial know-how and international presence, through research, development, innovation and design.

## MULTINATIONAL FAMILY-OWNED MANUFACTURER

100 years ago, **Simon** began with one family's enthusiasm. Today, in full expansion, enthusiasm is the engine that drives us to grow.

Everything we do conveys this feeling — it's who we are. And we do it in our own factories producing luminaires and columns.





## PERSONALISED CONSULTANCY IN ALL STAGES OF THE PROJECT

We collaborate with everyone involved in lighting projects, giving advice from the creative and design stage to installation and commissioning, to find the ideal solutions.

Exhaustive knowledge of the current standards and applied light technology enable us to advise and inspire lighting professionals.



## IN-HOUSE INNOVATION, TECHNOLOGY AND LABORATORY

At **Simon**, we are specialists in urban lighting. Our R&D team and our certified testing laboratory enable us to offer solutions that integrate light and create unique spaces adapted to people's needs.



## SOLUTIONS FOR CITIES

### WE MAKE CITIES MORE BEAUTIFUL



Our solutions integrate and adapt to the constantly evolving urban morphology, participating in the creation of the city's identity and enhancing the value of its heritage.

### EXPERTS IN CONTROL AND EFFICIENCY



Smart sensors and intensity regulators that automatically adapt light to the real needs of every space, such as detection of presence, the time of day or the weather.

### SECURITY IN SPACES



Light to promote the safety, sustainability and functionality required for vehicles and people to move around on any type of road. Light to orient the user and guide them through the space, to configure environments and create scenes protecting the night sky from light pollution.

### SMART CITIES THE SOLUTIONS OF THE FUTURE



Simon luminaires allow for easy and simple smart lighting control.

Our systems enable to manage your lighting network to achieve maximum efficiency and energy savings. Technology lets us connect urban spaces with people.

### COMPLETE SOLUTIONS WITH LIGHTING POINTS



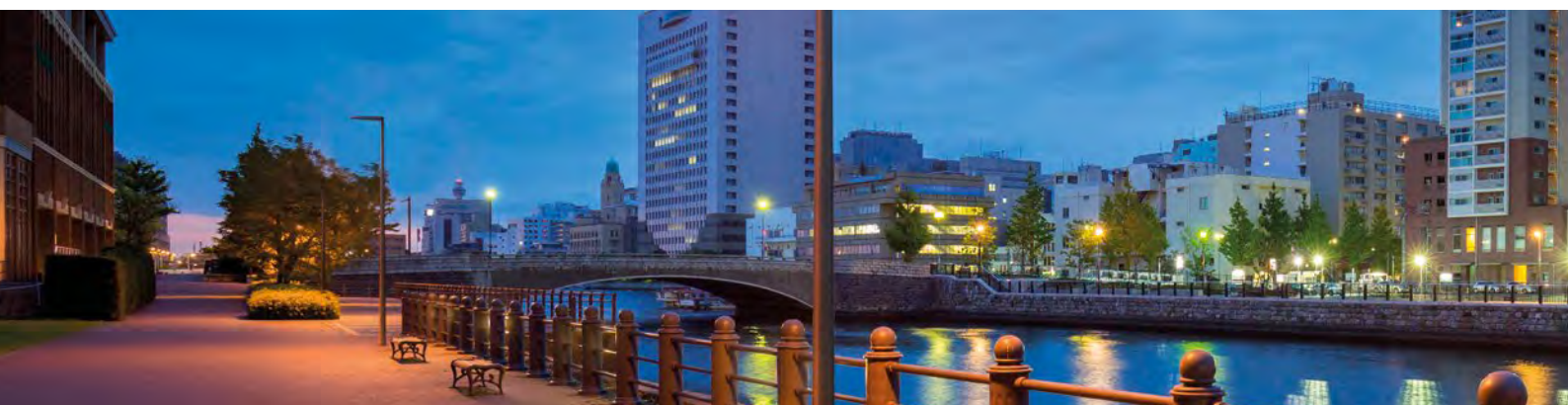
We offer complete, customised solutions with lighting points.

You will be able to choose between different options for the luminaire — type of optics, type of light engine, light colour temperature, type of finish, etc., up to the type of support and all the necessary accessories.

### PIONEERS IN CERTIFICATIONS



Simon has various production centres around the world equipped with advanced measurement systems. These centres allow us to perform demanding tests and checks, during both the development and production stages, thereby guaranteeing the quality of all our products.



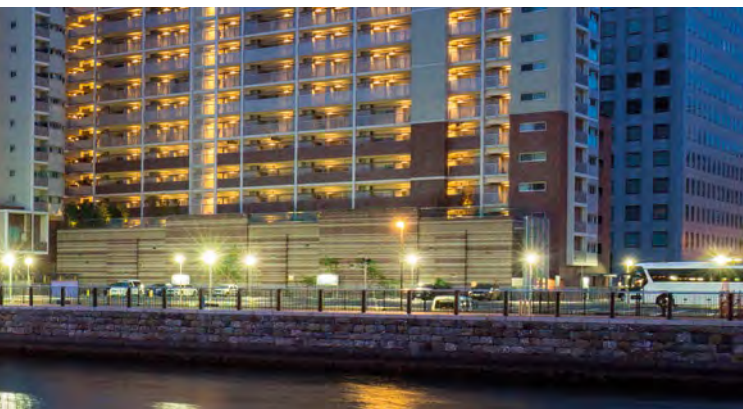
# ELECTRIC VEHICLE CHARGING

## SUSTAINABILITY AND EFFICIENCY

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**Simon's** commitment is that smart cities implement the essential service of electric vehicle charging points to improve the well-being of people, who will live in purer, healthier and more respectful environments. In short, sustainable.

Our urban electric vehicle charging solutions increase the operational efficiency of the city with energy control systems adapting these charging points to every need — for the garage at home, and car parks at work or shopping centres.



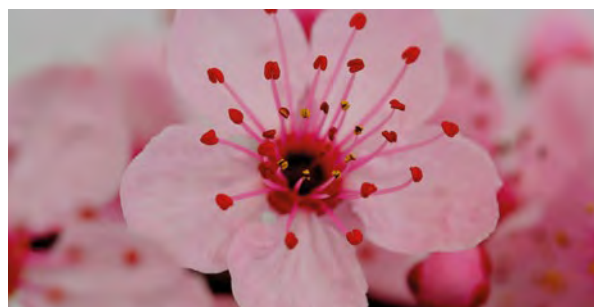
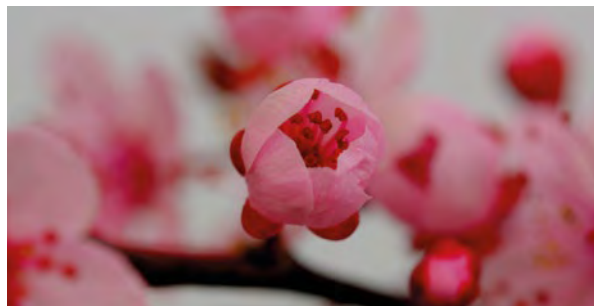


# ORGANIC LIGHT

## THE **INNOVATIVE DYNAMIC LIGHT** FOR CHANGING, NATURAL URBAN LIGHTING

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Nature is dynamic, it is alive, it has movement, it never remains static. No two sunsets are alike. Even stones acquire a certain movement with the sun that is constantly changing position, colour temperature, intensity, and generating shadows. This movement allows us to perceive changes in the static elements in nature and have a sense of time.



**Organic Light** is a concept developed by Simon's Design and Sustainability Department that aims to give time back to people, to communicate and move people through light. Return the seasons to the cities and emphasise nature.



Urban lighting was a great impetus for the growth of cities, reaching the point of cities "that never sleep." For citizens, time has stopped. Inspired by this changing of nature, where homogeneity does not exist, because everything is dynamic, **Organic Light** coexists with the natural environment; it seeks to harmonise human activity and green spaces, enriching the city's ecosystem.





Thanks to coloured light and dynamism, we can simulate the movements of nature and emphasise the colours of the seasons such as spring, autumn...and even communicate the phases of the moon. Artificial lighting has historically been static — it emerged with the functional purpose of lighting to see, seeking maximum uniformity, a uniform chromatic index and maximum efficiency.

This **organic light**, which is much more experiential and sustainable, favours diversity and difference, which is part of any ecosystem.



**Organic Light offers greater respect for the night and the stars, maintaining nocturnal biodiversity.**



# ISTANIUM LED TECHNOLOGY

High-performance Istanium LED technology provides high-quality LED light and makes our solutions both environmentally-friendly and people-friendly, by ensuring lighting quality over time.

## PRECISE CONTROL OF LIGHT FLUX

A special optic design allows for precise light flux control, reducing upward light pollution as much as possible. Our optic systems focus light in the desired area by directing the light flux wherever it is needed.

## ENERGY EFFICIENCY

The combination of the number of LEDs, the adjusted supply current and the various dimming protocols allows each luminaire's consumption to be precisely modulated, resulting in an energy-efficient installation.

## LIGHT FLUX STABILITY

We minimise annoying glare to provide people with greater visual comfort without sacrificing adequate lighting levels.

## VISUAL COMFORT

Istanium LEDs maintain the light flux while ensuring uniform start levels throughout a luminaire's service life. We offer a full optic portfolio for all types of projects.



# PROTECTION AND FINISHES

## SPECIAL PROTECTIONS FOR SUPPORTS



### DRAW-LESS

This is an additional anti-graffiti coating. The Draw-less treatment provides a smooth and transparent finish.



### ACID-LESS

The anti-acid coating is a synthetic thermoplastic polyamide powder applied to the base of supports to improve their resistance to corrosion, knocks, scratches, wear, abrasion, chemical agents and solvents.



### STICK-LESS

This is an additional anti-adhesive coating. The Stick-less treatment provides a coarse and satin finish.

## FINISHES

### GALVANISED

The galvanising process protects steel from corrosion. The hot-dip galvanising process consists of inserting steel parts into molten zinc at an approximate temperature of 450 °C, until a thick enough coating is achieved for the piece, based on the UNE EN ISO 1461 standard.

### STANDARD PAINT

The painting process consists of applying a coat of paint with polyester powder resins to the surface of the previously treated support, in a continuous layer with uniform thickness. The application process is divided into different stages — surface preparation, pre-treatment with chemical action, oven drying, paint application and polymerisation to reticulate the powder paint in 3D. The painting process for the luminaires is similar to that described, except the base surface is aluminium.

### SEAFRONT AND MARINE PAINT

Protection against extremely corrosive environments is used when poles are exposed to extreme environmental conditions classified as C5M-grade according to ISO Standard 12994 (marine paint). This coating is used to resist corrosion in various settings — exposure to harsh environments, on buried or submerged structures, etc. The organic coating contains anticorrosive pigments that actively protect the metallic substrate, serving as a protective barrier against water, oxygen and ions. The application process is divided into different stages — surface preparation, pre-treatment with chemical action, oven drying, primer application, oven drying, paint application and polymerisation to reticulate the powder paint in 3D. We offer a painting process for seafront luminaires.



# DIGITISING LIGHT TO CREATE UNIQUE EXPERIENCES

## ProtoPixel

ProtoPixel is Simon Group's partner for digitising light and creating innovative lighting experiences. With this alliance, Simon takes a step forward in dynamic, connective lighting and user experience.

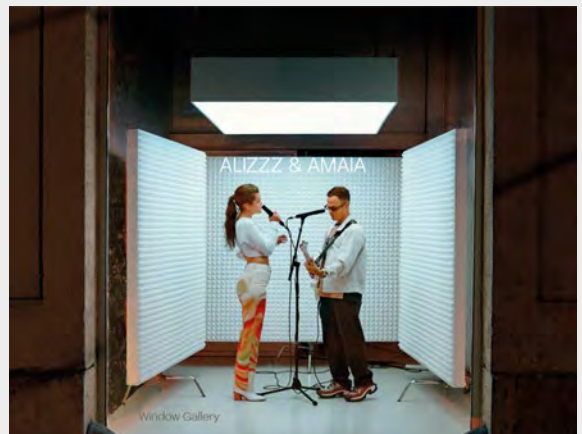


## TRANSFORMING LIGHT INTO TAILOR-MADE EXPERIENCES

**ProtoPixel Create** is the lighting design software for all types of creatives. From designers who are new to lighting to experts who create high-impact lighting experiences. It contains a library of ready-to-use content for luminaires.



A simple, versatile and limitless ecosystem that turns dynamic lighting control into simplicity, accessibility and efficiency. And with a consistent user experience, from designer to consumer.



## INTEGRATED



Fully integrated platform in both content conceptualisation, by adding photos, videos, text, sound, sensors, etc., and dynamic and digital light control — white, adjustable or colour: W, RGB, RGBW and WWA. Compatible with the most frequently used lighting protocols such as Artnet, DMX, DALI and Zwave. And finally, they can be integrated into local control elements that are part of the space — Simon 100 iO.



INDEX OF LUMINAIRES  
ISTANIUM®



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AMBIENT  
URBAN

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AMBIENT PARK /  
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AMBIENT  
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URBAN  
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SIGNALLING  
AND BEACON

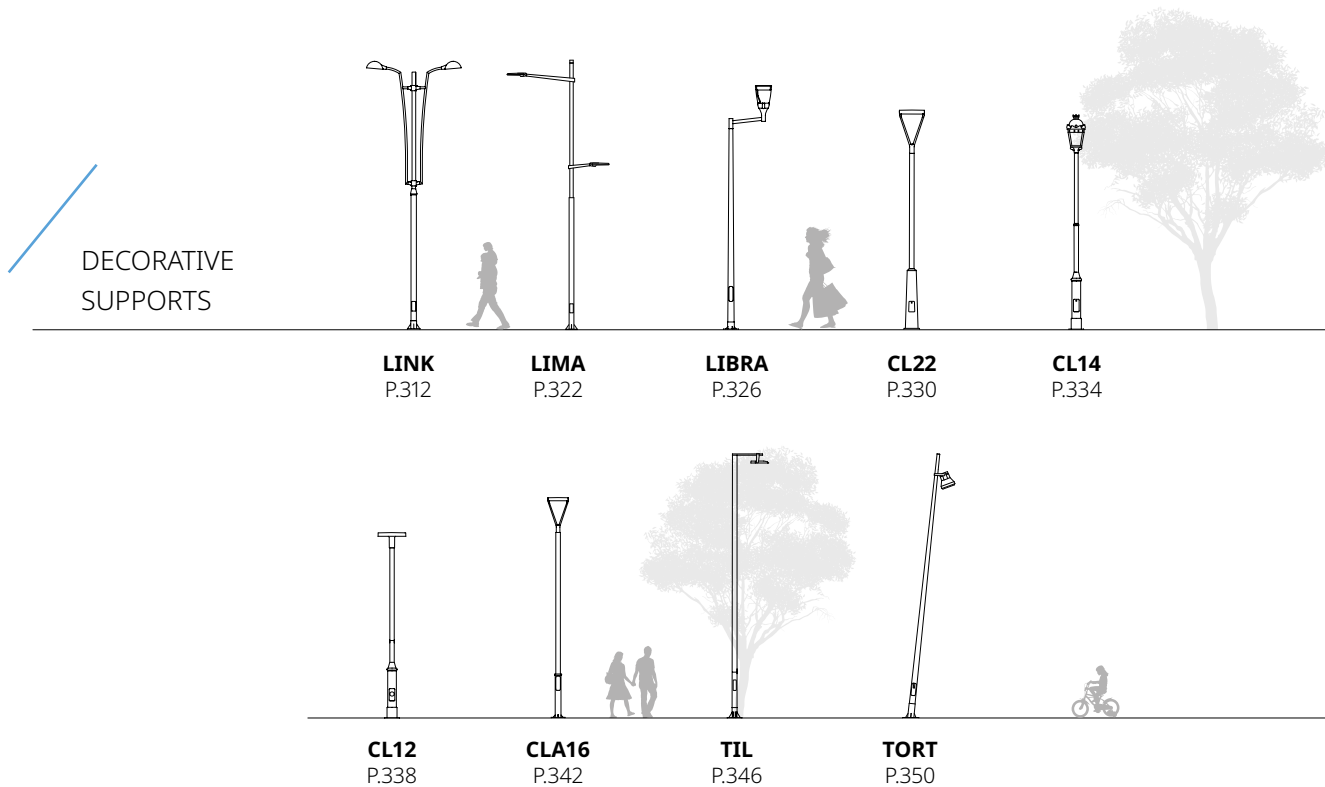
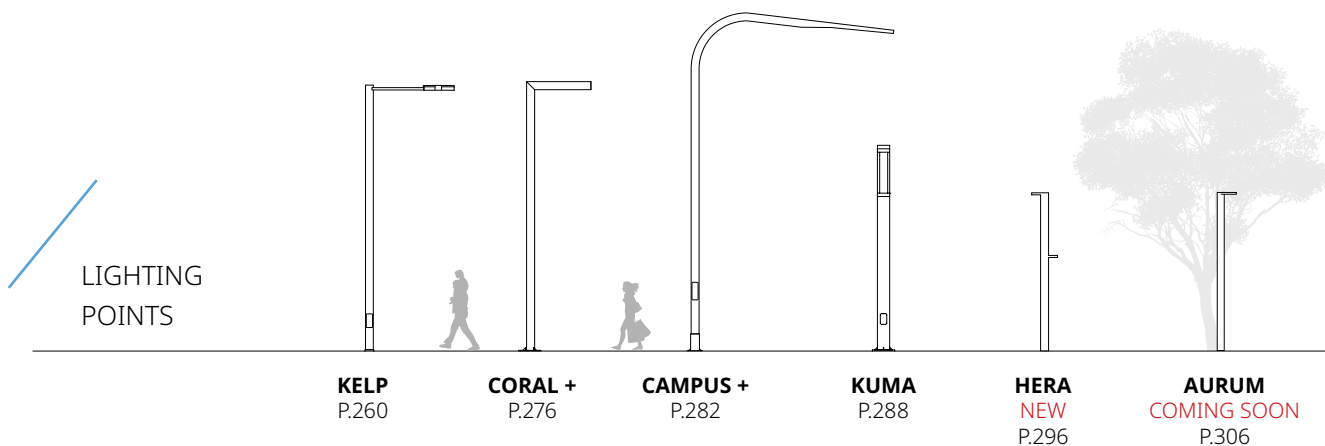
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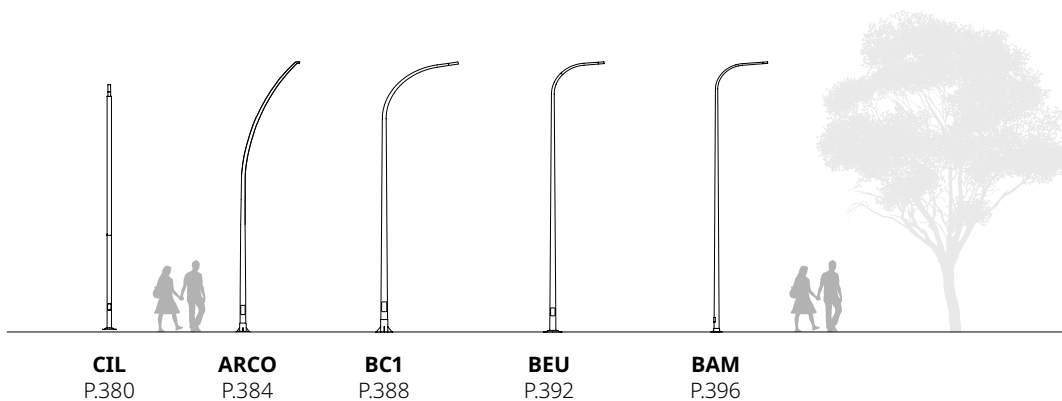
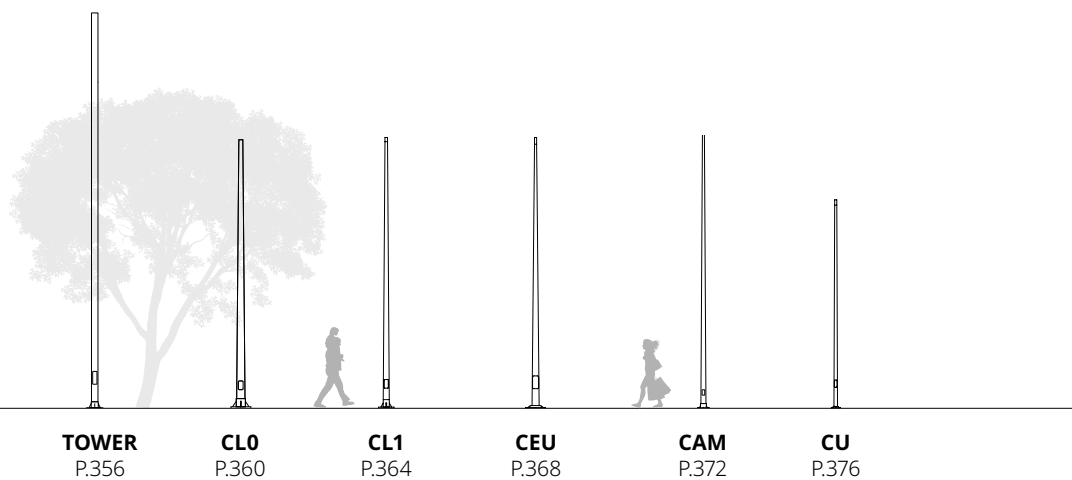
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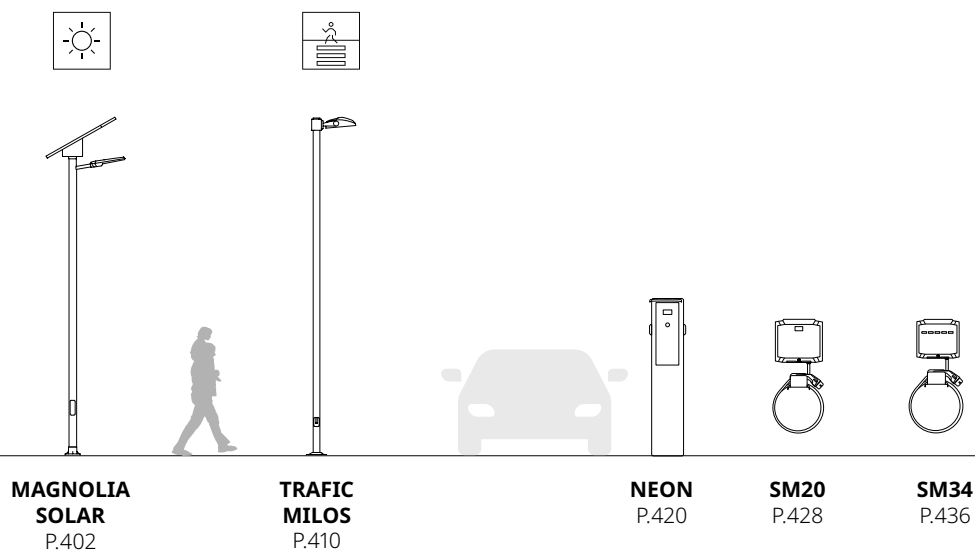
# INDEX OF LIGHTING POINTS AND SUPPORTS



FUNCTIONAL SUPPORTS

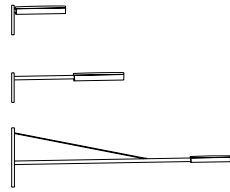


CUSTOM SOLUTIONS



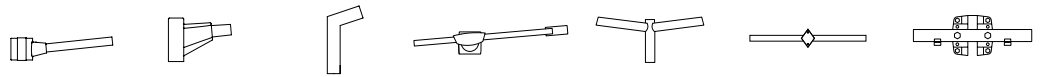


AMBIENT ARMS



**KELP  
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ARMS AND OTHER  
ACCESSORIES



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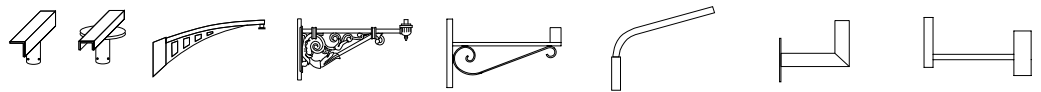
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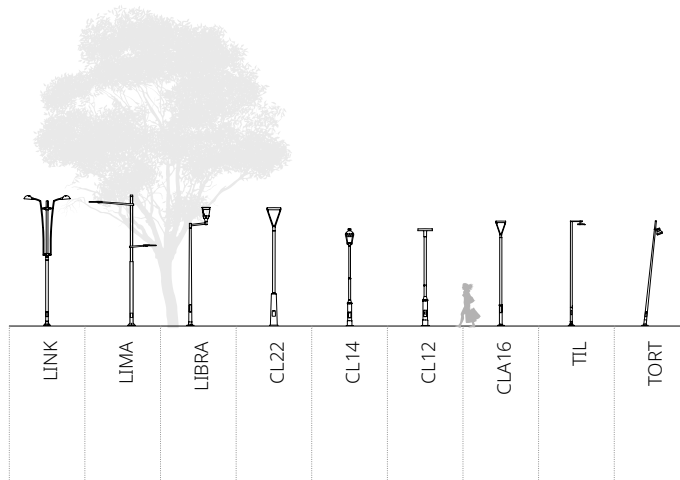
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# LUMINAIRE INDEX BY TYPE OF SUPPORT



	LINK	LIMA	LIBRA	CL22	CL14	CL12	CLA16	TIL	TORT
<b>NATH S / M / L</b>	●	●	●						
<b>ALTAIR IXF</b>	●	●	●	●			●		
<b>MERAK SXF</b>	●	●	●	●			●		
<b>TAU SXF</b>	●	●	●	●			●		
<b>ALTAIR IYF</b>			●	●	●	●	●		
<b>MERAK SYF</b>			●	●	●	●	●		
<b>SKAT M</b>			●		●	●	●		
<b>HYDRA</b>			●		●	●	●		
<b>PRAGA M PRO</b>	●			●	●	●			
<b>PRAGA M BASIC</b>	●			●	●	●			
<b>KOS</b>								●	●
<b>FOGO</b>								●	●
<b>MILOS S / M</b>								●	●
<b>LORE</b>								●	●
<b>IRIS GEN 2 LED</b>									
<b>IRAYA M / L</b>								●	●
<b>ZAO S / M / L</b>									

TOWER	CL1	CEU	CAM	CU	CL	ARCO	BC1	BEU	BAM	
	●	●	●	●	●	●	●	●	●	<b>NATH S / M / L</b>
	●	●	●	●	●	●	●	●	●	<b>ALTAIR IXF</b>
	●	●	●	●	●	●	●	●	●	<b>MERAK SXF</b>
	●	●	●	●	●	●	●	●	●	<b>TAU SXF</b>
	●	●	●	●	●					<b>ALTAIR IYF</b>
	●	●	●	●	●					<b>MERAK SYF</b>
	●	●	●	●	●					<b>SKAT M</b>
		●	●	●	●					<b>HYDRA</b>
										<b>PRAGA M PRO</b>
										<b>PRAGA M BASIC</b>
●										<b>KOS</b>
●										<b>FOGO</b>
●										<b>MILOS S / M</b>
●										<b>LORE</b>
										<b>IRIS GEN 2 LED</b>
●										<b>IRAYA M / L</b>
										<b>ZAO S / M / L</b>

























# INDEX OF LUMINAIRES BY TYPE OF LIGHTING POINTS AND SPECIFIC SOLUTIONS

	KELP	CORAL +	CAMPUS +	KUMA	HERA	MAGNOLIA SOLAR	TRAFIC MILOS
<b>NATH S / M / L</b>						●	
<b>TAU SXF</b>						●	
<b>MERAK SXF</b>	●						
<b>ALTAIR IXF</b>	●						
<b>MERAK SYF</b>							
<b>ALTAIR IYF</b>							
<b>SKAT M</b>							
<b>HYDRA</b>							
<b>LORE</b>							
<b>PRAGA PRO / BASIC</b>							
<b>ZAO</b>							
<b>KOS</b>							
<b>IRAYA</b>							
<b>FOGO</b>							
<b>MILOS S / M</b>						●	●
<b>IRIS GEN 2 LED</b>							



# INDEX BY LUMINAIRE APPLICATION

											
	MOTORWAYS / HIGHWAYS	MAIN ROADS	INDUSTRIAL SPACES	PARKING AREAS	GREEN TRAILS	AVENUES	STREETS	PEDESTRIAN STREETS	COMMERCIAL AREAS	PARKS / GARDENS	SQUARES
NATH S	●	●	●	●	●	●	●	●	●		
NATH M	●	●	●	●		●	●		●		
NATH L	●		●	●		●					
TAU											
ALTAIR IXF				●			●	●	●	●	●
MERAK SXF				●		●	●	●	●	●	●
ALTAIR IYF							●	●	●	●	●
MERAK SYF							●	●	●	●	●
SKAT							●	●	●	●	●
HYDRA							●	●	●	●	●
KUMA							●	●	●	●	●
PRAGA M PRO						●	●	●	●	●	●
PRAGA M BASIC						●	●	●	●	●	●
KOS											
FOGO				●			●	●	●	●	●
MILOS S		●	●	●	●		●	●	●	●	●
MILOS M		●	●	●	●	●	●	●	●	●	●
LORE				●	●	●	●	●	●	●	●
IRIS GEN 2 LED											
ZAO			●	●							
IRAYA M	●	●	●			●	●				
IRAYA L	●	●	●			●	●				
MAGNOLIA		●		●	●	●		●		●	●
TRAFIC MILOS						●			●		
KELP				●		●	●	●	●	●	●
CORAL +							●	●	●	●	●
CAMPUS +							●	●	●	●	●
HERA				●			●	●	●	●	●
JR1				●				●	●	●	

											
URBAN CYCLE PATH	ROUNDBOUTS / INTERSECTIONS	ZEBRA CROSSINGS	TUNNELS	UNDERPASSES	MONUMENTS	BRIDGES	FAÇADE	SPORTS FACILITIES	LARGE AREAS	SIGNALLING	
●	●										NATH S
●	●										NATH M
	●								●		NATH L
											TAU
	●										ALTAIR IXF
	●										MERAK SXF
	●										ALTAIR IYF
	●		●								MERAK SYF
											SKAT
											HYDRA
											KUMA
											PRAGA M PRO
											PRAGA M BASIC
			●		●	●	●	●	●		KOS
●	●				●	●	●		●		FOGO
●	●		●		●	●	●				MILOS S
●	●	●	●	●	●	●	●	●	●		MILOS M
●	●				●				●		LORE
					●	●	●			●	IRIS GEN 2 LED
								●	●		ZAO
	●		●			●	●	●			IRAYA M
	●		●			●	●	●			IRAYA L
●	●										MAGNOLIA
		●									TRAFIC MILOS
	●								●		KELP
	●										CORAL +
	●										CAMPUS +
	●								●	●	HERA
				●	●					●	JR1





LUMINAIRES

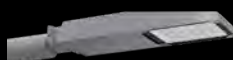
## ROAD LIGHTS

ISTANIUM<sup>LED</sup>®**NATH**

LXF / MXF / SXF

**TAU**

SXF



Simon's comprehensive high-performance road lighting solution, with an innovative design and an advanced thermal dissipation system and multiple lighting distributions to complete highly efficient and precise lighting projects.





# NATH

LXF / MXF / SXF

NEW

ISTANIUM®

The goal of the new generation is to provide the necessary public lighting with maximum energy efficiency and adaptability for future Smart Cities.

Simon NATH Istanium® LED

Light flux greater than 32,000 lm  
Savings up to 65%  
Efficiency up to 156 lm/W at 3,000 K  
Advanced thermal management



Motorways /  
highways  
S / M / L



Main roads  
S / M



Industrial  
spaces  
S / M / L



Parking areas  
S / M / L



Green trails  
S



Avenues  
S / M / L



Streets  
S / M



Pedestrian  
streets  
S



Commercial  
areas  
S / M



Urban cycle  
path  
S / M



Roundabouts  
/ Intersections  
S / M / L



Large areas  
L



# NATH

## FEATURES

### COLLECTION

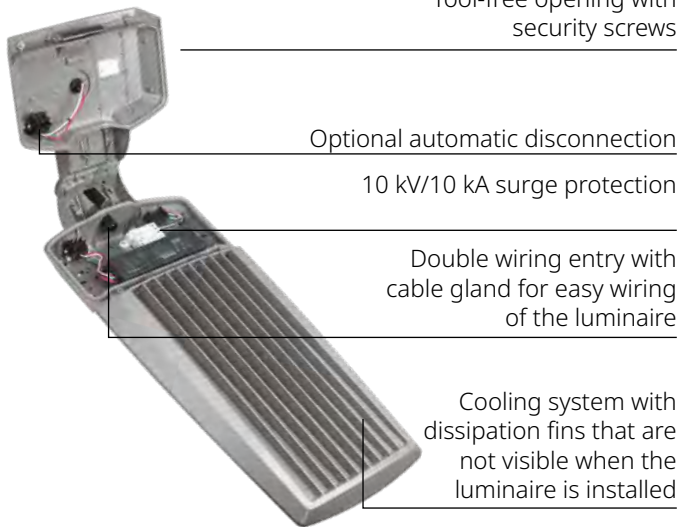


Size S

Size M

Size L

### TECHNICAL SPECIFICATIONS



Tool-free opening with security screws

Optional automatic disconnection

10 kV/10 kA surge protection

Double wiring entry with cable gland for easy wiring of the luminaire

Cooling system with dissipation fins that are not visible when the luminaire is installed

### ADAPTABLE TO "IoT" AND SMART CITIES

Luminaire equipped for telemanagement and sensor management; option of installing a **Zhaga / NEMA** connector on the top and a **Zhaga** connector on the bottom.



Example of Zhaga top connector with IP66 cap

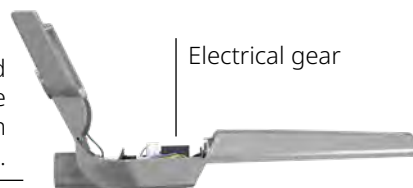


Example of an upper communication node



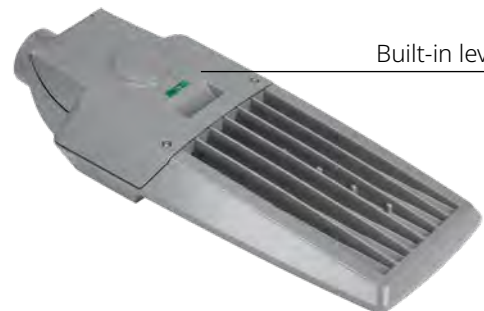
Example of a lower communication node

The electrical gear and the LED light group are housed in a single body with two individual compartments.



Electrical gear

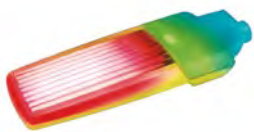
Optic light group



Built-in level



## ADVANCED DESIGN



New refrigeration system with fins that cannot be seen from below, which increases LED performance at high supply currents.

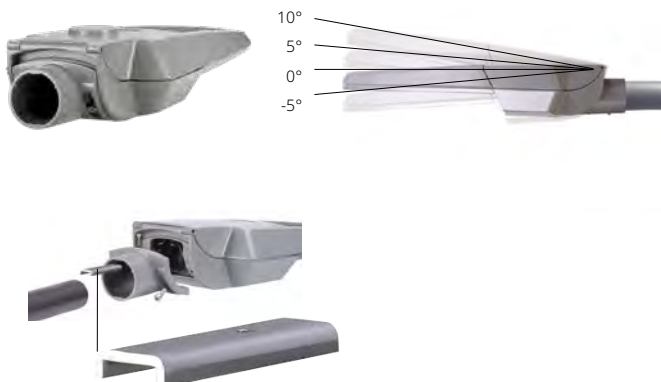


Replacement and update of Istanium® LED lighting groups while the luminaire is installed, extending its service life. Numerous different lighting packages are available, thanks to its modular LED system.



Self-cleaning system using rain water. The water escapes without dirtying the luminaire and lighting performance is not affected over time.

## LATERAL FASTENING SYSTEM



Arm lateral fastening accessory of 48 mm. Accessories available for attachment to Ø42 and Ø34 mm arms.

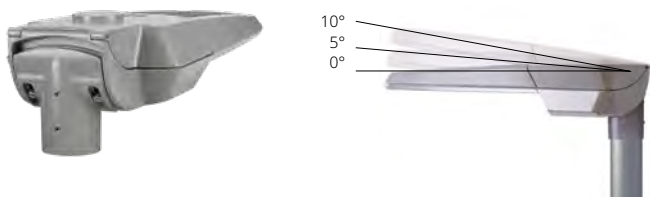


New diffuser glass fastening system, in sizes S and M, by means of stainless steel captive screws to avoid corrosion and guarantee functionality over time.

**IP66** for the complete luminaire, with a **pressure relief valve** to keep the pressure constant and prevent moisture entry.

**IK10** rating to guarantee the luminaire's resistance to vandalism in sizes S and M. IK08 in size L.

## POST-TOP FASTENING SYSTEM



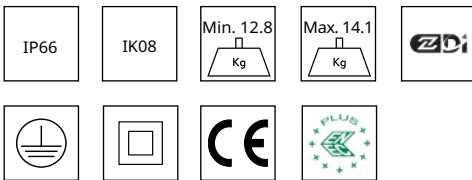
Ø76 mm adapter accessory available.



# NATH LXF

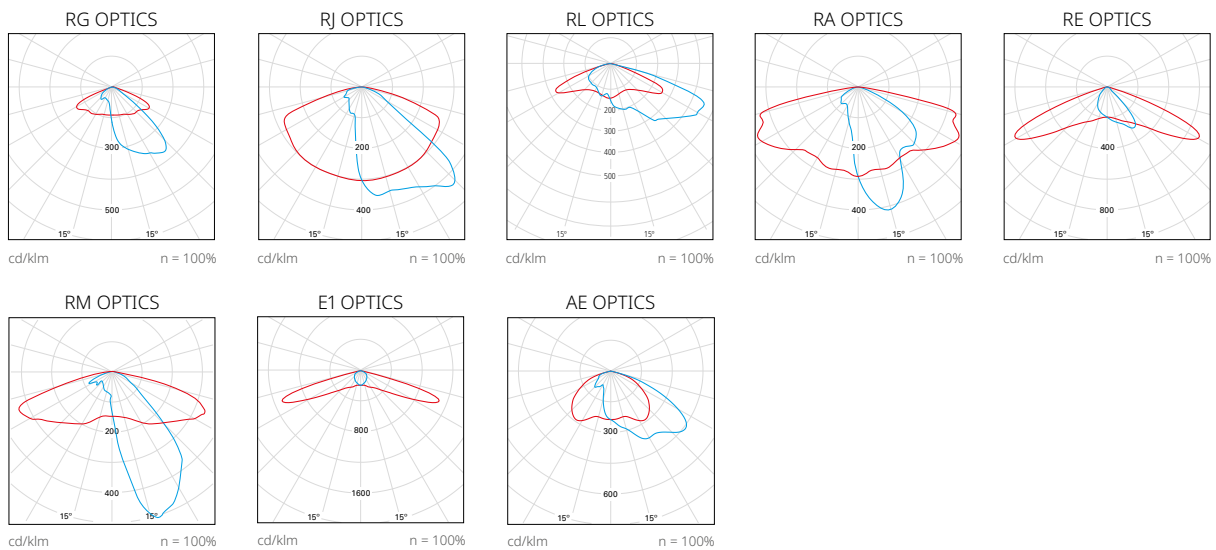
ISTANIUM<sup>LED</sup>®

## ROAD LIGHT LED LUMINAIRE



COLOUR TEMP.: ND L 4000 K | WDL 3000 K | SDL 2700 K | XDL 2200 K | PCA\*  
 COLOUR RENDERING INDEX: >70  
 UPWARD LIGHT OUTPUT RATIO (ULOR): <0.1 %\*\*  
 LED DURATION (L90 B10 AT T<sub>a</sub>=25 °C AND T<sub>j</sub>=95 °C): 100,000 h

\* Upon request \*\* Value may change depending on the optics



— C0 - C180 — C90 - C270

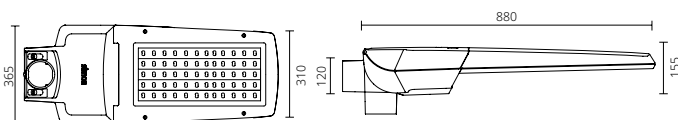
Rear hemisphere flux control visors available for RJ, RL, RE, E1 and AE optics (see page 488 for more information).

Check other photometric distributions.

Simon **NATH** LED road light luminaire, size L, made of die-cast aluminium. Adjustable lateral fastening from  $-5^\circ$  to  $+10^\circ$  and adjustable post-top fastening from  $0^\circ$  to  $+10^\circ$  by changing the piece's position. Adaptation to fastenings from  $\varnothing 34$  mm to  $\varnothing 76$  mm depending on the adaptor, with negative compensation on poles and wall arms. Flat cover with non-visible cooling fins in installed position. Self-cleaning system by means of rainwater, which allows its correct evacuation without dirtying the luminaire, preventing the lighting performance from being affected over time. Single body luminaire with two independent volumes of thermal separation for optical group and for electrical group, with self-levelling device. Possibility of fitting an upper **Zhaga/NEMA** connector and a **lower Zhaga** connector. Access to gear and maintenance from the top with lever opening, without tools. Possibility of closing with two upper security screws. Easy-clean transparent flat tempered glass diffuser to prevent UV radiation in the optics. **IP66** protection rating for the complete luminaire, with **safety valve** to keep the pressure constant and prevent moisture entry, and impact resistance rating of **IK08**. Possibility of mounting up to eleven multi-array optics. Anti-glare, truncated pyramid-shaped reflector, matt with light flux recovery. Possibility of four colour temperatures in white light, as well as PCA (Phosphor Converted Amber) for specially protected areas. Service life of LED **L90 B10 100,000 hours**. Istantium LED lighting groups can be replaced and updated even when the luminaire is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (**ULOR**) equal to **0%** (verify according to optics used).

With **Class I** and **Class II** electronic control gear with 230 Vac/50-60 Hz supply voltage. Possibility of including additional protection against surges of **10 kV/10 kA** and automatic disconnector when opening the equipment compartment. Optional dimming with control line 2N+, without control line (Self-dimming) 2N-, by means of a flow dimmer from CAD cabinet amplitude dimming, for telemanagement with 1.10V or DALI input. Optional custom programming and maintenance of constant light output (**CLO**). Standard finish in Simon GY9007 colour. Possibility of Simon and RAL finishes, as well as Seafront paint for corrosive environments with high durability in a **C5M** environment. Dimensions 880x365x155 mm. **ENEC+** and **Zhaga-D4i** certified luminaire.

## DIMENSIONS AND FASTENING SYSTEMS



Lateral fastening	$\varnothing 60$ mm, 100 mm long, $-5^\circ$ , $0^\circ$ , $+5^\circ$ , $+10^\circ$ inclination
Post-top fastening	$\varnothing 60$ mm, 100 mm long, $0^\circ$ , $+5^\circ$ , $+10^\circ$ inclination
Surface exposed to the wind	0.073 m <sup>2</sup>
Weight	Max. 14.1 kg Min. 12.8 kg

## PHYSICAL FEATURES AND MATERIALS

IP	IP66 (with security screws)
IK	IK08
Body	Die-cast aluminium
Closure system	Stainless steel lever, tool-free opening, with two security screws
Fastening system	Die-cast aluminium
Diffuser	Flat transparent shatter-proof tempered glass

## FINISHES

Body	Painted GY9007 colour (Standard Paint) Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)
Closure	Stainless steel

## ELECTRICAL PARAMETERS\* AND CONNECTIVITY

Temp.	$-20^\circ\text{C} \dots +35^\circ\text{C}$
Dimming**	<b>2N-</b> Without control line <b>Dxxx</b> Without custom programmed control line <b>2N+</b> With control line <b>CAD</b> Cabinet amplitude dimming <b>1N (100%)</b> Without dimming <b>1.10V</b> Dimming through 1.10V input protocol <b>DALI</b> Dimming through DALI input protocol

Possibility of activating the **CLO** function, which allows the depreciation of the light emitted by the LEDs to be compensated by gradually increasing the supply current to them.

Possibility of fitting a **Zhaga / NEMA** connector on the top of the luminaire and a **Zhaga** connector on the bottom of the luminaire according to Zhaga Consortium Book 18.

### Luminaires supplied by electrical grid

Supply voltage	220-240 Vac		
Frequency	50/60 Hz		
Protection against power surge	6 kV (Possibility of increasing to 10 kV / 10 kA upon request)		
Power factor (cos $\phi$ at max. charge)	$\geq 0.95$		
Luminaire electrical protection	Class I or Class II		
Optical group power by model***	64 LEDs	96 LEDs	128 LEDs
Supply current			
HIGH EFFICIENCY	63 W	94 W	125 W
HIGH BALANCE	97 W	145 W	193 W
HIGH FLUX	130 W	195 W	260 W
VERY HIGH FLUX	200 W	297 W	-

## REGULATIONS AND CERTIFICATES



Luminaire according to: EN 60598-2-3 / EN 62493 / EN 55015 / EN 61547 / EN 61000-3-2 / EN 50581

Warranty	5 years.
Supply and packaging	Packed in recycled cardboard with an identifying label to protect the product during transport and storage.
Maintenance	Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent. Lubricate the sealing gaskets and replace them when they are cracked. Lubricate the closures and/or hinges of the moving parts. Keep the thermal radiation surface clean to not lose light flux without shortening the life of the LEDs.

\* Values corresponding to the current state of technology. \*\* Check other regulations. \*\*\* Power values have a tolerance of  $\pm 7\%$ .



## CONFIGURE YOUR NATH LXF LUMINAIRE

Model	Diffuser	Wire	Optics	Colour Temp.	Optical group power	Team	Dimming	Protection	Finish	Description
<b>NATLXF</b>										Simon NATH Istanium® LED, size L, Ø60 mm post-top and lateral fastening, flat cover
	<b>GTF</b>									Flat transparent shatter-proof glass diffuser
		<b>0</b>								Without installation wire (0 m)
			<b>RG_</b>							G type front road light optics (for 96 LED models only)
			<b>RJ_</b>							J type front road light optics
			<b>RL_</b>							L type front road light optics (for 96 LED models only)
			<b>RA_</b>							A type extended road light optics (for 96 LED models only)
			<b>RE_</b>							E type extended road light optics
			<b>RM_</b>							Class M road light optics (for 64 and 128 LED models only)
			<b>E1_</b>							Type 1 elliptical road light optics (for 96 LED models only)
			<b>AE_</b>							E type asymmetric optics (for 96 LED models only)
				<input type="radio"/> <b>NDL</b>						Neutral daylight - 4,000 K
				<input type="radio"/> <b>WDL</b>						Warm daylight - 3,000 K
				<input type="radio"/> <b>SDL</b>						Soft daylight - 2,700 K
				<input type="radio"/> <b>XDL</b>						Extra warm daylight - 2,200 K
					<b>_63W350</b>					63 W 350 mA   9,560 lm to 3,000 K   64 LEDs
					<b>_97W530</b>					97 W 530 mA   13,550 lm to 3,000 K   64 LEDs
					<b>130W700</b>					130 W 700 mA   16,810 lm to 3,000 K   64 LEDs
					<b>200W_1K</b>					200 W 1,050 mA   21,880 lm to 3,000 K   64 LEDs
					<b>_94W350</b>					94 W 350 mA   14,979 lm to 3,000 K   96 LEDs
					<b>145W530</b>					145 W 530 mA   21,301 lm to 3,000 K   96 LEDs
					<b>195W700</b>					195 W 700 mA   26,604 lm to 3,000 K   96 LEDs
					<b>297W900</b>					297 W 900 mA   32,044 lm to 3,000 K   96 LEDs
					<b>125W350</b>					125 W 350 mA   18,650 lm to 3,000 K   128 LEDs
					<b>193W530</b>					193 W 530 mA   26,280 lm to 3,000 K   128 LEDs
					<b>260W700</b>					260 W 700 mA   32,570 lm to 3,000 K   128 LEDs
						<b>IA23_</b>				Electronic control gear at 230 V <sub>AC</sub> 50/60 Hz, standard protection against 6 kV power surges
						<b>IA23S</b>				Electronic control gear at 230 V <sub>AC</sub> 50/60 Hz, additional protection against 10 kV power surges
						<b>2N_-</b>				Dimming without control line (self-dimming)
						<b>2N+_</b>				Dimming with control line
						<b>1N_</b>				Without dimming (on/off)
						<b>CAD_</b>				Cabinet amplitude dimming (electrical box dimmer)
						<b>1-10</b>				Dimming through 1-10V input protocol
						<b>DALI</b>				Dimming through DALI input protocol
						<b>DXXX</b>				Dimming without control line (custom program)
							<b>C1</b>			Class I luminaire electrical protection
							<b>C2</b>			Class II luminaire electrical protection (for 96 LED models only)
								<b>GY9007</b>		Standard finish in Simon RAL 9007
								<b>xxxxxx</b>		Finish in Simon colours
								<b>xxxxxx</b>		Finish in RAL classic chart colours
								<b>CMxxxx</b>		Seafront Paint Finish

### BASE REFERENCES

Power	No. of LEDs	Current	Configuration	Order code
94 W	96	350 mA	NATLXFGTFORJ_WDL_94W350IA23_1N_C1GY9007	<b>104-006020016</b>
145 W	96	530 mA	NATLXFGTFORJ_WDL145W530IA23_1N_C1GY9007	<b>104-006021016</b>
195 W	96	700 mA	NATLXFGTFORJ_WDL195W700IA23_1N_C1GY9007	<b>104-006022016</b>
297 W	96	900 mA	NATLXFGTFORJ_WDL256W900IA23_1N_C1GY9007	<b>104-006023016</b>

The luminaire flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes.  
The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.

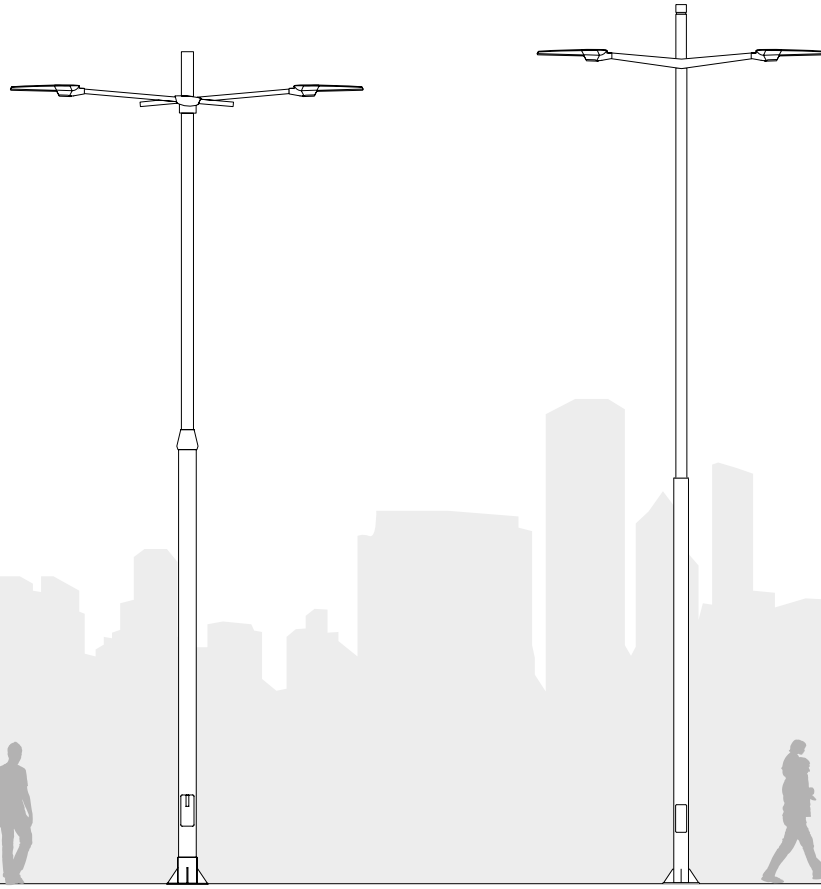






COMBINE YOUR NATH LXF LUMINAIRE WITH:

DECORATIVE POLES:





LINK QTECH

LIMA

OTHER DECORATIVE POLES: -



ACCESSORIES / REPLACEMENTS

	Description	Order code
	Fastening accessory for Ø76mm mount	50-88540
	Fastening accessory for Ø76mm mount, GY9007 finish	50-88540-016

OTHER LUMINAIRES IN THE COLLECTION



NATH SXF



NATH MXF

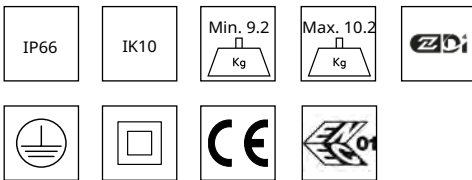


NEW

# NATH MXF

## ISTANIUM<sup>LED</sup>®

### ROAD LIGHT LED LUMINAIRE



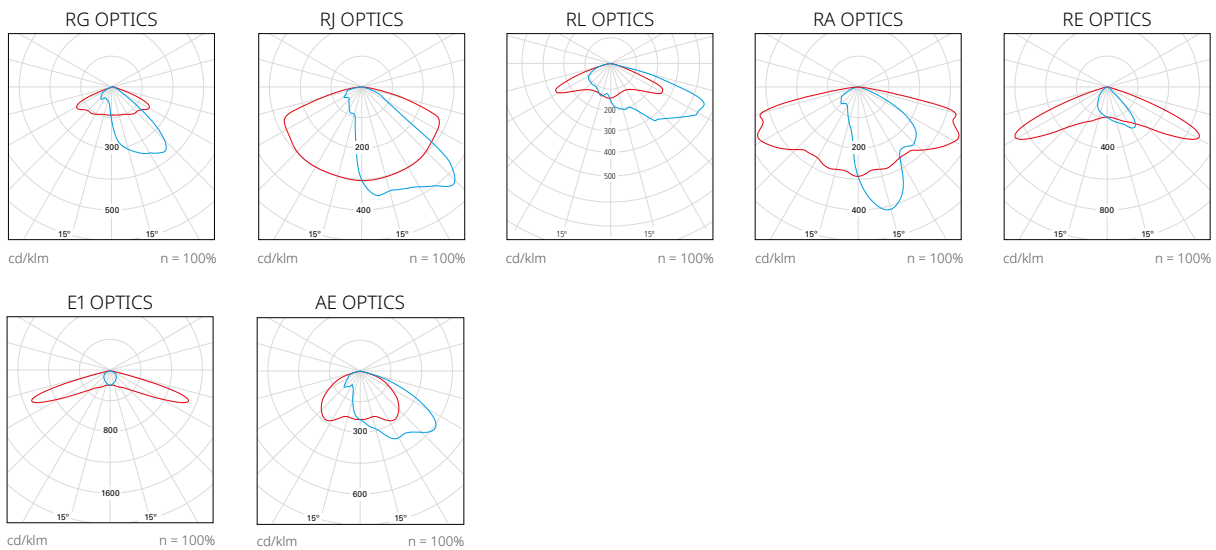
COLOUR TEMP.: ND L 4000 K | WDL 3000 K | SDL 2700 K | XDL 2200 K | PCA\*

COLOUR RENDERING INDEX: >70

UPWARD LIGHT OUTPUT RATIO (ULOR): <0.1 %\*\*

LED DURATION (L90 B10 AT  $T_a=25$  °C AND  $T_j=95$  °C): 100,000 h

\* Upon request \*\* Value may change depending on the optics



— C0 - C180 — C90 - C270

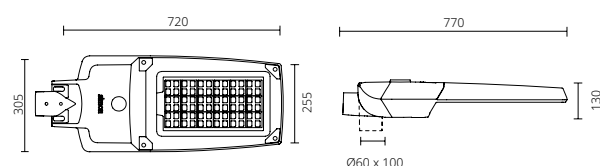
Rear hemisphere flux control visors available for RJ, RL, RE, E1 and AE optics (see page 488 for more information).

Check other photometric distributions.

Simon **NATH** LED road light luminaire, size M, made of die-cast aluminium. Adjustable lateral fastening from  $-5^{\circ}$  to  $+10^{\circ}$  and adjustable post-top fastening from  $0^{\circ}$  to  $+10^{\circ}$  by changing the piece's position. Adaptation to fastenings from  $\varnothing 34$  mm to  $\varnothing 76$  mm depending on the adapter, with negative compensation on curved poles and wall arms. Flat cover with non-visible cooling fins in installed position. Self-cleaning system by means of rainwater, which allows its correct evacuation without dirtying the luminaire, preventing the lighting performance from being affected over time. Single body luminaire with two independent volumes of thermal separation for optical group and for electrical group, with self-levelling device. Possibility of fitting an upper **Zhaga/NEMA** connector and a **lower Zhaga connector**. Access to gear and maintenance from the top with lever opening, without tools. Possibility of closing with two upper security screws. Easy-clean transparent flat tempered glass diffuser to prevent UV radiation on the optics. **IP66** protection rating for the complete luminaire, with **pressure relief valve** to keep the pressure constant and prevent moisture from entering, and **IK10** impact resistance rating. Possibility of mounting up to ten multi-array optics. Anti-glare, truncated pyramid-shaped reflector, matt with light flux recovery. Possibility of four colour temperatures in white light, as well as APC (Amber Phosphor Converted) for specially protected areas. LED life **L90 B10 100,000 hours**. Istantium LED lighting groups can be replaced and updated even when the luminaire is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (**ULOR**) equal to **0%** (verify according to optics used).

With **Class I** and **Class II** electronic control gear with 230 Vac/50-60 Hz supply voltage. Possibility of including additional protection against surges of **10 kV / 10 kA** and automatic disconnector when opening the equipment compartment. Optional dimming with control line 2N+, without control line (Self-dimming) 2N-, by means of a flow dimmer from CAD cabinet amplitude dimming, for telemanagement with 1.10V or DALI input. Optional custom programming and maintenance of constant light output (**CLO**). Standard finish in Simon GY9007 colour. Possibility of Simon and RAL finishes, as well as Seafront paint for corrosive environments with high durability in a **C5M** environment. Dimensions 720x305x130 mm. **ENEC+** and **Zhaga-D4i** certified luminaire.

## DIMENSIONS AND FASTENING SYSTEMS



Lateral fastening	$\varnothing 60$ mm, 100 mm long, $-5^{\circ}$ , $0^{\circ}$ , $+5^{\circ}$ , $+10^{\circ}$ inclination
Post-top fastening	$\varnothing 60$ mm, 100 mm long, $0^{\circ}$ , $+5^{\circ}$ , $+10^{\circ}$ inclination
Surface exposed to the wind	0.063 m <sup>2</sup>
Weight	Max. 10.2 kg Min. 9.2 kg

## PHYSICAL FEATURES AND MATERIALS

IP	IP66 (with security screws)
IK	IK10
Body	Die-cast aluminium
Closure system	Stainless steel lever, tool-free opening, with two security screws
Fastening system	Die-cast aluminium
Diffuser	Flat transparent shatter-proof tempered glass

## FINISHES

Body	Painted GY9007 colour (Standard Paint) Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)
Closure	Stainless steel

## ELECTRICAL PARAMETERS\* AND CONNECTIVITY

Temp.	$-20^{\circ}\text{C} \dots +35^{\circ}\text{C}$
Dimming**	<b>2N-</b> Without control line <b>Dxxx</b> Without custom programmed control line <b>2N+</b> With control line <b>CAD</b> Cabinet amplitude dimming <b>1N (100%)</b> Without dimming <b>1.10V</b> Dimming through 1.10V input protocol <b>DALI</b> Dimming through DALI input protocol

Possibility of activating the **CLO** function, which allows the depreciation of the light emitted by the LEDs to be compensated by gradually increasing the supply current to them.

Possibility of fitting a **Zhaga / NEMA** connector on the top of the luminaire and a **Zhaga** connector on the bottom of the luminaire according to Zhaga Consortium Book 18.

## Luminaires supplied by electrical grid

Supply voltage	220-240 V <sub>ac</sub>
Frequency	50/60 Hz
Protection against power surge	6 kV (Possibility of increasing to 10 kV / 10 kA upon request)
Power factor (cos $\varphi$ at max. charge)	$\geq 0.95$
Luminaire electrical protection	Class I or Class II
Optical group power depending on the model***	48 LEDs   60 LEDs   72 LEDs
Supply current	
HIGH EFFICIENCY	47 W   59 W   71 W
HIGH BALANCE	73 W   91 W   109 W
HIGH FLUX	97 W   122 W   146 W
VERY HIGH FLUX	150 W   196 W   227 W

## REGULATIONS AND CERTIFICATES



Luminaire according to: EN 60598-2-3 / EN 62493 / EN 55015 / EN 61547 / EN 61000-3-2 / EN 50581

Warranty	5 years.
Supply and packaging	Packed in recycled cardboard with an identifying label to protect the product during transport and storage.
Maintenance	Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent. Lubricate the sealing gaskets and replace them when they are cracked. Lubricate the closures and/or hinges of the moving parts. Keep the thermal radiation surface clean to not lose light flux without shortening the life of the LEDs.

\* Values corresponding to the current state of technology. \*\* Check other regulations. \*\*\* Power values have a tolerance of  $\pm 7\%$ .



## CONFIGURE YOUR NATH MXF LUMINAIRE

Model	Diffuser	Wire	Optics	Colour Temp.	Optical group power	Team	Dimming	Protection	Finish	Description
<b>NATMXF</b>										Simon NATH Istanium® LED, size M, Ø60 mm post-top and lateral fastening, flat cover
	<b>GTF</b>									Flat transparent shatter-proof tempered glass diffuser
		<b>0</b>								Without installation wire (0 m)
			<b>RG_</b>							G type front road light optics
			<b>RJ_</b>							J type front road light optics
			<b>RL_</b>							L type front road light optics
			<b>RA_</b>							A type extended road light optics
			<b>RE_</b>							E type extended road light optics
			<b>E1_</b>							1 type elliptical road light optics
			<b>AE_</b>							E type asymmetric optics
				<input type="radio"/> <b>NDL</b>						Neutral daylight - 4,000 K
				<input type="radio"/> <b>WDL</b>						Warm daylight – 3,000 K
				<input type="radio"/> <b>SDL</b>						Soft daylight - 2,700 K
				<input type="radio"/> <b>XDL</b>						Extra warm daylight – 2,200 K
					<b>_47W350</b>					47W 350 mA   7,535 lm to 3,000 K   48 LEDs
					<b>_73W530</b>					73W 530 mA   10,765 lm to 3,000 K   48 LEDs
					<b>_97W700</b>					97W 700 mA   13,492 lm to 3,000 K   48 LEDs
					<b>150W_1K</b>					150W 1,050 mA   18,172 lm to 3,000 K   48 LEDs
					<b>_59W350</b>					59W 350 mA   9,004 lm to 3,000 K   60 LEDs
					<b>_91W530</b>					91W 530 mA   12,873 lm to 3,000 K   60 LEDs
					<b>122W700</b>					122W 700 mA   16,137 lm to 3,000 K   60 LEDs
					<b>189W_1K</b>					189W 1,050 mA   21,535 lm to 3,000 K   60 LEDs
					<b>_71W350</b>					71W 350 mA   10,599 lm to 3,000 K   72 LEDs
					<b>109W530</b>					109W 530 mA   15,115 lm to 3,000 K   72 LEDs
					<b>146W700</b>					146W 700 mA   18,852 lm to 3,000 K   72 LEDs
					<b>227W_1K</b>					227W 1,050 mA   25,079 lm to 3,000 K   72 LEDs
						<b>IA23_</b>				Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, standard protection against 6 kV power surges
						<b>IA23S</b>				Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, additional protection against 10 kV power surges
						<b>2N_</b>				Dimming without control line (self-dimming)
						<b>2N+_</b>				Dimming with control line
						<b>1N_</b>				Without dimming (on/off)
						<b>CAD_</b>				Cabinet amplitude dimming (electrical box dimmer)
						<b>1-10</b>				Dimming through 1-10V input protocol
						<b>DALI</b>				Dimming through DALI input protocol
						<b>DXXX</b>				Dimming without control line (custom program)
							<b>C1</b>			Class I luminaire electrical protection
							<b>C2</b>			Class II luminaire electrical protection
								<b>GY9007</b>		Standard finish in Simon RAL 9007
								<b>XXXXXX</b>		Finish in Simon colours
								<b>XXXXXX</b>		Finish in RAL classic chart colours
								<b>CMXXXX</b>		Seafront Paint Finish

### BASE REFERENCES

Power	No. of LEDs	Current	Configuration	Order code
47 W	48	350 mA	NA2MXFGTFORJ_WDL_47W350IA23_1N__C1GY9007	<b>116-000911016</b>
73 W	48	530 mA	NA2MXFGTFORJ_WDL_73W530IA23_1N__C1GY9007	<b>116-001158016</b>
97 W	48	700 mA	NA2MXFGTFORJ_WDL_97W700IA23_1N__C1GY9007	<b>116-001343016</b>
122 W	60	700 mA	NA2MXFGTFORJ_WDL122W700IA23_1N__C1GY9007	<b>116-006031016</b>
150 W	48	1,050 mA	NA2MXFGTFORJ_WDL150W_1KIA23_1N__C1GY9007	<b>116-006002016</b>
196 W	60	1,050 mA	NA2MXFGTFORJ_WDL196W_1KIA23_1N__C1GY9007	<b>116-006032016</b>
227 W	72	1,050 mA	NA2MXFGTFORJ_WDL227W_1KIA23_1N__C1GY9007	<b>116-006033016</b>

\* Models available only with RJ and RE optics.

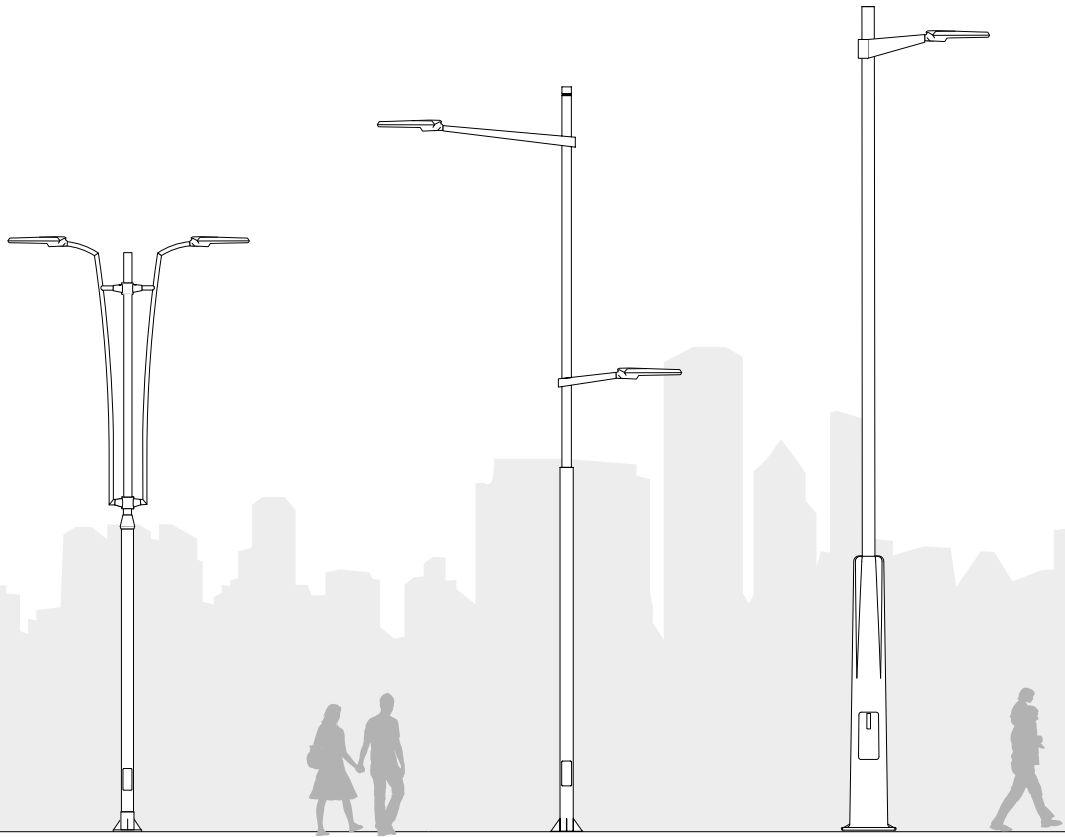
The luminaire flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes.  
The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.





COMBINE YOUR NATH MXF LUMINAIRE WITH:

DECORATIVE POLES:

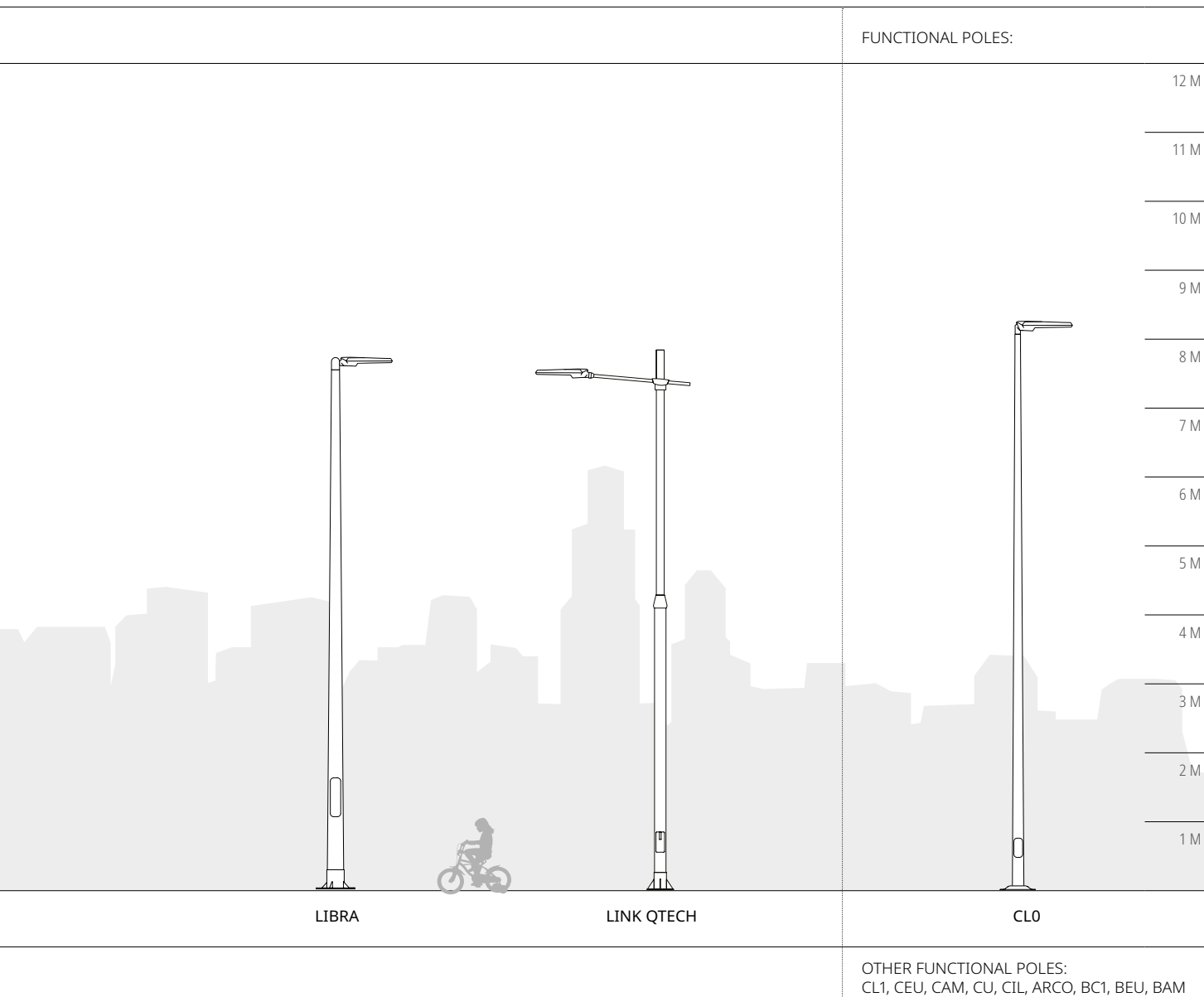


LINK LINETECH

LIMA




CL22

OTHER DECORATIVE POLES: -



ACCESSORIES / REPLACEMENTS

OTHER LUMINAIRES IN THE COLLECTION

	Description	Order code
	Reducing accessory for lateral fastening to Ø48 mm arm	<b>50-73277</b>
	Fastening accessory for Ø76 mm mount	<b>50-88540</b>
	Fastening accessory for Ø76 mm mount, GY9007 finish	<b>50-88540-016</b>



NATH SXF



NATH LXF

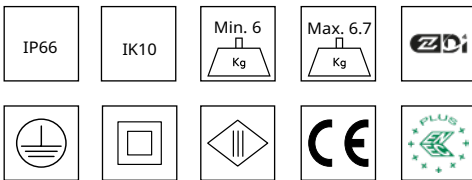


NEW

# NATH SXF

## ISTANIUM<sup>LED</sup>®

### ROAD LIGHT LED LUMINAIRE



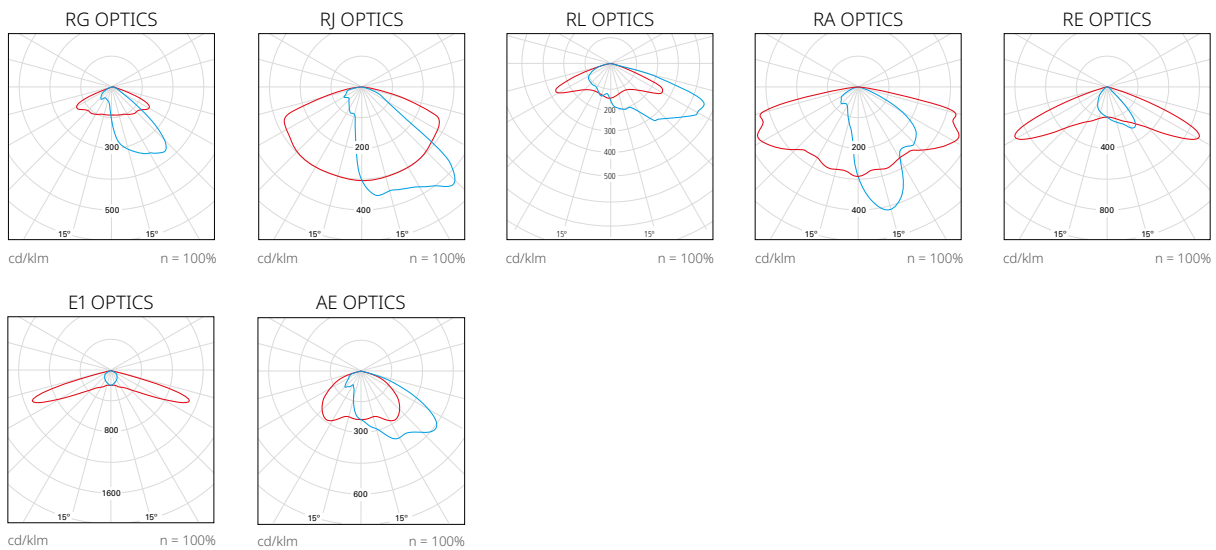
COLOUR TEMP.: ND L 4000 K | WDL 3000 K | SDL 2700 K | XDL 2200 K | PCA\*

COLOUR RENDERING INDEX: >70

UPWARD LIGHT OUTPUT RATIO (ULOR): <0.1 %\*\*

LED DURATION (L90 B10 AT  $T_a=25\text{ °C}$  AND  $T_j=95\text{ °C}$ ): 100,000 h

\* Upon request \*\* Value may change depending on the optics



— C0 - C180 — C90 - C270

Rear hemisphere flux control visors available for RJ, RL, RE, E1 and AE optics (see page 488 for more information).

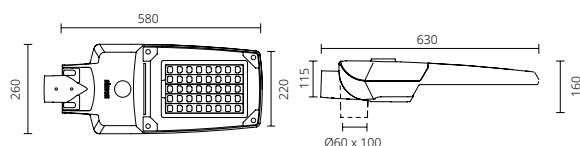
Check other photometric distributions.

Simon **NATH** LED road light luminaire, size S, made of die-cast aluminium. Adjustable lateral fastening from  $-5^{\circ}$  to  $+10^{\circ}$  and adjustable post-top fastening from  $0^{\circ}$  to  $+10^{\circ}$  by changing the piece's position. Adaptation to fastenings from  $\varnothing 34$  mm to  $\varnothing 76$  mm depending on the adaptor, with negative compensation on poles and wall arms. Flat cover with non-visible cooling fins in installed position. Self-cleaning system by means of rainwater, which allows its correct evacuation without dirtying the luminaire, preventing the lighting performance from being affected over time. Single body luminaire with two independent volumes of thermal separation for optical group and for electrical group, with self-levelling device. Possibility of fitting an **upper Zhaga/NEMA** connector and a **lower Zhaga** connector. Access to gear and maintenance from the top with lever opening, without tools. Possibility of closing with two upper security screws. Easy-clean transparent flat tempered glass diffuser to prevent UV radiation in the optics. **IP66** protection rating for the complete luminaire, with **pressure relief valve** to keep the pressure constant and prevent moisture from entering, and **IK10** impact resistance rating. Possibility of mounting up to eleven multi-array optics. Anti-glare, truncated pyramid-shaped reflector, matt with light flux recovery. Possibility of four colour temperatures in white light, as well as PCA (Phosphor Converted Amber) for specially protected areas. Service life of LED **L90 B10 100,000 hours**. Istantium LED lighting groups can be replaced and updated even when the luminaire is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (**ULOR**) equal to **0%** (verify according to optics used).

With **Class I** and **Class II** electronic control gear with 230 Vac/50 - 60 Hz supply voltage and **Class III** with A 12/24 VDC supply voltage. Possibility of including additional protection against surges of **10 kV/10 kA** and automatic disconnector when opening the equipment compartment. Optional dimming with control line 2N+, without control line (Self-dimming) 2N-, by means of a flow dimmer from CAD cabinet amplitude dimming, for telemanagement with 1.10V or DALI input. Optional custom programming and maintenance of constant light output (**CLO**). Standard finish in Simon GY9007 colour. Possibility of Simon and RAL finishes, as well as Seafront paint for corrosive environments with high durability in a **C5M** environment. Dimensions 580x260x160 mm.

**ENEC+** and **Zhaga-D4i** certified luminaire.

## DIMENSIONS AND FASTENING SYSTEMS



Lateral fastening	$\varnothing 60$ mm, 100 mm long, $-5^{\circ}$ , $0^{\circ}$ , $+5^{\circ}$ , $+10^{\circ}$ inclination Optional accessory 50-73277, $\varnothing 48$ mm, 100 mm long, $-5^{\circ}$ , $0^{\circ}$ , $+5^{\circ}$ , $+10^{\circ}$ inclination
Post-top fastening	$\varnothing 60$ mm, 100 mm long, $0^{\circ}$ , $+5^{\circ}$ , $+10^{\circ}$ inclination
Surface exposed to the wind	0.047 m <sup>2</sup>
Weight	Max. 6.7 kg Min. 6.0 kg

## PHYSICAL FEATURES AND MATERIALS

IP	IP66 (with security screws)
IK	IK10
Body	Die-cast aluminium
Closure system	Stainless steel lever, tool-free opening, with two security screws
Fastening system	Die-cast aluminium
Diffuser	Flat transparent shatter-proof tempered glass

## FINISHES

Body	Painted GY9007 colour (Standard Paint) Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)
Closure	Stainless steel

## ELECTRICAL PARAMETERS\* AND CONNECTIVITY

Temp.	$-20^{\circ}\text{C} \dots +35^{\circ}\text{C}$
Dimming**	<b>2N-</b> Without control line <b>Dxxx</b> Without custom programmed control line <b>2N+</b> With control line <b>CAD</b> Cabinet amplitude dimming <b>1N (100%)</b> Without dimming <b>1.10V</b> Dimming through 1.10V input protocol <b>DALI</b> Dimming through DALI input protocol

Possibility of activating the **CLO** function, which allows the depreciation of the light emitted by the LEDs to be compensated by gradually increasing the supply current to them.

Possibility of fitting a **Zhaga / NEMA** connector on the top of the luminaire and a **Zhaga** connector on the bottom of the luminaire according to Zhaga Consortium Book 18.

	Luminaires supplied by electrical grid	Solar powered luminaires		
Supply voltage	220-240 Vac	12/24 Vdc		
Frequency	50/60 Hz	-		
Protection against power surge	6 kV (Possibility of increasing to 10 kV / 10 kA upon request)	-		
Power factor (cos $\varphi$ at max. charge)	$\geq 0.95$	-		
Luminaire electrical protection	Class I or Class II	Class III		
Optical group power by model***	16 LEDs	24 LEDs	32 LEDs	40 LEDs
Supply current				
HIGH EFFICIENCY	16W	24W	31W	39W
HIGH BALANCE	24W	36W	47W	60W
HIGH FLUX	32W	49W	63W	81W
VERY HIGH FLUX	50W	75W	94W	94W****

## REGULATIONS AND CERTIFICATES



Luminaire according to: EN 60598-2-3 / EN 62493 / EN 55015 / EN 61547 / EN 61000-3-2 / EN 50581

Warranty	5 years.
Supply and packaging	Packed in recycled cardboard with an identifying label to protect the product during transport and storage.
Maintenance	Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent. Lubricate the sealing gaskets and replace them when they are cracked. Lubricate the closures and/or hinges of the moving parts. Keep the thermal radiation surface clean to not lose light flux without shortening the life of the LEDs.

\* Values corresponding to the current state of technology. \*\* Check other regulations. \*\*\* Power values have a tolerance of  $\pm 7\%$ . \*\*\*\* 800 mA





## CONFIGURE YOUR NATH SXF LUMINAIRE

Model	Diffuser	Wire	Optics	Colour Temp.	Optical group power	Team	Dimming	Protection	Finish	Description
<b>NATSXF</b>										Simon NATH Istanium® LED, size S, Ø60 mm post-top and lateral fastening, flat cover
	<b>GTF</b>									Flat transparent shatter-proof tempered glass diffuser
		<b>0</b>								Without installation wire (0 m)
			<b>RG_</b>							G type front road light optics
			<b>RJ_</b>							J type front road light optics
			<b>RL_</b>							L type front road light optics
			<b>RA_</b>							A type extended road light optics
			<b>RE_</b>							E type extended road light optics
			<b>E1_</b>							1 type elliptical road light optics
			<b>AE_</b>							E type asymmetric optics
				<input type="radio"/> <b>NDL</b>						Neutral daylight - 4,000 K
				<input type="radio"/> <b>WDL</b>						Warm daylight - 3,000 K
				<input type="radio"/> <b>SDL</b>						Soft daylight - 2,700 K
				<input type="radio"/> <b>XDL</b>						Extra warm daylight - 2,200 K
					<b>_16W350</b>					16 W 350 mA 2,460 lm to 3,000 K 16 LEDs
					<b>_24W530</b>					24 W 530 mA 3,420 lm to 3,000 K 16 LEDs
					<b>_32W700</b>					32 W 700 mA 4,400 lm to 3,000 K 16 LEDs
					<b>_50W_1K</b>					50 W 1050 mA 5,990 lm to 3,000 K 16 LEDs
					<b>_24W350</b>					24 W 350 mA 3,630 lm to 3,000 K 24 LEDs
					<b>_36W530</b>					36 W 530 mA 5,080 lm to 3,000 K 24 LEDs
					<b>_49W700</b>					49 W 700 mA 6,500 lm to 3,000 K 24 LEDs
					<b>_75W_1K</b>					75 W 1050 mA 8,700 lm to 3,000 K 24 LEDs
					<b>_31W350</b>					31 W 350 mA 5,170 lm to 3,000 K 32 LEDs
					<b>_47W530</b>					47 W 530 mA 6,830 lm to 3,000 K 32 LEDs
					<b>_63W700</b>					63 W 700 mA 8,400 lm to 3,000 K 32 LEDs
					<b>_94W_1K</b>					94 W 1050 mA 11,260 lm to 3,000 K 32 LEDs
					<b>_39W350</b>					39 W 350 mA 5,600 lm to 3,000 K 40 LEDs*
					<b>_60W530</b>					60 W 530 mA 8,120 lm to 3,000 K 40 LEDs*
					<b>_81W700</b>					81 W 700 mA 10,160 lm to 3,000 K 40 LEDs*
					<b>_94W800</b>					94 W 800 mA 11,360 lm to 3,000 K 40 LEDs*
					<b>IA23_</b>					Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, standard protection against 6 kV power surges
					<b>IA23S</b>					Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, additional protection against 10 kV power surges
					<b>IA12_</b>					Elec. eq. 12/24 V <sub>oc</sub> C3 (solar). Only admits up to 36 W and 1N, 2N- and Dxxx dimming
					<b>2N-_</b>					Dimming without control line (self-dimming)
					<b>2N+_</b>					Dimming with control line
					<b>1N_</b>					Without dimming (on/off)
					<b>CAD_</b>					Cabinet amplitude dimming (electrical box dimmer)
					<b>1-10</b>					Dimming through 1-10V input protocol
					<b>DALI</b>					Dimming through DALI input protocol
					<b>DXXX</b>					Dimming without control line (custom program)
							<b>C1</b>			Class I luminaire electrical protection
							<b>C2</b>			Class II luminaire electrical protection (not available for 40 LED models)
							<b>C3</b>			Class III luminaire electrical protection
								<b>GY9007</b>		Standard finish in Simon RAL 9007
								<b>XXXXXX</b>		Finish in Simon colours
								<b>XXXXXX</b>		Finish in RAL classic chart colours
								<b>CMXXXX</b>		Seafront Paint Finish

### BASE REFERENCES

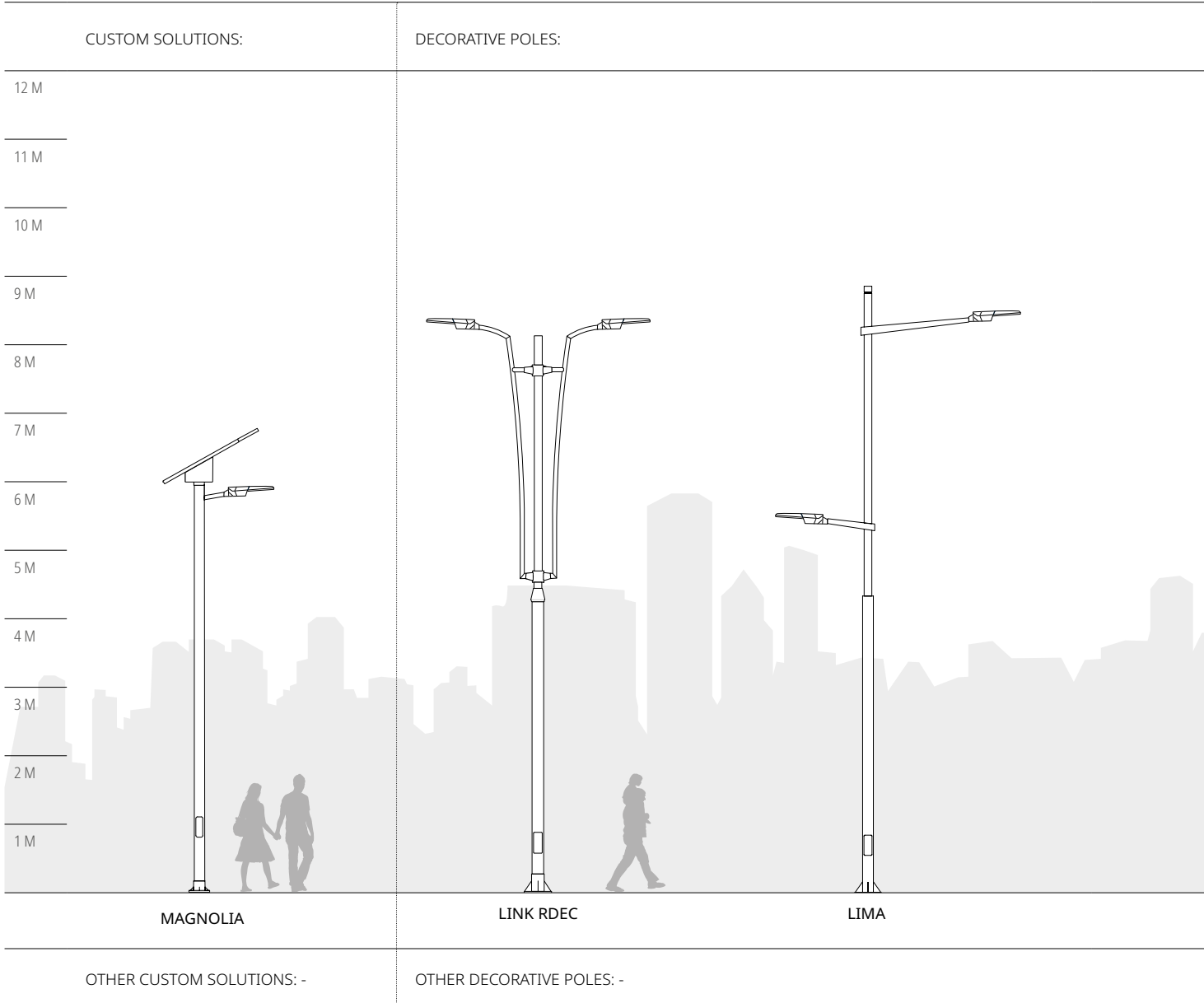
Power	No. of LEDs	Current	Configuration	Order code
16 W	16	350 mA	NATSXFGTF0RJ_WDL_16W350IA23_1N_C1GY9007	<b>103-000606016</b>
24 W	16	530 mA	NATSXFGTF0RJ_WDL_24W530IA23_1N_C1GY9007	<b>103-000531016</b>
32 W	16	700 mA	NATSXFGTF0RJ_WDL_32W700IA23_1N_C1GY9007	<b>103-000611016</b>
36 W	24	530 mA	NATSXFGTF0RJ_WDL_36W530IA23_1N_C1GY9007	<b>103-000597016</b>
47 W	32	530 mA	NATSXFGTF0RJ_WDL_47W530IA23_1N_C1GY9007	<b>103-002767016</b>
49 W	24	700 mA	NATSXFGTF0RJ_WDL_49W700IA23_1N_C1GY9007	<b>103-000479016</b>
50 W	16	1,050 mA	NATSXFGTF0RJ_WDL_50W_1KIA23_1N_C1GY9007	<b>103-000736016</b>
60 W	40	530 mA	NATSXFGTF0RJ_WDL_60W530IA23_1N_C1GY9007	<b>103-000530016</b>
63 W	32	700 mA	NATSXFGTF0RJ_WDL_63W700IA23_1N_C1GY9007	<b>103-002770016</b>
75 W	24	1,050 mA	NATSXFGTF0RJ_WDL_75W_1KIA23_1N_C1GY9007	<b>103-000737016</b>
81 W	40	700 mA	NATSXFGTF0RJ_WDL_81W700IA23_1N_C1GY9007	<b>103-000634016</b>
94 W	32	1,050 mA	NATSXFGTF0RJ_WDL_94W_1KIA23_1N_C1GY9007	<b>103-006063016</b>

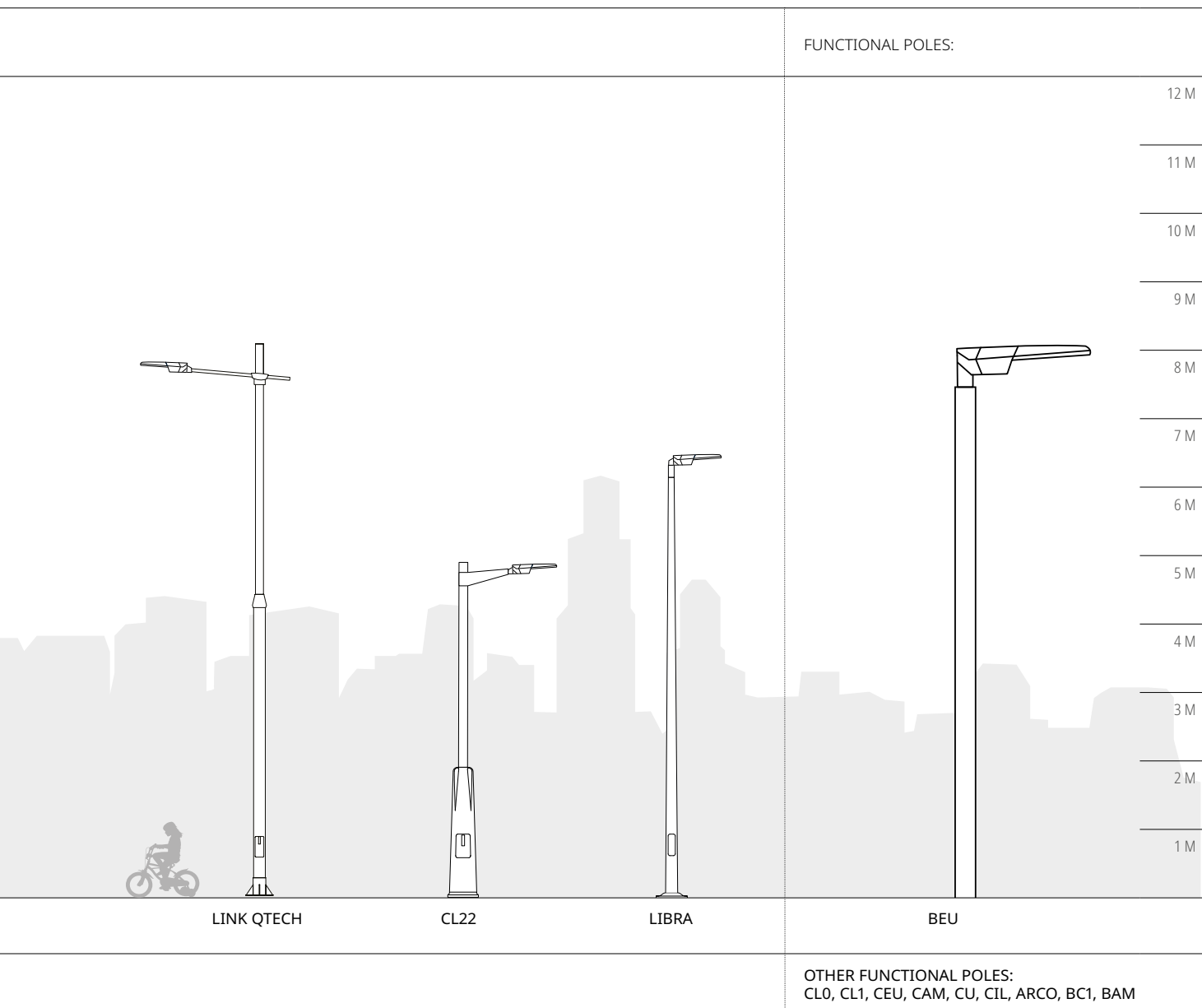
\* Models available only with RJ and RE optics.

The luminaire flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes.  
The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.



COMBINE YOUR NATH SXF LUMINAIRE WITH:





ACCESSORIES / REPLACEMENTS

	Description	Order code
	Reducing accessory for lateral fastening to Ø48 mm arm	50-73277
	Fastening accessory for Ø76 mm mount	50-88540
	Fastening accessory for Ø76 mm mount, GY9007 finish	50-88540-016
	Reducing accessory for lateral fastening to Ø42 mm arm	5-531785
	Reducing accessory for lateral fastening to Ø34 mm arm	5-531818

OTHER LUMINAIRES IN THE COLLECTION



NATH MXF



NATH LXF









# TAU

S

NEW

## ISTANIUM<sup>LED</sup>®

TAU is a functional road light luminaire that balances technical performance, quality and price, allowing the intensive introduction of the most efficient LED technology when upgrading current road lighting.

Light flux greater than 9,100 lm  
Multiple lighting solutions  
Advanced thermal management  
Adaptable to the "IoT"



Main roads



Industrial spaces



Parking areas



Green trails



Streets



Pedestrian streets



Commercial areas



Urban cycle path



Roundabouts / Intersections

# TAU

## FEATURES

### LIGHT CONTROL

A wide variety of road lighting optical solutions to optimise and precisely direct light flux, adapting it to the needs of the project.



### ADAPTABLE TO "IoT" AND SMART CITIES

Luminaire equipped for telemanagement and sensor management; option of installing a **Zhaga / NEMA** connector on the top and a **Zhaga** connector on the bottom.



### MAINTENANCE OF LIGHT PERFORMANCE

Self-cleaning system using rain water. The water escapes without dirtying the luminaire and lighting performance is not affected over time.

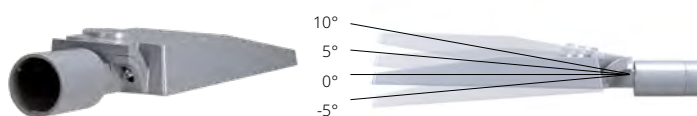


## FASTENING SYSTEM

Helps optimum mounting and orientation of the luminaire with the upper spirit level and inclination/compensation angles:

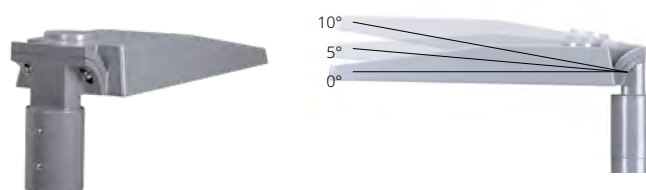
### LATERAL FASTENING

Lateral fastening:  $-5^\circ$ ,  $0^\circ$ ,  $+5^\circ$ ,  $+10^\circ$



### POST-TOP FASTENING

Post-top fastening:  $0^\circ$ ,  $+5^\circ$ ,  $+10^\circ$



## OTHER TECHNICAL FEATURES

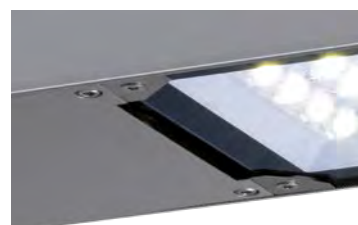


Refrigeration system with fins that cannot be seen from below, which increases LED performance at high supply currents.



**IP66** for the complete luminaire, with a **pressure relief valve** to keep the pressure constant and prevent moisture entry.

**IK08** rating to guarantee the luminaire's resistance to vandalism.



Captive stainless steel screws to avoid corrosion and guarantee functionality over time.



Double entry to the luminaire body with two compression seal fittings to facilitate mounting of external remote management systems.



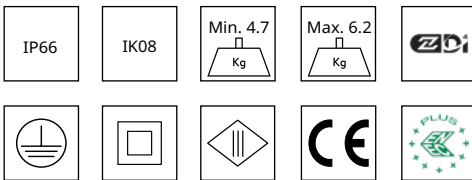
Arm lateral fastening accessory from 48 mm to 60 mm.



# TAU S

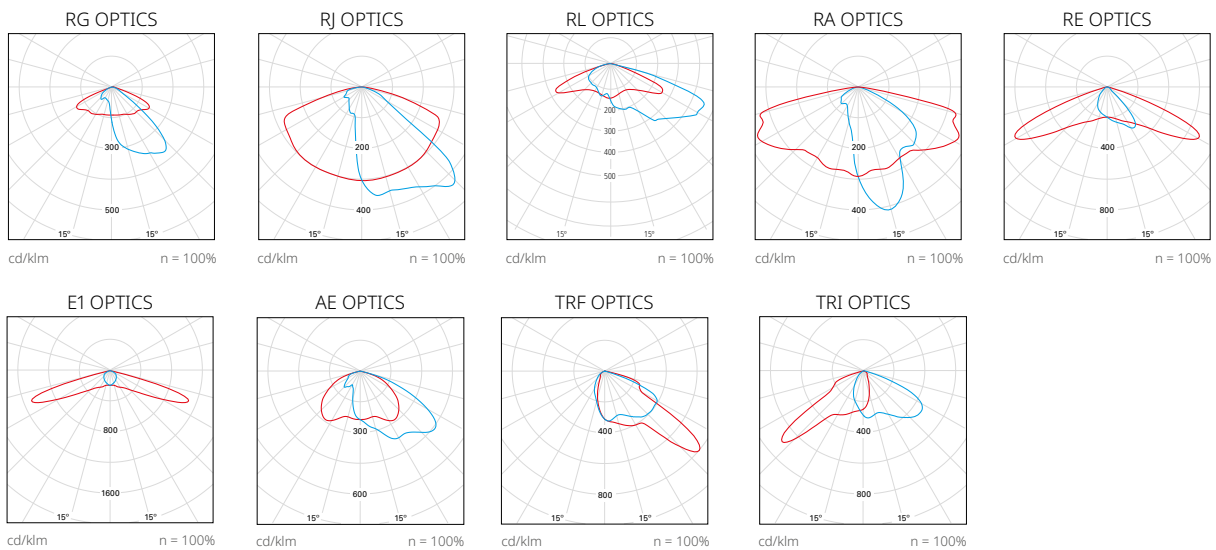
ISTANIUM ®

## ROAD LIGHT LED LUMINAIRE



COLOUR TEMP: NDL 4000 K | WDL 3000 K | SDL 2700 K | XDL 2200 K | PCA\*  
 COLOUR RENDERING INDEX: >70  
 UPWARD LIGHT OUTPUT RATIO (ULOR): <0.1 %\*\*  
 LED DURATION (L90 B10 AT  $T_a=25\text{ °C}$  AND  $T_j=95\text{ °C}$ ): 100,000 h

\* Upon request \*\* Value may change depending on the optics



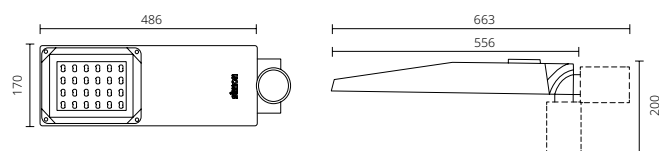
— C0 - C180 — C90 - C270

Rear hemisphere flux control visors available for RJ, RL, RE, SA and SB optics (see page 488 for more information).

Check other photometric distributions.

Simon **TAU** LED road light luminaire, size S, made of die-cast aluminium. Adjustable lateral fastening from  $-5^\circ$  to  $+10^\circ$  and adjustable post-top fastening from  $0^\circ$  to  $+10^\circ$  by changing the piece's position. Adaptation to fastenings from  $\varnothing 34$  mm to  $\varnothing 76$  mm depending on the adaptor, with negative compensation on poles and wall arms. Flat cover with non-visible cooling fins in installed position. Self-cleaning system by means of rainwater, which allows its correct evacuation without dirtying the luminaire, preventing the lighting performance from being affected over time. Single body luminaire with two independent volumes of thermal separation for optical group and for electrical group, with self-levelling device. Possibility of fitting an **upper Zhaga/NEMA** connector and a **lower Zhaga** connector. Access to the equipment and maintenance from the bottom with opening by four captive screws and a fastening system to prevent the lid from falling. Easy-clean transparent flat tempered glass diffuser to prevent UV radiation in the optics. **IP66** protection rating for the complete luminaire, with **safety valve** to keep the pressure constant and prevent moisture entry, and impact resistance rating of **IK08**. Possibility of mounting up to eleven multi-array optics. Anti-glare, truncated pyramid-shaped reflector, matt with light flux recovery. Possibility of four colour temperatures in white light, as well as PCA (Phosphor Converted Amber) for specially protected areas. Service life of LED **L90 B10 100,000 hours**. Istantium LED lighting groups can be replaced and updated even when the luminaire is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (**ULOR**) equal to **0%** (verify according to optics used). With **Class I** and **Class II** electronic control gear with 230 V<sub>AC</sub>/50 - 60 Hz supply voltage and **Class III** with A 12/24 VDC supply voltage. Possibility of including additional protection against surges of 10 kV/10 kA. Optional dimming with control line 2N+, without control line (Self-dimming) 2N-, by means of a flow dimmer from CAD cabinet amplitude dimming, for telemanagement with 1.10V or DALI input. Optional custom programming and maintenance of constant light output (**CLO**). Standard finish in Simon GY9007 colour. Possibility of Simon and RAL finishes, as well as Seafront paint for corrosive environments with high durability in a **C5M** environment. Dimensions 556x170x200 mm. **ENEC+** and **Zhaga-D4i** certified luminaire.

## DIMENSIONS AND FASTENING SYSTEMS



Lateral fastening	$\varnothing 60$ mm, 100 mm long, $-5^\circ$ , $0^\circ$ , $+5^\circ$ , $+10^\circ$ inclination Optional accessory 50-73277, $\varnothing 48$ mm, 100 mm long, $-5^\circ$ , $0^\circ$ , $+5^\circ$ , $+10^\circ$ inclination
Post-top fastening	$\varnothing 60$ mm, 100 mm long, $0^\circ$ , $+5^\circ$ , $+10^\circ$ inclination
Surface exposed to the wind	0.039 m <sup>2</sup>
Weight	Min. 4.7 kg Max. 6.2 kg

## PHYSICAL FEATURES AND MATERIALS

IP	IP66
IK	IK08
Body	Die-cast aluminium
Closure system	Stainless steel screws
Fastening system	Die-cast aluminium
Diffuser	Flat transparent shatter-proof tempered glass

## FINISHES

Body	Painted GY9007 colour (Standard Paint) Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)
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## ELECTRICAL PARAMETERS\* AND CONNECTIVITY

Temp.	$-20^\circ\text{C} \dots +35^\circ\text{C}$
Dimming**	<b>2N-</b> Without control line <b>Dxxx</b> Without custom programmed control line <b>2N+</b> With control line <b>CAD</b> Cabinet amplitude dimming <b>1N (100%)</b> Without dimming <b>1.10V</b> Dimming through 1.10V input protocol <b>DALI</b> Dimming through DALI input protocol
	Possibility of activating the <b>CLO</b> function, which allows the depreciation of the light emitted by the LEDs to be compensated by gradually increasing the supply current to them.
	Possibility of fitting a <b>Zhaga / NEMA</b> connector on the top of the luminaire and a <b>Zhaga</b> connector on the bottom of the luminaire according to Zhaga Consortium Book 18.

	Luminaires supplied by electrical grid	Solar powered luminaires
Supply voltage	220-240 V <sub>AC</sub>	12/24 V <sub>DC</sub>
Frequency	50/60 Hz	-
Protection against power surge	6 kV (Possibility of increasing to 10 kV / 10 kA upon request)	-
Power factor (cos $\varphi$ at max. charge)	$\geq 0.95$	-
Luminaire electrical protection	Class I or Class II	Class III
Power according to models***	12 LEDs    16 LEDs    24 LEDs	
Supply current		
HIGH EFFICIENCY	12 W    16 W    24 W	
HIGH BALANCE	18 W    24 W    36 W	
HIGH FLUX	24 W    32 W    49 W	
VERY HIGH FLUX	37 W    50 W    75 W	

## REGULATIONS AND CERTIFICATES






 Luminaire according to: EN 60598-1 and 2-3 / EN 61547 / EN 61000-3-2 and 3-3 / EN 62031 / EN 61347-2-13 / EN 62471 / EN 55015

Warranty	5 years (extended warranty upon request)
Supply and packaging	Packed in recyclable cardboard to protect the product during transport and storage.
Maintenance	Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent. Lubricate the sealing gaskets and replace them when they are cracked. Lubricate the closures and/or hinges of the moving parts. Keep the thermal radiation surface clean to not lose light flux without shortening the life of the LEDs.

\* Values corresponding to the current state of technology. \*\* Check other regulations. \*\*\* Power values have a tolerance of  $\pm 7\%$ .





## CONFIGURE YOUR TAU S LUMINAIRE

Model	Diffuser	Wire	Optics	Colour Temp.	Optical group power	Team	Dimming	Protection	Finish	Description
<b>TAUSXF</b>										Simon TAU Istanium® LED, size S, Ø60 mm post-top and lateral fastening, flat cover
	<b>GTF</b>									Flat transparent shatter-proof tempered glass diffuser
		<b>0</b>								Without installation wire (0 m)
			<b>RG_</b>							G type front road light optics
			<b>RJ_</b>							J type front road light optics
			<b>RL_</b>							L type front road light optics
			<b>RA_</b>							A type extended road light optics
			<b>RE_</b>							E type extended road light optics
			<b>AE_</b>							E type asymmetric optics
				<input type="radio"/> <b>NDL</b>						Neutral daylight - 4,000 K
				<input type="radio"/> <b>WDL</b>						Warm daylight – 3,000 K
				<input type="radio"/> <b>SDL</b>						Soft daylight - 2,700 K
				<input type="radio"/> <b>XDL</b>						Extra warm daylight – 2,200 K
					<b>_12W350</b>					12 W 350 mA   1,740 lm to 3,000 K   12 LEDs
					<b>_18W530</b>					18 W 530 mA   2,520 lm to 3,000 K   12 LEDs
					<b>_24W700</b>					24 W 700 mA   3,200 lm to 3,000 K   12 LEDs
					<b>_32W700</b>					32 W 700 mA   4,260 lm to 3,000 K   16 LEDs
					<b>_50W_1K</b>					50 W 1,050 mA   5,760 lm to 3,000 K   16 LEDs
					<b>_36W530</b>					36 W 530 mA   5,040 lm to 3,000 K   24 LEDs
					<b>_49W700</b>					49 W 700 mA   6,390 lm to 3,000 K   24 LEDs
					<b>_75W_1K</b>					75 W 1,050 mA   8,640 lm to 3,000 K   24 LEDs
						<b>IA23_</b>				Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, standard protection against 6 kV power surges
						<b>IA23S</b>				Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, additional protection against 10 kV power surges
						<b>IA12_</b>				Electronic control gear at 12/24 V <sub>ac</sub> C3 (solar). Only admits up to 36W and 1N and 2N- dimming
						<b>2N_</b>				Dimming without control line (self-dimming)
						<b>2N+_</b>				Dimming with control line
						<b>1N_</b>				Without dimming (on/off)
						<b>CAD_</b>				Cabinet amplitude dimming (electrical box dimmer)
						<b>1-10</b>				Dimming through 1-10V input protocol
						<b>DALI</b>				Dimming through DALI input protocol
						<b>DXXX</b>				Dimming without control line (custom program)
							<b>C1</b>			Class I luminaire electrical protection
							<b>C2</b>			Class II luminaire electrical protection
							<b>C3</b>			Class III luminaire electrical protection
								<b>GY9007</b>		Standard finish in Simon RAL 9007
								<b>XXXXXX</b>		Finish in Simon colours
								<b>XXXXXX</b>		Finish in RAL classic chart colours
								<b>CMXXXX</b>		Seafront Paint Finish

### BASE REFERENCES

Power	No. of LEDs	Current	Configuration	Order code
12 W	12	350 mA	TAUSXGTFORJ_WDL_12W350IA23_1N_C1GYDECO	<b>111-000762013</b>
18 W	12	530 mA	TAUSXGTFORJ_WDL_18W530IA23_1N_C1GYDECO	<b>111-000632013</b>
24 W	12	700 mA	TAUSXGTFORJ_WDL_24W700IA23_1N_C1GYDECO	<b>111-000759013</b>
32 W	16	700 mA	TAUSXGTFORJ_WDL_32W700IA23_1N_C1GYDECO	<b>111-000611013</b>
36 W	24	530 mA	TAUSXGTFORJ_WDL_36W530IA23_1N_C1GYDECO	<b>111-000597013</b>
50 W	16	1000 mA	TAUSXGTFORJ_WDL_50W_1KIA23_1N_C1GYDECO	<b>111-000736013</b>
49 W	24	700 mA	TAUSXGTFORJ_WDL_49W700IA23_1N_C1GYDECO	<b>111-000479013</b>
75 W	24	1000 mA	TAUSXGTFORJ_WDL_75W_1KIA23_1N_C1GYDECO	<b>111-000737013</b>

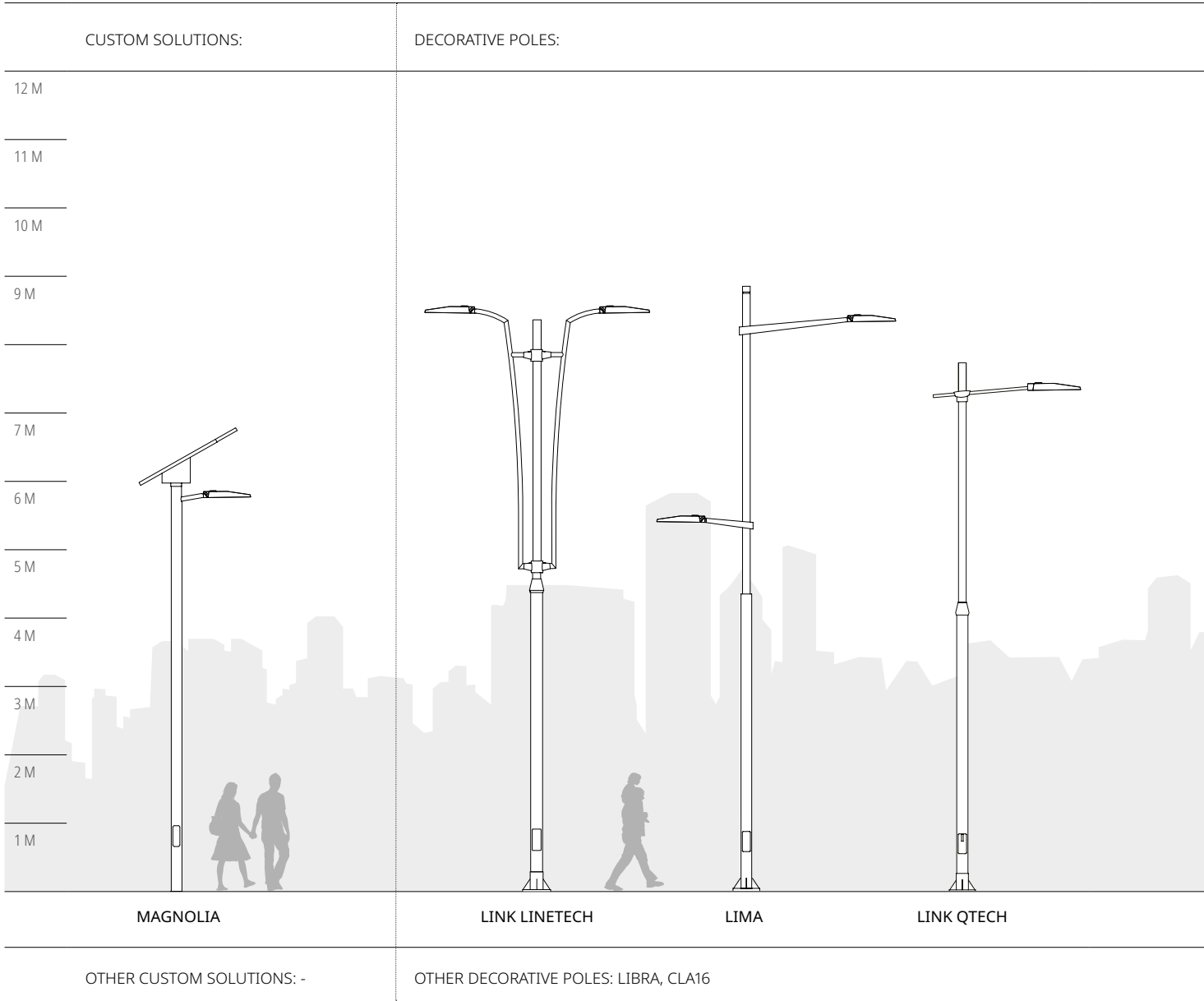
The luminaire flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes. The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.

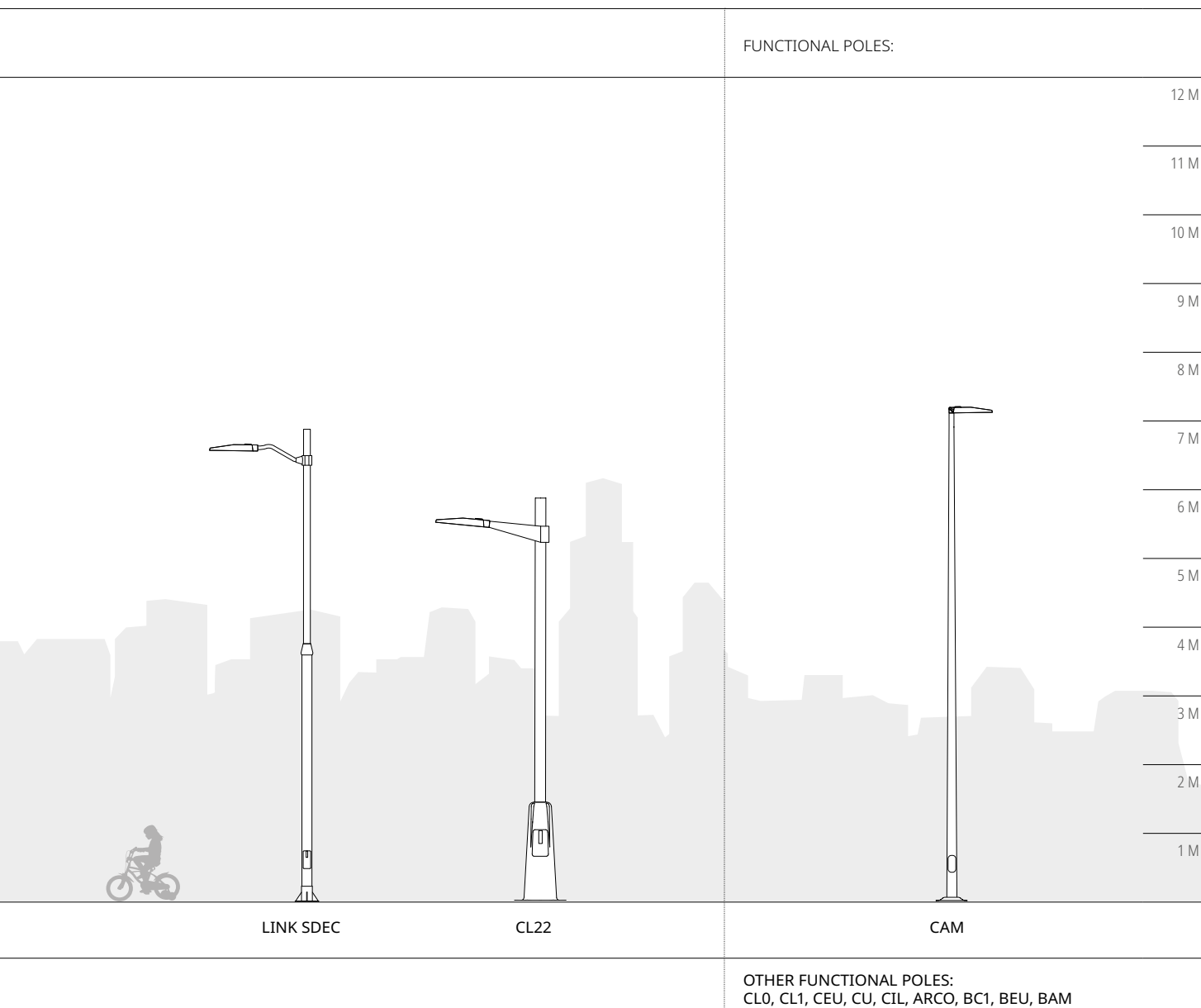






COMBINE YOUR TAU S LUMINAIRE WITH:





## ACCESSORIES / REPLACEMENTS

	Description	Order code
	Reducing accessory for lateral fastening to Ø48 mm arm	<b>50-73277</b>
	Fastening accessory for Ø76 mm mount	<b>50-88540</b>
	Fastening accessory for Ø76 mm mount, GY9007 finish	<b>50-88540-016</b>
	Reducing accessory for lateral fastening to Ø42 mm arm	<b>5-531785</b>
	Reducing accessory for lateral fastening to Ø34 mm arm	<b>5-531818</b>





LUMINAIRES

# AMBIENT URBAN

ISTANIUM<sup>LED</sup>®

**MERAK**

SXF



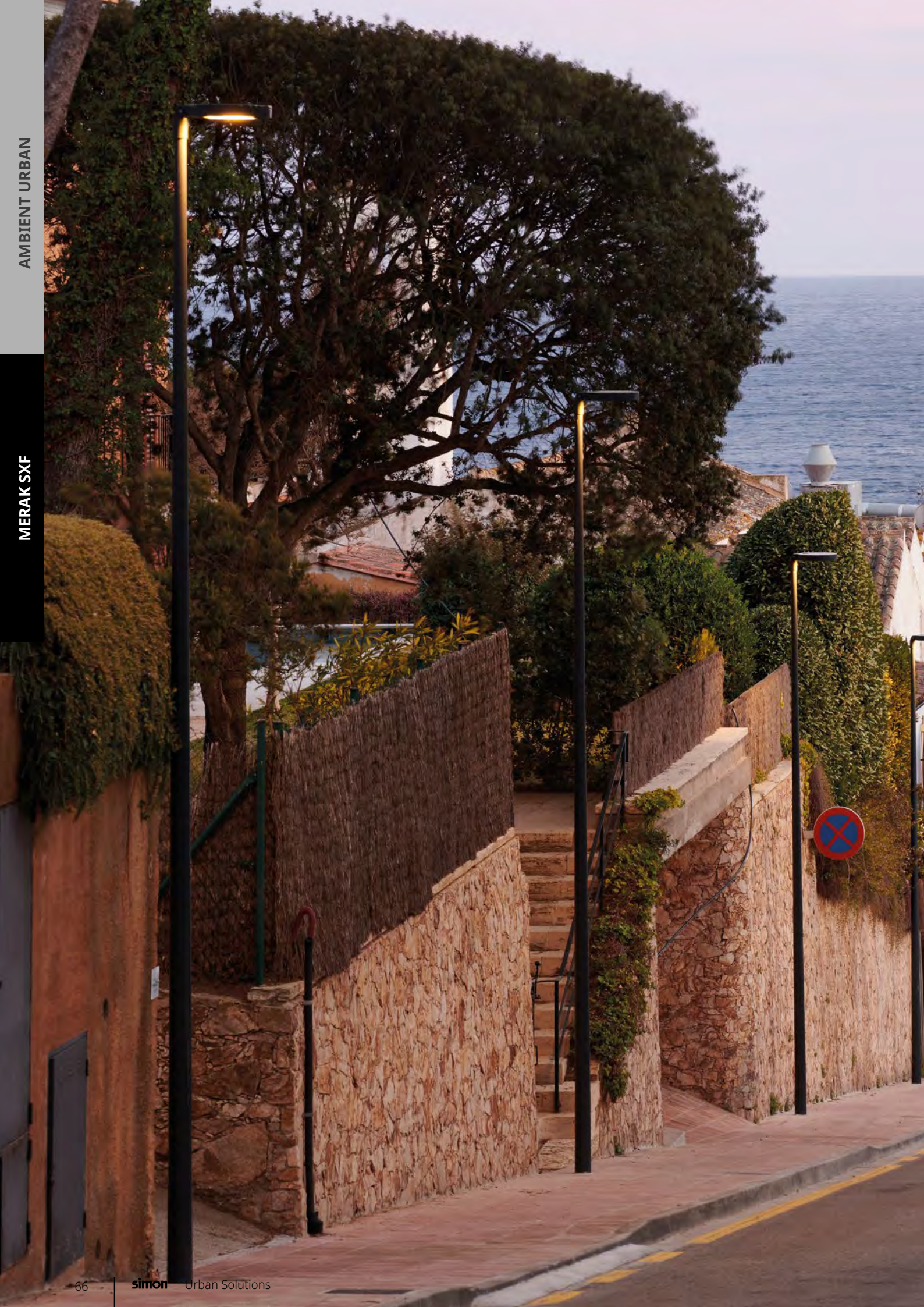
**ALTAIR**

IXF



Simon's full high-performance ambient urban proposal, with an innovative design and equipped with an advanced thermal dissipation system, offering multiple light distributions for the development of highly efficient and precise lighting projects.









# MERAK

SXF

ISTANIUM<sup>LED</sup>®

Ambient urban luminaire, ideal for the intensive introduction of LED technology

During the luminaire's 25-year service life, it is only necessary to replace the light engine to ensure maximum energy efficiency.

Tool-less installation.

Reduce costs by reusing the body of the luminaire and only updating the light source.

Guaranteed driver and light source updates.



Parking areas



Avenues



Streets



Pedestrian streets



Commercial areas



Parks / gardens



Squares



Roundabouts / Intersections

# MERAK SXF

## FEATURES

### DESIGN

---

Compact luminaire with a flat cover and an internal LED cooling system with a honeycomb design and no visible fins. Flat tempered glass closure that prevents dirt from accumulating on the optics. Minimum light pollution (ULOR<0.1%) depending on the optics used.

### EASY TO UPGRADE

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The electro-optic group is removable and upgradeable by means of a single piece, with a disconnection mechanism for automatic disconnection.

### WATERTIGHTNESS

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Depressor that allows high dust and water resistance - IP66.



Tool-free opening.



Automatic electric disconnection.

## SECURITY

Automatic electrical disconnection when opening the luminaire. Possibility of incorporating surge protection for surges up to 10 kV.



## THERMAL MANAGEMENT

Internal refrigeration system to dissipate heat from the honeycomb LEDs, without fins, guaranteeing the service life of the LED and its optimal performance at high supply currents.



## TECHNICAL QUALITY



Simon has various production centres, both in Spain and around the world. All are equipped with advanced technology that allows us to maintain another of our basic principles for success: performing demanding tests and controls to guarantee the quality of all our products.

## ORIENTATION



Adjustable lateral fastening from  $-10^{\circ}$  to  $+15^{\circ}$ . Replacement with a new ball joint with the possibility of  $360^{\circ}$  in  $5^{\circ}$  steps.



Adjustable post-top fastening from  $0^{\circ}$  to  $+10^{\circ}$  by changing the position of the piece itself. Replacement with a new ball joint with the possibility of  $360^{\circ}$  in  $5^{\circ}$  steps.

Adaptable for fastenings of different diameters (from  $\varnothing 34$  mm to  $\varnothing 76$  mm) with negative compensation in curved poles and wall arms.

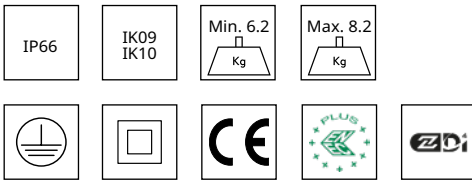




# MERAK SXF

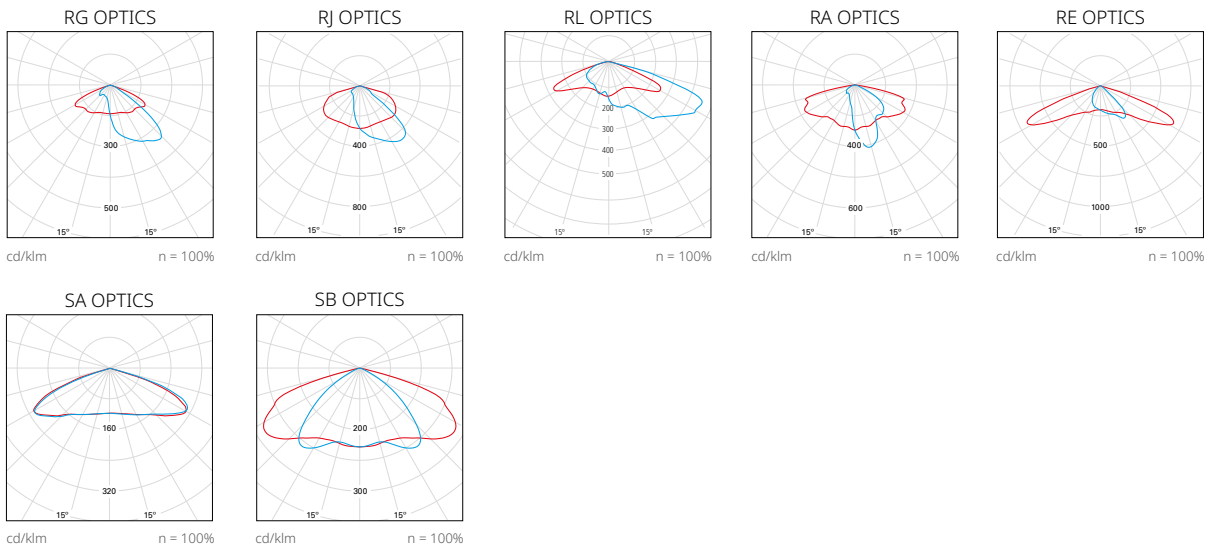
ISTANIUM<sup>LED</sup>®

## AMBIENT URBAN LED LUMINAIRE



COLOUR TEMP.: ND L 4000 K | WDL 3000 K | SDL 2700 K | XDL 2200 K | PCA\*  
 COLOUR RENDERING INDEX: >70  
 UPWARD LIGHT OUTPUT RATIO (ULOR): <0.1 %\*\*  
 LED DURATION (L90 B10 AT T<sub>a</sub>=25 °C AND T<sub>j</sub>=95 °C): 100,000 h

\* Upon request \*\* Value may change depending on the optics



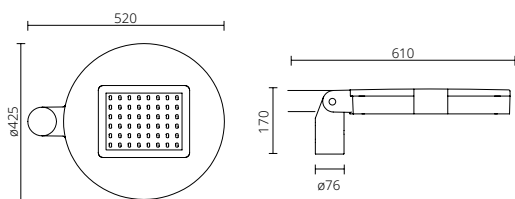
— C0 - C180 — C90 - C270

Rear hemisphere flux control visors available for RJ, RL, RE, SA and SB optics (see page 488 for more information).

Check other photometric distributions.

Simon **MERAK** LED decorative luminaire, size S, made of die-cast aluminium. Adjustable lateral fastening from -10° to +15° and adjustable post-top fastening from 0° to +10° by changing the position of the piece itself. New version with lateral fastening and adjustable post-top with ball joint that rotates 360° in 5° steps. Adaptation to fastenings from Ø34 mm to Ø76 mm depending on the adaptor, with negative compensation on poles and wall arms. Flat cover with internal honeycomb LED cooling system, no visible fins. Access to the electro-optical group and maintenance from the upper part with opening by means of two levers, without tools. The electro-optical group is removable and upgradeable in a single piece, with a disconnecter for automatic disconnection and a three-guide alignment system to avoid incorrect assemblies. Luminaire with internal self-levelling device. Possibility of fitting an **upper Zhaga/NEMA** connector and a **lower Zhaga** connector. 6 mm thick flat transparent tempered glass diffuser to facilitate cleaning and avoid UV radiation on the optics. **IP66** protection rating for the complete luminaire, with **pressure relief valve** to keep the pressure constant and prevent moisture from entering, and up to **IK10** impact resistance rating. Possibility of mounting up to nine multi-array optics. Anti-glare, truncated pyramid-shaped reflector, matt with light flux recovery. Possibility of four colour temperatures in white light, as well as PCA (Phosphor Converted Amber) for specially protected areas. Service life of LED **L90 B10 100,000 hours**. Istantium LED lighting groups can be replaced and updated even when the luminaire is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (**ULOR**) equal to **0%** (verify according to optics used). With **Class I** and **Class II** electronic control gear with 230 V AC/50-60 Hz supply voltage. Possibility of including additional protection against surges of **10 kV/10 kA**. With automatic disconnection when opening the gear compartment. Optional dimming with control line 2N+, without control line (Self-dimming) 2N-, by means of a flow dimmer from CAD cabinet amplitude dimming, for telemanagement with 1.10V or DALI input. Optional custom programming and maintenance of constant light output (**CLO**). Standard finish in Simon GYDECO colour. Possibility of Simon and RAL finishes, as well as Seafront paint for corrosive environments with high durability in a **C5M** environment. Dimensions 520x170x425 mm. **ENEC+** and **Zhaga-D4i** certified luminaire.

### DIMENSIONS AND FASTENING SYSTEMS



Lateral fastening	Ø60 mm, 100 mm long, -10°, -5°, 0°, 5°, 10°, 15° inclination, with optional accessory 50-73277, Ø48 mm, 100 mm long, -10°, -5°, 0°, 5°, 10°, 15° inclination
Post-top fastening	Ø60 mm, 100 mm long, 0°, +5°, +10° inclination Both mounts can be replaced by a new ball joint with the possibility of 360° rotation in 5° steps Optional accessory 50-73277, Ø48 mm, 100 mm long, 0°, +5°, +10° inclination
Surface exposed to the wind	0.066 m <sup>2</sup>
Weight	Min. 6.2 kg Max. 8.2 kg

### PHYSICAL FEATURES AND MATERIALS

IP	IP66
IK	From IK09 to IK10
Body	Die-cast aluminium
Cover	Die-cast aluminium
Closure system	Levers made of die-cast aluminium, tool-free opening
Fastening system	Die-cast aluminium

### FINISHES

Body	Painted in GYDECO colour (Standard Paint) Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)
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### ELECTRICAL PARAMETERS\* AND CONNECTIVITY

Temp.	-20 °C... +35 °C
Dimming**	<b>2N-</b> Without control line <b>Dxxx</b> Without custom programmed control line <b>2N+</b> With control line <b>CAD</b> Cabinet amplitude dimming <b>1N (100%)</b> Without dimming <b>1.10V</b> Dimming through 1.10V input protocol <b>DALI</b> Dimming through DALI input protocol

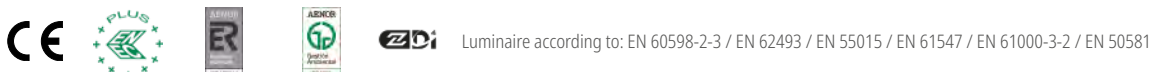
Possibility of activating the **CLO** function, which allows the depreciation of the light emitted by the LEDs to be compensated by gradually increasing the supply current to them.

Possibility of fitting a **Zhaga / NEMA** connector on the top of the luminaire and a **Zhaga** connector on the bottom of the luminaire according to Zhaga Consortium Book 18.

#### Luminaires supplied by electrical grid

Supply voltage	220-240 V <sub>ac</sub>			
Frequency	50/60 Hz			
Protection against power surge	6 kV (Possibility of increasing to 10 kV / 10 kA upon request)			
Power factor (cos φ at max. charge)	≥ 0.95			
Luminaire electrical protection	Class I or Class II			
Optical group power by model***	16 LEDs	24 LEDs	40 LEDs	48 LEDs
Supply current				
HIGH EFFICIENCY	16 W	24 W	39 W	47 W
HIGH BALANCE	24 W	36 W	60 W	73 W
HIGH FLUX	32 W	49 W	81 W	97 W
VERY HIGH FLUX	50 W	75 W	-	-

### REGULATIONS AND CERTIFICATES



Warranty	5 years.
Supply and packaging	Packed in recycled cardboard with an identifying label to protect the product during transport and storage.
Maintenance	Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent. Lubricate the sealing gaskets and replace them when they are cracked. Lubricate the closures and/or hinges of the moving parts. Keep the thermal radiation surface clean to not lose light flux without shortening the life of the LEDs.

\* Values corresponding to the current state of technology. \*\* Check other regulations. \*\*\* Power values have a tolerance of ±7%.



## CONFIGURE YOUR MERAK SXF LUMINAIRE

Model	Diffuser	Wire	Optics	Colour Temp.	Optical group power	Team	Dimming	Protection	Finish	Description
<b>MERSXF</b>										Simon MERAK Istanium® LED, size S, ø60 mm post-top and lateral fastening, flat cover
	<b>GTF</b>									Flat transparent shatter-proof tempered glass diffuser
	<b>BTF</b>									Flat transparent shatter-proof tempered glass diffuser IK10 (maximum impact resistance)
		<b>0</b>								Without installation wire (0 m)
		<b>5</b>								With installation wire (5 m)
			<b>RG_</b>							G type front road light optics
			<b>RJ_</b>							J type front road light optics
			<b>RL_</b>							L type front road light optics
			<b>RA_</b>							A type extended road light optics
			<b>RE_</b>							E type extended road light optics
			<b>SA_</b>							A Type Symmetric Optics
			<b>SB_</b>							B Type Symmetric Optics
				<input type="radio"/> <b>NDL</b>						Neutral daylight - 4,000 K
				<input type="radio"/> <b>WDL</b>						Warm daylight - 3,000 K
				<input type="radio"/> <b>SDL</b>						Soft daylight - 2,700 K
				<input type="radio"/> <b>XDL</b>						Extra warm daylight - 2,200 K
					<b>_16W350</b>					16 W 350 mA      2,420 lm to 3,000 K      16 LEDs
					<b>_24W530</b>					24 W 530 mA      3,450 lm to 3,000 K      16 LEDs
					<b>_32W700</b>					32 W 700 mA      4,300 lm to 3,000 K      16 LEDs
					<b>_36W530</b>					36 W 530 mA      5,040 lm to 3,000 K      24 LEDs
					<b>_49W700</b>					49 W 700 mA      6,240 lm to 3,000 K      24 LEDs
					<b>_75W_1K</b>					75 W 1,050 mA      8,310 lm to 3,000 K      24 LEDs
					<b>_81W700</b>					81 W 700 mA      10,130 lm to 3,000 K      40 LEDs
					<b>_97W700</b>					97 W 700 mA      12,070 lm to 3,000 K      48 LEDs
						<b>IA23_</b>				Electronic control gear at 230 Vac 50/60 Hz, standard protection against 6 kV power surges
						<b>IA23S</b>				Electronic control gear at 230 Vac 50/60 Hz, additional protection against 10 kV power surges
						<b>2N_</b>				Dimming without control line (self-dimming)
						<b>2N+</b>				Dimming with control line
						<b>1N_</b>				Without dimming (on/off)
						<b>CAD_</b>				Cabinet amplitude dimming (electrical box dimmer)
						<b>1-10</b>				Dimming through 1-10V input protocol
						<b>DALI</b>				Dimming through DALI input protocol
						<b>DXXX</b>				Dimming without control line (custom program)
							<b>C1</b>			Class I luminaire electrical protection
							<b>C2</b>			Class II luminaire electrical protection
								<b>GYDECO</b>		Standard finish in Simon Decorative Grey
								<b>xxxxxx</b>		Finish in Simon colours
								<b>xxxxxx</b>		Finish in RAL classic chart colours
								<b>CMxxxx</b>		Seafront Paint Finish

### BASE REFERENCES

Power	No. of LEDs	Current	Configuration	Order code
16 W	16	350 mA	MERSXFBTFORJ_WDL_16W350IA23_1N__C1GYDECO	<b>243-000606013</b>
24 W	16	530 mA	MERSXFBTFORJ_WDL_24W530IA23_1N__C1GYDECO	<b>243-000531013</b>
32 W	16	700 mA	MERSXFBTFORJ_WDL_32W700IA23_1N__C1GYDECO	<b>243-000611013</b>
36 W	24	530 mA	MERSXFBTFORJ_WDL_36W530IA23_1N__C1GYDECO	<b>243-000597013</b>
49 W	24	700 mA	MERSXFBTFORJ_WDL_49W700IA23_1N__C1GYDECO	<b>243-000479013</b>
75 W	24	1,050 mA	MERSXFBTFORJ_WDL_75W_1KIA23_1N__C1GYDECO	<b>243-000737013</b>
81 W	40	700 mA	MERSXFBTFORJ_WDL_81W700IA23_1N__C1GYDECO	<b>243-000634013</b>
97 W	48	700 mA	MERSXFBTFORJ_WDL_97W700IA23_1N__C1GYDECO	<b>243-001343013</b>

The luminaire flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes. The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.

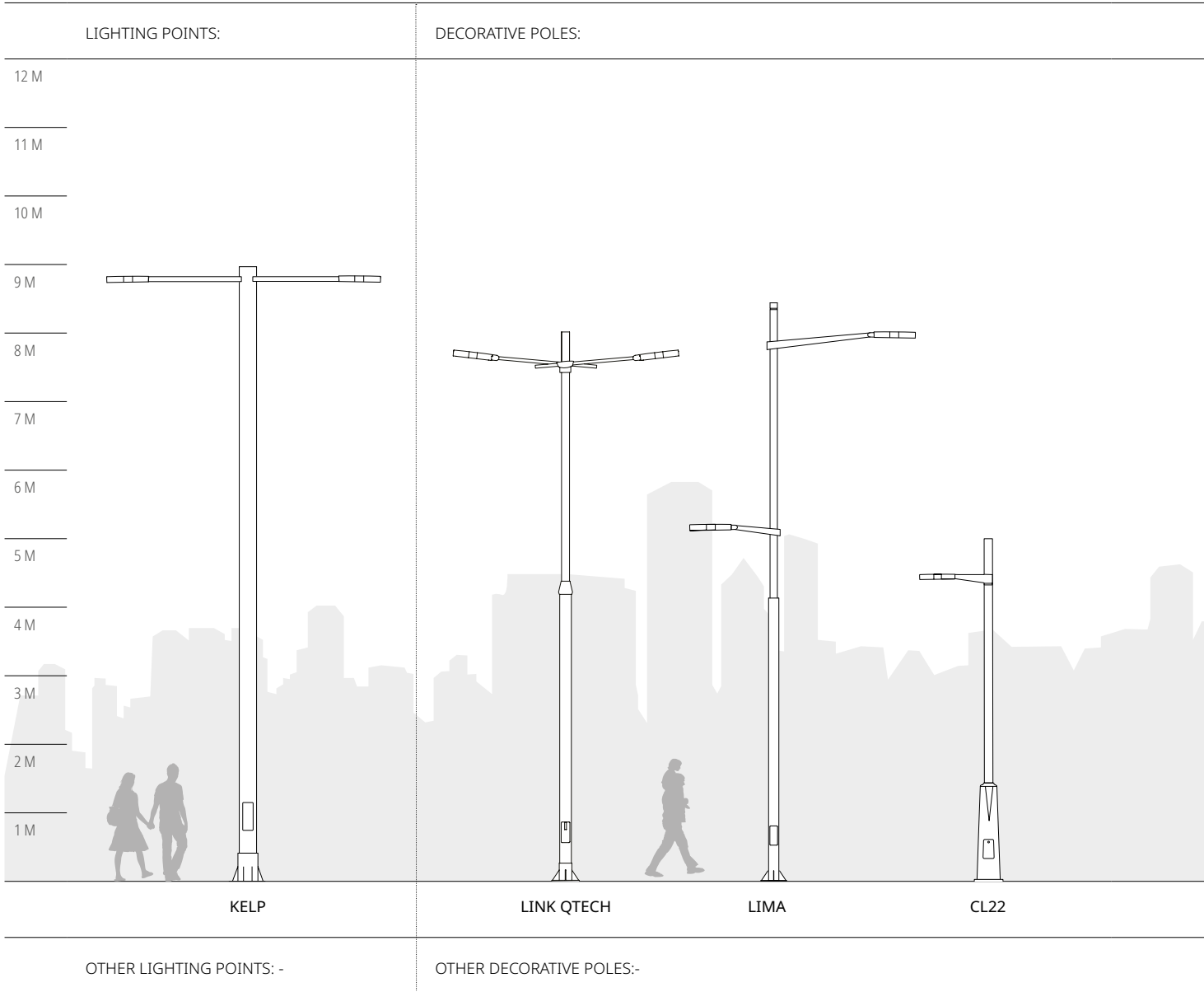




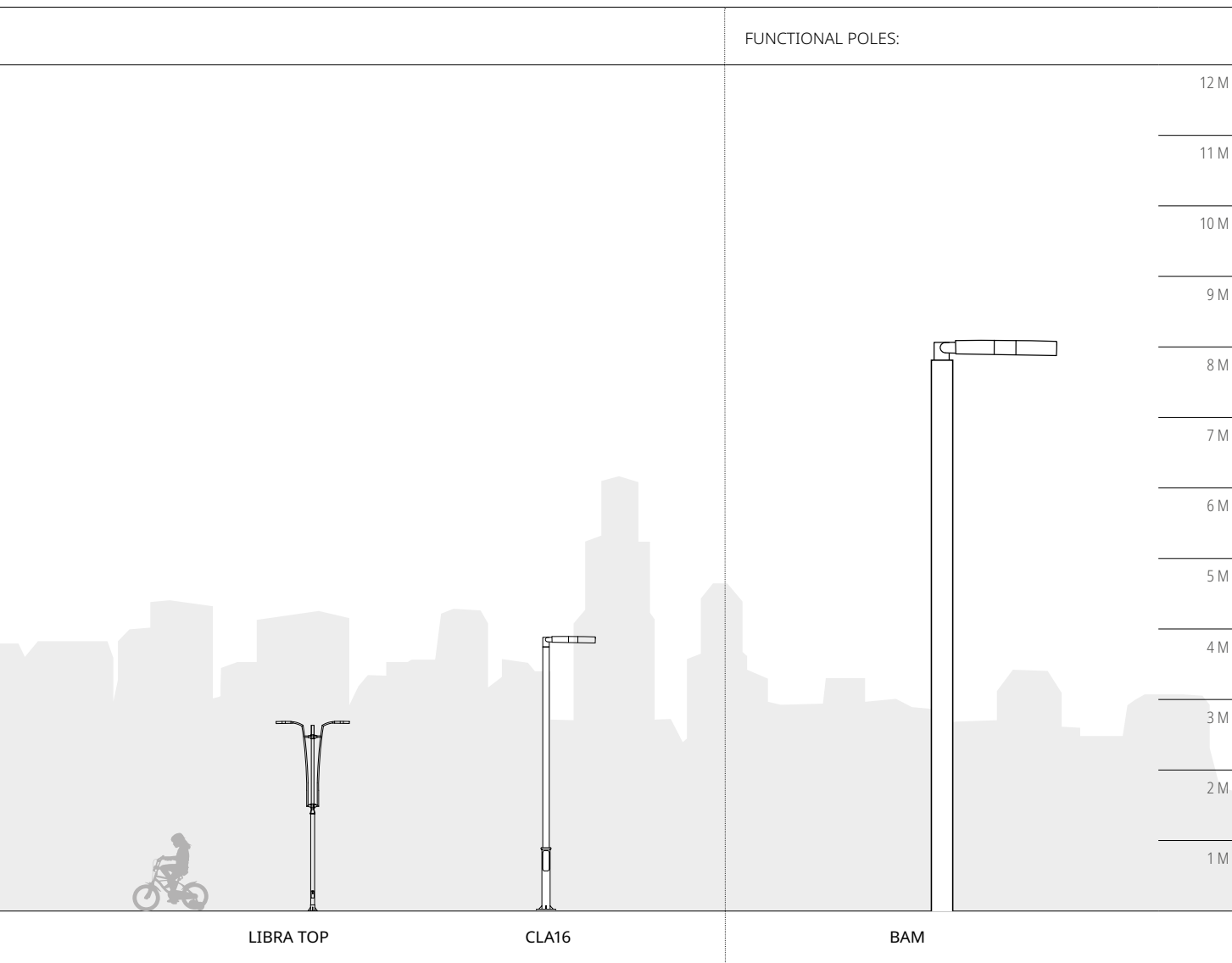
AMBIENT URBAN

MERAK SXF

COMBINE YOUR MERAK SXF LUMINAIRE WITH:







OTHER FUNCTIONAL POLES:  
 CLO, CL1, CEU, CAM, CU, CIL, ARCO, BC1, BEU

ACCESSORIES / REPLACEMENTS

	Description	Order code
	Fastening accessory for Ø76 mm mount	<b>50-88540</b>
	Fastening accessory for Ø76 mm mount, GY9007 finish	<b>50-88540-013</b>
	Reducing accessory for lateral fastening to Ø48 mm arm	<b>50-73277</b>
	Reducing accessory for lateral fastening to Ø42 mm arm	<b>5-531785</b>
	Reducing accessory for lateral fastening to Ø34 mm arm	<b>5-531818</b>
	Fastening system replacement	<b>50-73617</b>

OTHER LUMINAIRES IN THE COLLECTION



MERAK SYF

AMBIENT URBAN

ALTAIR IXF





# ALTAIR

IXF

ISTANIUM<sup>LED</sup>®

Ambient urban luminaire, ideal for the intensive introduction of LED technology

During the luminaire's 25-year service life, it is only necessary to replace the light engine to ensure maximum energy efficiency. Reduce costs by reusing the body of the luminaire and only updating the light source. Guaranteed driver and light source updates.



Parking areas



Streets



Pedestrian streets



Commercial areas



Parks / gardens



Squares



Roundabouts / Intersections

# ALTAIR IXF

## FEATURES

### DESIGN

---

Compact luminaire with a flat cover and an internal LED cooling system with a honeycomb design and no visible fins.

Flat tempered glass closure that prevents dirt from accumulating on the optics.

Minimum light pollution (ULOR <0.1%).

### EASY TO UPGRADE

---



The electro-optic group is removable and upgradeable by means of a single piece, with a disconnection mechanism for automatic disconnection.



### WATERTIGHTNESS

Depressor that allows high dust and water resistance - IP66.



### ORIENTATION



Adjustable lateral fastening from  $-10^{\circ}$  to  $+15^{\circ}$ . Replacement with a new ball joint with the possibility of  $360^{\circ}$  in  $5^{\circ}$  steps.

### SECURITY

Automatic electrical disconnection when opening the luminaire. Possibility of incorporating surge protection for surges up to 10 kV.



Adjustable post-top fastening from  $0^{\circ}$  to  $+10^{\circ}$  by changing the position of the piece itself. Replacement with a new ball joint with the possibility of  $360^{\circ}$  in  $5^{\circ}$  steps.



Adaptable for fastenings of different diameters (from  $\varnothing 34$  mm to  $\varnothing 76$  mm) with negative compensation in curved poles and wall arms.

### TECHNICAL QUALITY



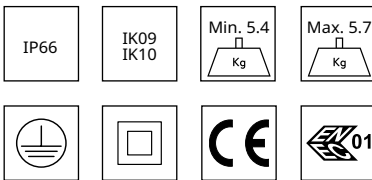
Simon has various production centres, both in Spain and around the world. All are equipped with advanced technology that allows us to maintain another of our basic principles for success: performing demanding tests and controls to guarantee the quality of all our products.



# ALTAIR IXF

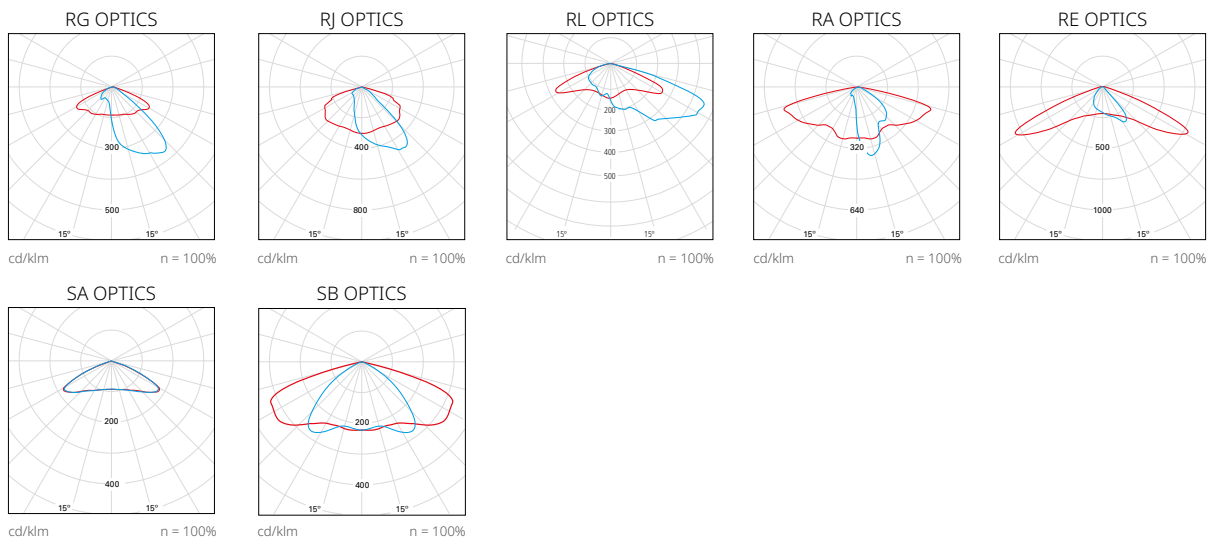
ISTANIUM<sup>®</sup>

## AMBIENT URBAN LED LUMINAIRE



COLOUR TEMP.: ND L 4000 K | WDL 3000 K | SDL 2700 K | XDL 2200 K | PCA\*  
 COLOUR RENDERING INDEX: >70  
 UPWARD LIGHT OUTPUT RATIO (ULOR): <0.1 %\*\*  
 LED DURATION (L90 B10 AT T<sub>a</sub>=25 °C AND T<sub>j</sub>=95 °C): 100,000 h

\* Upon request \*\* Value may change depending on the optics



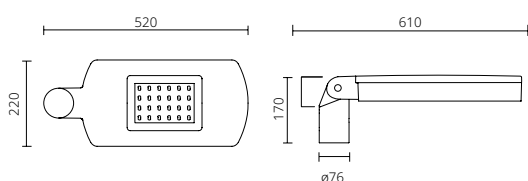
— C0 - C180 — C90 - C270

Rear hemisphere flux control visors available for RJ, RL, RE, SA and SB optics (see page 488 for more information).

Check other photometric distributions.

Simon **ALTAIR** LED decorative luminaire, size I, made of die-cast aluminium. Adjustable lateral fastening from -10° to + 15° and adjustable post-top fastening from 0° to + 10° by changing the position of the piece itself. New version with lateral fastening and adjustable post-top with ball joint that rotates 360° in 5° steps. Adaptation to fastenings from Ø34 mm to Ø76 mm depending on the adaptor, with negative compensation on poles and wall arms. Flat cover with internal honeycomb LED cooling system, no visible fins. Access to the electrical-optical group and maintenance via the top part, fastened with four captive screws that are invisible when installed. The electro-optical group is removable and upgradeable by means of a single piece, with a disconnection mechanism for automatic disconnection. Luminaire with internal self-levelling device. Possibility of fitting an **upper Zhaga/NEMA** connector. 6 mm thick flat transparent tempered glass diffuser to facilitate cleaning and avoid UV radiation on the optics. **IP66** protection rating for the complete luminaire, with a **pressure relief valve** to keep the pressure constant and prevent moisture from entering, and an impact resistance rating of up to IK10. Possibility of mounting up to nine multi-array optics. Anti-glare, truncated pyramid-shaped reflector, matt with light flux recovery. Possibility of four colour temperatures in white light, as well as PCA (Phosphor Converted Amber) for specially protected areas. Service life of LED **L90 B10 100,000 hours**. Istantium LED lighting groups can be replaced and updated even when the luminaire is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (**ULOR**) equal to **0%** (verify according to optics used). With **Class I** and **Class II** electronic control gear with 230 V<sub>AC</sub> / 50-60 Hz supply voltage. Possibility of including additional protection against surges of **10 kV/10 kA**. With automatic disconnection when opening the gear compartment. Optional dimming without control line (Self-dimming) 2N-, by means of cabinet amplitude dimming (CAD), for telemanagement with 1.10V or DALI input. Optional custom programming and maintenance of constant light output (**CLO**). Standard finish in Simon GYDECO colour. Possibility of Simon and RAL finishes, as well as Seafrent paint for corrosive environments with high durability in a **C5M** environment. Dimensions 520x170x220 mm. ENEC certified luminaire compatible with **Zhaga-D4i**.

## DIMENSIONS AND FASTENING SYSTEMS



Lateral fastening	Ø60 mm, 100 mm long, -10°, -5°, 0°, 5°, 10°, 15° inclination, with optional accessory 50-73277, Ø48 mm, 100 mm long, -10°, -5°, 0°, 5°, 10°, 15° inclination
Post-top fastening	Ø60 mm, 100 mm long, 0°, +5°, +10° inclination. Optional accessory 50-73277, Ø48 mm, 100 mm long, 0°, +5°, +10° inclination  Both mounts can be replaced by a new ball joint with the possibility of 360° rotation in 5° steps
Surface exposed to the wind	0.066 m <sup>2</sup>
Weight	Max. 5.7 kg Min. 5.4 kg

## PHYSICAL FEATURES AND MATERIALS

IP	IP66
IK	From IK09 to IK10
Body	Die-cast aluminium
Cover	Die-cast aluminium
Closure system	Stainless steel screws
Fastening system	Die-cast aluminium
Diffuser	Flat transparent shatter-proof tempered glass

## FINISHES

Body	Painted in GYDECO colour (Standard Paint) Simon Colours (Standard Paint / Seafrent Paint) RAL chart colours (Standard Paint / Seafrent Paint)
------	---

## ELECTRICAL PARAMETERS\* AND CONNECTIVITY

Temp.	-20 °C... +35 °C
Dimming**	<b>2N-</b> Without control line <b>Dxxx</b> Without custom programmed control line <b>CAD</b> Cabinet amplitude dimming <b>1N (100%)</b> Without dimming <b>1.10V</b> Regulation by means of 1.10V protocol (Consult the technical validity of the application) <b>DALI</b> Dimming through DALI input protocol (available for Class II only)

Possibility of activating the **CLO** function, which allows the depreciation of the light emitted by the LEDs to be compensated by gradually increasing the supply current to them.

Possibility of fitting a **Zhaga / NEMA** connector on the top of the luminaire and a **Zhaga** connector on the bottom of the luminaire according to Zhaga Consortium Book 18.

### Luminaires supplied by electrical grid

Supply voltage	220-240 V <sub>AC</sub>		
Frequency	50/60 Hz		
Protection against power surge	6 kV (Possibility of increasing to 10 kV / 10 kA upon request)		
Power factor (cos φ at max. charge)	≥ 0.95		
Luminaire electrical protection	Class I or Class II		
Optical group power by model***	12 LEDs	16 LEDs	24 LEDs
Supply current			
HIGH EFFICIENCY	12 W	16 W	24 W
HIGH BALANCE	18 W	24 W	36 W
HIGH FLUX	24 W	32 W	49 W
VERY HIGH FLUX	37 W	50 W	75 W

## REGULATIONS AND CERTIFICATES



Luminaire according to: EN 60598-2-3 / EN 62493 / EN 55015 / EN 61547 / EN 61000-3-2 / EN 50581

Warranty	5 years.
Supply and packaging	Packed in recycled cardboard with an identifying label to protect the product during transport and storage.
Maintenance	Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent. Lubricate the sealing gaskets and replace them when they are cracked. Lubricate the closures and/or hinges of the moving parts. Keep the thermal radiation surface clean to not lose light flux without shortening the life of the LEDs.

\* Values corresponding to the current state of technology. \*\* Check other regulations. \*\*\* Power values have a tolerance of ±7%.



## CONFIGURE YOUR ALTAIR IXF LUMINAIRE

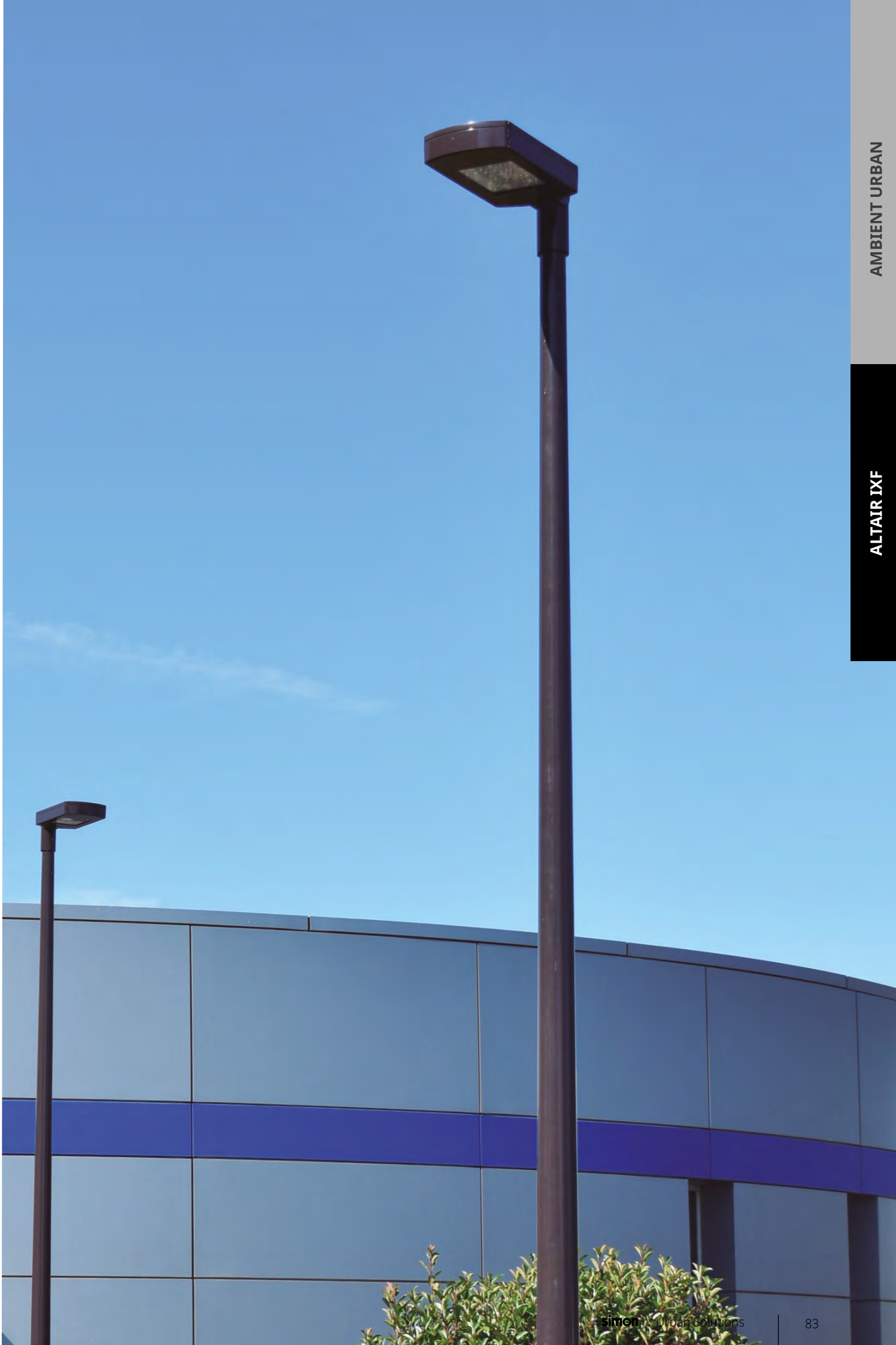
Model	Diffuser	Wire	Optics	Colour Temp.	Optical group power	Team	Dimming	Protection	Finish	Description
<b>ALTXF</b>										Simon ALTAIR Istanium® LED, size I, post-top and lateral fastening, flat cover
	<b>GTF</b>									Flat transparent shatter-proof tempered glass diffuser
	<b>BTF</b>									Flat transparent shatter-proof tempered glass diffuser IK10 (maximum impact resistance)
		<b>0</b>								Without installation wire (0 m)
		<b>5</b>								With installation wire (5 m)
			<b>RG_</b>							G type front road light optics
			<b>RJ_</b>							J type front road light optics
			<b>RL_</b>							L type front road light optics
			<b>RA_</b>							A type extended road light optics
			<b>RE_</b>							E type extended road light optics
			<b>SA_</b>							A Type Symmetric Optics
			<b>SB_</b>							B Type Symmetric Optics
				<input type="radio"/> <b>NDL</b>						Neutral daylight - 4,000 K
				<input type="radio"/> <b>WDL</b>						Warm daylight – 3,000 K
				<input type="radio"/> <b>SDL</b>						Soft daylight - 2,700 K
				<input type="radio"/> <b>XDL</b>						Extra warm daylight – 2,200 K
					<b>_12W350</b>					12 W 350 mA      1,870 lm to 3,000 K      12 LEDs
					<b>_18W530</b>					18 W 530 mA      2,660 lm to 3,000 K      12 LEDs
					<b>_24W700</b>					24 W 700 mA      3,360 lm to 3,000 K      12 LEDs
					<b>_37W_1K</b>					37 W 1,000 mA      4,640 lm to 3,000 K      12 LEDs
					<b>_32W700</b>					32 W 700 mA      4,340 lm to 3,000 K      16 LEDs
					<b>_50W_1K</b>					50 W 1,000 mA      5,820 lm to 3,000 K      16 LEDs
					<b>_75W_1K</b>					75 W 1,000 mA      8,180 lm to 3,000 K      24 LEDs
						<b>IA23_</b>				Electronic control gear at 230 V <sub>AC</sub> 50/60 Hz, standard protection against 6 kV power surges
						<b>IA23S</b>				Electronic control gear at 230 V <sub>AC</sub> 50/60 Hz, additional protection against 10 kV power surges
						<b>2N_</b>				Dimming without control line (self-dimming)
						<b>1N_</b>				Without dimming (on/off)
						<b>CAD_</b>				Cabinet amplitude dimming (electrical box dimmer)
						<b>1-10</b>				Dimming via 1-10V protocol input (consult the technical validity of the application)
						<b>DALI</b>				Dimming via DALI protocol input (for Class II only)
						<b>DXXX</b>				Dimming without control line (custom program)
							<b>C1</b>			Class I luminaire electrical protection
							<b>C2</b>			Class II luminaire electrical protection
								<b>GYDECO</b>		Standard finish in Simon Decorative Grey
								<b>XXXXXX</b>		Finish in Simon colours
								<b>XXXXXX</b>		Finish in RAL classic chart colours
								<b>CMxxxx</b>		Seafront Paint Finish

### BASE REFERENCES

Power	No. of LEDs	Current	Configuration	Order code
12 W	12	350 mA	ALTIXFBTFORj_WDL_12W350IA23_1N__C1GYDECO	<b>249-000762013</b>
18 W	12	530 mA	ALTIXFBTFORj_WDL_18W530IA23_1N__C1GYDECO	<b>249-000632013</b>
24 W	12	700 mA	ALTIXFBTFORj_WDL_24W700IA23_1N__C1GYDECO	<b>249-000759013</b>
32 W	16	700 mA	ALTIXFBTFORj_WDL_32W700IA23_1N__C1GYDECO	<b>249-000611013</b>
37 W	12	1,050 mA	ALTIXFBTFORj_WDL_37W_1KIA23_1N__C1GYDECO	<b>249-001424013</b>
50 W	16	1,050 mA	ALTIXFBTFORj_WDL_50W_1KIA23_1N__C1GYDECO	<b>249-000736013</b>
75 W	24	1,050 mA	ALTIXFBTFORj_WDL_75W_1KIA23_1N__C1GYDECO	<b>249-000737013</b>

The luminaire flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes. The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.

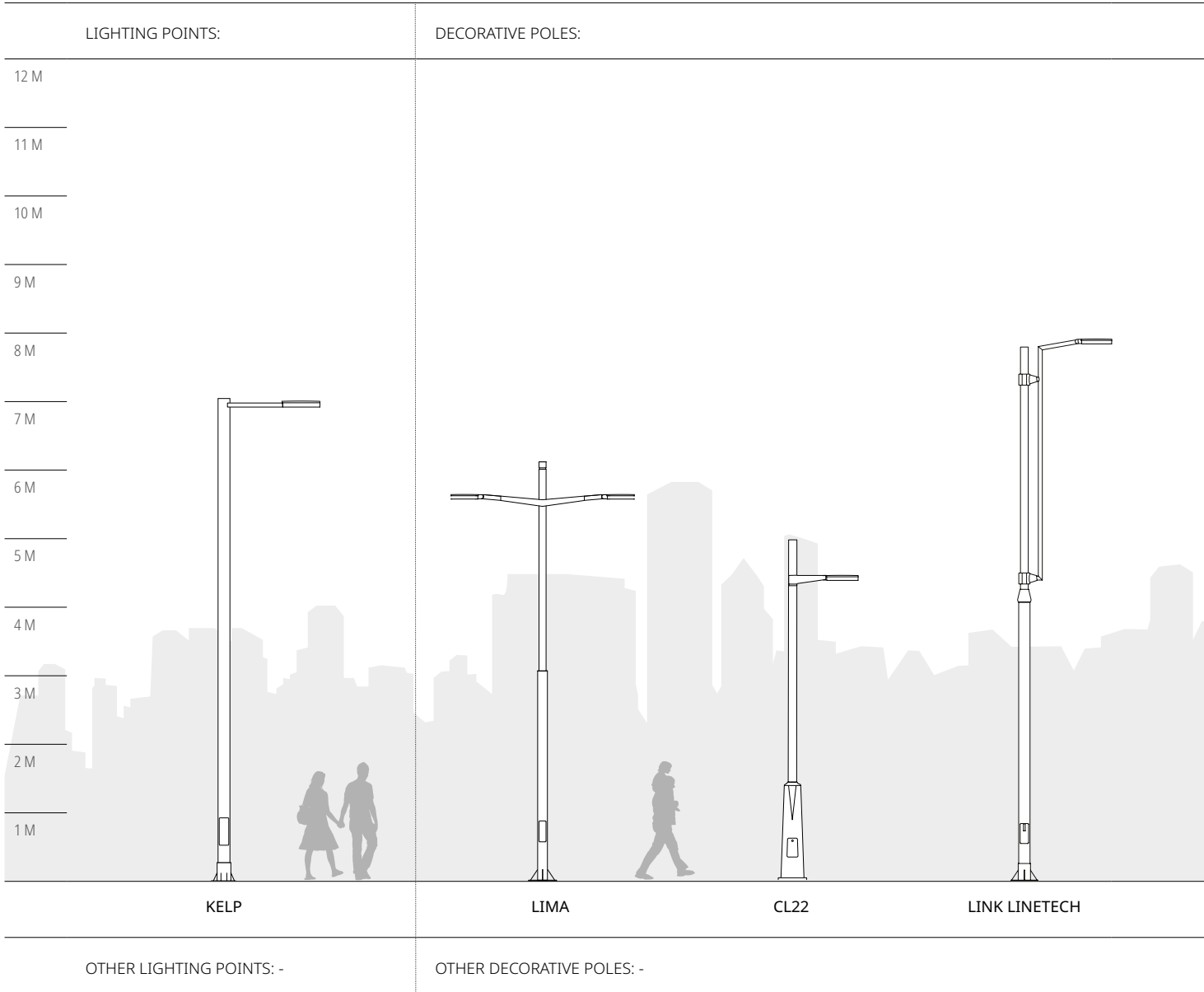


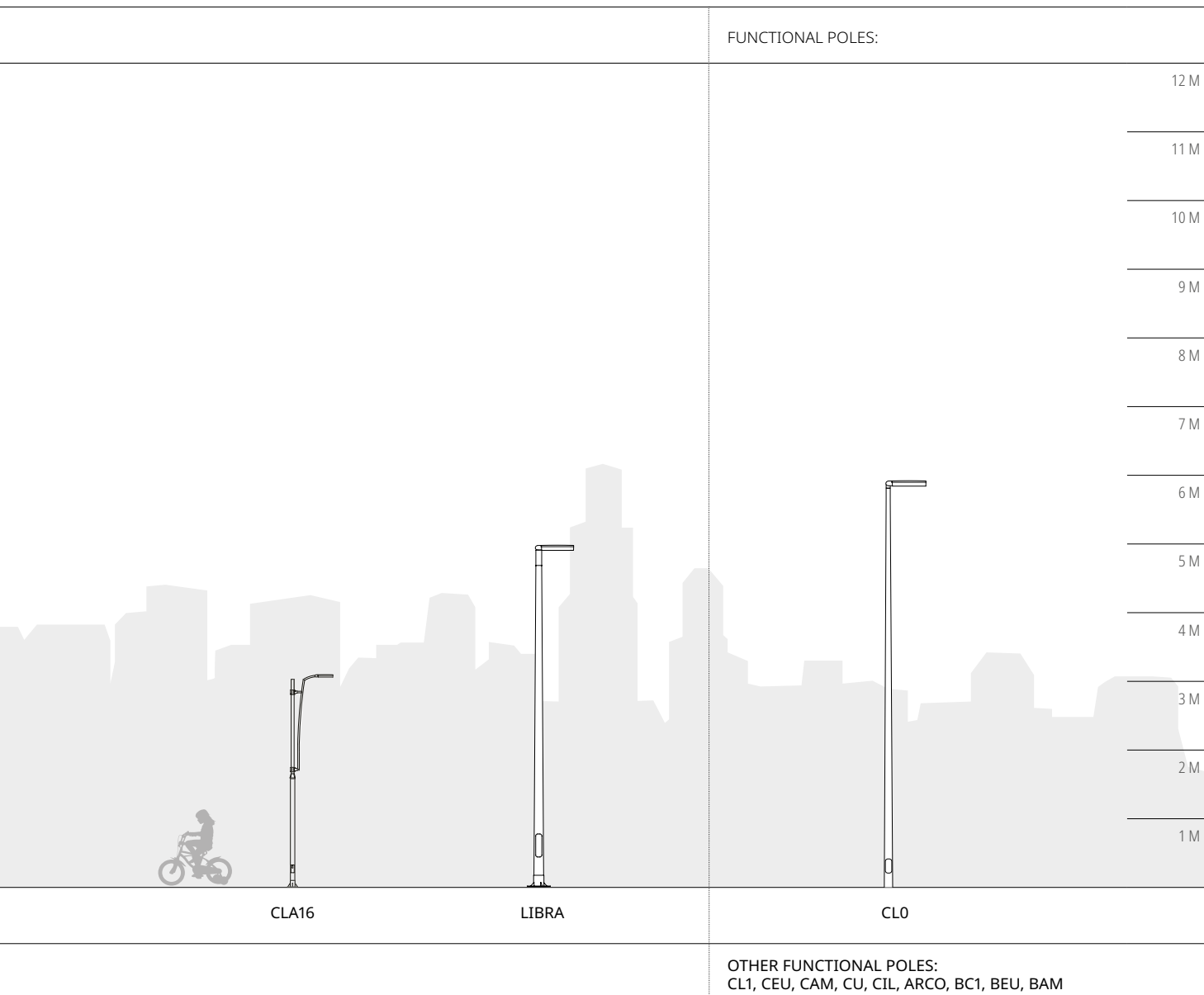


AMBIENT URBAN

ALT AIR IXF

COMBINE YOUR ALTAIR IXF LUMINAIRE WITH:





ACCESSORIES / REPLACEMENTS

	Description	Order code
	Reducing accessory for lateral fastening to Ø60 mm arm	50-73277
	Reducing accessory for lateral fastening to Ø42 mm arm	5-531785
	Reducing accessory for lateral fastening to Ø34 mm arm	5-531818
	Replacement diffuser glass for ALTAIR IK10	50-73598
	Fastening system replacement	50-73617

OTHER LUMINAIRES IN THE COLLECTION



ALTAIR IYF





LUMINAIRES

# AMBIENT PARK / GARDEN

ISTANIUM<sup>LED</sup>®

**MERAK**  
SYF



**ALTAIR**  
IYF



**SKAT**  
MPF



**HYDRA**



**LORE**



The ambient park/garden lighting solutions fulfil the need to illuminate various public spaces in urban areas, while also stylistically enhancing the environment.



# MERAK

SYF

ISTANIUM<sup>LED</sup>®

Ambient park/garden luminaire, ideal for the intensive introduction of LED technology

With a circular body and Y-shaped arms, it incorporates technical innovations that allow instant technology updates.



Streets



Pedestrian streets



Commercial areas



Parks / gardens



Squares



Roundabouts / Intersections



# MERAK SYF

## FEATURES

### EASY TO UPGRADE

The electro-optic group is removable and upgradeable by means of a single piece, with a disconnection mechanism for automatic disconnection.



Tool-free opening.



Automatic electric disconnection.

### DESIGN

Compact luminaire with a flat cover and an internal LED cooling system with a honeycomb design and no visible fins.



Depressor that allows high dust and water resistance - IP66.



## SECURITY

Automatic electrical disconnection when opening the luminaire. Possibility of incorporating surge protection for surges up to 10 kV.



## THERMAL MANAGEMENT

Internal refrigeration system to dissipate heat from the honeycomb LEDs, without fins, guaranteeing the service life of the LED and its optimal performance at high supply currents.



## FASTENING

Post-top fastening with two Y-shaped arms constructed as a single injection-moulded part and with the possibility of feeding wiring through both arms.

Adaptable for fastenings of different diameters (from Ø34 mm to Ø76 mm).



## TECHNICAL QUALITY

Simon has various production centres, both in Spain and around the world. All are equipped with advanced technology that allows us to maintain another of our basic principles for success: performing demanding tests and controls to guarantee the quality of all our products.



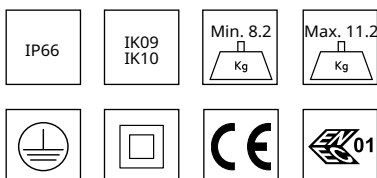
reddot award 2018  
winner

# MERAK SYF

ISTANIUM<sup>®</sup>

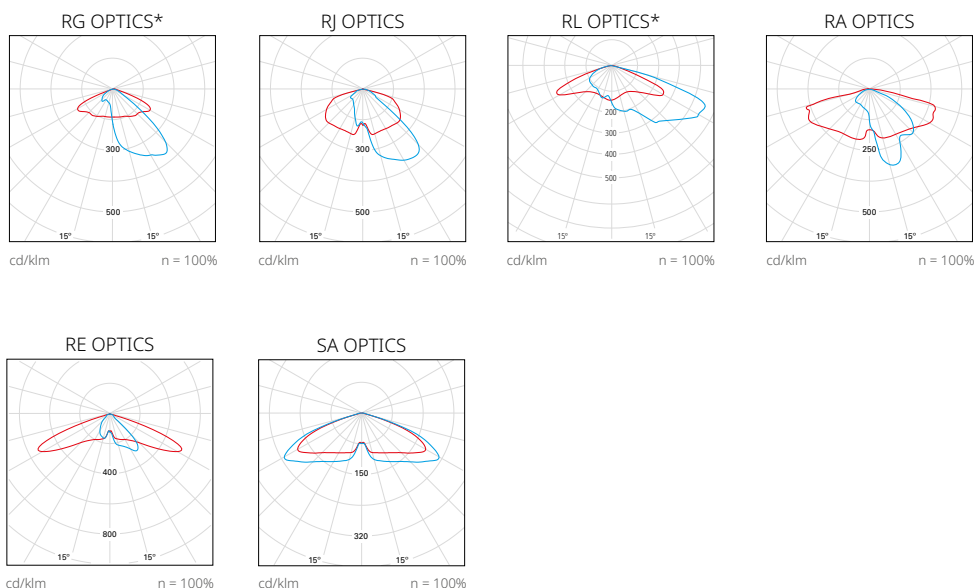


## AMBIENT PARK / GARDEN LED LUMINAIRE



COLOUR TEMP.: ND L 4000 K | WDL 3000 K | SDL 2700 K | XDL 2200 K | PCA\*  
 COLOUR RENDERING INDEX: >70  
 UPWARD LIGHT OUTPUT RATIO (ULOR): <2.5 %\*\*  
 LED DURATION (L90 B10 AT T<sub>a</sub>=25 °C AND T<sub>j</sub>=95 °C): 100,000 h

\* Upon request \*\* Value may change depending on the optics



— C0 - C180 — C90 - C270

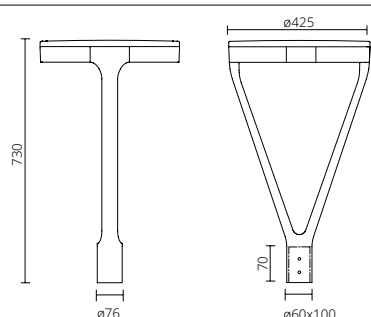
Rear hemisphere flux control visors available for RJ, RL, RE and SA optics (see page 488 for more information).

Check other photometric distributions.

\*Generic optics polar curve.

Simon **MERAK** LED decorative luminaire, size S, made of die-cast aluminium. Post-top fastening with two Y-shaped arms constructed as a single injection-moulded part and with the possibility of feeding wiring through both arms. Adaptation to fastenings from Ø34 mm to Ø76 mm depending on the adaptor. Flat cover with internal honeycomb LED cooling system, no visible fins. Access to the electro-optical group and maintenance from the upper part with opening by means of two levers, without tools. The electro-optical group is removable and upgradeable in a single piece, with a disconnecter for automatic disconnection and a three-guide alignment system to avoid incorrect assemblies. Possibility of fitting an **upper Zhaga/NEMA** connector and a **lower Zhaga** connector. 6 mm thick flat transparent tempered glass diffuser for easy cleaning and to avoid UV radiation on the optics. **IP66** protection rating for the complete luminaire, with **pressure relief valve** to keep the pressure constant and prevent moisture from entering, and up to **IK10** impact resistance rating. Possibility of mounting up to nine multi-array optics. Anti-glare, truncated pyramid-shaped reflector, matt with light flux recovery. Possibility of four colour temperatures in white light, as well as PCA (Phosphor Converted Amber) for specially protected areas. Service life of LED **L90 B10 100,000 hours**. Istantium LED lighting groups can be replaced and updated even when the luminaire is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (**ULOR**) less than **2.5%** (verify according to optics used). With **Class I** and **Class II** electronic control gear with 230 V AC/50-60 Hz supply voltage. Possibility of including additional protection against surges of **10 kV/10 kA**. With automatic disconnection when opening the gear compartment. Optional dimming with control line 2N+, without control line (Self-dimming) 2N-, by means of a flow dimmer from CAD cabinet amplitude dimming, for telemanagement with 1.10V or DALI input. Optional custom programming and maintenance of constant light output (**CLO**). Standard finish in Simon GYDECO colour. Possibility of Simon and RAL finishes, as well as Seafront paint for corrosive environments with high durability in a **C5M** environment. Dimensions 425x730x425 mm. **ENEC+** and **Zhaga-D4i** certified luminaire.

### DIMENSIONS AND FASTENING SYSTEMS



Post-top fastening	Ø60 mm, 100 mm long With optional accessory from Ø34 mm to Ø76 mm
Surface exposed to the wind	0.066 m <sup>2</sup>
Weight	Max. 11.2 kg Min. 8.2 kg

### PHYSICAL FEATURES AND MATERIALS

IP	IP66
IK	From IK09 to IK10
Body	Die-cast aluminium
Cover	Die-cast aluminium
Closure system	Levers made of die-cast aluminium, tool-free opening
Fastening system	Die-cast aluminium
Diffuser	Flat transparent shatter-proof tempered glass

### FINISHES

Body	Painted in GYDECO colour (Standard Paint) Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)
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### ELECTRICAL PARAMETERS\* AND CONNECTIVITY

Temp.	-20 °C... +35 °C
Dimming**	<b>2N-</b> Without control line <b>Dxxx</b> Without custom programmed control line <b>2N+</b> With control line <b>CAD</b> Cabinet amplitude dimming <b>1N (100%)</b> Without dimming <b>1.10V</b> Dimming through 1.10V input protocol <b>DALI</b> Dimming through DALI input protocol

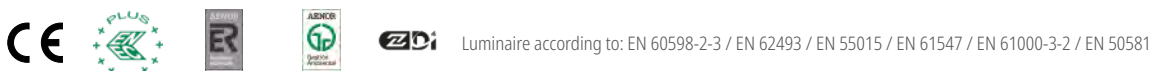
Possibility of activating the **CLO** function, which allows the depreciation of the light emitted by the LEDs to be compensated by gradually increasing the supply current to them.

Possibility of fitting a **Zhaga / NEMA** connector on the top of the luminaire and a **Zhaga** connector on the bottom of the luminaire according to Zhaga Consortium Book 18.

### Luminaires supplied by electrical grid

Supply voltage	220-240 Vac			
Frequency	50/60 Hz			
Protection against power surge	6 kV (Possibility of increasing to 10 kV / 10 kA upon request)			
Power factor (cos φ at max. charge)	≥ 0.95			
Luminaire electrical protection	Class I or Class II			
Optical group power by model***	16 LEDs	24 LEDs	40 LEDs	48 LEDs
Supply current				
HIGH EFFICIENCY	16 W	24 W	39 W	47 W
HIGH BALANCE	24 W	36 W	60 W	73 W
HIGH FLUX	32 W	49 W	81 W	97 W
VERY HIGH FLUX	50 W	75 W	-	-

### REGULATIONS AND CERTIFICATES



Warranty	5 years.
Supply and packaging	Packed in recycled cardboard with an identifying label to protect the product during transport and storage.
Maintenance	Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent. Lubricate the sealing gaskets and replace them when they are cracked. Lubricate the closures and/or hinges of the moving parts. Keep the thermal radiation surface clean to not lose light flux without shortening the life of the LEDs.

\* Values corresponding to the current state of technology. \*\* Check other regulations. \*\*\* Power values have a tolerance of ±7%.



## CONFIGURE YOUR MERAK SYF LUMINAIRE

Model	Diffuser	Wire	Optics	Colour Temp.	Optical group power	Team	Dimming	Protection	Finish	Description
<b>MERSYF</b>										Simon MERAK Istanium® LED, size S, Y-shaped arm post-top fastening, flat cover
	<b>GTF</b>									Flat transparent shatter-proof tempered glass diffuser
	<b>BTF</b>									Flat transparent shatter-proof tempered glass diffuser IK10 (maximum impact resistance)
		<b>0</b>								Without installation wire (0 m)
		<b>5</b>								With installation wire (5 m)
			<b>RG_</b>							G type front road light optics
			<b>RJ_</b>							J type front road light optics
			<b>RL_</b>							L type front road light optics
			<b>RA_</b>							A type extended road light optics
			<b>RE_</b>							E type extended road light optics
			<b>SA_</b>							A Type Symmetric Optics
				<input type="radio"/> <b>NDL</b>						Neutral daylight - 4,000 K
				<input type="radio"/> <b>WDL</b>						Warm daylight – 3,000 K
				<input type="radio"/> <b>SDL</b>						Soft daylight - 2,700 K
				<input type="radio"/> <b>XDL</b>						Extra warm daylight – 2,200 K
					<b>_16W350</b>					16 W 350 mA      2,420 lm to 3,000 K      16 LEDs
					<b>_24W530</b>					24 W 530 mA      3,450 lm to 3,000 K      16 LEDs
					<b>_32W700</b>					32 W 700 mA      4,300 lm to 3,000 K      16 LEDs
					<b>_36W530</b>					36 W 530 mA      5,040 lm to 3,000 K      24 LEDs
					<b>_49W700</b>					49 W 700 mA      6,240 lm to 3,000 K      24 LEDs
						<b>IA23_</b>				Electronic control gear at 230 Vac 50/60 Hz, standard protection against 6 kV power surges
						<b>IA23S</b>				Electronic control gear at 230 Vac 50/60 Hz, additional protection against 10 kV power surges
						<b>2N_</b>				Dimming without control line (self-dimming)
						<b>2N+</b>				Dimming with control line
						<b>1N_</b>				Without dimming (on/off)
						<b>CAD_</b>				Cabinet amplitude dimming (electrical box dimmer)
						<b>1-10</b>				Dimming through 1-10V input protocol
						<b>DALI</b>				Dimming through DALI input protocol
						<b>DXXX</b>				Dimming without control line (custom program)
							<b>C1</b>			Class I luminaire electrical protection
							<b>C2</b>			Class II luminaire electrical protection
								<b>GYDECO</b>		Standard finish in Simon Decorative Grey
								<b>xxxxxx</b>		Finish in Simon colours
								<b>xxxxxx</b>		Finish in RAL classic chart colours
								<b>CMxxxx</b>		Seafront Paint Finish

### BASE REFERENCES

Power	No. of LEDs	Current	Configuration	Order code
16 W	16	350 mA	MERSYFBTFORJ_WDL_16W350IA23_1N_C1GYDECO	<b>244-000606013</b>
24 W	16	530 mA	MERSYFBTFORJ_WDL_24W530IA23_1N_C1GYDECO	<b>244-000531013</b>
32 W	16	700 mA	MERSYFBTFORJ_WDL_32W700IA23_1N_C1GYDECO	<b>244-000611013</b>
36 W	24	530 mA	MERSYFBTFORJ_WDL_36W530IA23_1N_C1GYDECO	<b>244-000597013</b>
49 W	24	700 mA	MERSYFBTFORJ_WDL_49W700IA23_1N_C1GYDECO	<b>244-000479013</b>

The luminaire flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes. The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.







COMBINE YOUR MERAK SYF LUMINAIRE WITH:

DECORATIVE POLES:

6 M

5 M

4 M

3 M

2 M

1 M

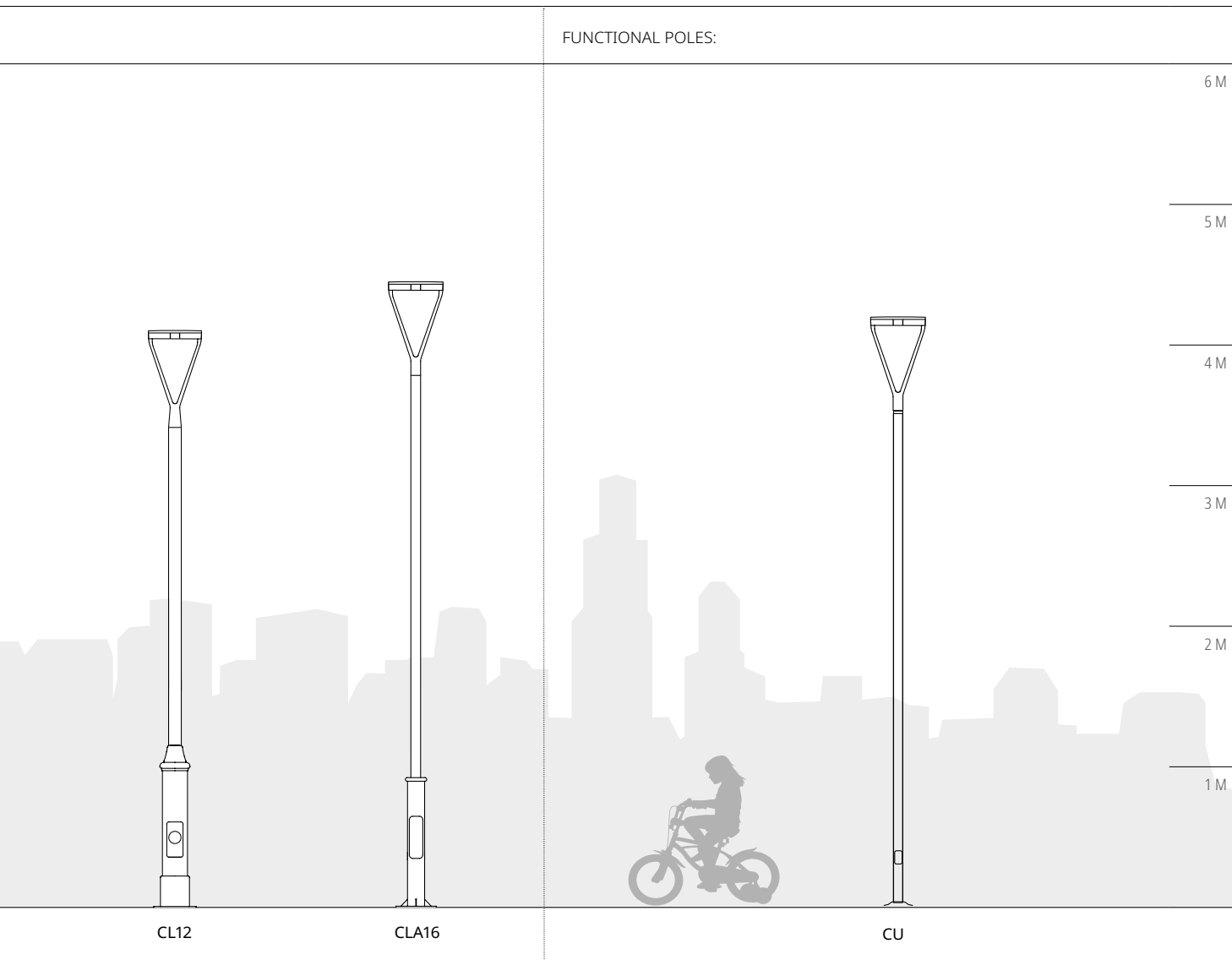


LIBRA

CL22



CL14

OTHER DECORATIVE POLES: -



OTHER FUNCTIONAL POLES: CL0, CL1, CEU, CAM, CIL

ACCESSORIES / REPLACEMENTS

	Description	Order code
	Fastening accessory for Ø76 mm mount	50-88540
	Fastening accessory for Ø76 mm mount, GYDECO finish	50-88540-013

OTHER LUMINAIRES IN THE COLLECTION



MERAK SXF





# ALTAIR

IYF

ISTANIUM<sup>®</sup>

Ambient park/garden luminaire, ideal for the intensive introduction of LED technology

Luminaire in die-cast aluminium, Y-shaped post-top fastening. It provides necessary public lighting with maximum efficiency.



Streets



Pedestrian streets



Commercial areas



Parks / gardens



Squares



Roundabouts / Intersections





# ALTAIR IYF

## FEATURES

### DESIGN

---

Compact luminaire with a flat cover and an internal LED cooling system with a honeycomb design and no visible fins. Flat tempered glass closure that prevents dirt from accumulating on the optics.

### SECURITY

---

Automatic electrical disconnection when opening the luminaire. Possibility of incorporating surge protection for surges up to 10 kV.



### EASY TO UPGRADE

---

The electro-optic group is removable and upgradeable by means of a single piece, with a disconnection mechanism for automatic disconnection.



## FASTENING

---

Post-top fastening with two Y-shaped arms constructed as a single injection-moulded part and with the possibility of feeding wiring through both arms.

Adaptable for fastenings of different diameters (from Ø34 mm to Ø76 mm).



## TECHNICAL QUALITY

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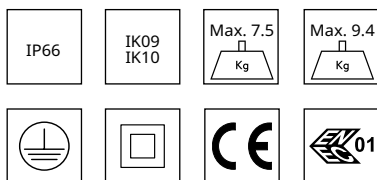
Simon has various production centres, both in Spain and around the world. All are equipped with advanced technology that allows us to maintain another of our basic principles for success: performing demanding tests and controls to guarantee the quality of all our products.

# ALTAIR IYF

ISTANIUM<sup>LED</sup>®

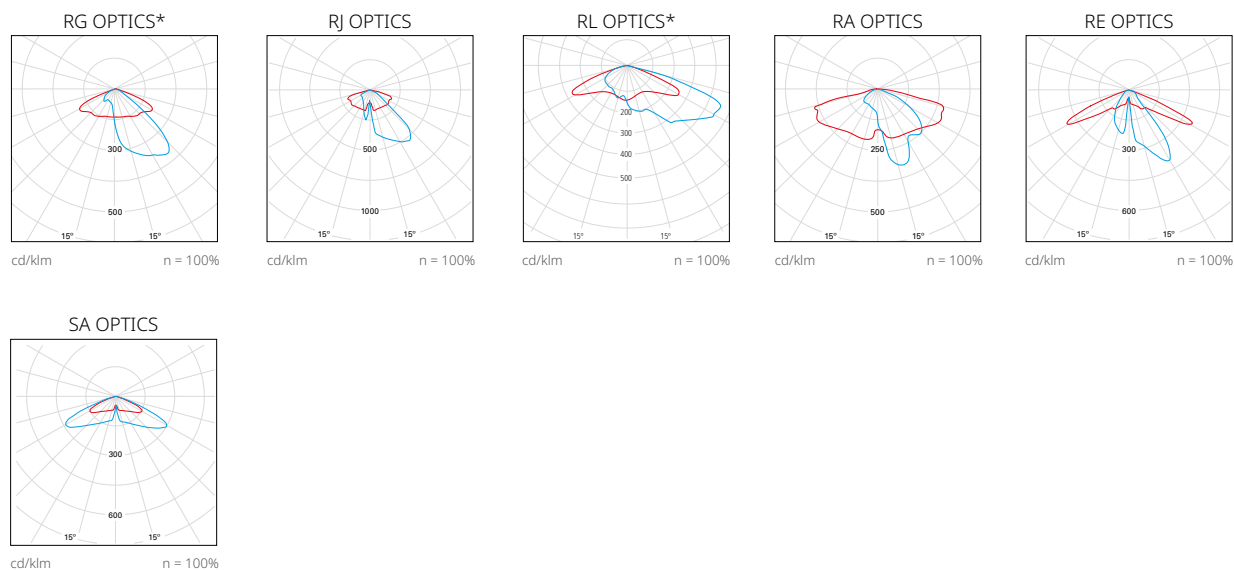


## AMBIENT PARK / GARDEN LED LUMINAIRE



COLOUR TEMP.: NDL 4000 K | WDL 3000 K | SDL 2700 K | XDL 2200 K | PCA\*  
 COLOUR RENDERING INDEX: >70  
 UPWARD LIGHT OUTPUT RATIO (ULOR): <2.5 %\*\*  
 LED DURATION (L90 B10 AT T<sub>a</sub>=25 °C AND T<sub>j</sub>=95 °C): 100,000 h

\* Upon request \*\* Value may change depending on the optics



— C0 - C180 — C90 - C270

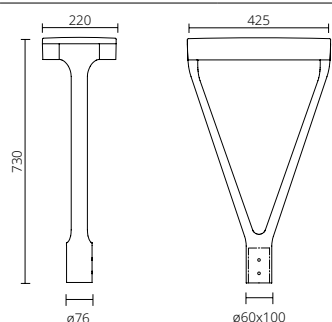
\*Generic optics polar curve.

Rear hemisphere flux control visors available for RJ, RL, RE and SA optics (see page 488 for more information).

Check other photometric distributions.

Simon **ALTAIR** LED decorative luminaire, size I, made of die-cast aluminium. Post-top fastening with two Y-shaped arms constructed as a single injection-moulded part and with the possibility of feeding wiring through both arms. Adaptation to fastenings from Ø34 mm to Ø76 mm depending on the adaptor. Flat cover with internal honeycomb LED cooling system, no visible fins. Access to the electrical-optical group and maintenance via the top part, fastened with four captive screws that are invisible when installed. The electro-optic group is removable and upgradeable by means of a single piece, with a disconnection mechanism for automatic disconnection. Possibility of fitting an **upper Zhaga/NEMA** connector. 6 mm thick flat transparent tempered glass diffuser to facilitate cleaning and avoid UV radiation on the optics. **IP66** protection rating for the complete luminaire, with **pressure relief valve** to keep the pressure constant and prevent moisture from entering, and up to **IK10** impact resistance rating. Possibility of mounting up to nine multi-array optics. Anti-glare, truncated pyramid-shaped reflector, matt with light flux recovery. Possibility of four colour temperatures in white light, as well as PCA (Phosphor Converted Amber) for specially protected areas. Service life of LED **L90 B10 100,000 hours**. Istantium LED lighting groups can be replaced and updated even when the luminaire is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (**ULOR**) less than **2.5%** (verify according to optics used). With **Class I** and **Class II** electronic control gear with 230 V AC/50-60 Hz supply voltage. Possibility of including additional protection against surges of **10 kV/10 kA**. With automatic disconnection when opening the gear compartment. Optional dimming without control line (Self-dimming) 2N-, by means of cabinet amplitude dimming (CAD), for telemanagement with 1.10V or DALI input. Optional custom programming and maintenance of constant light output (**CLO**). Standard finish in Simon GYDECO colour. Possibility of Simon and RAL finishes, as well as Seafront paint for corrosive environments with high durability in a **C5M** environment. Dimensions 425x730x220 mm. **ENEC** certified luminaire compatible with **Zhaga-D4i**.

### DIMENSIONS AND FASTENING SYSTEMS



Post-top fastening Ø60 mm, 100 mm long,  
With optional accessory from Ø34 mm to Ø76 mm

Surface exposed to the wind 0.066 m<sup>2</sup>

Weight Max. 9.4 kg Min. 7.5 kg

### PHYSICAL FEATURES AND MATERIALS

IP	IP66
IK	From IK09 to IK10
Body	Die-cast aluminium
Cover	Die-cast aluminium
Closure system	Stainless steel screws
Fastening system	Die-cast aluminium

### FINISHES

Body	Painted in GYDECO colour (Standard Paint) Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)
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### ELECTRICAL PARAMETERS\* AND CONNECTIVITY

Temp.	-20 °C... +35 °C
Dimming**	<b>2N-</b> Without control line <b>Dxxx</b> Without custom programmed control line <b>CAD</b> Cabinet amplitude dimming <b>1N (100%)</b> Without dimming <b>1.10V</b> Regulation by means of 1.10V protocol (Consult the technical validity of the application) <b>DALI</b> Dimming through DALI input protocol (Only available for Class II)

Possibility of activating the **CLO** function, which allows the depreciation of the light emitted by the LEDs to be compensated by gradually increasing the supply current to them.

Possibility of fitting a **Zhaga / NEMA** connector on the top of the luminaire according to Zhaga Consortium Book 18.

### Luminaires supplied by electrical grid

Supply voltage	220-240 V <sub>ac</sub>		
Frequency	50/60 Hz		
Protection against power surge	6 kV (Possibility of increasing to 10 kV / 10 kA upon request)		
Power factor (cos φ at max. charge)	≥ 0.95		
Luminaire electrical protection	Class I or Class II		
Optical group power by model***	12 LEDs	16 LEDs	24 LEDs
Supply current			
HIGH EFFICIENCY	12 W	16 W	24 W
HIGH BALANCE	18 W	24 W	36 W
HIGH FLUX	24 W	32 W	49 W
VERY HIGH FLUX	37 W	50 W	75 W

### REGULATIONS AND CERTIFICATES



Luminaire according to: EN 60598-2-3 / EN 62493 / EN 55015 / EN 61547 / EN 61000-3-2 / EN 50581

Warranty	5 years.
Supply and packaging	Packed in recycled cardboard with an identifying label to protect the product during transport and storage.
Maintenance	Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent. Lubricate the sealing gaskets and replace them when they are cracked. Lubricate the closures and/or hinges of the moving parts. Keep the thermal radiation surface clean to not lose light flux without shortening the life of the LEDs.

\* Values corresponding to the current state of technology. \*\* Check other regulations. \*\*\* Power values have a tolerance of ±7%.





## CONFIGURE YOUR ALTAIR IYF LUMINAIRE

Model	Diffuser	Wire	Optics	Colour Temp.	Optical group power	Team	Dimming	Protection	Finish	Description
<b>ALTIYF</b>										Simon ALTAIR Istanium® LED, size I, Y-shaped arm post-top fastening, flat cover
	<b>GTF</b>									Flat transparent shatter-proof tempered glass diffuser IK09
	<b>BTF</b>									Flat transparent shatter-proof tempered glass diffuser IK10 maximum impact resistance
		<b>0</b>								Without installation wire (0 m)
		<b>5</b>								With installation wire (5 m)
			<b>RG_</b>							G type front road light optics
			<b>RJ_</b>							J type front road light optics
			<b>RL_</b>							L type front road light optics
			<b>RA_</b>							A type extended road light optics
			<b>RE_</b>							E type extended road light optics
			<b>SA_</b>							A Type Symmetric Optics
				<input type="radio"/> <b>NDL</b>						Neutral daylight - 4,000 K
				<input type="radio"/> <b>WDL</b>						Warm daylight – 3,000 K
				<input type="radio"/> <b>SDL</b>						Soft daylight - 2,700 K
				<input type="radio"/> <b>XDL</b>						Extra warm daylight – 2,200 K
					<b>_12W350</b>					12 W 350 mA      1,740 lm to 3,000 K      12 LEDs
					<b>_18W530</b>					18 W 530 mA      2,620 lm to 3,000 K      12 LEDs
					<b>_24W700</b>					24 W 700 mA      3,300 lm to 3,000 K      12 LEDs
					<b>_37W_1K</b>					37 W 1,000 mA      4,580 lm to 3,000 K      12 LEDs
					<b>_32W700</b>					32 W 700 mA      4,070 lm to 3,000 K      16 LEDs
					<b>_50W_1K</b>					50 W 1,000 mA      5,520 lm to 3,000 K      16 LEDs
						<b>IA23_</b>				Electronic control gear at 230 Vac 50/60 Hz, standard protection against 6 kV power surges
						<b>IA23S</b>				Electronic control gear at 230 Vac 50/60 Hz, additional protection against 10 kV power surges
							<b>2N_</b>			Dimming without control line (self-dimming)
							<b>1N_</b>			Without dimming (on/off)
							<b>CAD_</b>			Cabinet amplitude dimming (electrical box dimmer)
							<b>1-10</b>			Dimming via 1-10V protocol input (consult the technical validity of the application)
							<b>DALI</b>			Dimming via DALI protocol input (for Class II only)
							<b>DXXX</b>			Dimming without control line (custom program)
								<b>C1</b>		Class I luminaire electrical protection
								<b>C2</b>		Class II luminaire electrical protection
									<b>GYDECO</b>	Standard finish in Simon Decorative Grey
									<b>xxxxxx</b>	Finish in Simon colours
									<b>xxxxxx</b>	Finish in RAL classic chart colours
									<b>CMxxxx</b>	Seafront Paint Finish

### BASE REFERENCES

Power	No. of LEDs	Current	Configuration	Order code
12 W	12	350 mA	ALTIYFBTFORJ_WDL_12W350IA23_1N__C1GYDECO	<b>248-000762013</b>
18 W	12	530 mA	ALTIYFBTFORJ_WDL_18W530IA23_1N__C1GYDECO	<b>248-000632013</b>
24 W	12	700 mA	ALTIYFBTFORJ_WDL_24W700IA23_1N__C1GYDECO	<b>248-000759013</b>
32 W	16	700 mA	ALTIYFBTFORJ_WDL_32W700IA23_1N__C1GYDECO	<b>248-000611013</b>
37 W	12	1,050 mA	ALTIYFBTFORJ_WDL_37W_1KIA23_1N__C1GYDECO	<b>248-001424013</b>
50 W	16	1,050 mA	ALTIYFBTFORJ_WDL_50W_1KIA23_1N__C1GYDECO	<b>248-000736013</b>

The luminaire flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes. The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.





COMBINE YOUR ALTAIR IYF LUMINAIRE WITH:

DECORATIVE POLES:

6 M

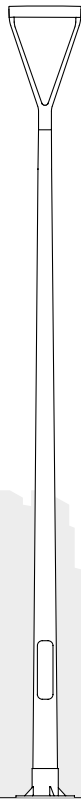
5 M

4 M

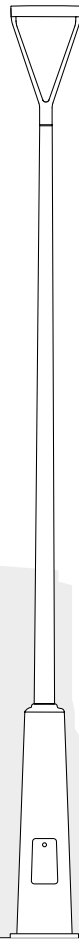
3 M

2 M

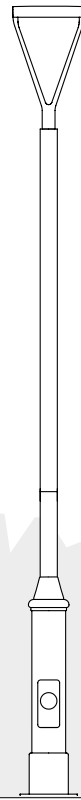
1 M



LIBRA

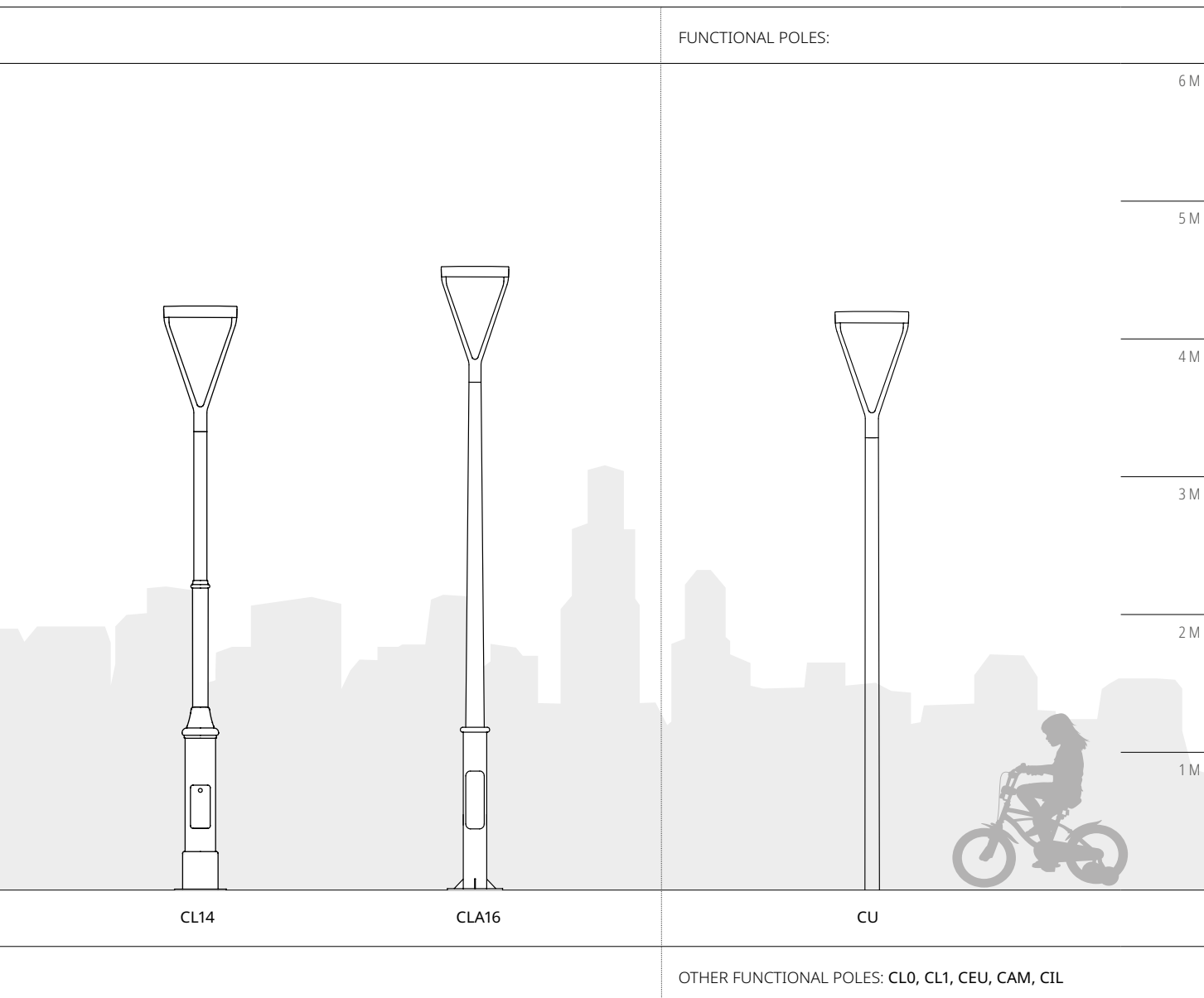


CL22





CL12

OTHER DECORATIVE POLES: -



ACCESSORIES / REPLACEMENTS

OTHER LUMINAIRES IN THE COLLECTION

	Description	Order code
	Lateral fastening accessory for Ø 76 mm mount	<b>50-88540</b>
	Lateral fastening accessory for Ø 76 mm mount, GYDECO finish	<b>50-88540-013</b>
	Replacement diffuser glass for ALTAIR IK10	<b>50-73598</b>



ALTAIR IXF





# SKAT

MPF

ISTANIUM<sup>LED</sup>®

Simon's SKAT ambient park / garden luminaire shows a strong commitment to elegance without neglecting the highest technological standards.

Luminaire adapted for installation at low heights.  
Multiple lighting solutions.  
Advanced thermal management.  
Adaptable to the "IoT".



Streets



Pedestrian streets



Commercial areas



Parks / gardens



Squares



# SKAT

## FEATURES

### DESIGN

---

Decorative luminaire that applies innovative technical concepts to offer excellent lighting flexibility, allowing it to be used in multiple urban and private environments.

Stainless steel screws to avoid corrosion and guarantee functionality over time.



### ADAPTABLE TO "IOT" AND SMART CITIES

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Luminaire equipped for telemanagement and sensor management; option of installing a ZHAGA/NEMA connector on the top.



### OPTICS AND LIGHTING SOLUTIONS

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The wide variety of optics allows the optimization and precise direction of light flux, adapting it to the needs of each project.

### LIGHTING VERSATILITY

---

A VERSATILE luminaire ideal for the most demanding environments where EFFICIENCY is key, or whenever greater VISUAL COMFORT is needed.

### OTHER TECHNICAL FEATURES

---

**Internal LED cooling system** without visible fins, to optimise the luminaire efficiency without accumulating dirt on the upper part, which reduces light performance over time.



#### ASSEMBLY

Ø60 mm post-top fastening. Adaptable for fastenings of different diameters (from Ø34 mm to Ø76 mm)



#### TECHNICAL QUALITY

Simon has various production centres, both in Spain and around the world. All are equipped with advanced technology that allows us to maintain another of our basic principles for success: performing demanding tests and controls to guarantee the quality of all our products.

#### PROTECTION RATINGS

**IK08** rating to guarantee the luminaire's resistance to vandalism.

**IP66** for the complete luminaire, with a safety valve to keep the pressure constant and prevent moisture entry.

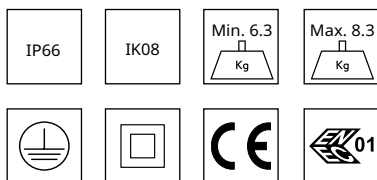


# SKAT MPF

ISTANIUM<sup>LED</sup>®

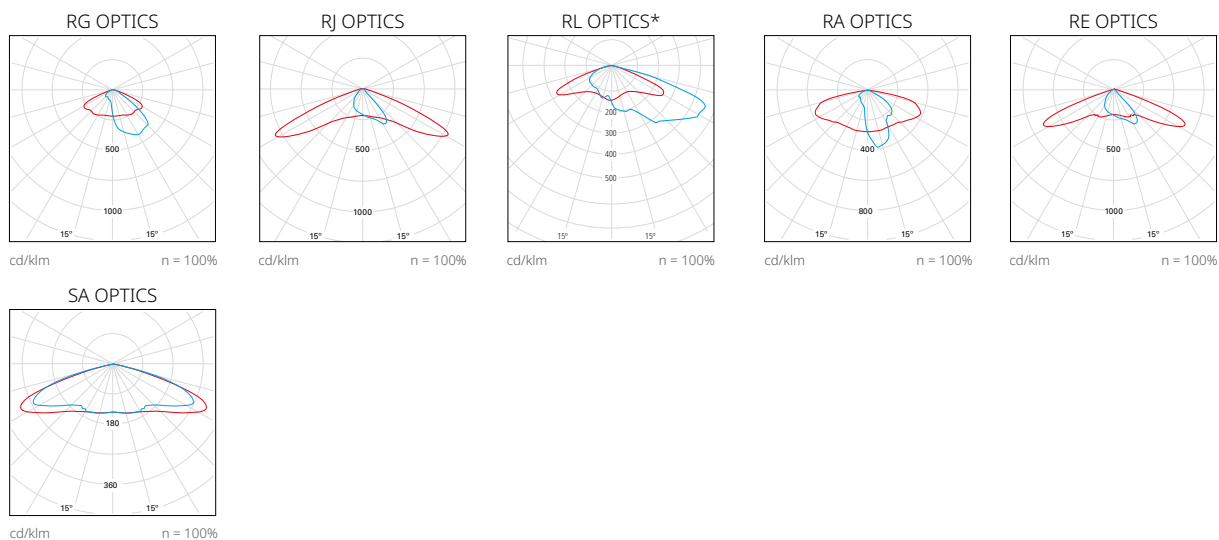


## AMBIENT PARK / GARDEN LED LUMINAIRE



COLOUR TEMP.: NDL 4000 K | WDL 3000 K | SDL 2700 K | XDL 2200 K | PCA\*  
 COLOUR RENDERING INDEX: >70  
 UPWARD LIGHT OUTPUT RATIO (ULOR): <0.1 %\*\*  
 LED DURATION (L90 B10 AT T<sub>a</sub>=25 °C AND T<sub>j</sub>=95 °C): 100,000 h

\* Upon request \*\* Value may change depending on the optics



— C0 - C180 — C90 - C270

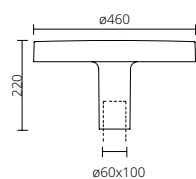
\*Generic optics polar curve.

Rear hemisphere flux control visors available for RJ, RL, RE and SA optics (see page 488 for more information).

Check other photometric distributions.

Simon **SKAT** LED decorative luminaire, size M, made of die-cast aluminium. Post-top fastening. Adaptation to fastenings from Ø34 mm to Ø76 mm depending on the adaptor. Flat covering with internal LED cooling system, without visible fins. Possibility of fitting an **upper Zhaga/NEMA** connector and a **lower Zhaga** connector. Access to the gear and maintenance via the top part, fastened with six stainless steel screws that are invisible when installed. Transparent PMMA high-impact resistant (HIR) diffuser to facilitate cleaning and prevent UV radiation in the optics. **IP66** protection rating for the complete luminaire, with **safety valve** to keep the pressure constant and prevent moisture entry, and impact resistance rating of **IK08**. With pre-wiring of 40 cm. Capacity of up to nine multi-array optics and fourteen photometric distributions. Anti-glare, truncated cone-shaped reflector, matt with light-flow recovery. Possibility of four colour temperatures in white light, as well as PCA (Phosphor Converted Amber) for specially protected areas. Service life of LED **L90 B10 100,000 hours**. Istantium LED lighting groups can be replaced and updated even when the luminaire is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (**ULOR**) greater than **0%** (verify according to optics used). With **Class I** and **Class II** electronic control gear with 230 V AC/50-60 Hz supply voltage. Possibility of including additional protection against surges of **10 kV/10 kA**. Optional dimming without control line (Self-dimming) 2N- and by remote management with 1.10V or DALI input. Optional custom programming and maintenance of constant light output (**CLO**). Standard finish in Simon GYDECO colour. Possibility of Simon and RAL finishes, as well as Seafront paint for corrosive environments with high durability in a **C5M** environment. Dimensions 460x220x460 mm. **ENEC** certified luminaire compatible with **Zhaga-D4i**.

## DIMENSIONS AND FASTENING SYSTEMS



Post-top fastening Ø60 mm, 100 mm long

Surface exposed to the wind 0.037 m<sup>2</sup>

Weight Max. 8.3 kg Min. 6.3 kg

## PHYSICAL FEATURES AND MATERIALS

IP	IP66
IK	IK08
Body	Die-cast aluminium
Closure system	With 6 stainless steel screws
Fastening system	Die-cast aluminium
Diffuser	Transparent PMMA with high impact resistance (HIR)

## FINISHES

Body	Painted in GYDECO colour (Standard Paint) Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)
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## ELECTRICAL PARAMETERS\* AND CONNECTIVITY

Temp.	-20 °C... +35 °C
Dimming**	<b>2N-</b> Without control line <b>Dxxx</b> Without custom programmed control line <b>CAD</b> Cabinet amplitude dimming <b>1N (100%)</b> Without dimming <b>1.10V</b> Dimming through 1.10V input protocol <b>DALI</b> Dimming through DALI input protocol
	Possibility of activating the <b>CLO</b> function, which allows the depreciation of the light emitted by the LEDs to be compensated by gradually increasing the supply current to them.
	Possibility of fitting a <b>Zhaga / NEMA</b> connector on the top of the luminaire according to Zhaga Consortium Book 18.

### Luminaires supplied by electrical grid

Supply voltage	220-240 Vac		
Frequency	50/60 Hz		
Protection against power surge	6 kV (Possibility of increasing to 10 kV / 10 kA upon request)		
Power factor (cos φ at max. charge)	≥ 0.95		
Luminaire electrical protection	Class I or Class II		
Optical group power depending on the model***	12 LEDs	16 LEDs	24 LEDs
Supply current			
HIGH EFFICIENCY	12W	16W	24W
HIGH BALANCE	18W	24W	36W
HIGH FLUX	24W	32W	49W
VERY HIGH FLUX	-	-	-

## REGULATIONS AND CERTIFICATES



Luminaire according to: EN 60598-2-3 / EN 62493 / EN 55015 / EN 61547 / EN 61000-3-2 / EN 50518

Warranty 5 years.

Supply and packaging Packed in recycled cardboard with an identifying label to protect the product during transport and storage.

Maintenance Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent. Lubricate the sealing gaskets and replace them when they are cracked. Lubricate the closures and/or hinges of the moving parts. Keep the thermal radiation surface clean to not lose light flux without shortening the life of the LEDs.

\* Values corresponding to the current state of technology. \*\* Check other regulations. \*\*\* The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.



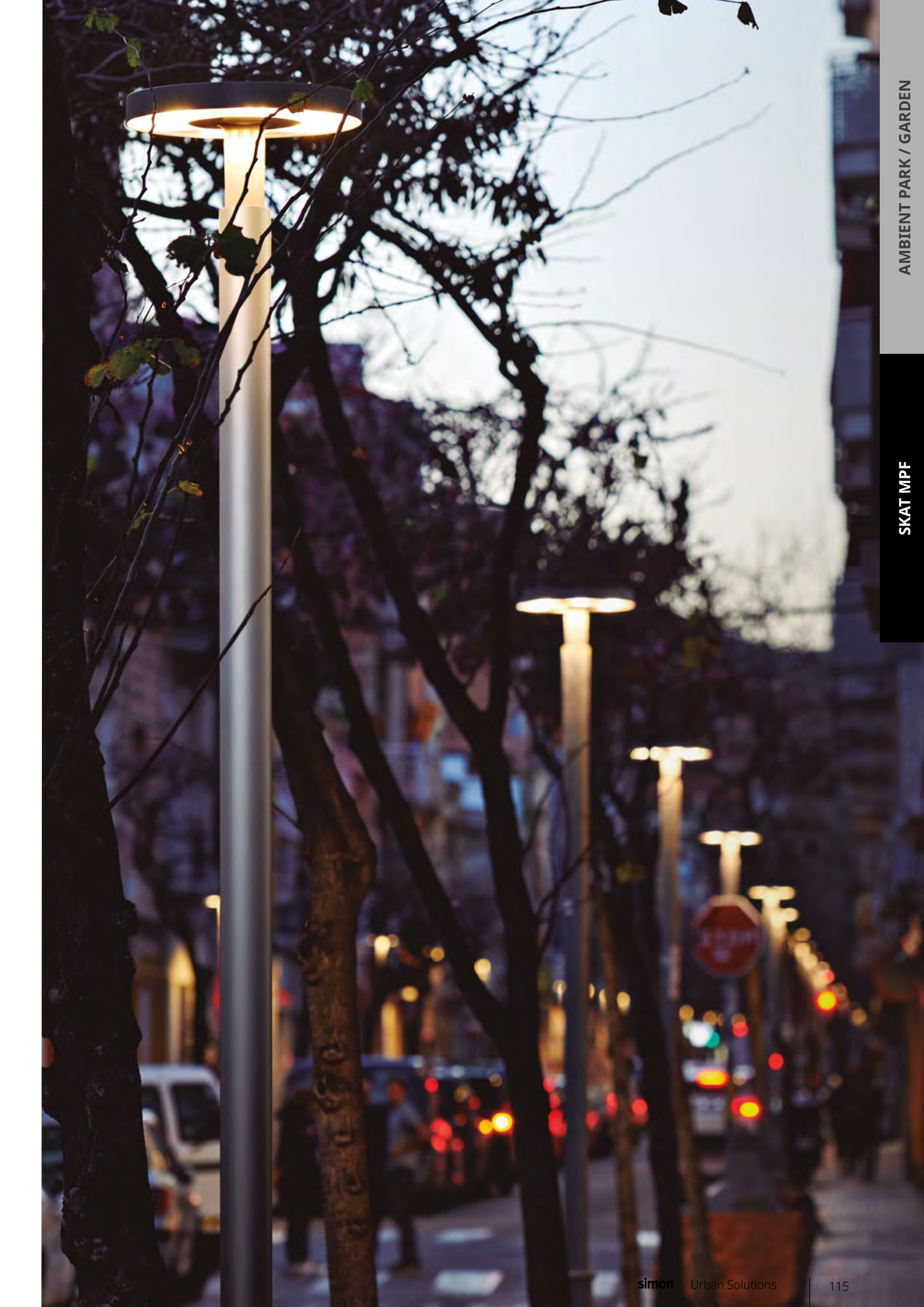
## CONFIGURE YOUR SKAT M LUMINAIRE

Model	Diffuser	Wire	Optics	Colour Temp.	Optical group power	Team	Dimming	Protection	Finish	Description
<b>SKAMPF</b>										Simon SKAT Istanium® LED, size M, post-top fastening, flat cover
	<b>ATF</b>									Flat transparent PMMA high-impact resistant diffuser
		<b>C</b>								With installation wire (0.4 m)
			<b>RG_</b>							G Type Front Road Light Optics
			<b>RJ_</b>							J Type Front Road Light Optics
			<b>RL_</b>							L type front road light optics
			<b>RA_</b>							A Type Extended Road Light Optics
			<b>RE_</b>							E Type Extended Road Light Optics
			<b>SA_</b>							A Type Symmetric Optics
				<input type="radio"/> <b>NDL</b>						Neutral daylight - 4,000 K
				<input type="radio"/> <b>WDL</b>						Warm daylight – 3,000 K
				<input type="radio"/> <b>SDL</b>						Soft daylight - 2,700 K
				<input type="radio"/> <b>XDL</b>						Extra warm daylight – 2,200 K
					<b>_12W350</b>					12 W 350 mA 1,580 lm to 3,000 K 12 LEDs
					<b>_18W530</b>					18 W 530 mA 2,250 lm to 3,000 K 12 LEDs
					<b>_24W700</b>					24 W 700 mA 2,800 lm to 3,000 K 12 LEDs
					<b>_32W700</b>					32 W 700 mA 3,770 lm to 3,000 K 16 LEDs
					<b>_36W530</b>					36 W 530 mA 4,470 lm to 3,000 K 24 LEDs
					<b>_49W700</b>					49 W 700 mA 5,590 lm to 3,000 K 24 LEDs
						<b>IA23_</b>				Electronic control gear at 230 Vac 50/60 Hz, standard protection against 6 kV power surges
						<b>IA23S</b>				Electronic control gear at 230 Vac 50/60 Hz, additional protection against 10 kV power surges
							<b>2N_</b>			Dimming without control line (self-dimming)
							<b>1N_</b>			Without dimming (on/off)
							<b>CAD_</b>			Cabinet amplitude dimming (electrical box dimmer)
							<b>1-10</b>			Dimming through 1-10V input protocol
							<b>DALI</b>			Dimming through DALI input protocol
							<b>DXXX</b>			Dimming without control line (custom program)
								<b>C1</b>		Class I luminaire electrical protection
								<b>C2</b>		Class II luminaire electrical protection
									<b>GYDECO</b>	Standard finish in Simon Decorative Grey
									<b>xxxxxx</b>	Finish in Simon colours
									<b>xxxxxx</b>	Finish in RAL classic chart colours
									<b>CMxxxx</b>	Seafront Paint Finish

### BASE REFERENCES

Power	No. of LEDs	Current	Configuration	Order code
12 W	12	350 mA	SKAMPFATFPRJ_WDL_12W350IA23_1N_C1GYDECO	<b>284-000762013</b>
18 W	12	530 mA	SKAMPFATFPRJ_WDL_18W530IA23_1N_C1GYDECO	<b>284-000632013</b>
24 W	24	700 mA	SKAMPFATFPRJ_WDL_24W700IA23_1N_C1GYDECO	<b>284-000759013</b>
32 W	16	700 mA	SKAMPFATFPRJ_WDL_32W700IA23_1N_C1GYDECO	<b>284-000611013</b>
36 W	24	530 mA	SKAMPFATFPRJ_WDL_36W530IA23_1N_C1GYDECO	<b>284-000597013</b>
49 W	24	700 mA	SKAMPFATFPRJ_WDL_49W700IA23_1N_C1GYDECO	<b>284-000479013</b>

The luminaire flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes. The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.





COMBINE YOUR SKAT M LUMINAIRE WITH:

DECORATIVE POLES:

6 M

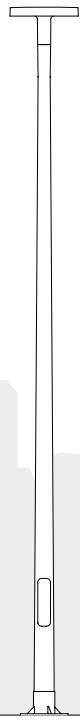
5 M

4 M

3 M

2 M

1 M

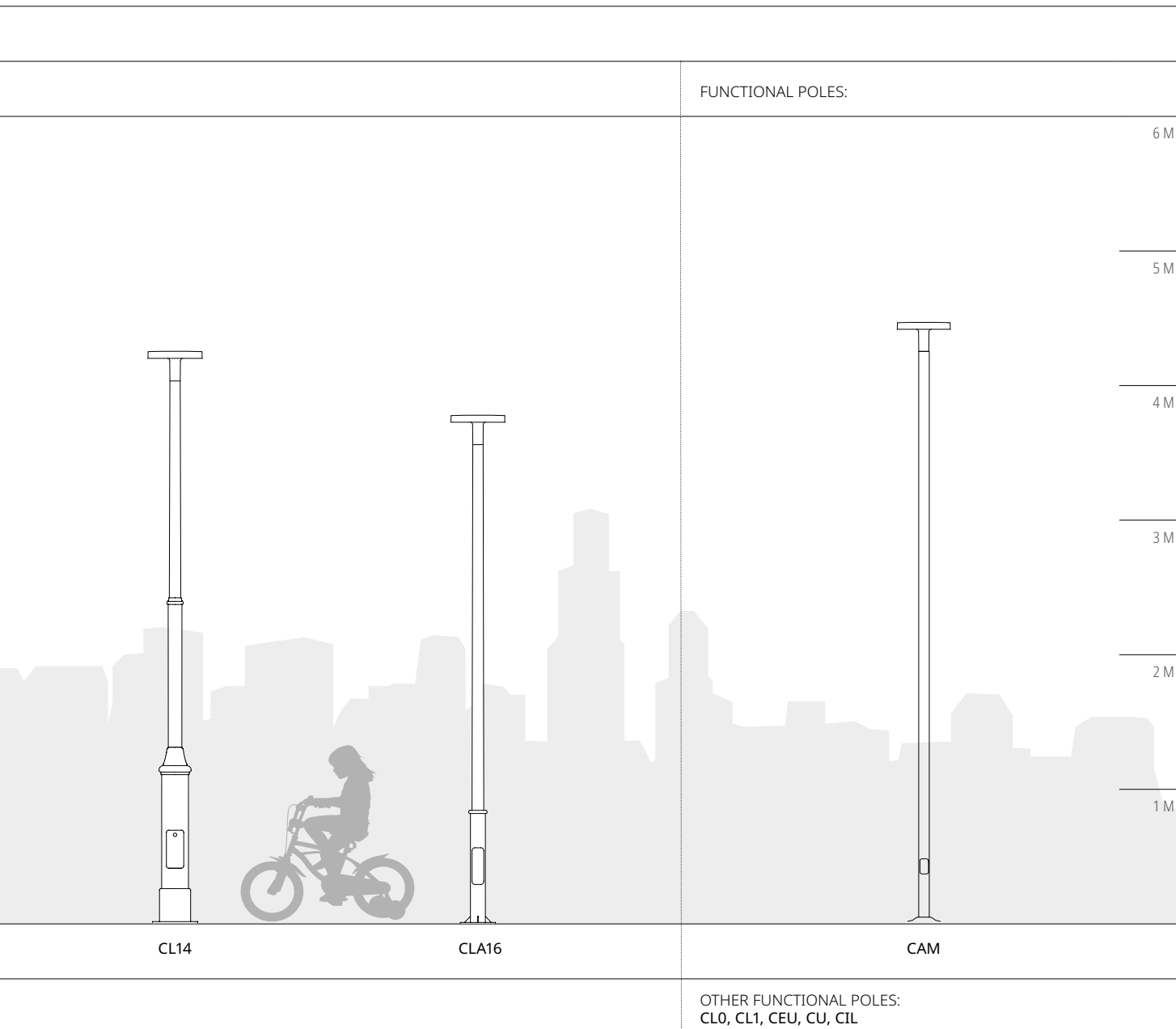


LIBRA





CL22

OTHER DECORATIVE POLES:  
CL12, CLB16



ACCESSORIES / REPLACEMENTS

	Description	Order code
	Fastening accessory for Ø76 mm mount	<b>50-88540</b>
	Fastening accessory for Ø76 mm mount, GYDECO finish	<b>50-88540-013</b>



# HYDRA

ISTANIUM<sup>LED</sup>

Ambient park/garden luminaire, ideal for the intensive introduction of LED technology.

With a tapered shape and flat cover. It incorporates decorative elements that give it personality without taking away from its impressive technical performance.



Streets



Pedestrian streets



Commercial areas



Parks / gardens



Squares



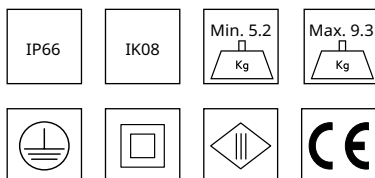


# HYDRA

ISTANIUM<sup>LED</sup>®

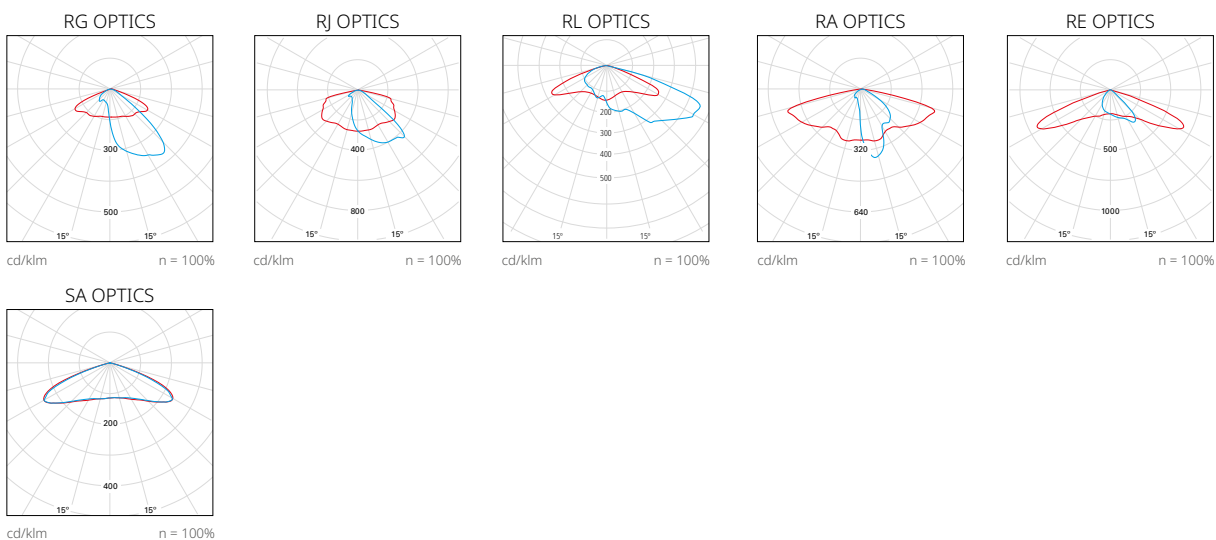


## AMBIENT PARK / GARDEN LED LUMINAIRE



COLOUR TEMP.: NDL 4000 K | WDL 3000 K | SDL 2700 K | XDL 2200 K | PCA\*  
 COLOUR RENDERING INDEX: >70  
 UPWARD LIGHT OUTPUT RATIO (ULOR): <2.5 %\*\*  
 LED DURATION (L90 B10 AT T<sub>a</sub>=25 °C AND T<sub>j</sub>=95 °C): 100,000 h

\* Upon request \*\* Value may change depending on the optics



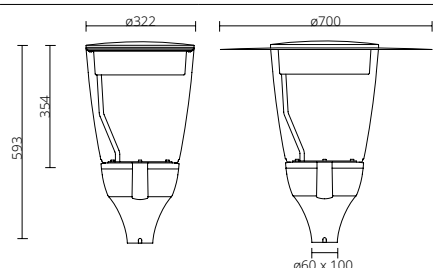
— C0 - C180 — C90 - C270

Rear hemisphere flux control visors available for RJ, RL, RE and SA optics (see page 488 for more information).

Check other photometric distributions.

Simon **HYDRA** LED decorative luminaire, size M, made of die-cast aluminium. Post-top fastening. Adaptation to fastenings from Ø34 mm to Ø76 mm depending on the adaptor. Ø322 mm flat cover, with the option of Ø700 mm flat cover. Internal refrigeration system through fins. Single body luminaire with two independent compartments for thermal separation, for the optical group and for the electric group. Access to gear and maintenance from the top with 2-lever opening, without tools. Curved transparent PMMA high-impact resistant (HIR) diffuser to facilitate cleaning and prevent UV radiation in the optics. **IP66** protection rating for luminaire, and **IK08** impact resistance rating. No pre-wiring. Option of 5 m wiring. Possibility of mounting up to eleven multi-array optics. Possibility of four colour temperatures in white light, as well as PCA (Phosphor Converted Amber) for specially protected areas. Service life of LED **L90 B10 100,000 hours**. Istanium LED lighting groups can be replaced and updated even when the luminaire is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output (**ULOR**) less than **2.5%** (check according to optics used) with **Class I** and **Class II** electronic control gear with 230 V AC/50 - 60 Hz power supply voltage and **Class III** with 12/24 VDC power supply voltage. Possibility of including additional protection against surges of **10 kV/10 kA**. Optional dimming with control line 2N+, without control line (Self-dimming) 2N-, by means of a flow dimmer from CAD cabinet amplitude dimming, for telemanagement with 1.10V or DALI input. Optional custom programming and maintenance of constant light output (**CLO**). Standard finish for in Simon GYDECO colour and aluminium top guard. Possibility of Simon and RAL finishes, as well as Seafront paint for corrosive environments with high durability in a **C5M** environment. Dimensions: 322x593x322 mm for Ø322-mm diffuser model and 700x593x700 mm for Ø700-mm diffuser model.

### DIMENSIONS AND FASTENING SYSTEMS



Post-top fastening	Ø60 mm, 100 mm long
Surface exposed to the wind	0.14 m <sup>2</sup>
Weight	Max. 9.3 kg Min. 5.2 kg

### PHYSICAL FEATURES AND MATERIALS

IP	IP66
IK	IK08
Body	Die-cast aluminium
Closure system	Die-cast aluminium lever
Fastening system	Die-cast aluminium
Diffuser	High-strength transparent PMMA

### FINISHES

Body	Painted in GYDECO colour (Standard Paint) Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)
Top guard	Aluminium

### ELECTRICAL PARAMETERS\* AND CONNECTIVITY

Temp.	-20 °C... +35 °C
Dimming**	<b>2N-</b> Without control line <b>Dxxx</b> Without custom programmed control line <b>2N+</b> With control line <b>CAD</b> Cabinet amplitude dimming <b>1N (100%)</b> Without dimming <b>1.10V</b> Dimming through 1.10V input protocol <b>DALI</b> Dimming through DALI input protocol

Possibility of activating the **CLO** function, which allows the depreciation of the light emitted by the LEDs to be compensated by gradually increasing the supply current to them.

	Luminaires supplied by electrical grid	Luminaires supplied by solar lighting points
Supply voltage	220-240 V <sub>AC</sub>	12/24 V <sub>DC</sub>
Frequency	50/60 Hz	-
Protection against power surge	6 kV (Possibility of increasing to 10 kV / 10 kA upon request)	-
Power factor (cos φ at max. charge)	≥ 0.95	-
Luminaire electrical protection	Class I or Class II	Class III
Optical group power by model***	12 LEDs	24 LEDs
		36 LEDs
Supply current	1 module	2 module
		3 module
HIGH EFFICIENCY	12 W	24 W
		35 W
HIGH BALANCE	18 W	36 W
		54 W
HIGH FLUX	-	-
	-	-
VERY HIGH FLUX	-	-
	-	-

### REGULATIONS AND CERTIFICATES



Luminaire according to: EN 60598-2-3 / EN 62493 / EN 55015 / EN 61547 / EN 61000-3-2 / EN 50581

Warranty	5 years.
Supply and packaging	Packed in recycled cardboard with an identifying label to protect the product during transport and storage.
Maintenance	Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent. Lubricate the sealing gaskets and replace them when they are cracked. Lubricate the closures and/or hinges of the moving parts. Keep the thermal radiation surface clean to not lose light flux without shortening the life of the LEDs.

\* Values corresponding to the current state of technology. \*\* Check other regulations. \*\*\* The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.



## CONFIGURE YOUR HYDRA LUMINAIRE

Model	Diffuser	Wire	Optics	Colour Temp.	Optical group power	Team	Dimming	Protection	Finish	Description
<b>HYDMPF</b>										Simon HYDRA Istanium® LED, size M, post-top fastening, Ø322 mm flat cover
<b>HYDMPB</b>										Simon HYDRA Istanium® LED, size M, post-top fastening, Ø700 mm beret cover
	<b>ATB</b>									Curved transparent high resistance PMMA
		<b>0</b>								Without installation wire (0 m)
		<b>5</b>								With installation wire (5 m)
			<b>RG_</b>							G Type Front Road Light Optics
			<b>RJ_</b>							J Type Front Road Light Optics
			<b>RL_</b>							L type front road light optics
			<b>RA_</b>							A Type Extended Road Light Optics
			<b>RE_</b>							E Type Extended Road Light Optics
			<b>SA_</b>							A Type Symmetric Optics
				<input type="radio"/> <b>NDL</b>						Neutral daylight - 4,000 K
				<input type="radio"/> <b>WDL</b>						Warm daylight – 3,000 K
				<input type="radio"/> <b>SDL</b>						Soft daylight - 2,700 K
				<input type="radio"/> <b>XDL</b>						Extra warm daylight – 2,200 K
					<b>_12W350</b>					12 W 350 mA   1,670 lm to 3,000 K   12 LEDs
					<b>_18W530</b>					18 W 530 mA   2,460 lm to 3,000 K   12 LEDs
					<b>_36W530</b>					36 W 530 mA   4,720 lm to 3,000 K   24 LEDs
					<b>_54W530</b>					54 W 530 mA   7,030 lm to 3,000 K   36 LEDs
						<b>IA23_</b>				Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, standard protection against 6 kV power surges
						<b>IA23S</b>				Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, additional protection against 10 kV power surges
						<b>IA12_</b>				Electronic control gear at 12/24 V <sub>dc</sub> C3 (solar). Only admits up to 36W and 1N and 2N- dimming
						<b>2N-_</b>				Dimming without control line (self-dimming)
						<b>2N+_</b>				Dimming with control line
						<b>1N_</b>				Without dimming (on/off)
						<b>CAD_</b>				Cabinet amplitude dimming (electrical box dimmer)
						<b>1-10</b>				Dimming through 1-10V input protocol
						<b>DALI</b>				Dimming through DALI input protocol
						<b>DXXX</b>				Dimming without control line (custom program)
							<b>C1</b>			Class I luminaire electrical protection
							<b>C2</b>			Class II luminaire electrical protection
							<b>C3</b>			Class III luminaire electrical protection
								<b>GYDECO</b>		Standard finish in Simon Decorative Grey
								<b>xxxxxx</b>		Finish in Simon colours
								<b>xxxxxx</b>		Finish in RAL classic chart colours
								<b>CMxxxx</b>		Seafront Paint Finish

### BASE REFERENCES

Power	No. of LEDs	Current	Configuration	Order code
12 W	12	350 mA	HYDMPFATB0RJ_WDL_12W350IA23_1N__C1GYDECO	<b>220-000762013</b>
18 W	12	530 mA	HYDMPFATB0RJ_WDL_18W530IA23_1N__C1GYDECO	<b>220-000632013</b>
36 W	24	530 mA	HYDMPFATB0RJ_WDL_36W530IA23_1N__C1GYDECO	<b>220-000597013</b>
54 W	36	530 mA	HYDMPFATB0RJ_WDL_54W530IA23_1N__C1GYDECO	<b>220-000761013</b>

The luminaire flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes. The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.







COMBINE YOUR HYDRA LUMINAIRE WITH:

DECORATIVE POLES:

6 M



5 M



4 M



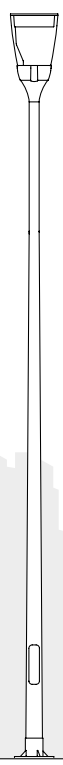
3 M



2 M



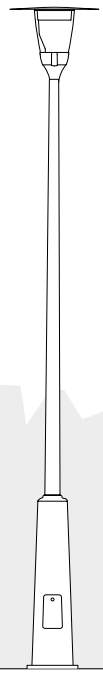
1 M



LIBRA



CL14



CL12



OTHER DECORATIVE POLES: -



ACCESSORIES / REPLACEMENTS

Description	Order code
Airtight cap. Prevents moisture from condensing inside the diffuser that may enter through the pole by means of the water tightness reinforcement at the base.	50-73364





# LORE

ISTANIUM<sup>LED</sup>®

Ambient park / garden luminaire that stands out for its industrial appearance, tapered shapes and superior functionality.



Parking areas



Green trails



Avenues



Streets



Pedestrian streets



Commercial areas



Parks / Gardens



Squares



Urban cycle path



Roundabouts / Intersections



Monuments



Large areas



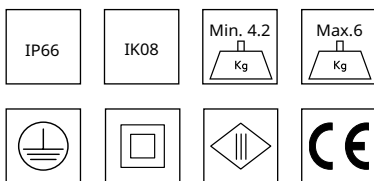




# LORE

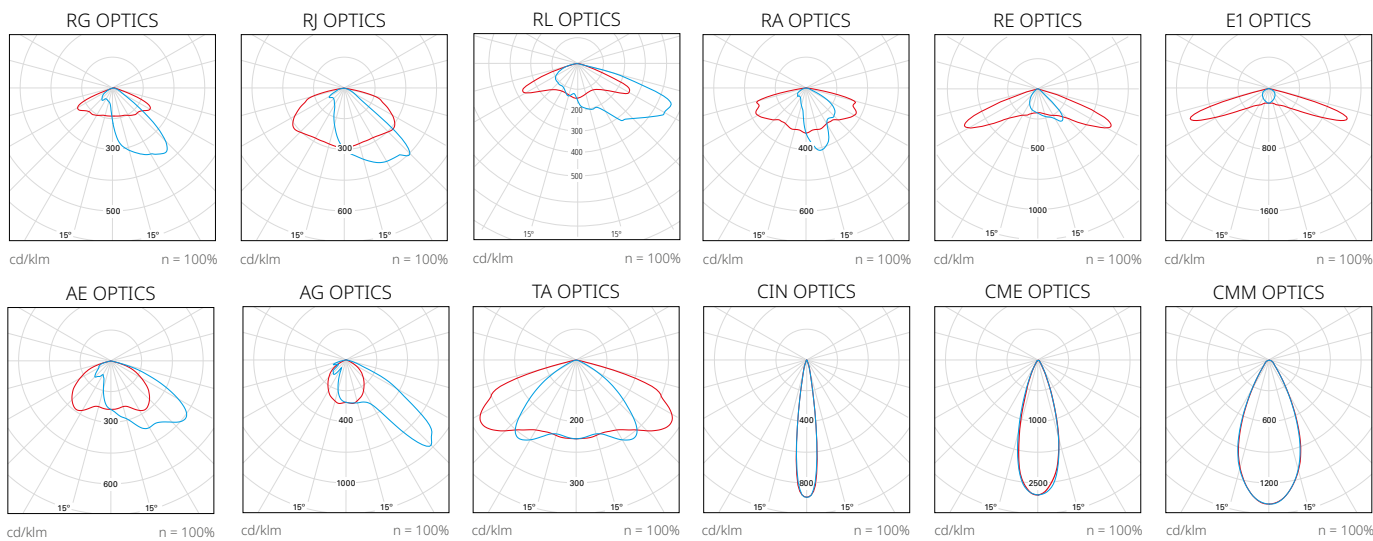
## ISTANIUM<sup>LED</sup>

### AMBIENT PARK / GARDEN LED LUMINAIRE



COLOUR TEMP: NDL 4000 K | WDL 3000 K | SDL 2700 K | XDL 2200 K | PCA\*  
 COLOUR RENDERING INDEX: >70  
 UPWARD LIGHT OUTPUT RATIO (ULOR): <0.1 %\*\*  
 LED DURATION (L90 B10 AT T<sub>a</sub>=25 °C AND T<sub>j</sub>=95 °C): 100,000 h

\* Upon request \*\* Value may change depending on the optics



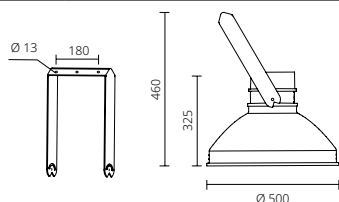
— C0 - C180 — C90 - C270

Rear hemisphere flux control visors available for RJ, RL, RE, E1, AE, AG, SA and TA optics (see page 488 for more information).

Check other photometric distributions.

Simon **LORE** LED spotlight, size M, made of die-cast aluminium and anodised aluminium. Bracket fastening, or catenary fastening through double wire grip with angle compensator. Flat cover. Internal refrigeration system through fins. Access to gear and maintenance through the back with two levers for tool-free opening. Access to the optical group and maintenance from the front with three levers for tool-free opening. Easy-clean transparent flat tempered glass diffuser to prevent UV radiation in the optics. **IP66** protection rating for the Istanium LED optical group and **IK08** impact resistance rating. Possibility of mounting up to fourteen multi-array optics. Possibility of four colour temperatures in white light, as well as PCA (Phosphor Converted Amber) for specially protected areas. Service life of LED **L90 B10 100,000 hours**. Istanium LED lighting groups can be replaced and updated even when the luminaire is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (**ULOR**) equal to **0%** with an angle from 0° to ± 5° (verify according to optics used). With **Class I** and **Class II** electronic control gear with 230 V AC/50 - 60 Hz supply voltage and **Class III** with A 12/24 VDC supply voltage. Possibility of including additional protection against surges of **10 kV/10 kA**. Optional dimming with control line 2N+, without control line (Self-dimming) 2N-, by means of a flow dimmer from CAD cabinet amplitude dimming, for telemanagement with 1.10V or DALI input. Optional custom programming and maintenance of constant light output (**CLO**). Standard finish on body and closures in Simon GY9006 colour, bracket with galvanised finish and reflector with anodised finish. Possibility of Simon and RAL finishes, as well as Seafront paint for corrosive environments with high durability in a **C5M** environment. Dimensions 500x460x500 mm.

## DIMENSIONS AND FASTENING SYSTEMS



Fastening	Bracket, Ø13 mm, Ø13 mm, Ø13 mm fastening holes Downward focus, maximum 15° angle
Catenary fastening	Fastening part with grip for dual Ø5-12 mm wires, with ±30° inclination balancer.
Wire inlet	Compression seal fittings Pg 13.5 (M20)
Distance of illuminated objects	1 m
Surface exposed to the wind	0.19 m <sup>2</sup>
Weight	Max. 6 kg Min. 4.2 kg

## PHYSICAL FEATURES AND MATERIALS

IP	IP66
IK	IK08
Body	Die-cast aluminium
Reflector	Anodised aluminium
Closure system	Die-cast aluminium levers
Fastening system	Galvanised steel sheet
Catenary fastening system	Galvanised steel sheet
Diffuser	Flat transparent shatter-proof tempered glass

## FINISHES

Body	Painted GY9006 colour (Standard Paint) Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)
Fastening system	Galvanised steel
Reflector	Anodised aluminium
Reflector closures	GY9006

## REGULATIONS AND CERTIFICATES



Luminaire according to: EN 60598-2-5 / EN 62493 / EN 55015 / EN 61547 / EN 61000-3-2 / EN 50581

Warranty	5 years.
Supply and packaging	Packed in recycled cardboard with an identifying label to protect the product during transport and storage.
Maintenance	Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent. Lubricate the sealing gaskets and replace them when they are cracked. Lubricate the closures and/or hinges of the moving parts. Keep the thermal radiation surface clean to not lose light flux without shortening the life of the LEDs.

\* Values corresponding to the current state of technology. \*\* Check other regulations. \*\*\* Power values have a tolerance of ±7%

## ELECTRICAL PARAMETERS\* AND CONNECTIVITY

Temp.	-20 °C... +35 °C					
Dimming**	<b>2N-</b> Without control line <b>Dxxx</b> Without custom programmed control line <b>2N+</b> With control line <b>CAD</b> Cabinet amplitude dimming <b>1N (100%)</b> Without dimming <b>1.10V</b> Dimming through 1.10V input protocol <b>DALI</b> Dimming through DALI input protocol					
	Luminaires supplied by electrical grid			Luminaires supplied by solar lighting points		
Supply voltage	220-240 V <sub>ac</sub>			12-24 V <sub>dc</sub>		
Frequency	50/60 Hz			-		
Protection against power surge	6 kV (Possibility of increasing to 10 kV / 10 kA upon request)			-		
Power factor (cos φ at max. charge)	≥ 0.95			-		
Luminaire electrical protection	Class I or Class II			Class III		
Optical group power by model***	12 LEDs	24 LEDs	36 LEDs	48 LEDs	60 LEDs	72 LEDs
Supply current	1 module	2 module	3 module	4 module	5 module	6 module
HIGH EFFICIENCY	12 W	24 W	35 W	47 W	59 W	71 W
HIGH BALANCE	18 W	36 W	54 W	73 W	91 W	109 W
HIGH FLUX	24 W	49 W	73 W	-	-	-
VERY HIGH FLUX	-	-	-	-	-	-



## CONFIGURE YOUR LORE LUMINAIRE

Model	Diffuser	Wire	Optics	Colour Temp.	Optical group power	Team	Dimming	Protection	Finish	Description
LORMXF										Simon LORE Istanium® LED, size M, bracket fastening, flat cover
LORMCF										Simon LORE Istanium® LED, size M, suspended catenary fastening, flat cover
	GTF									Flat transparent shatter-proof tempered glass diffuser
		0								Without installation wire (0 m)
			RG_ RJ_ RL_ RA_ RE_ E1_ AE_ AG_ TA_ CIN CME CMM							G Type Front Road Light Optics J Type Front Road Light Optics L type front road light optics A Type Extended Road Light Optics E Type Extended Road Light Optics 1 Type Front Road Light Optics E Type Asymmetric Optics G Type Asymmetric Optics Overhead Tunnel Optics Intensive Tapered Optics E Type Medium Tapered Optics M Type Medium Tapered Optics
			<input type="radio"/> NDL <input type="radio"/> WDL <input type="radio"/> SDL <input type="radio"/> XDL							Neutral daylight - 4,000 K Warm daylight – 3,000 K Soft daylight - 2,700 K Extra warm daylight – 2,200 K
										_12W350 12 W 350 mA 1,670 lm to 3,000 K 12 LEDs _24W700 24 W 700 mA 3,190 lm to 3,000 K 12 LEDs _36W530 36 W 530 mA 4,720 lm to 3,000 K 24 LEDs _49W700 49 W 700 mA 6,030 lm to 3,000 K 24 LEDs _54W530 54 W 530 mA 7,030 lm to 3,000 K 36 LEDs _73W700 73 W 700 mA 8,850 lm to 3,000 K 36 LEDs _91W530 91 W 530 mA 11,740 lm to 3,000 K 60 LEDs 109W530 109 W 530 mA 13,880 lm to 3,000 K 72 LEDs
										IA23_ Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, standard protection against 6 kV power surges IA23S Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, additional protection against 10 kV power surges IA12_ Electronic control gear at 12/24 V <sub>dc</sub> C3 (solar). Only admits up to 36W and 1N and 2N- dimming
										2N_ Dimming without control line (self-dimming) 2N+_ Dimming with control line 1N_ Without dimming (on/off) CAD_ Cabinet amplitude dimming (electrical box dimmer) 1-10 Dimming through 1-10V input protocol DALI Dimming through DALI input protocol DXXX Dimming without control line (custom program)
										C1 Class I luminaire electrical protection C2 Class II luminaire electrical protection C3 Class III luminaire electrical protection
										GY9006 Standard finish in Simon RAL GY9006 xxxxxx Finish in Simon colours xxxxxx Finish in Simon RAL classic chart colours CMxxxx Seafront Paint Finish

### BASE REFERENCES

Power	No. of LEDs	Current	Configuration	Order code
12 W	12	350 mA	LORMXFGTFORJ_WDL_12W350IA23_1N_C1GY9006	<b>409-000762017</b>
24 W	12	700 mA	LORMXFGTFORJ_WDL_24W700IA23_1N_C1GY9006	<b>409-000759017</b>
36 W	24	530 mA	LORMXFGTFORJ_WDL_36W530IA23_1N_C1GY9006	<b>409-000597017</b>
49 W	24	700 mA	LORMXFGTFORJ_WDL_49W700IA23_1N_C1GY9006	<b>409-000479017</b>
54 W	36	530 mA	LORMXFGTFORJ_WDL_54W530IA23_1N_C1GY9006	<b>409-000761017</b>
73 W	48	700 mA	LORMXFGTFORJ_WDL_73W700IA23_1N_C1GY9006	<b>409-000675017</b>
91 W	60	530 mA	LORMXFGTFORJ_WDL_91W530IA23_1N_C1GY9006	<b>409-000760017</b>
109 W	72	530 mA	LORMXFGTFORJ_WDL_109W530IA23_1N_C1GY9006	<b>409-001798017</b>

The luminaire flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes. The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.



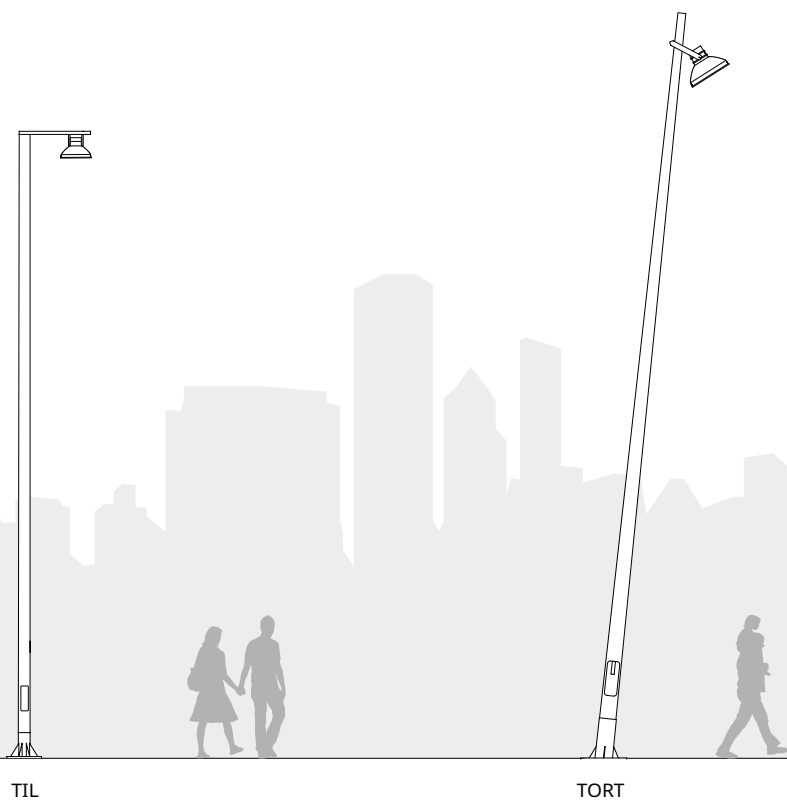




COMBINE YOUR LORE LUMINAIRE WITH:

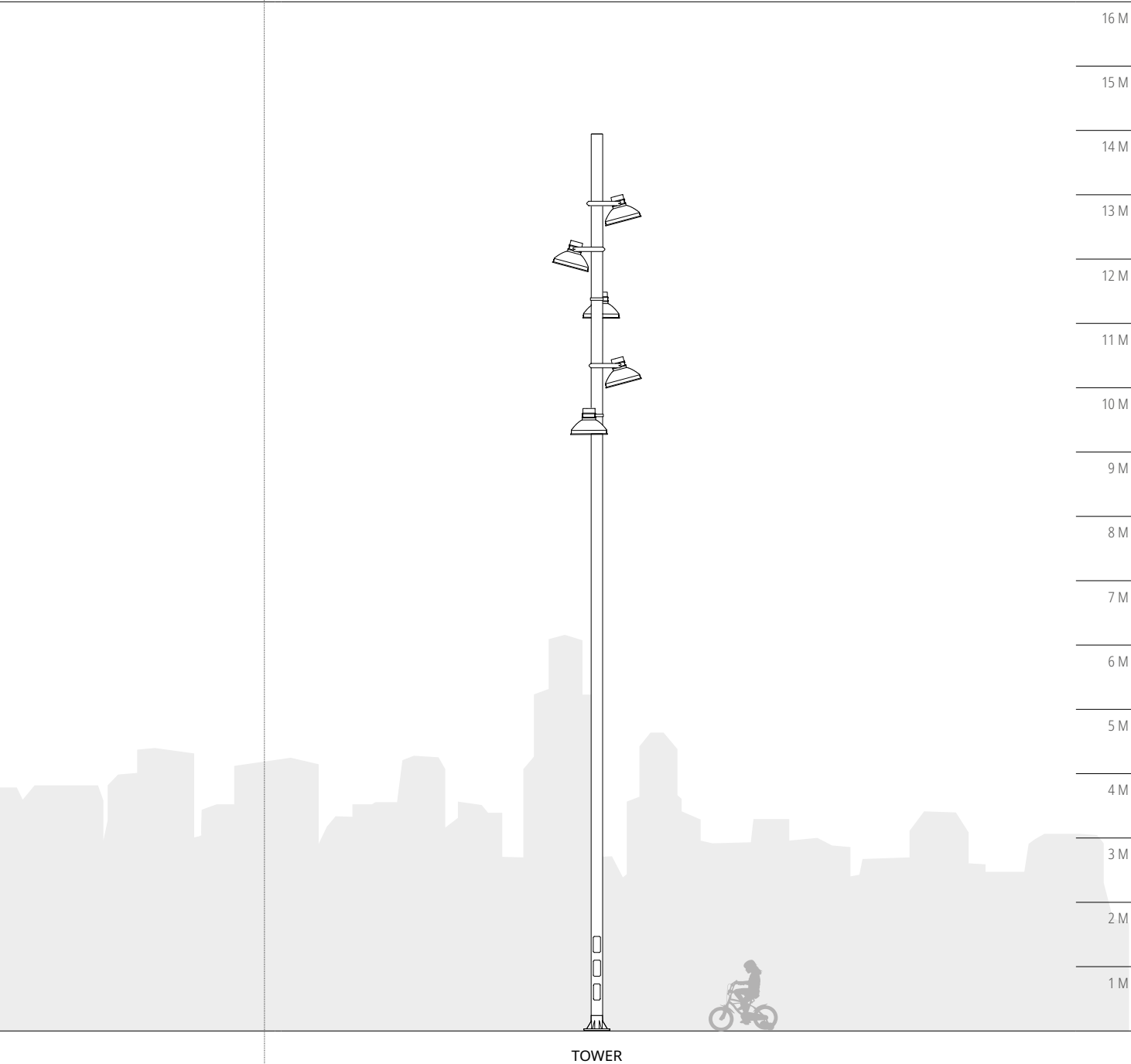
DECORATIVE POLES:

16 M  
15 M  
14 M  
13 M  
12 M  
11 M  
10 M  
9 M  
8 M  
7 M  
6 M  
5 M  
4 M  
3 M  
2 M  
1 M



OTHER DECORATIVE POLES: -

FUNCTIONAL POLES:



ACCESSORIES / REPLACEMENTS

Description	Order code
Flat transparent glass replacement	50-73486
Assembly bracket with 0° angle in vertical wall installation	50-73599











LUMINAIRES

# AMBIENT PERIOD

**PRAGA**  
M PRO / M BASIC



Choose our classic lighting solutions that can transport you to another era, which are suitable for urban environments with a historical flavour.





# PRAGA

M PRO / M BASIC

ISTANIUM®

The four-sided luminaires from the PRAGA collection are especially designed to blend into the urban landscape of historic centres. They use the most efficient technology and respect the personality of each space.



Avenues



Streets



Pedestrian streets



Commercial areas



Parks / gardens



Squares

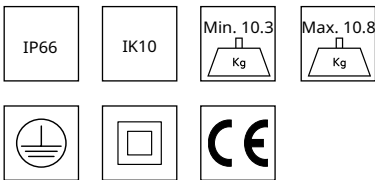




# PRAGA M PRO

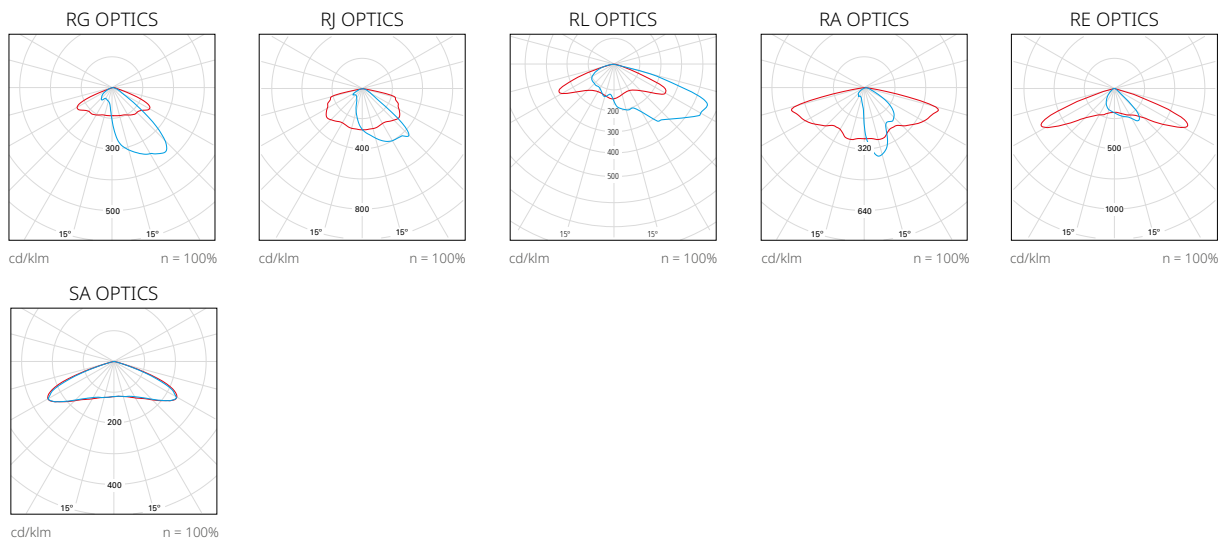
ISTANIUM<sup>®</sup> LED

## AMBIENT PERIOD LED LUMINAIRE



COLOUR TEMP.: NDL 4000 K | WDL 3000 K | SDL 2700 K | XDL 2200 K | PCA\*  
 COLOUR RENDERING INDEX: >70  
 UPWARD LIGHT OUTPUT RATIO (ULOR):  
 <2.5% with flat transparent tempered glass diffuser  
 <5% with flat four-sided transparent PMMA diffuser  
 <15% with flat four-sided opal PMMA diffuser  
 LED DURATION (L90 B10 AT T<sub>a</sub>=25 °C AND T<sub>j</sub>=95 °C): 100,000 h

\* Upon request \*\* Value may change depending on the optics



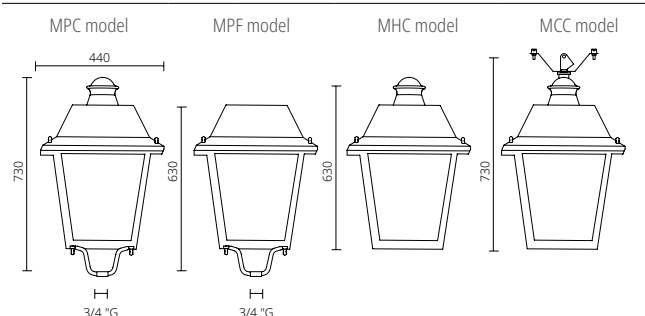
— C0 - C180 — C90 - C270

Rear hemisphere flux control visors available for RJ, RL, RE and SA optics (see page 488 for more information).

Check other photometric distributions.

Simon **PRAGA LED** ambient period luminaire, size M, PRO model, in die-cast aluminium. 3/4" G post-top fastening, or suspended fastening by means of a 3/4" G x 50 mm threaded coupling, or fastening to catenary by means of wire grip. Adaptation to Ø60 mm fastenings by means of an adaptor for post-top fastening model. Flat cover or tapered cover with trim. Internal refrigeration system through fins. Access to gear and maintenance from the top with stainless steel screw opening. Easy-clean transparent flat tempered glass optical group diffuser to prevent UV radiation in the optics. Option of flat four-sided transparent PMMA or flat four-sided opal PMMA luminaire diffuser. **IP66** protection rating for the Istantium LED optical group and **IK08** impact resistance rating. No pre-wiring. Option of 5 m wiring. Possibility of mounting up to eleven multi-array optics. Possibility of four colour temperatures in white light, as well as PCA (Phosphor Converted Amber) for specially protected areas. Service life of LED **L90 B10 100,000 hours**. Istantium LED lighting groups can be replaced and updated even when the luminaire is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (**ULOR**) less than **1%** for models without four-sided diffusers, Upward Light Output Ratio (**ULOR**) of less than **5%** for flat four-sided transparent diffuser and Upward Light Output Ratio (**ULOR**) of less than **15%** for flat four-sided opal diffuser. With **Class I** and **Class II** electronic control gear with 230 V<sub>AC</sub> / 50-60 Hz supply voltage and **Class III** with 12/24 VDC supply voltage. Possibility of including additional protection against surges of **10 kV/10 kA**. Optional dimming, with control line 2N+, without control line (self-dimming) 2N-, cabinet amplitude dimming CAD, for telemanagement with 1-10V input or DALI. Optional custom programming and maintenance of constant light output (**CLO**). Standard finish in Simon BKCLAS colour. Possibility of Simon and RAL chart finishes. Dimensions 440x730x440 mm for post-top models with trim and fastening with a catenary. Dimensions 440x630x440 mm for post-top models without trim and suspended fastening.

### DIMENSIONS AND FASTENING SYSTEMS



Post-top fastening	Fastening to 3/4" G x 50 mm threaded tube (MPF and MPC)
Suspended fastening	Fastening to 3/4" G x 50 mm threaded tube (MHC)
Catenary fastening	Fastening part with wire grip (MCC)
Surface exposed to the wind	0.18 m <sup>2</sup>
Weight	Max. 10.8 kg Min. 10.3 kg

### PHYSICAL FEATURES AND MATERIALS

IP	IP66 / IP65
IK	IK10
Body	Die-cast aluminium
Closure system	With stainless steel screws
Fastening system	Die-cast aluminium
Diffuser	GTF: Flat transparent shatter-proof tempered glass MTT: Four-sided transparent PMMA MOT: Engraved opal PMMA

### FINISHES

Body	Painted in BKCLAS colour (Standard Paint) Simon Colours (Standard Paint / Seafrost Paint) RAL chart colours (Standard Paint / Seafrost Paint)
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### ELECTRICAL PARAMETERS\* AND CONNECTIVITY

Temp.	-20 °C... +35 °C
Dimming**	<b>2N-</b> Without control line <b>Dxxx</b> Without custom programmed control line <b>2N+</b> With control line <b>CAD</b> Cabinet amplitude dimming <b>1N (100%)</b> Without dimming <b>1.10V</b> Dimming through 1.10V input protocol <b>DALI</b> Dimming through DALI input protocol

Possibility of activating the **CLO** function, which allows the depreciation of the light emitted by the LEDs to be compensated by gradually increasing the supply current to them.

	Luminaires supplied by electrical grid	Luminaires supplied by solar lighting point		
Supply voltage	220-240 V <sub>AC</sub>	12/24 V <sub>DC</sub>		
Frequency	50/60 Hz	-		
Protection against power surge	6 kV (Possibility of increasing to 10 kV / 10 kA upon request)	-		
Power factor (cos φ at max. charge)	≥ 0.95	-		
Luminaire electrical protection	Class I or Class II	Class III		
Optical group power by model***	12 LEDs	24 LEDs	36 LEDs	48 LEDs
Supply current	1 module	2 module	3 module	4 module
HIGH EFFICIENCY	12 W	24 W	35 W	47 W
HIGH BALANCE	18 W	36 W	54 W	73 W
HIGH FLUX	24 W	49 W	73 W	-
VERY HIGH FLUX	-	-	-	-

### REGULATIONS AND CERTIFICATES



Luminaire according to: EN 60598-2-3 / EN 62493 / EN 55015 / EN 61547 / EN 61000-3-2 / EN 50581

Warranty	5 years.
Supply and packaging	Packed in recycled cardboard with an identifying label to protect the product during transport and storage.
Maintenance	Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent. Lubricate the sealing gaskets and replace them when they are cracked. Lubricate the closures and/or hinges of the moving parts. Keep the thermal radiation surface clean to not lose light flux without shortening the life of the LEDs.

\* Values corresponding to the current state of technology. \*\* Check other regulations. \*\*\* Power values have a tolerance of ±7%.



## CONFIGURE YOUR PRAGA M PRO LUMINAIRE

Model	Diffuser	Wire	Optics	Colour Temp.	Optical group power	Team	Dimming	Protection	Finish	Description
<b>PRGMPP</b>										Simon PRAGA M PRO Istanium® LED, size M, ¾" G post-top fastening, flat cover
<b>PRGMPC</b>										Simon PRAGA M PRO Istanium® LED, size M, ¾" G post-top fastening, tapered cover
<b>PRGMHC</b>										Simon PRAGA M PRO Istanium® LED luminaire, size M, ¾" G suspended fastening, tapered cover
<b>PRGMCC</b>										Simon PRAGA M PRO Istanium® LED, size M, suspended catenary fastening, tapered cover
	<b>GTF</b>									Flat transparent shatter-proof tempered glass diffuser
	<b>MTT</b>									4-sided transparent PMMA diffuser
	<b>MOT</b>									4-sided opal PMMA diffuser
		<b>0</b>								Without installation wire (0 m)
		<b>5</b>								With installation wire (5 m)
			<b>RG_</b>							G Type Front Road Light Optics
			<b>RJ_</b>							J Type Front Road Light Optics
			<b>RL_</b>							L type front road light optics
			<b>RA_</b>							A Type Extended Road Light Optics
			<b>RE_</b>							E Type Extended Road Light Optics
			<b>SA_</b>							A Type Symmetric Optics
				<input type="radio"/> <b>NDL</b>						Neutral daylight - 4,000 K
				<input type="radio"/> <b>WDL</b>						Warm daylight – 3,000 K
				<input type="radio"/> <b>SDL</b>						Soft daylight - 2,700 K
				<input type="radio"/> <b>XDL</b>						Extra warm daylight – 2,200 K
					<b>_12W350</b>					12 W 350 mA   1,670 lm to 3,000 K   12 LEDs
					<b>_24W700</b>					24 W 700 mA   3,190 lm to 3,000 K   12 LEDs
					<b>_36W530</b>					36 W 530 mA   4,720 lm to 3,000 K   24 LEDs
					<b>_49W700</b>					49 W 700 mA   6,030 lm to 3,000 K   24 LEDs
					<b>_54W530</b>					54 W 530 mA   7,030 lm to 3,000 K   36 LEDs
					<b>_73W700</b>					73 W 700 mA   8,850 lm to 3,000 K   36 LEDs
						<b>IA23_</b>				Electronic control gear at 230 V <sub>AC</sub> 50/60 Hz, standard protection against 6 kV power surges
						<b>IA23S</b>				Electronic control gear at 230 V <sub>AC</sub> 50/60 Hz, additional protection against 10 kV power surges
						<b>IA12_</b>				Electronic control gear at 12/24 V <sub>dc</sub> C3 (solar). Only admits up to 36W and 1N and 2N- dimming
						<b>2N_</b>				Dimming without control line (self-dimming)
						<b>2N+</b>				Dimming with control line
						<b>1N_</b>				Without dimming (on/off)
						<b>CAD_</b>				Cabinet amplitude dimming (electrical box dimmer)
						<b>1-10</b>				Dimming through 1-10V input protocol
						<b>DALI</b>				Dimming through DALI input protocol
						<b>DXXX</b>				Dimming without control line (custom program)
							<b>C1</b>			Class I luminaire electrical protection
							<b>C2</b>			Class II luminaire electrical protection
							<b>C3</b>			Class III luminaire electrical protection
								<b>BKCLAS</b>		Standard finish in Simon Forged Sand Blasted Black
								<b>xxxxxx</b>		Finish in Simon colours
								<b>xxxxxx</b>		Finish in Simon RAL classic chart colours
								<b>CMxxxx</b>		Seafront Paint Finish

### BASE REFERENCES

Power	No. of LEDs	Current	Configuration	Order code
12 W	12	350 mA	PRGMPFGTFORJ_WDL_12W350IA23_1N_C1BKCLAS	<b>319-000762014</b>
24 W	12	700 mA	PRGMPFGTFORJ_WDL_24W700IA23_1N_C1BKCLAS	<b>319-000759014</b>
36 W	24	530 mA	PRGMPFGTFORJ_WDL_36W530IA23_1N_C1BKCLAS	<b>319-000597014</b>
49 W	24	700 mA	PRGMPFGTFORJ_WDL_49W700IA23_1N_C1BKCLAS	<b>319-000479014</b>
54 W	36	530 mA	PRGMPFGTFORJ_WDL_54W530IA23_1N_C1BKCLAS	<b>319-000761014</b>
73 W	36	700 mA	PRGMPFGTFORJ_WDL_73W700IA23_1N_C1BKCLAS	<b>319-000675014</b>

The luminaire flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes. The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.





AMBIENT PERIOD

PRAGA M PRO



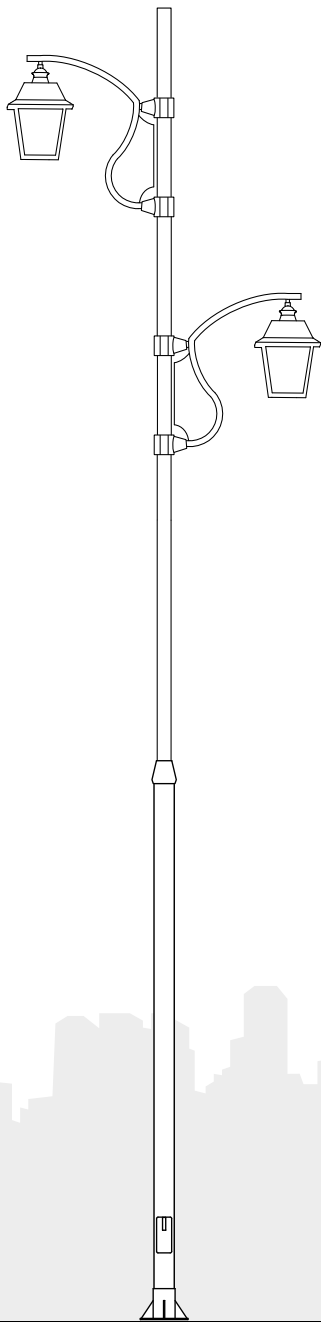
COMBINE YOUR PRAGA M PRO LUMINAIRE WITH:

DECORATIVE POLES:

AMBIENT PERIOD

PRAGA M PRO

8 M  
7 M  
6 M  
5 M  
4 M  
3 M  
2 M  
1 M



LINK CLASSIC



CL22





ACCESSORIES / REPLACEMENTS

Description	Order code
¾" G fastening adaptor to Ø60 support in BKCLAS	<b>50-73542</b>
4-sided transparent PMMA diffuser tray replacement.	<b>50-73396</b>
4-sided opal PMMA diffuser tray replacement.	<b>50-73470</b>

OTHER LUMINAIRES IN THE COLLECTION



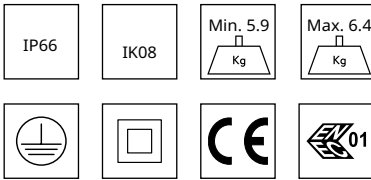
PRAGA M BASIC



# PRAGA M BASIC

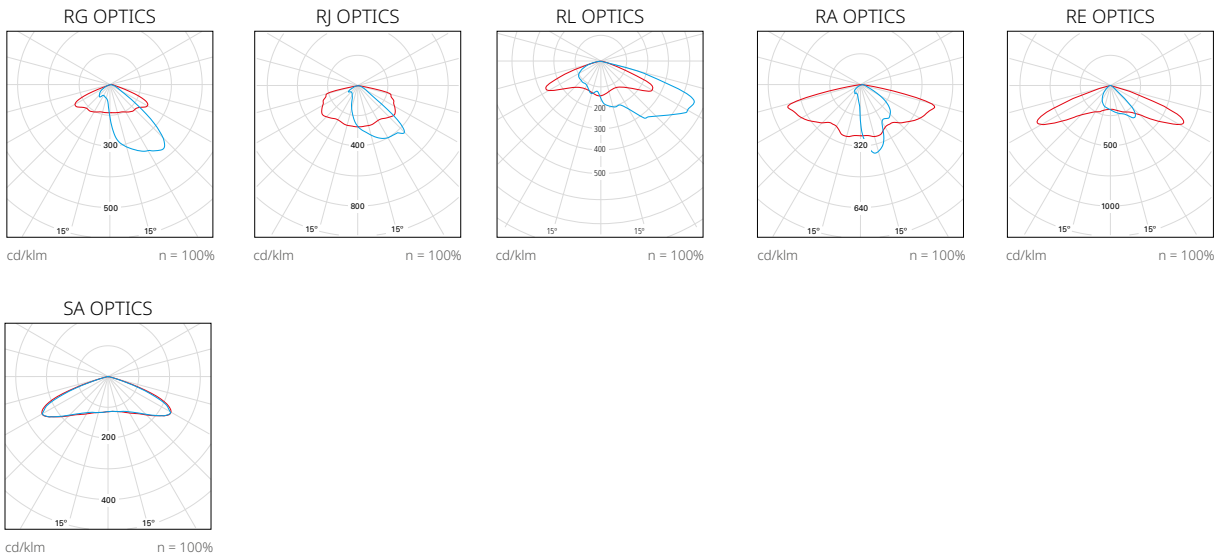
ISTANIUM <sup>®</sup>

## AMBIENT PERIOD LED LUMINAIRE



COLOUR TEMP: NDL 4000 K | WDL 3000 K | SDL 2700 K | XDL 2200 K | PCA\*  
 COLOUR RENDERING INDEX: >70  
 UPWARD LIGHT OUTPUT RATIO (ULOR): <2.5 %\*\*  
 LED DURATION (L90 B10 AT T<sub>a</sub>=25 °C AND T<sub>j</sub>=95 °C): 100,000 h

\* Upon request \*\* Value may change depending on the optics



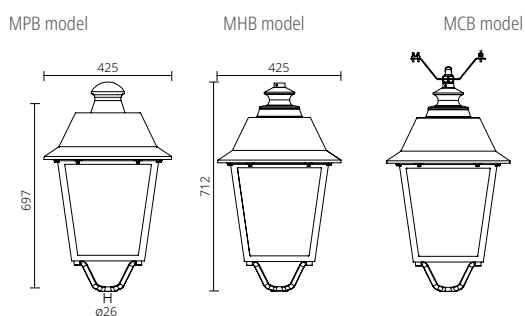
— C0 - C180 — C90 - C270

Rear hemisphere flux control visors available for RJ, RL, RE and SA optics (see page 488 for more information).

Check other photometric distributions.

Simon **PRAGA LED** classic luminaire, size M, BASIC model, in die-cast aluminium. Post-top fixation 3/4" G. Adaptation to Ø60 mm fastenings via an adapter. Tapered cover with trim. Internal refrigeration system through fins. Possibility of fitting an **upper Zhaga/NEMA** connector. Access to gear and maintenance from the top with stainless steel screw opening. Easy-clean transparent flat glass diffuser to prevent UV radiation in the optics for 12 and 24-LED models. Transparent PMMA high-impact resistant (HIR) diffuser to facilitate cleaning and prevent UV radiation in the optics for 36-LED models. **IP66** protection rating for the complete luminaire, with **safety valve** in the optical group to keep the pressure constant and prevent moisture entry, and an impact resistance rating of **IK08**. Possibility of mounting up to nine multi-array optics. Anti-glare, truncated pyramid-shaped reflector, matt with light flux recovery. Possibility of four colour temperatures in white light, as well as PCA (Phosphor Converted Amber) for specially protected areas. Service life of LED **L90 B10 100,000 hours**. Istantium LED lighting groups can be replaced and updated even when the luminaire is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (**ULOR**) less than **2.5%**. With **Class I** and **Class II** electronic control gear with 230 V<sub>AC</sub> / 50-60 Hz supply voltage. Possibility of including additional protection against surges of **10 kV/10 kA**. Optional dimming, with control line 2N+, without control line (self-dimming) 2N-, cabinet amplitude dimming CAD, for telemanagement with 1-10 input or DALI. Optional custom programming and maintenance of constant light output (**CLO**). Standard finish in Simon BKTECH colour. Possibility of Simon and RAL finishes, as well as Seafront paint for corrosive environments with high durability in a **C5M** environment. Dimensions 425x698x425 mm. **ENEC** certified luminaire, compatible with **Zhaga-D4i**.

## DIMENSIONS AND FASTENING SYSTEMS



Post-top fastening	Fastening to 3/4" G x 50 mm threaded tube (MBP)
Suspended fastening	Fastening to 3/4" G x 50 mm threaded tube (MHB)
Catenary fastening	Fastening part with wire grip (MCB)
Surface exposed to the wind	0.18 m <sup>2</sup>
Weight	Max. 6.4 kg Min. 5.9 kg

## PHYSICAL FEATURES AND MATERIALS

IP	IP66
IK	IK08
Body	Die-cast aluminium
Closure system	With stainless steel screws
Fastening system	Die-cast aluminium
Diffuser	Flat transparent shatter-proof tempered glass

## FINISHES

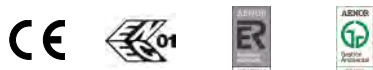
Body	Painted in BKTECH colour (Standard Paint) Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)
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## ELECTRICAL PARAMETERS\* AND CONNECTIVITY

Temp.	-20 °C... +35 °C
Dimming**	<b>2N-</b> Without control line <b>Dxxx</b> Without custom programmed control line <b>2N+</b> With control line <b>CAD</b> Cabinet amplitude dimming <b>1N (100%)</b> Without dimming <b>1.10V</b> Dimming through 1.10V input protocol <b>DALI</b> Dimming through DALI input protocol
	Possibility of activating the <b>CLO</b> function, which allows the depreciation of the light emitted by the LEDs to be compensated by gradually increasing the supply current to them.
	Possibility of fitting a <b>Zhaga / NEMA</b> connector to the top of the luminaire according to Zhaga Consortium Book 18 for model MPB. The assembly of this connector entails disassembling the upper trim. Not valid for models MHB and MCB.

	Luminaires supplied by electrical grid		
Supply voltage	220-240 V <sub>AC</sub>		
Frequency	50/60 Hz		
Protection against power surge	6 kV (Possibility of increasing to 10 kV / 10 kA upon request)		
Power factor (cos φ at max. charge)	≥ 0.95		
Luminaire electrical protection	Class I or Class II		
Optical group power by model***	12 LEDs	24 LEDs	36 LEDs
Supply current	1 module	2 module	3 module
HIGH EFFICIENCY	12 W	24 W	35 W
HIGH BALANCE	18 W	36 W	54 W
HIGH FLUX	24 W	49 W	-
VERY HIGH FLUX	-	-	-

## REGULATIONS AND CERTIFICATES



Luminaire according to: EN 60598-2-3 / EN 62493 / EN 55015 / EN 61547 / EN 61000-3-2 / EN 50581

Warranty	5 years.
Supply and packaging	Packed in recycled cardboard with an identifying label to protect the product during transport and storage.
Maintenance	Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent. Lubricate the sealing gaskets and replace them when they are cracked. Lubricate the closures and/or hinges of the moving parts. Keep the thermal radiation surface clean to not lose light flux without shortening the life of the LEDs.

\* Values corresponding to the current state of technology. \*\* Check other regulations. \*\*\* Power values have a tolerance of ±7%.





## CONFIGURE YOUR PRAGA M BASIC LUMINAIRE

Model	Diffuser	Wire	Optics	Colour Temp.	Optical group power	Team	Dimming	Protection	Finish	Description
<b>PRGMPB</b>										Simon PRAGA M BASIC Istanium® LED, size M, post-top fastening, flat cover
<b>PRGMHB</b>										Simon PRAGA M BASIC Istanium® LED, size M, ¾" G suspended fastening, tapered cover
<b>PRGMCB</b>										Simon PRAGA M BASIC Istanium® LED, size M, suspended catenary fastening, tapered cover
	<b>GTF</b>									Flat transparent shatter-proof tempered glass diffuser
	<b>ITF</b>									Flat transparent PMMA high-impact resistant encapsulation. 36 LED models
		<b>0</b>								Without installation wire (0 m)
			<b>RG_</b>							G Type Front Road Light Optics
			<b>RJ_</b>							J Type Front Road Light Optics
			<b>RL_</b>							L type front road light optics
			<b>RA_</b>							A Type Extended Road Light Optics
			<b>RE_</b>							E Type Extended Road Light Optics
			<b>SA_</b>							A Type Symmetric Optics
				<input type="radio"/> <b>NDL</b>						Neutral daylight - 4,000 K
				<input type="radio"/> <b>WDL</b>						Warm daylight - 3,000 K
				<input type="radio"/> <b>SDL</b>						Soft daylight - 2,700 K
				<input type="radio"/> <b>XDL</b>						Extra warm daylight - 2,200 K
					<b>_12W350</b>					12 W 350 mA   1,670 lm to 3,000 K   12 LEDs
					<b>_24W700</b>					24 W 700 mA   3,190 lm to 3,000 K   12 LEDs
					<b>_36W530</b>					36 W 530 mA   4,720 lm to 3,000 K   24 LEDs
					<b>_49W700</b>					49 W 700 mA   6,030 lm to 3,000 K   24 LEDs
					<b>_54W530</b>					54 W 530 mA   7,030 lm to 3,000 K   36 LEDs
						<b>IA23_</b>				Electronic control gear at 230 V <sub>AC</sub> 50/60 Hz, standard protection against 6 kV power surges
						<b>IA23S</b>				Electronic control gear at 230 V <sub>AC</sub> 50/60 Hz, additional protection against 10 kV power surges
						<b>2N_</b>				Dimming without control line (self-dimming)
						<b>2N+</b>				Dimming with control line
						<b>1N_</b>				Without dimming (on/off)
						<b>CAD_</b>				Cabinet amplitude dimming (electrical box dimmer)
						<b>1-10</b>				Dimming through 1-10V input protocol
						<b>DALI</b>				Dimming through DALI input protocol
						<b>DXXX</b>				Dimming without control line (custom program)
							<b>C1</b>			Class I luminaire electrical protection
							<b>C2</b>			Class II luminaire electrical protection
								<b>BKTECH</b>		Standard finish in Simon Technical Black
								<b>XXXXXX</b>		Finish in Simon colours
								<b>XXXXXX</b>		Finish in Simon RAL classic chart colours
								<b>CMXXXX</b>		Seafront Paint Finish

### BASE REFERENCES

Power	No. of LEDs	Current	Configuration	Order code
12 W	12	350 mA	PRGMPBGTFORJ_WDL_12W350IA23_1N__C1BKTECH	<b>341-000762015</b>
24 W	12	700 mA	PRGMPBGTFORJ_WDL_24W700IA23_1N__C1BKTECH	<b>341-000759015</b>
36 W	24	530 mA	PRGMPBGTFORJ_WDL_36W530IA23_1N__C1BKTECH	<b>341-000597015</b>
49 W	24	700 mA	PRGMPBGTFORJ_WDL_49W700IA23_1N__C1BKTECH	<b>341-000479015</b>
54 W	36	530 mA	PRGMPBITFORJ_WDL_54W530IA23_1N__C1BKTECH	<b>341-000761015</b>

The luminaire flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes. The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.





AMBIENT PERIOD

PRAGA M BASIC

COMBINE YOUR PRAGA M BASIC LUMINAIRE WITH:

DECORATIVE POLES:

6 M

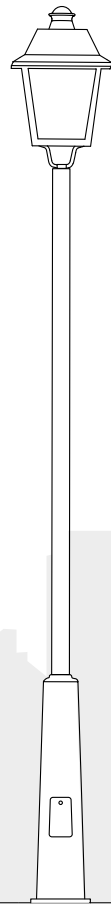
5 M

4 M

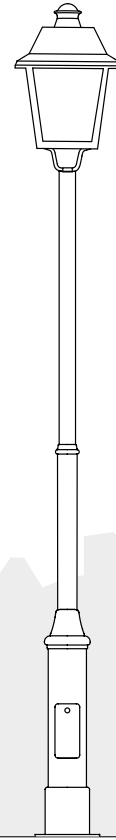
3 M

2 M

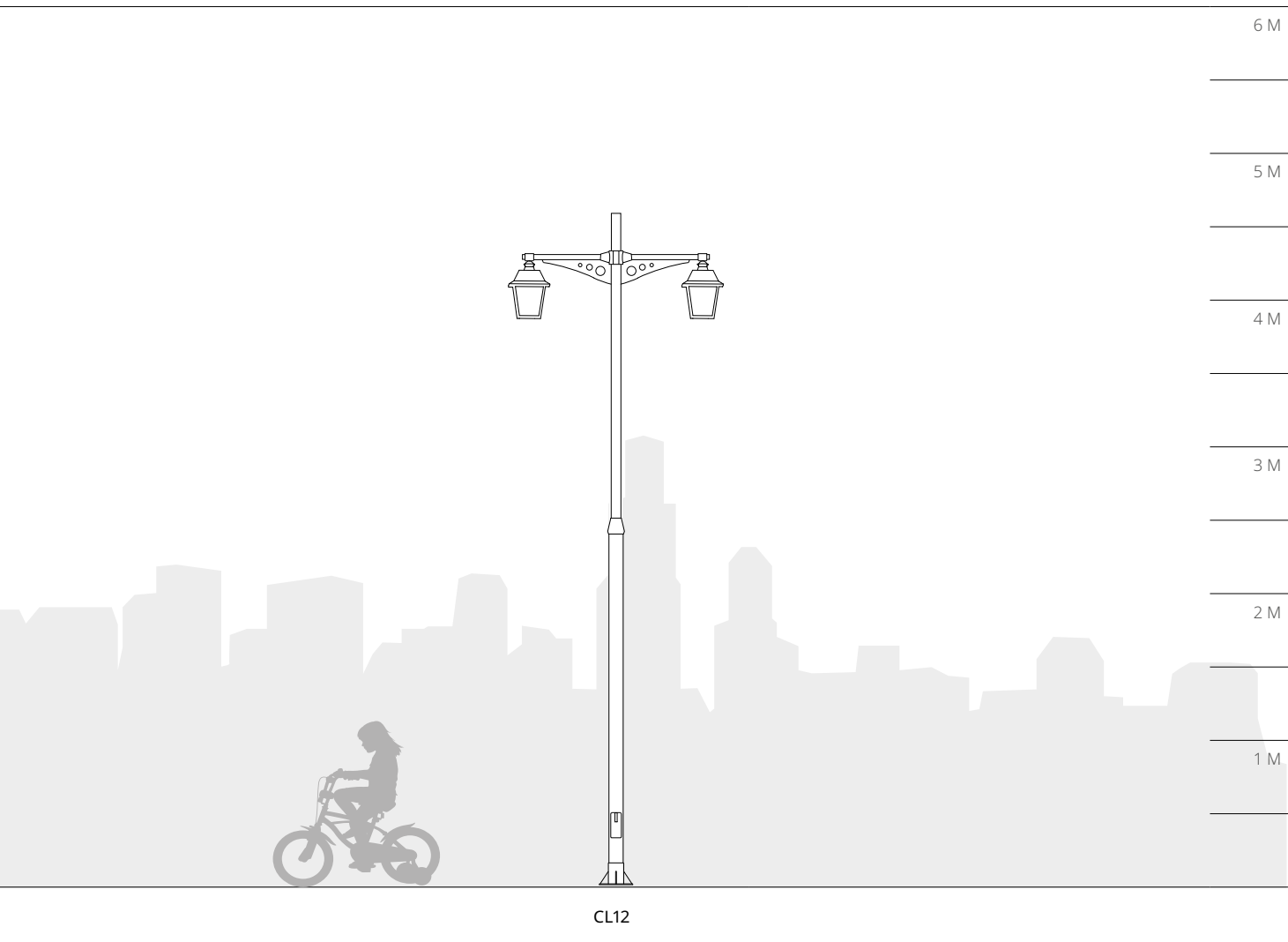
1 M




CL22



CL14



ACCESSORIES / REPLACEMENTS

Description	Order code
 <p>¾" G fastening adaptor to Ø60 in BKTECH</p>	<b>5-531881</b>

OTHER LUMINAIRES IN THE COLLECTION



PRAGA M PRO



SPOTLIGHT



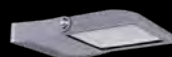
LUMINAIRES

# SPOTLIGHT

ISTANIUM<sup>LED</sup>®

**ZAO**

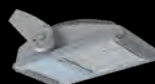
S / M / L

**KOS****IRAYA**

LXF / MXF

**FOGO****MILOS**

MXF / SXF



Spotlight lighting allows us to precisely direct light where we want to highlight architectural elements or emphasise areas of interest.









# ZAO

S / M / L

NEW

ZAO is Simon's range of modular floodlights designed to provide lighting solutions for sports facilities and large areas, thanks to its different modules, high power, excellent performance and easy installation with a single anchor point.

Flux up to 160,000 lm.  
Individual orientation of the light modules.  
CRI > 80.



Industrial spaces



Parking areas



Sports facilities



Large areas



# ZAO

## FEATURES

### LIGHTING SOLUTIONS

A wide variety of lighting solutions to **optimise** and precisely **direct** light flux, adapting it to the needs of each project:

Various **light distributions**.

Possibility of **group** or **individual orientation** of the lighting modules.



### LIGHT QUALITY

**CRI > 80** for **4,000 K** and **5,000 K**.  
High colour rendering and uniform distribution.

### PROTECTION RATINGS

**IP66** for the electro-light group, with a pressure relief valve to keep the pressure constant and prevent moisture entry. IP68 connectors.

**IK10** rating for the whole luminaire.



### SURGE PROTECTION SPD

**External** surge protection up to **20 kV** and **20 kA** with operation indicator **lamp**



## INSTALLATION AND ADAPTABILITY

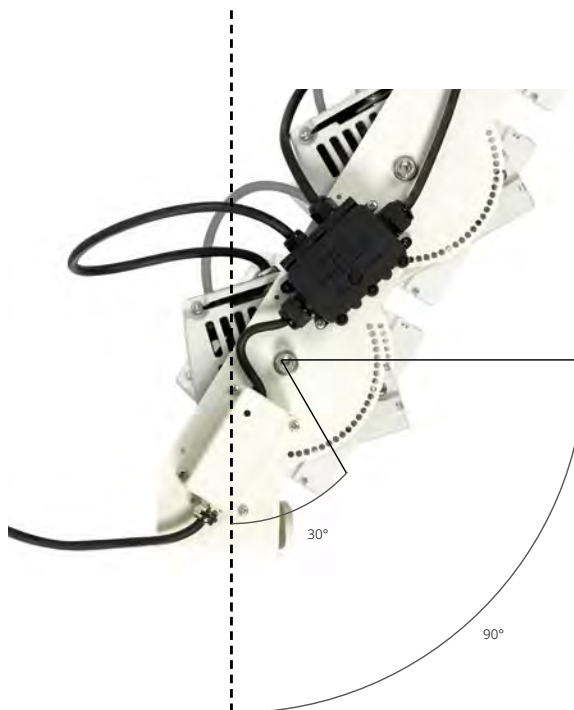
Installation in vertical position by means of a bracket with a **single anchor point**.

Factory pre-wired with IP connectors, watertight boxes and quick connectors for **fast installation** and easy replacement.



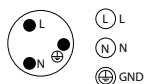
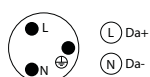
The light modules can be oriented independently with a range of up to 60° (from 30° to 90° to the vertical and with orientation marks every 15°).

Orientation in 5° steps and **locking** with **security screws**.



## DALI CONTROL

Independent and individual **DALI** input allowing the control of switching on and dimming for different scenarios (training, midfield, total, competition, maintenance, etc.)



## FLEXIBILITY AND DURABILITY

**Maximum application and installation flexibility** thanks to its **configurable modules** mounted on a single anchor point, adapting perfectly to the requirements of each situation and **making use of existing structures**.



2, 3 and 4 modules with **independent IP66 drivers**, ensuring partial operation of the luminaire in case of a driver failure



# ZAO

## LXF / MXF / SXF

### SPOTLIGHT LED LUMINAIRE



COLOUR TEMP.: \_DM 5,000 K | NDM 4,000 K

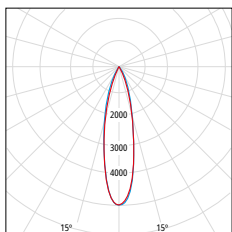
COLOUR RENDERING INDEX: > 80

UPWARD LIGHT OUTPUT RATIO (ULOR): <2.5%\*

LED DURATION (L90 B10 AT  $T_a=25\text{ °C}$  AND  $T_j=95\text{ °C}$ ): 100,000 h

\* The value may change depending on the optics.

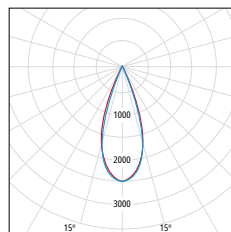
#### INTENSIVE TAPERED OPTICS



cd/klm

n = 100%

#### M TYPE MEDIUM TAPERED OPTICS

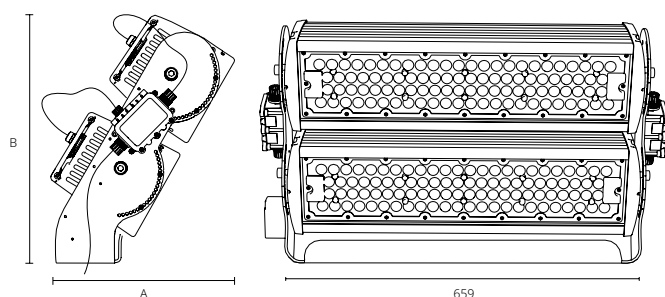


cd/klm

n = 100%

Simon **ZAO** LED spotlight, size depending on the number of light modules, made of extruded aluminium. Steel bracket fastening. Individually adjustable light modules from +15° to +45° with double fastening screw. Fastening in vertical position. Cover with cooling moulding. Self-cleaning system by means of rainwater, which allows its correct evacuation without dirtying the luminaire, preventing the lighting performance from being affected over time. Access to the gear and maintenance through the rear of each module through sheet steel cover with screw opening. Flat opalised polycarbonate diffuser with UV-treated optics to prevent premature aging. **IP66** protection rating for the full spotlight, and **IK10** impact resistance rating. Modules wired together at factory. With pre-wiring of 50 cm and IP67 connector. Possibility of mounting two multi-array optics. Possibility of two colour temperatures in white light. Service life of LED **L90 B10 100,000 hours**. Istantium LED lighting modules can be replaced and updated even when the luminaire is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (**ULOR**) of less than **2.5%** with an angle of 45°. With **Class I** electronic control gear with 230 V AC/50-60 Hz power supply. With additional overvoltage protection of **20 kV / 20 kA**. Optional dimming via DALI input. Standard finish in Simon WHDUST colour for side covers and lyre, anodised aluminium for the body and BKTECH for the rear cover. Dimensions 640x391x288 mm for size S, dimensions 640x546x377 mm for size M and dimensions 640x698x465 mm for size L.

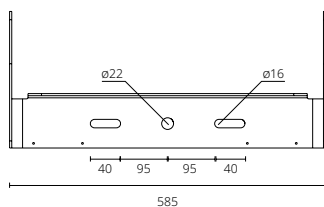
## DIMENSIONS AND FASTENING SYSTEMS



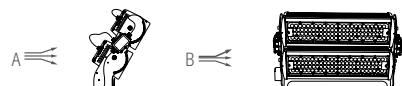
	ZAO S	ZAO M	ZAO L
A (mm)	288	376	463
B (mm)	391	544	696

### Fastening

With bracket



### Surface exposed to the wind



	ZAO S	ZAO M	ZAO L
A (m²)	0.214	0.308	0.396
B (m²)	0.053	0.077	0.098

### Weight

ZAO S: max. 24.7 kg / ZAO M: max. 37.6 kg / ZAO L: max. 50.1 kg

## PHYSICAL FEATURES AND MATERIALS

IP	IP66
IK	IK10
Body	Aluminium extrusion
Lateral covers	Injection of plastic
Rear covers	Sheet steel
Diffuser	Flat opalised polycarbonate with optics and UV treatment

## FINISHES

Body	Anodised aluminium
Lateral covers	Painted in WHDUST colour (Standard Paint)
Rear cover	Painted in BKTECH colour (Standard Paint)
Bracket	Painted in WHDUST colour (Standard Paint)

## ELECTRICAL PARAMETERS\* AND CONNECTIVITY

Temp.	-35°C... + 50°C
Dimming	<b>1N (100%)</b> Without dimming <b>DALI</b> Dimming via DALI protocol input Luminaires supplied by electrical grid
Supply voltage	220-240 V <sub>AC</sub>
Frequency	50/60 Hz
Protection against power surges	20 kV / 20 kA
Power factor (cos φ at max. charge)	≥ 0.95
Luminaire electrical protection	Class I
Optical group power by model***	250 W 300 W
Supply current	400 mA 490 mA
ZAO S - 2 MODULES 192 LEDS	- 600 W
ZAO M - 3 MODULES 288 LEDS	750 W 900 W
ZAO L - 4 MODULES 384 LEDS	1000 W 1200 W

## REGULATIONS AND CERTIFICATES



Luminaire according to: EN 60598-1 and 2-5 / EN 61547 / EN 61000-3-2 and 3-3 / EN 62031 / EN 61347-2-13 / EN 62471 / EN 55015\*\*

### Warranty

5 years (extended warranty upon request)

### Supply and packaging

Packed in recyclable cardboard to protect the product during transport and storage.

### Maintenance

Keep the diffuser surface clean to achieve maximum light flux.  
Use a damp rag without any type of harsh product or detergent.  
Lubricate the sealing gaskets and replace them when they are cracked.  
Lubricate the closures and/or hinges of the moving parts.  
Keep the thermal radiation surface clean to not lose light flux without shortening the life of the LEDs.

\* Values corresponding to the current state of technology. \*\*\* Optical group power values have a tolerance of ±7%.





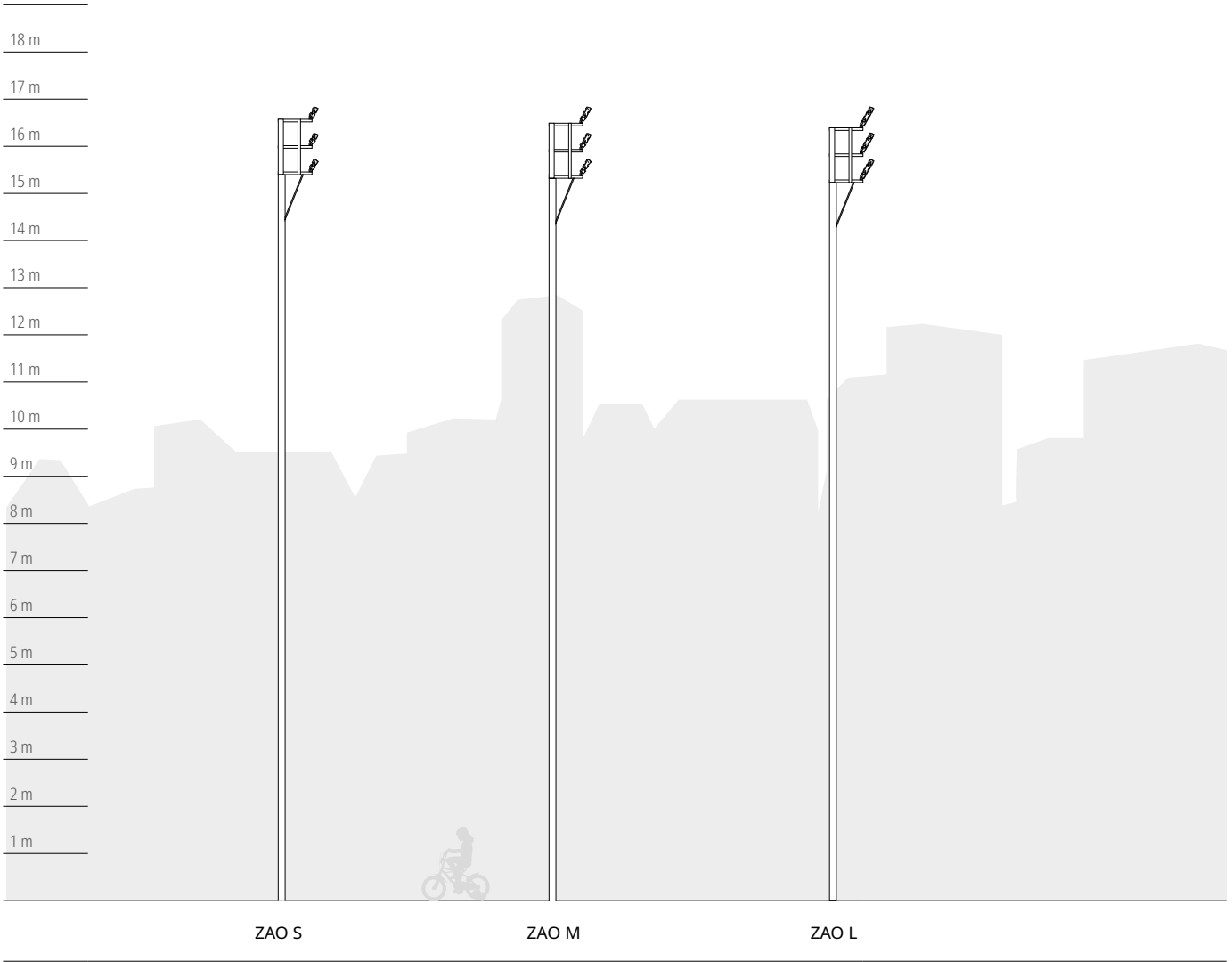
## CONFIGURE YOUR ZAO LUMINAIRE

Model	Diffuser	Wire	Optics	Colour Temp.	Optical group power	Team	Dimming	Protection	Finish	Description
<b>ZAOLXF</b>										Simon ZAO, size L (for 4 modules), bracket fastening, flat cover
<b>ZAOMXF</b>										Simon ZAO, size M (for 3 modules), bracket fastening, flat cover
<b>ZAOSXF</b>										Simon ZAO, size S (for 2 modules), bracket fastening, flat cover
	<b>PMO</b>									Flat opalised polycarbonate diffuser, with optics, IK10
		<b>P</b>								With installation wiring (0.5 m) and IP67 watertight connector
			<b>CIN</b>							Intensive tapered optics
			<b>CMM</b>							M type medium tapered optics
				<b>_DM</b>						Daylight- 5.000 K - CRI80
				<b>NDM</b>						Neutral daylight - 4,000 K – CRI80
					<b>600W490</b>					2 x 300 W 490 mA      79,800 lm to 4,000 K      2 modules
					<b>750W400</b>					3 x 250 W 400 mA      106,875 lm to 4,000 K      3 modules
					<b>900W490</b>					3 x 300 W 490 mA      119,700 lm to 4,000 K      3 modules
					<b>1K_W400</b>					4 x 250 W 400 mA      142,500 lm to 4,000 K      4 modules
					<b>1K2W490</b>					4 x 300 W 490 mA      159,600 lm to 4,000 K      4 modules
						<b>TA23U</b>				Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, standard protection against 20 kV power surges
							<b>1N_</b>			Without dimming (on/off)
							<b>DALI</b>			Dimming through DALI input protocol
								<b>C1</b>		Class I luminaire electrical protection
									<b>WHDUST</b>	Standard finish in Simon WHDUST for side covers and lyre, anodised aluminium for the body and BKTECH for the rear cover.

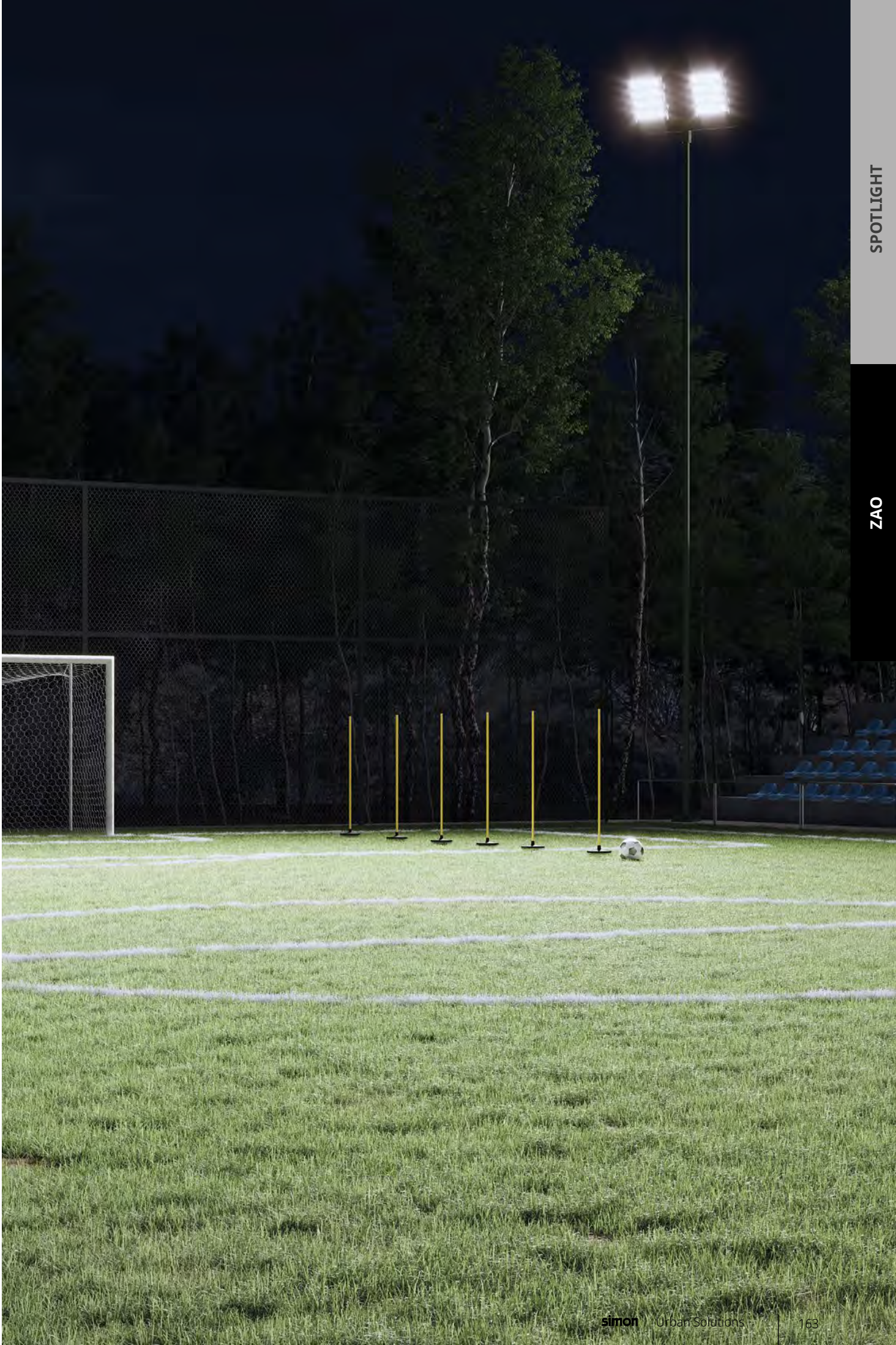
The luminaire flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes.  
The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.



YOUR ZAO LUMINAIRE:













# KOS

ISTANIUM<sup>LED</sup>®

Functional spotlight, ideal for the intensive introduction of LED technology.



Tunnels



Monuments



Bridges



Façades



Sports facilities



Large areas

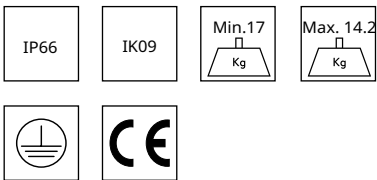




# KOS

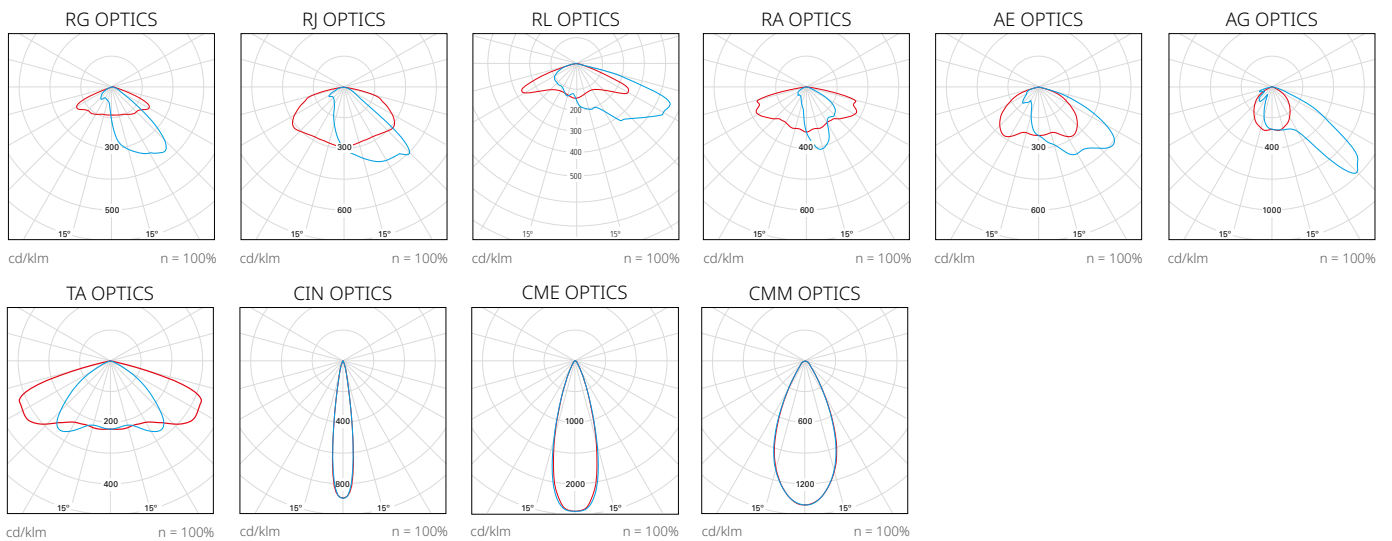
## ISTANIUM<sup>®</sup> LED

### SPOTLIGHT LED LUMINAIRE



COLOUR TEMP.: ND L 4000 K | WDL 3000 K | SDL 2700 K | XDL 2200 K | PCA\*  
 COLOUR RENDERING INDEX: >70  
 UPWARD LIGHT OUTPUT RATIO (ULOR): <0.1 %\*\*  
 LED DURATION (L90 B10 AT T<sub>a</sub>=25 °C AND T<sub>j</sub>=95 °C): 100,000 h

\* Upon request \*\* Value may change depending on the optics



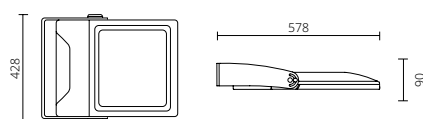
— C0 - C180 — C90 - C270



Rear hemisphere flux control visors available for RJ, RL, RE, AE, AG and TA optics (see page 488 for more information).

Check other photometric distributions.

Simon **KOS** LED spotlight, size L, made of die-cast aluminium. Bracket fastening. Flat cover with non-visible cooling fins in installed position. Self-cleaning system by means of rainwater, which allows its correct evacuation without dirtying the luminaire, preventing the lighting performance from being affected over time. Easy-clean transparent flat tempered glass diffuser to prevent UV radiation in the optics. **IP66** protection rating for the Istantium LED optical group, with a **pressure relief valve** to keep the pressure constant and prevent moisture from entering, and an impact resistance rating of IK09. With pre-wiring of 20 cm and **IP67** connector. Possibility of mounting up to fourteen multi-array optics. Anti-glare, truncated pyramid-shaped reflector, matt with light flux recovery. Possibility of four colour temperatures in white light, as well as PCA (Phosphor Converted Amber) for specially protected areas. Service life of LED **L90 B10 100,000 hours**. Istantium LED lighting groups can be replaced and updated even when the luminaire is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (**ULOR**) equal to **0%** with an angle from 0° to ± 5° (verify according to optics used). With **Class I** electronic control gear with 230 V AC/50-60 Hz power supply. Possibility of including additional protection against surges of **10 kV/10 kA**. Optional dimming without control line (Self-dimming) 2N-, through telemanagement with 1.10V or DALI input. Optional custom programming and maintenance of constant light output (**CLO**). Standard finish in Simon GY9007 colour. Possibility of Simon and RAL finishes, as well as Seafront paint for corrosive environments with high durability in a **C5M** environment. Dimensions 428x578x90 mm.

## DIMENSIONS AND FASTENING SYSTEMS



Fastening	Bracket, Ø13 mm, Ø15 mm, Ø13 mm fastening holes. Downward focus, maximum 15° angle
Wire inlet	IP67 external connector
Surface exposed to the wind	 0.03 m <sup>2</sup>  0.21 m <sup>2</sup>
Weight	Max. 17.0 kg Min. 14.2 kg

## PHYSICAL FEATURES AND MATERIALS

IP	IP66
IK	IK09
Body	Die-cast aluminium
Closure system	With stainless steel screws
Fastening system	Painted galvanised sheet steel
Diffuser	Flat transparent shatter-proof tempered glass

## FINISHES

Body	Painted GY9007 colour (Standard Paint) Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)
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## ELECTRICAL PARAMETERS \* AND CONNECTIVITY

Temp.	-20 °C... +35 °C
Dimming**	<b>2N-</b> Without control line <b>Dxxx</b> Without custom programmed control line <b>CAD</b> Cabinet amplitude dimming <b>1N (100%)</b> Without dimming <b>1.10V</b> Dimming through 1.10V input protocol <b>DALI</b> Dimming through DALI input protocol

Possibility of activating the **CLO** function, which allows the depreciation of the light emitted by the LEDs to be compensated by gradually increasing the supply current to them.

### Luminaires supplied by electrical grid

Supply voltage	220-240 V <sub>AC</sub>
Frequency	50/60 Hz
Protection against power surge	6 kV (Possibility of increasing to 10 kV / 10kA upon request)
Power factor (cos φ at max. charge)	≥ 0.95
Luminaire electrical protection	Class I
Optical group power by model***	100 LEDs
Supply current	
HIGH EFFICIENCY	98 W
HIGH BALANCE	151 W
HIGH FLUX	203 W
VERY HIGH FLUX	268 W****

## REGULATIONS AND CERTIFICATES



Luminaire according to: EN 60598-2-5 / EN 62493 / EN 55015 / EN 61547 / EN 61000-3-2 / EN 50571

Warranty	5 years.
Supply and packaging	Packed in recycled cardboard with an identifying label to protect the product during transport and storage.
Maintenance	Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent. Lubricate the sealing gaskets and replace them when they are cracked. Lubricate the closures and/or hinges of the moving parts. Keep the thermal radiation surface clean to not lose light flux without shortening the life of the LEDs.

\* Values corresponding to the current state of technology. \*\* Check other regulations. \*\*\* Power values have a tolerance of ±7% \*\*\*\*900mA.





## CONFIGURE YOUR KOS LUMINAIRE

Model	Diffuser	Wire	Optics	Colour Temp.	Optical group power	Team	Dimming	Protection	Finish	Description
<b>KOSLXF</b>										Simon Kos Istanium® LED, size L, bracket fastening, flat cover
	<b>GTF</b>									Flat transparent shatter-proof tempered glass diffuser
		<b>P</b>								With installation wiring (0.5 m) and IP67 watertight connector
			<b>RG_</b>							G type front road light optics
			<b>RJ_</b>							J type front road light optics
			<b>RL_</b>							L type front road light optics
			<b>RA_</b>							A type extended road light optics
			<b>AE_</b>							E type asymmetric optics
			<b>AG_</b>							G Type Asymmetric Optics
			<b>TA_</b>							Overhead tunnel optics
			<b>CIN</b>							Intensive tapered optics
			<b>CME</b>							E type medium tapered optics
			<b>CMM</b>							M type medium tapered optics
				<input type="radio"/> <b>NDL</b>						Neutral daylight - 4,000 K
				<input type="radio"/> <b>WDL</b>						Warm daylight - 3,000 K
				<input type="radio"/> <b>SDL</b>						Soft daylight - 2,700 K
				<input type="radio"/> <b>XDL</b>						Extra warm daylight - 2,200 K
					<b>_98W350</b>					98 W 350 mA      15040 lm to 3,000 K      100 LEDs
					<b>151W530</b>					151 W 530 mA      21130 lm to 3,000 K      100 LEDs
					<b>203W700</b>					203 W 700 mA      26950 lm to 3,000 K      100 LEDs
					<b>260W900</b>					260 W 900 mA      32940 lm to 3,000 K      100 LEDs
						<b>IA23_</b>				Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, standard protection against 6 kV power surges
						<b>IA23S</b>				Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, additional protection against 10 kV power surges
						<b>2N_</b>				Dimming without control line (self-dimming)
						<b>1N_</b>				Without dimming (on/off)
						<b>1-10</b>				Dimming through 1-10V input protocol
						<b>DALI</b>				Dimming through DALI input protocol
						<b>DXXX</b>				Dimming without control line (custom program)
								<b>C1</b>		Class I luminaire electrical protection
									<b>GY9007</b>	Standard finish in Simon RAL GY9007
									<b>xxxxxx</b>	Finish in Simon colours
									<b>xxxxxx</b>	Finish in Simon RAL classic chart colours
									<b>CMxxxx</b>	Seafront Paint Finish

### BASE REFERENCES

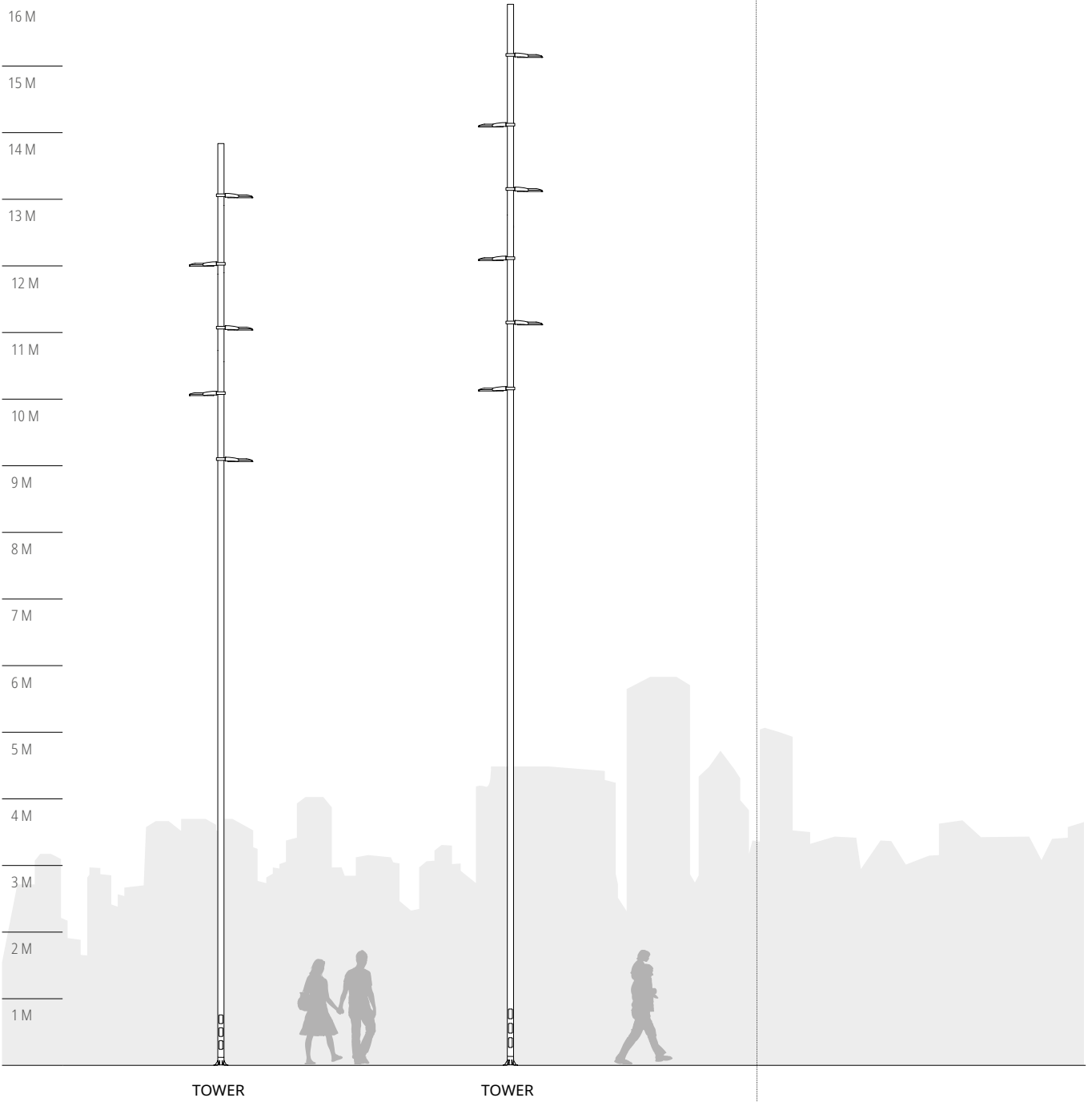
Power	No. of LEDs	Current	Configuration	Order code
98 W	100	350 mA	KOSLXGTFPAG_WDL_98W350IA23_1N_C1GY9007	<b>412-004718016</b>
151 W	100	530 mA	KOSLXGTFPAG_WDL151W530IA23_1N_C1GY9007	<b>412-005988016</b>
203 W	100	700 mA	KOSLXGTFPAG_WDL203W700IA23_1N_C1GY9007	<b>412-005989016</b>
268 W	100	900 mA	KOSLXGTFPAG_WDL268W900IA23_1N_C1GY9007	<b>412-005066016</b>

The luminaire flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes. The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.



COMBINE YOUR KOS LUMINAIRE WITH:

FUNCTIONAL POLES:



OTHER DECORATIVE POLES: TORT, TIL





SPOTLIGHT

IRAYA







# IRAYA

LXF / MXF

NEW

ISTANIUM®

IRAYA is a functional spotlight that balances technical performance, quality and price, allowing the intensive introduction of the most efficient LED technology when upgrading current technical lighting.

Light flux up to 30,000 lm.  
Multiple lighting solutions.  
Advanced thermal management.



Motorways /  
highways



Main roads



Streets



Avenues



Industrial spaces



Roundabouts  
/ Intersections



Tunnels



Bridges



Façades



Sports facilities

# IRAYA

## FEATURES



### LIGHT CONTROL

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A wide variety of road lighting optical solutions for tunnels and architecture to optimise and precisely direct light flux, adapting it to the needs of the project.

### COMPATIBLE WITH "IoT" AND SMARTCITIES

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Luminaire equipped for telemanagement and sensor management; option of installing a ZHAGA/NEMA connector on the top and a ZHAGA connector on the bottom. Double entry to the luminaire body with two compression seal fittings to facilitate control connections.

### MAINTENANCE OF LIGHT PERFORMANCE

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Self-cleaning system using rain water. The water escapes without dirtying the luminaire and lighting performance is not affected over time.



## FASTENING SYSTEM

Angular bracket invisible in wall or ceiling installations.



Mechanical bracket interlocking system with a screw, with 5° steps, to maintain its orientation over time despite vibrations due to wind and rain. To facilitate correct orientation of the light flux, there is a goniometer with markings every 15°.



## OTHER TECHNICAL FEATURES

Refrigeration system with fins that cannot be seen from below, which increases LED performance at high supply currents.



Captive stainless steel screws to avoid corrosion and guarantee functionality over time.



**IP66** for the complete luminaire, with a **pressure relief valve** to keep the pressure constant and prevent moisture entry. **IK09** to guarantee the integrity of the luminaire against vandalism.



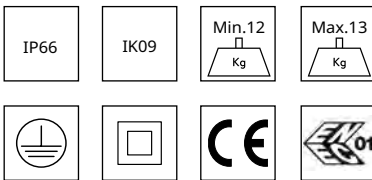




# IRAYA LXF

ISTANIUM<sup>LED</sup>®

## SPOTLIGHT LED LUMINAIRE



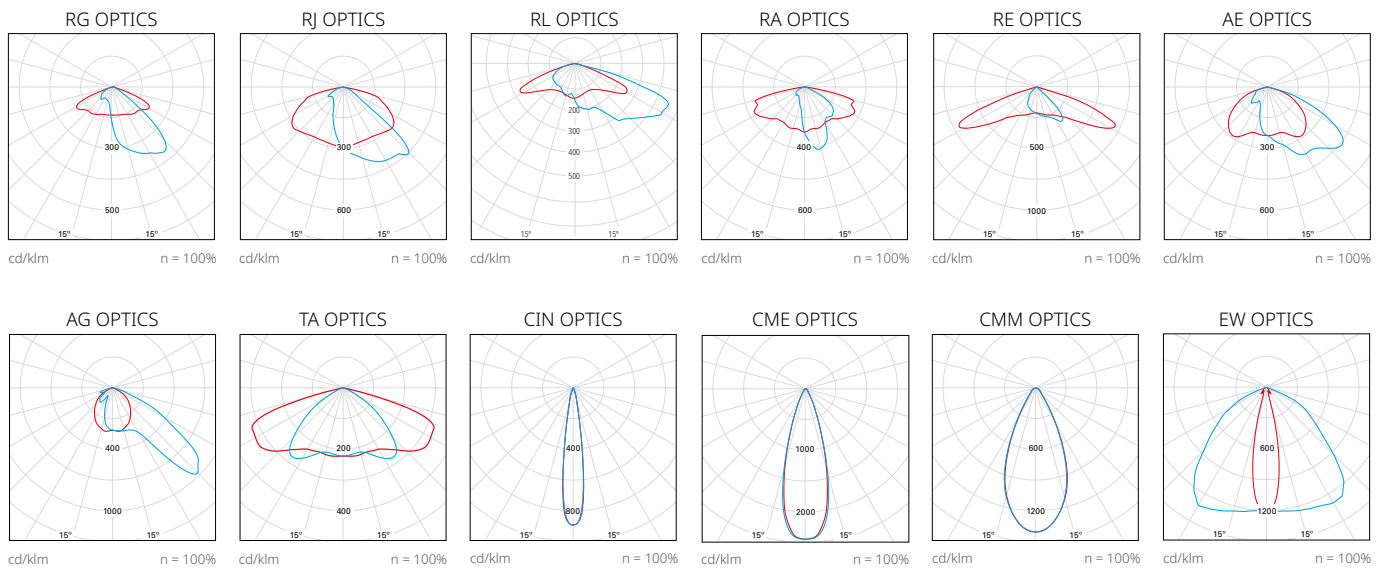
COLOUR TEMP.: ND L 4000 K | WDL 3000 K | SDL 2700 K | XDL 2200 K | PCA\*

COLOUR RENDERING INDEX: >70

UPWARD LIGHT OUTPUT RATIO (ULOR): <0.1 %\*\*

LED DURATION (L90 B10 AT  $T_a=25$  °C AND  $T_j=95$  °C): 100,000 h

\* Upon request \*\* The value may change depending on the optics.



— C0 - C180 — C90 - C270

Rear hemisphere flux control visors available for RJ, RJ, RE, AE, AG and TA optics (see page 488 for more information).

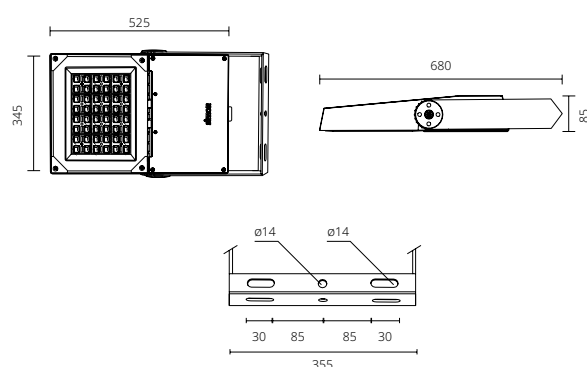
Check other photometric distributions.



Simon **IRAYA** LED spotlight, size L, made of die-cast aluminium. Bracket fastening. Flat cover with non-visible cooling fins in installed position. Self-cleaning system by means of rainwater, which allows its correct evacuation without dirtying the luminaire, preventing the lighting performance from being affected over time. Single body spotlight with two independent compartments for thermal separation, for the optical group and for the electric group. Possibility of fitting an **upper Zhaga/NEMA** connector and a **lower Zhaga** connector. Access to the gear and maintenance from the back with four-screw opening and a fastening system to prevent the lid from falling. Easy-clean transparent flat tempered glass diffuser to prevent UV radiation in the optics. **IP66** protection rating for the full spotlight, with a **pressure relief valve** to keep the pressure constant and prevent moisture from entering, and an impact resistance rating of **IK09**. With pre-wiring of 50 cm and IP67 connector. Possibility of mounting up to sixteen multi-array optics. Anti-glare, truncated pyramid-shaped reflector, matt with light flux recovery.

Possibility of four colour temperatures in white light, as well as PCA (Phosphor Converted Amber) for specially protected areas.

Service life of LED **L90 B10 100,000 hours**. Istantium LED lighting groups can be replaced and updated even when the luminaire is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (**ULOR**) equal to **0%** with an angle from 0° to ± 5° (verify according to optics used). With **Class I** and **Class II** electronic control gear with 230 V AC/50-60 Hz supply voltage. Possibility of including additional protection against surges of **10 kV/10 kA**. Optional dimming with control line 2N+, without control line (Self-dimming) 2N-, by means of a flow dimmer from CAD cabinet amplitude dimming, for telemanagement with 1.10V or DALI input. Optional custom programming and maintenance of constant light output (**CLO**). Standard finish in Simon GY9007 colour. Possibility of Simon and RAL finishes, as well as Seafront paint for corrosive environments with high durability in a **C5M** environment. Dimensions 365x680x80 mm. **ENEC** certified luminaire compatible with **Zhaga-D4i**.

## DIMENSIONS AND FASTENING SYSTEMS



Fastening	Bracket, Ø14 mm, Ø14 mm, Ø14 mm fastening holes
Wire inlet	Compression seal fittings Pg 13.5 (m20)
Surface exposed to the wind	 0.027 m <sup>2</sup>  0.181 m <sup>2</sup>
Weight	Max. 13 kg Min. 12kg

## PHYSICAL FEATURES AND MATERIALS

IP	IP66
IK	IK09
Body	Die-cast aluminium
Closure system	Stainless steel screws
Fastening system	Painted galvanised sheet steel
Diffuser	Flat transparent shatter-proof tempered glass

## FINISHES

Body	Painted GY9007 colour (Standard Paint) Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)
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## REGULATIONS AND CERTIFICATES



Luminaire according to: EN 60598-2-5 / EN 62493 / EN 55015 / EN 61547 / EN 61000-3-2 / EN 50581

Warranty	5 years.
Supply and packaging	Pole and arms packed with foam reel protector and plate base with foam protector on edges

Maintenance	Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent. Lubricate the sealing gaskets and replace them when they are cracked. Lubricate the closures and/or hinges of the moving parts. Keep the thermal radiation surface clean to not lose light flux without shortening the life of the LEDs.
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\* Values corresponding to the current state of technology. \*\* The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.

## ELECTRICAL PARAMETERS \* AND CONNECTIVITY

Temp.	-20 °C... +35 °C
Dimming	<b>2N-</b> Without control line <b>Dxxx</b> Without custom programmed control line <b>2N+</b> With control line <b>CAD</b> Cabinet amplitude dimming <b>1N (100%)</b> Without dimming <b>1.10V</b> Dimming through 1.10V input protocol <b>DALI</b> Dimming through DALI input protocol

Possibility of activating the **CLO** function, which allows the depreciation of the light emitted by the LEDs to be compensated by gradually increasing the supply current to them.

Possibility of fitting a **Zhaga / NEMA** connector on the top of the luminaire and a **Zhaga** connector on the bottom of the luminaire according to Zhaga Consortium Book 18.

### Luminaires supplied by electrical grid

Supply voltage	220-240 VAC
Frequency	50/60 Hz
Protection against power surge	10 kV / 10 kA
Power factor (cos φ at max. charge)	≥ 0.95
Luminaire electrical protection	Class I or Class II
Power according to models**	80 LEDs
Supply current	
HIGH EFFICIENCY	78 W
HIGH BALANCE	121 W
HIGH FLUX	161 W
VERY HIGH FLUX	212 W



## CONFIGURE YOUR IRAYA L LUMINAIRE

Model	Diffuser	Wire	Optics	Colour Temp.	Optical group power	Team	Dimming	Protection	Finish	Description
<b>IRALXF</b>										Simon IRAYA Istanium® LED, Size L, bracket fastening, flat cover
	<b>GTF</b>									Flat transparent shatter-proof tempered glass diffuser
		<b>P</b>								With installation wiring (0,5 m) and IP67 watertight connector
			<b>RG_</b>							G type front road light optics
			<b>RJ_</b>							J type front road light optics
			<b>RL_</b>							L type front road light optics
			<b>RA_</b>							A type extended road light optics
			<b>RE_</b>							E type extended road light optics
			<b>AE_</b>							E type asymmetric optics
			<b>AG_</b>							G Type Asymmetric Optics
			<b>TA_</b>							Overhead tunnel optics
			<b>CIN</b>							Reverse tapered optics
			<b>CME</b>							E type medium tapered optics
			<b>CMM</b>							M type medium tapered optics
			<b>EW_</b>							Wide elliptical optics
				<input type="radio"/> <b>NDL</b>						Neutral daylight - 4,000 K
				<input type="radio"/> <b>WDL</b>						Warm daylight – 3,000 K
				<input type="radio"/> <b>SDL</b>						Soft daylight - 2,700 K
				<input type="radio"/> <b>XDL</b>						Extra warm daylight – 2,200 K
					<b>121W530</b>					121 W 530 mA      17,810 lm to 3,000 K      80 LEDs
					<b>161W700</b>					161 W 700 mA      22,340 lm to 3,000 K      80 LEDs
					<b>212W900</b>					212 W 900 mA      27,040 lm to 3,000 K      80 LEDs
						<b>IA23_</b>				Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, standard protection against 6 kV power surges
						<b>IA23S</b>				Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, additional protection against 10 kV power surges
						<b>2N_</b>				Dimming without control line (self-dimming)
						<b>2N+ _</b>				Dimming with control line
						<b>1N_</b>				Without dimming (on/off)
						<b>CAD_</b>				Cabinet amplitude dimming (electrical box dimmer)
						<b>1-10</b>				Dimming through 1-10V input protocol
						<b>DALI</b>				Dimming through DALI input protocol
						<b>DXXX</b>				Dimming without control line (custom program)
								<b>C1</b>		Class I luminaire electrical protection
								<b>C2</b>		Class II luminaire electrical protection
									<b>GY9007</b>	Standard finish in Simon RAL GY9007
									<b>xxxxxx</b>	Finish in Simon colours
									<b>xxxxxx</b>	Finish in Simon RAL classic chart colours
									<b>CMxxxx</b>	Seafront Paint Finish

### BASE REFERENCES

Power	No. of LEDs	Current	Configuration	Order code
121	80	530	IRALXFGTFPRJ_WDL121W530IA23_1N__C1GY9007	<b>419-005994016</b>
161	80	700	IRALXFGTFPRJ_WDL161W700IA23_1N__C1GY9007	<b>419-005995016</b>
212	80	900	IRALXFGTFPRJ_WDL212W900IA23_1N__C1GY9007	<b>419-005996016</b>

The luminaire flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes.  
The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.



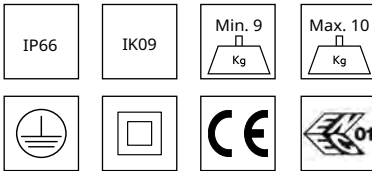




# IRAYA MXF

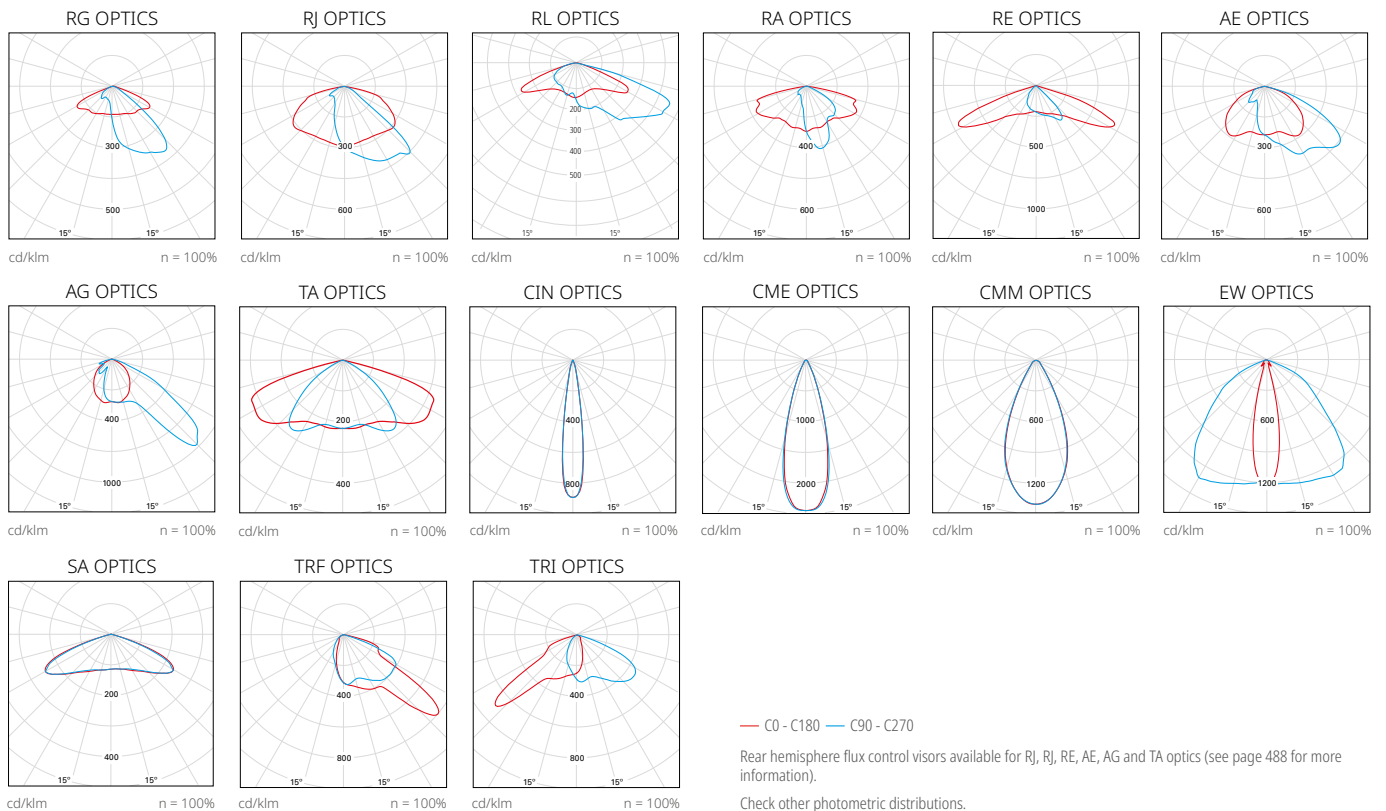
## ISTANIUM<sup>®</sup>

### SPOTLIGHT LED LUMINAIRE



COLOUR TEMP.: ND L 4000 K | WDL 3000 K | SDL 2700 K | XDL 2200 K | PCA\*  
 COLOUR RENDERING INDEX: >70  
 UPWARD LIGHT OUTPUT RATIO (ULOR): <0.1 %\*\*  
 LED DURATION (L90 B10 AT T<sub>a</sub>=25 °C AND T<sub>j</sub>=95 °C): 100,000 h

\* Upon request \*\* The value may change depending on the optics.

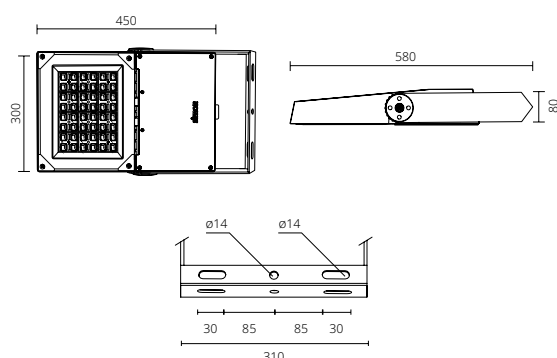




Simon **IRAYA** LED spotlight, size M, made of die-cast aluminium. Bracket fastening. Flat cover with non-visible cooling fins in installed position. Self-cleaning system by means of rainwater, which allows its correct evacuation without dirtying the luminaire, preventing the lighting performance from being affected over time. Single body spotlight with two independent compartments for thermal separation, for the optical group and for the electric group. Possibility of fitting an **upper Zhaga/NEMA** connector and a **lower Zhaga** connector. Access to the gear and maintenance from the back with four-screw opening and a fastening system to prevent the lid from falling. Easy-clean transparent flat tempered glass diffuser to prevent UV radiation in the optics. **IP66** protection rating for the full spotlight, with a **pressure relief valve** to keep the pressure constant and prevent moisture from entering, and an impact resistance rating of **IK09**. With pre-wiring of 50 cm and IP67 connector. Possibility of mounting up to sixteen multi-array optics. Anti-glare, truncated pyramid-shaped reflector, matt with light flux recovery.

Possibility of four colour temperatures in white light, as well as PCA (Phosphor Converted Amber) for specially protected areas.

Service life of LED **L90 B10 100,000 hours**. Istantium LED lighting groups can be replaced and updated even when the luminaire is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (**ULOR**) equal to **0%** with an angle from 0° to ± 5° (verify according to optics used). With **Class I** and **Class II** electronic control gear with 230 V AC/50-60 Hz supply voltage. Possibility of including additional protection against surges of **10 kV/10 kA**. Optional dimming with control line 2N+, without control line (Self-dimming) 2N-, by means of a flow dimmer from CAD cabinet amplitude dimming, for telemanagement with 1.10V or DALI input. Optional custom programming and maintenance of constant light output (**CLO**). Standard finish in Simon GY9007 colour. Possibility of Simon and RAL finishes, as well as Seafront paint for corrosive environments with high durability in a C5M environment. Dimensions 320x582x80 mm. **ENEC** certified luminaire compatible with **Zhaga-D4i**.

## DIMENSIONS AND FASTENING SYSTEMS



Fastening	Bracket, Ø14 mm, Ø14 mm, Ø14 mm fastening holes
Wire inlet	Compression seal fittings Pg 13.5 (m20)
Surface exposed to the wind	 0.024 m <sup>2</sup>  0.135 m <sup>2</sup>
Weight	Max. 10 kg Min. 9 kg

## PHYSICAL FEATURES AND MATERIALS

IP	IP66
IK	IK09
Body	Die-cast aluminium
Closure system	Stainless steel screws
Fastening system	Painted galvanised sheet steel
Diffuser	Flat transparent shatter-proof tempered glass

## FINISHES

Body	Painted GY9007 colour (Standard Paint) Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)
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## ELECTRICAL PARAMETERS \* AND CONNECTIVITY

Temp.	-20 °C... +35 °C
Dimming	<b>2N-</b> Without control line <b>Dxxx</b> Without custom programmed control line <b>2N+</b> With control line <b>CAD</b> Cabinet amplitude dimming <b>1N (100%)</b> Without dimming <b>1.10V</b> Dimming through 1.10V input protocol <b>DALI</b> Dimming through DALI input protocol

Possibility of activating the **CLO** function, which allows the depreciation of the light emitted by the LEDs to be compensated by gradually increasing the supply current to them.

Possibility of fitting a **Zhaga / NEMA** connector on the top of the luminaire and a **Zhaga** connector on the bottom of the luminaire according to Zhaga Consortium Book 18.

### Luminaires supplied by electrical grid

Supply voltage	220-240 V <sub>ac</sub>
Frequency	50/60 Hz
Protection against power surge	6 kV (Possibility of increasing to 10 kV / 10 kA upon request)
Power factor (cos φ at max. charge)	≥ 0.95
Luminaire electrical protection	Class I or Class II
Power according to models**	48 LEDs
Supply current	
HIGH EFFICIENCY	47 W
HIGH BALANCE	73 W
HIGH FLUX	97 W
VERY HIGH FLUX	150 W

## REGULATIONS AND CERTIFICATES



Luminaire according to: EN 60598-2-5 / EN 62493 / EN 55015 / EN 61547 / EN 61000-3-2 / EN 50581

Warranty	5 years
Supply and packaging	Packed in recycled cardboard with an identifying label to protect the product during transport and storage.
Maintenance	Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent. Lubricate the sealing gaskets and replace them when they are cracked. Lubricate the closures and/or hinges of the moving parts. Keep the thermal radiation surface clean to not lose light flux without shortening the life of the LEDs.

\* Values corresponding to the current state of technology. \*\* The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.



## CONFIGURE YOUR IRAYA M LUMINAIRE

Model	Diffuser	Wire	Optics	Colour Temp.	Optical group power	Team	Dimming	Protection	Finish	Description
<b>IRAMXF</b>										Simon IRAYA Istanium® LED, size M, bracket fastening, flat cover
	<b>GTF</b>									Flat transparent shatter-proof tempered glass diffuser
		<b>P</b>								With installation wiring (0.5 m) and IP67 watertight connector
			<b>RG_</b>							G type front road light optics
			<b>RJ_</b>							J type front road light optics
			<b>RL_</b>							L type front road light optics
			<b>RA_</b>							A type extended road light optics
			<b>RE_</b>							E type extended road light optics
			<b>AE_</b>							E type asymmetric optics
			<b>AG_</b>							G Type Asymmetric Optics
			<b>SA_</b>							A Type Symmetric Optics
			<b>TRF</b>							Traffic optics
			<b>TRI</b>							Reverse traffic optics
			<b>TA_</b>							Overhead tunnel optics
			<b>CIN</b>							Reverse tapered optics
			<b>CME</b>							E type medium tapered optics
			<b>CMM</b>							M type medium tapered optics
			<b>EW_</b>							Wide elliptical optics
				<input type="radio"/> <b>NDL</b>						Neutral daylight - 4,000 K
				<input type="radio"/> <b>WDL</b>						Warm daylight – 3,000 K
				<input type="radio"/> <b>SDL</b>						Soft daylight - 2,700 K
				<input type="radio"/> <b>XDL</b>						Extra warm daylight – 2,200 K
					<b>_73W530</b>					73 W 530 mA      10,600 lm to 3000 K      48 LEDs
					<b>_97W700</b>					97 W 700 mA      13,270 lm to 3000 K      48 LEDs
					<b>150W_1K</b>					150 W 1050 mA      17,860 lm to 3000 K      48 LEDs
						<b>IA23_</b>				Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, standard protection against 6 kV power surges
						<b>IA23S</b>				Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, additional protection against 10 kV power surges
						<b>2N_</b>				Dimming without control line (self-dimming)
						<b>2N+_</b>				Dimming with control line
						<b>1N_</b>				Without dimming (on/off)
						<b>CAD_</b>				Cabinet amplitude dimming (electrical box dimmer)
						<b>1-10</b>				Dimming through 1-10V input protocol
						<b>DALI</b>				Dimming through DALI input protocol
						<b>DXXX</b>				Dimming without control line (custom program)
							<b>C1</b>			Class I luminaire electrical protection
							<b>C2</b>			Class II luminaire electrical protection
								<b>GY9007</b>		Standard finish in Simon RAL GY9007
								<b>xxxxxx</b>		Finish in Simon colours
								<b>xxxxxx</b>		Finish in Simon RAL classic chart colours
								<b>CMxxxx</b>		Seafront Paint Finish

### BASE REFERENCES

Power	No. of LEDs	Current	Configuration	Order code
73	80	530	IRAMXFGTFPRJ_WDL_73W530IA23_1N_C1GY9007	<b>417-001158016</b>
97	80	700	IRAMXFGTFPRJ_WDL_97W700IA23_1N_C1GY9007	<b>417-001343016</b>
150	80	1050	IRAMXFGTFPRJ_WDL150W_1KIA23_1N_C1GY9007	<b>417-006002016</b>

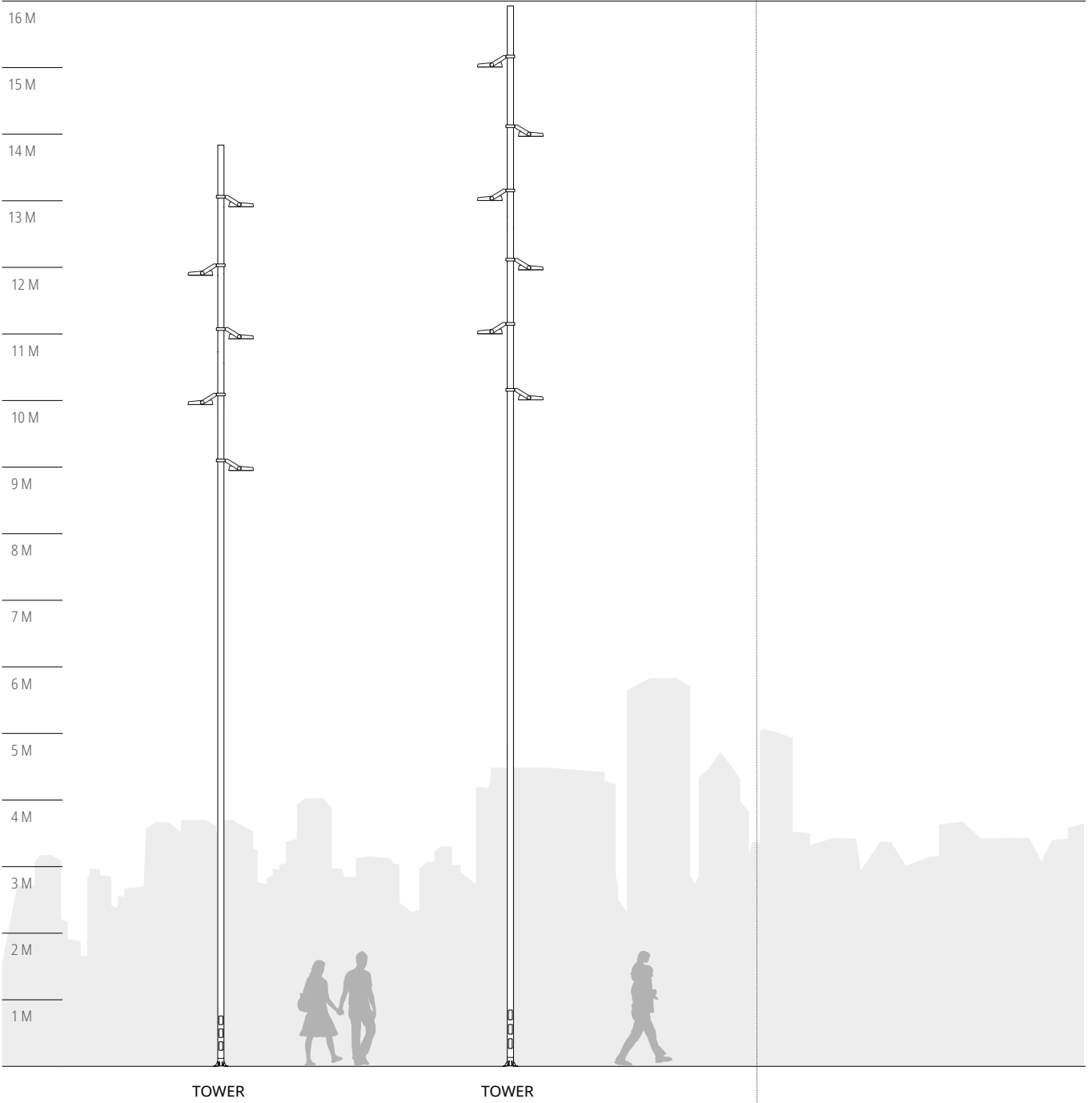
The luminaire flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes.  
The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.





COMBINE YOUR IRAYA LUMINAIRE WITH:

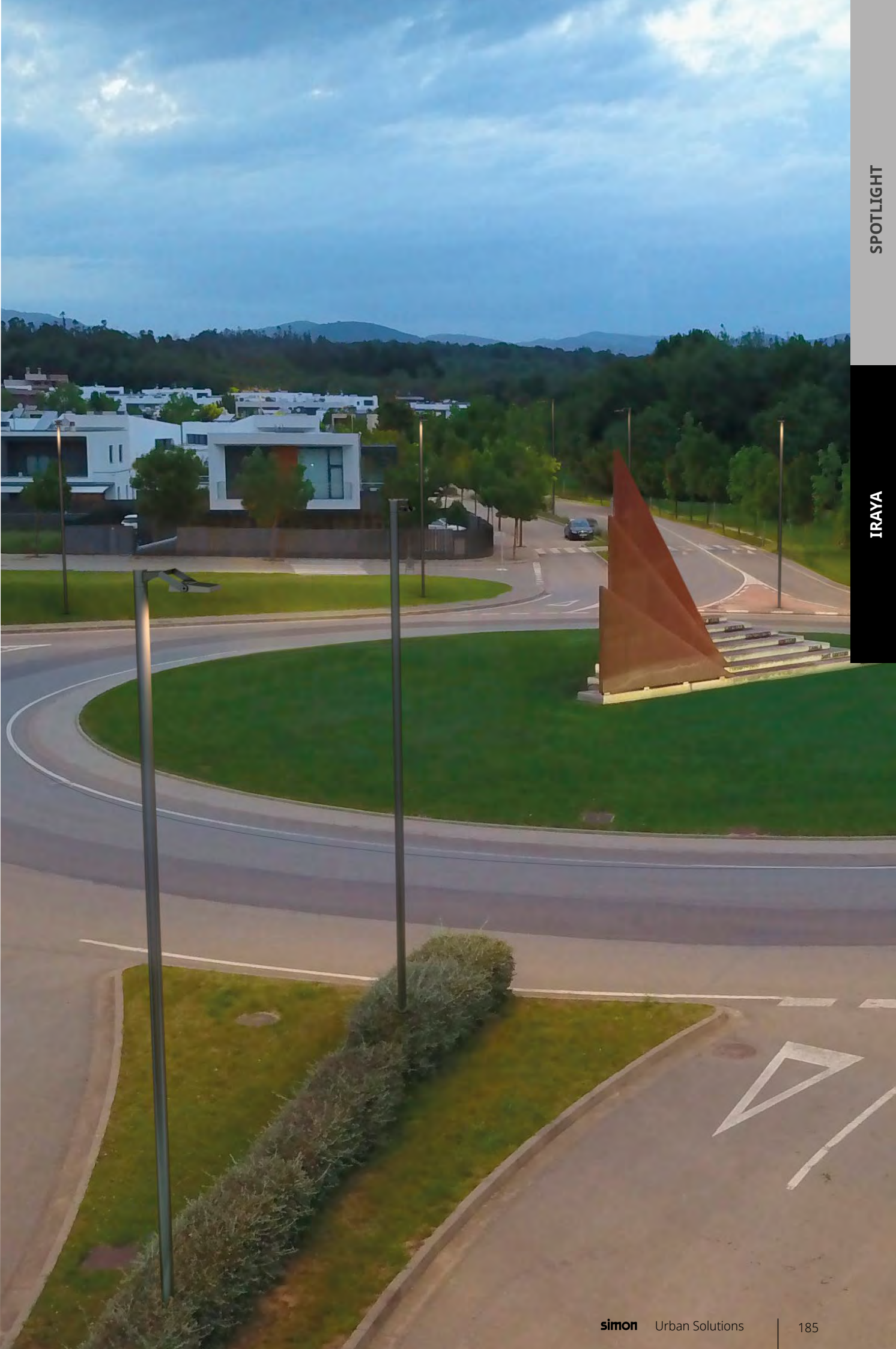
FUNCTIONAL POLES:



TOWER

TOWER

OTHER DECORATIVE POLES: TORT, TIL



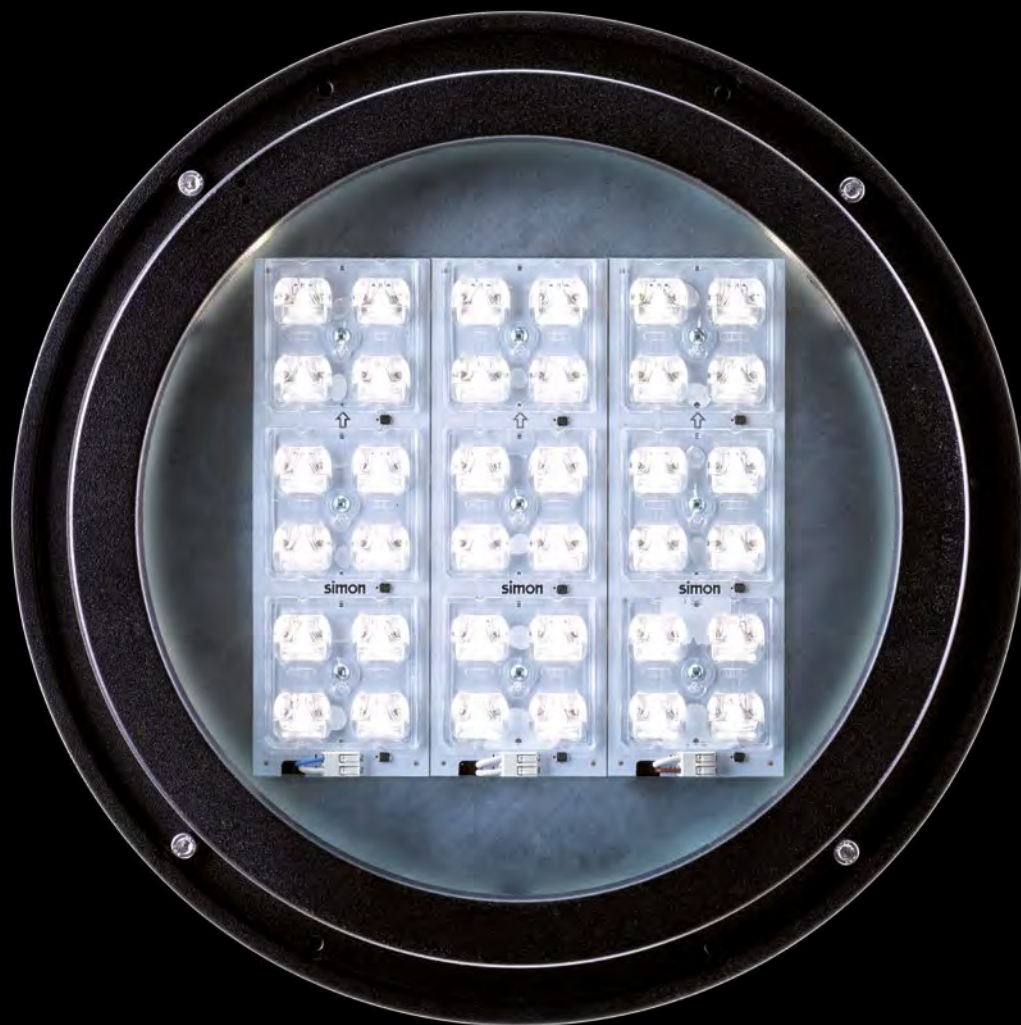


SPOTLIGHT

FOGO







# FOGO

## ISTANIUM<sup>LED</sup>®

Functional spotlight, ideal for the intensive introduction of LED technology



Parking areas



Streets



Pedestrian streets



Commercial areas



Parks / Gardens



Squares



Urban cycle path



Roundabouts / Intersections



Monuments



Bridges



Façades



Large areas

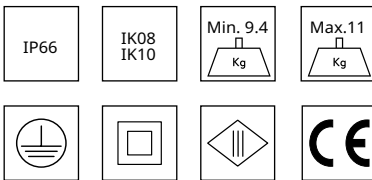




# FOGO

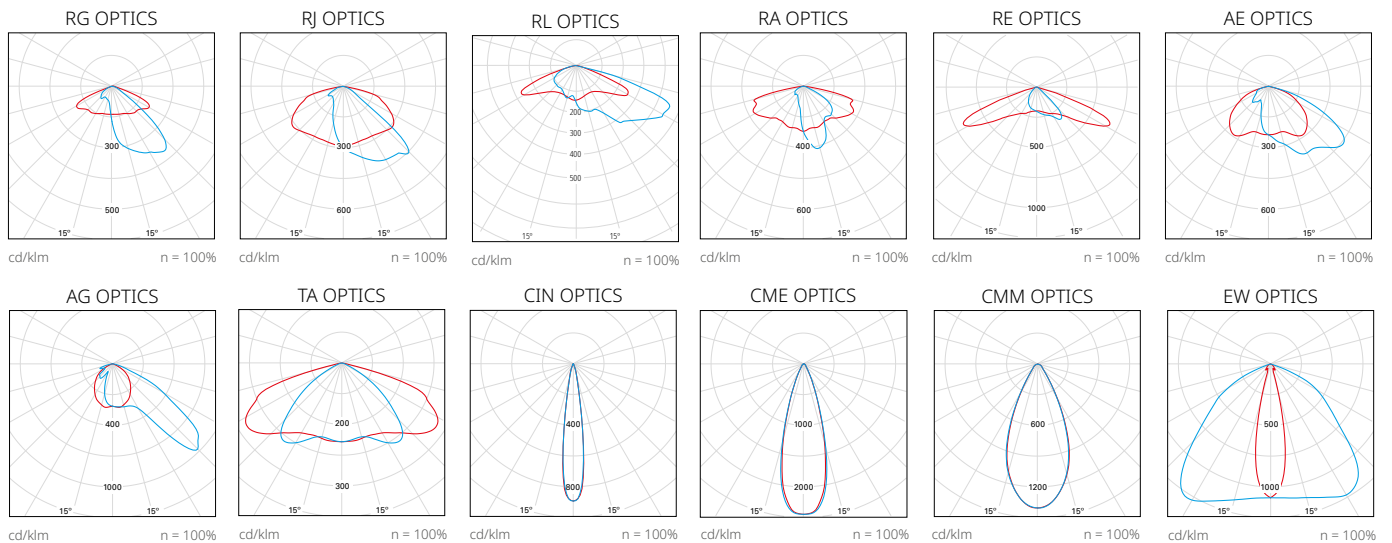
## ISTANIUM<sup>LED</sup>

### SPOTLIGHT LED LUMINAIRE



COLOUR TEMP: NDL 4000 K | WDL 3000 K | SDL 2700 K | XDL 2200 K | PCA\*  
 COLOUR RENDERING INDEX: >70  
 UPWARD LIGHT OUTPUT RATIO (ULOR): <0.1 %\*\*  
 LED DURATION (L90 B10 AT  $T_a=25\text{ °C}$  AND  $T_j=95\text{ °C}$ ): 100,000 h

\* Upon request \*\* Value may change depending on the optics



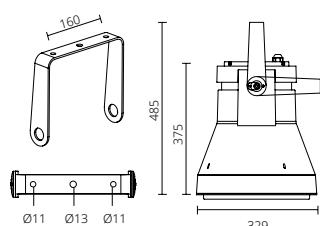
— C0 - C180 — C90 - C270



Rear hemisphere flux control visors available for RJ, RL, RE, SA and SB optics (see page 488 for more information).

Check other photometric distributions.

Simon **FOGO** LED spotlight, size S, made of die-cast aluminium. Bracket fastening. Flat cover. Internal refrigeration system through fins. Access to gear and maintenance from the back with four-screw opening. Access to optical group from the front with four-screw opening. Easy-clean transparent flat tempered glass diffuser to prevent UV radiation in the optics. **IP66** protection rating for full spotlight and **IK08** impact resistance rating, or **IK10** with protective grille accessory. Possibility of mounting up to fourteen multi-array optics. Possibility of four colour temperatures in white light, as well as PCA (Phosphor Converted Amber) for specially protected areas. Service life of LED **L90 B10 100,000 hours**. Istantium LED lighting groups can be replaced and updated even when the luminaire is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (**ULOR**) equal to **0%** with an angle from 0° to ± 5° (verify according to optics used) with **Class I** and **Class II** electronic gear with 230 V AC/50 - 60 Hz power supply voltage and **Class III** with 12/24 VDC power supply voltage. Possibility of including additional protection against surges of **10 kV/10 kA**. Optional dimming with control line 2N+, without control line (Self-dimming) 2N-, by means of a flow dimmer from CAD cabinet amplitude dimming, for telemanagement with 1.10V or DALI input. Optional custom programming and maintenance of constant light output (**CLO**). Standard finish in Simon GYTECH colour, with bracket trim, front trim ring and back cover in Simon BKTECH colour, as well as Seafront paint for corrosive environments with high durability in a **C5M** environment. Possibility of Simon and RAL chart finishes. Dimensions 329x482x329 mm.

## DIMENSIONS AND FASTENING SYSTEMS



Fastening	Bracket, Ø11 mm, Ø13 mm, Ø11 mm fastening holes
Wire inlet	Compression seal fittings Pg 13.5 (M20)
Distance of illuminated objects	1m
Surface exposed to the wind	 0.085 m <sup>2</sup>  0.098 m <sup>2</sup>
Weight	Max. 11 kg Min. 9.4 kg

## PHYSICAL FEATURES AND MATERIALS

IP	IP66
IK	K08 IK10 (with protective grille)
Base	Die-cast aluminium
Closure system	With stainless steel screws
Fastening system	Painted galvanised sheet steel
Diffuser	Flat, transparent, tempered glass

## FINISHES

Body and bracket	Painted in GYTECH colour (Standard Paint) Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)
Lyre trim, front trim ring and back cap	BKTECH

## REGULATIONS AND CERTIFICATES



Luminaire according to: EN 60598-2-5 / EN 62493 / EN 55015 / EN 61547 / EN 61000-3-2 / EN 50581

Warranty	5 years.
Supply and packaging	Packed in recycled cardboard with an identifying label to protect the product during transport and storage.
Maintenance	Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent. Lubricate the sealing gaskets and replace them when they are cracked. Lubricate the closures and/or hinges of the moving parts. Keep the thermal radiation surface clean to not lose light flux without shortening the life of the LEDs.

\* Values corresponding to the current state of technology. \*\* Check other regulations. \*\*\* Power values have a tolerance of ±7%

## ELECTRICAL PARAMETERS \* AND CONNECTIVITY

Temp.	-20 °C... +35 °C
Dimming**	<b>2N-</b> Without control line <b>Dxxx</b> Without custom programmed control line <b>2N+</b> With control line <b>CAD</b> Cabinet amplitude dimming <b>1N (100%)</b> Without dimming <b>1.10V</b> Dimming through 1.10V input protocol <b>DALI</b> Dimming through DALI input protocol

Possibility of activating the **CLO** function, which allows the depreciation of the light emitted by the LEDs to be compensated by gradually increasing the supply current to them.

	Luminaires supplied by electrical grid	Luminaires supplied by solar lighting points	
Supply voltage	220-240 V <sub>ac</sub>	12-24 V <sub>dc</sub>	
Frequency	50/60 Hz	-	
Protection against power surge	6 kV (Possibility of increasing to 10 kV / 10 kA upon request)	-	
Power factor (cos φ at max. charge)	≥ 0.95	-	
Luminaire electrical protection	Class I or Class II	Class III	
Optical group power by model***	12 LEDs	24 LEDs	36 LEDs
Supply current	1mod.	2mod.	3mod.
HIGH EFFICIENCY	12 W	24 W	35 W
HIGH BALANCE	18 W	36 W	54 W
HIGH FLUX	24 W	49 W	73 W
VERY HIGH FLUX	-	-	-



## CONFIGURE YOUR FOGO LUMINAIRE

Model	Diffuser	Wire	Optics	Colour Temp.	Optical group power	Team	Dimming	Protection	Finish	Description
<b>FOGSXF</b>										Simon FOGO Istanium® LED, size S, bracket fastening, flat cover
	<b>GTF</b>									Flat transparent shatter-proof tempered glass diffuser
		<b>0</b>								Without installation wire (0 m)
			<b>RG_</b>							G type front road light optics
			<b>RJ_</b>							J type front road light optics
			<b>RL_</b>							L type front road light optics
			<b>RA_</b>							A type extended road light optics
			<b>RE_</b>							E type extended road light optics
			<b>AE_</b>							E type asymmetric optics
			<b>AG_</b>							G Type Asymmetric Optics
			<b>TA_</b>							Overhead tunnel optics
			<b>CIN</b>							Reverse tapered optics
			<b>CME</b>							E type medium tapered optics
			<b>CMM</b>							M type medium tapered optics
			<b>EW_</b>							Wide elliptical optics
				<input type="radio"/> <b>NDL</b>						Neutral daylight - 4,000 K
				<input type="radio"/> <b>WDL</b>						Warm daylight – 3,000 K
				<input type="radio"/> <b>SDL</b>						Soft daylight - 2,700 K
				<input type="radio"/> <b>XDL</b>						Extra warm daylight – 2,200 K
					<b>_12W350</b>					12 W 350 mA      1,670 lm to 3,000 K      12 LEDs
					<b>_24W700</b>					24 W 700 mA      3,190 lm to 3,000 K      12 LEDs
					<b>_36W530</b>					36 W 530 mA      4,720 lm to 3,000 K      24 LEDs
					<b>_49W700</b>					49 W 700 mA      6,030 lm to 3,000 K      24 LEDs
					<b>_54W530</b>					54 W 530 mA      7,030 lm to 3,000 K      36 LEDs
					<b>_73W700</b>					73 W 700 mA      8,850 lm to 3,000 K      36 LEDs
						<b>IA23_</b>				Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, standard protection against 6 kV power surges
						<b>IA23S</b>				Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, additional protection against 10 kV power surges
						<b>IA12_</b>				Electronic control gear at 12/24 V <sub>ac</sub> C3 (solar). Only admits up to 36W and 1N and 2N-dimming
						<b>2N_-</b>				Dimming without control line (self-dimming)
						<b>2N+</b>				Dimming with control line
						<b>1N_</b>				Without dimming (on/off)
						<b>CAD_</b>				Cabinet amplitude dimming (electrical box dimmer)
						<b>1-10</b>				Dimming through 1-10V input protocol
						<b>DALI</b>				Dimming through DALI input protocol
						<b>DXXX</b>				Dimming without control line (custom program)
							<b>C1</b>			Class I luminaire electrical protection
							<b>C2</b>			Class II luminaire electrical protection
							<b>C3</b>			Class III luminaire electrical protection
								<b>GYTECH</b>		Standard finish in Simon Technical Grey
								<b>XXXXXX</b>		Finish in Simon colours
								<b>XXXXXX</b>		Finish in Simon RAL classic chart colours
								<b>CMXXXX</b>		Seafront Paint Finish

### BASE REFERENCES

Power	No. of LEDs	Current	Configuration	Order code
12 W	12	350 mA	FOGSXFGTF0RJ_WDL_12W350IA23_1N_C1GYTECH	<b>408-000762012</b>
24 W	12	700 mA	FOGSXFGTF0RJ_WDL_24W700IA23_1N_C1GYTECH	<b>408-000759012</b>
36 W	24	530 mA	FOGSXFGTF0RJ_WDL_36W530IA23_1N_C1GYTECH	<b>408-000597012</b>
49 W	24	700 mA	FOGSXFGTF0RJ_WDL_49W700IA23_1N_C1GYTECH	<b>408-000479012</b>
54 W	36	530 mA	FOGSXFGTF0RJ_WDL_54W530IA23_1N_C1GYTECH	<b>408-000761012</b>
73 W	36	700 mA	FOGSXFGTF0RJ_WDL_73W700IA23_1N_C1GYTECH	<b>408-000675012</b>

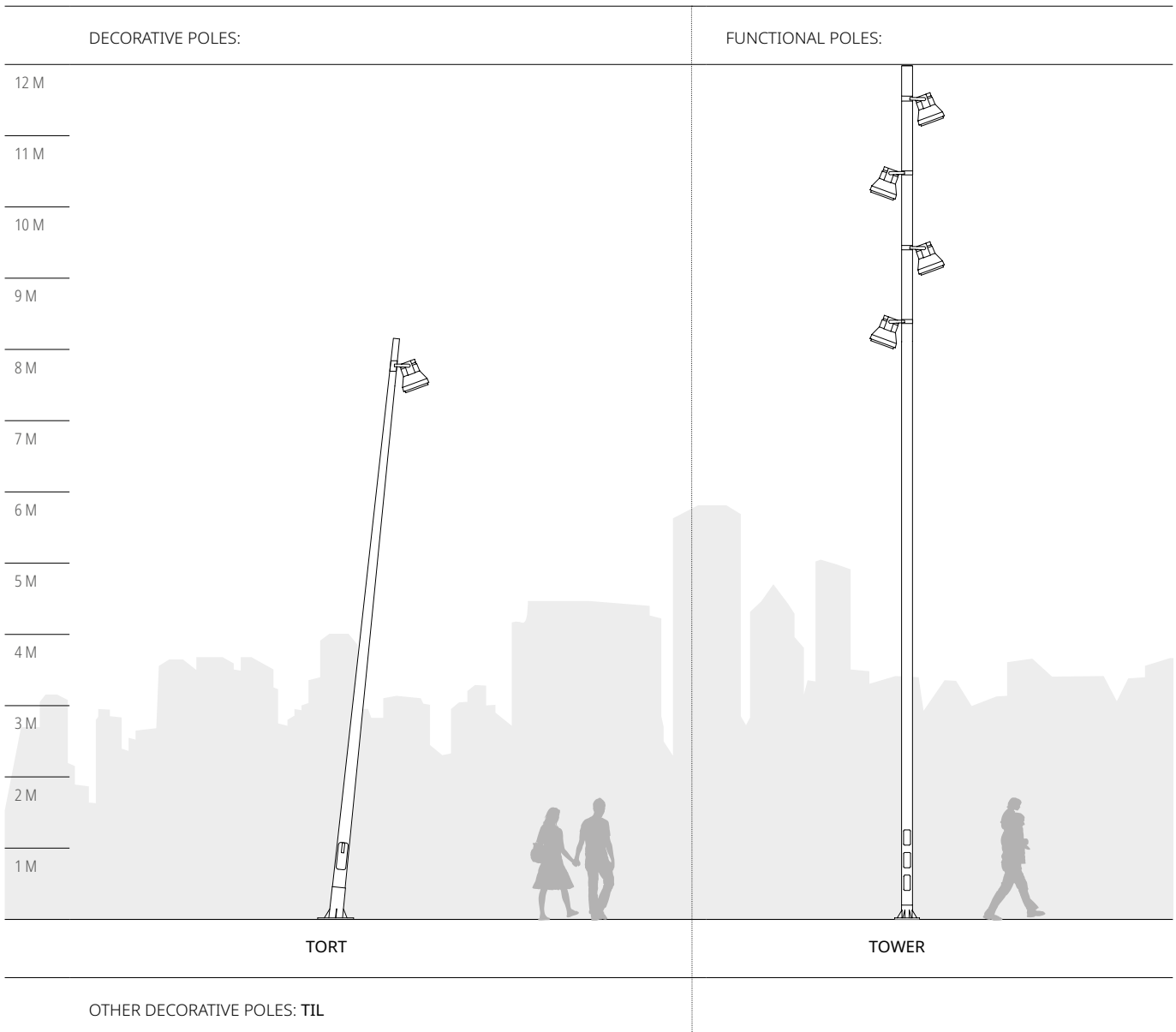
The luminaire flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes. The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes







## COMBINE YOUR FOGO LUMINAIRE:



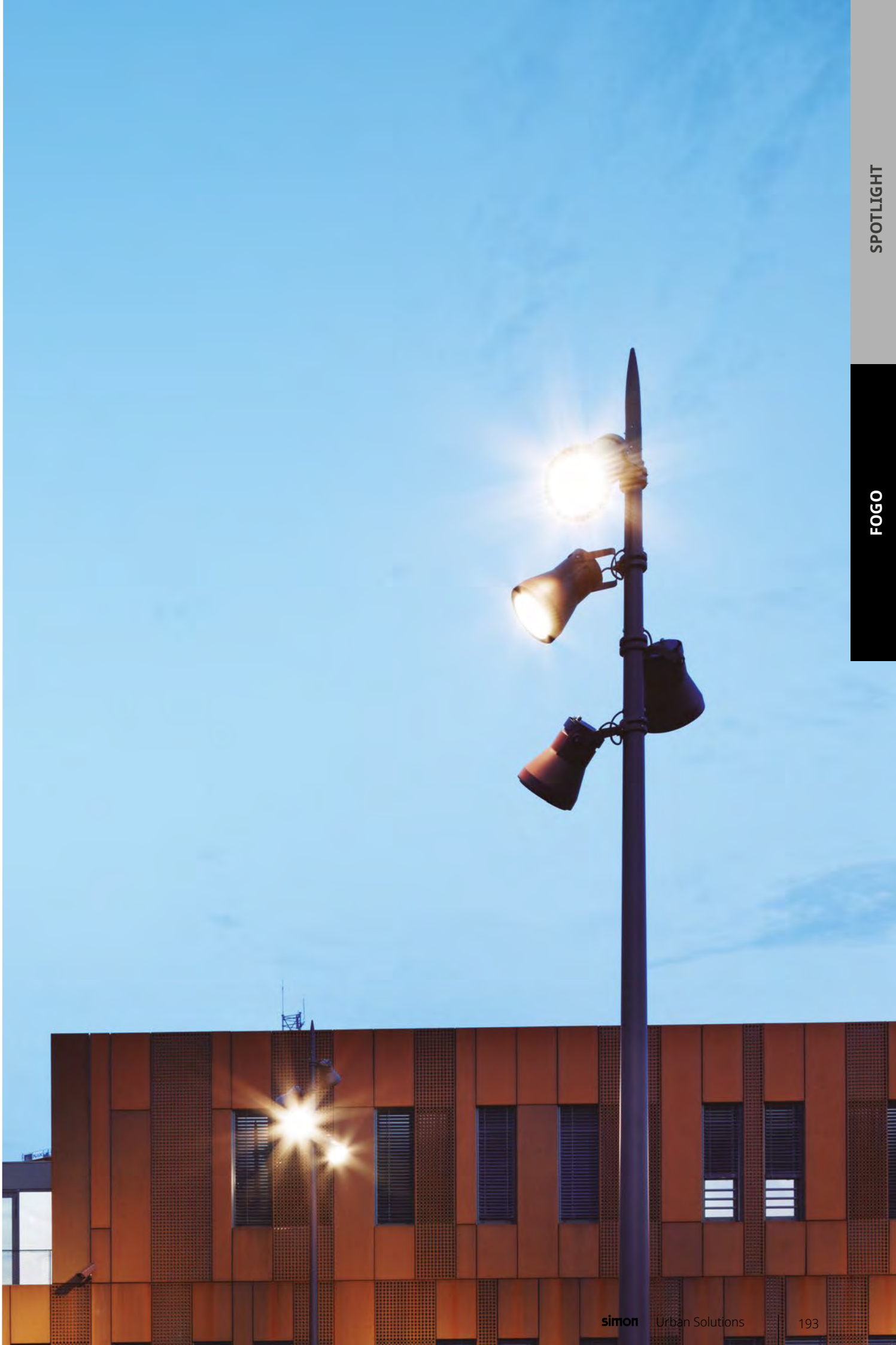
## ACCESSORIES / REPLACEMENTS

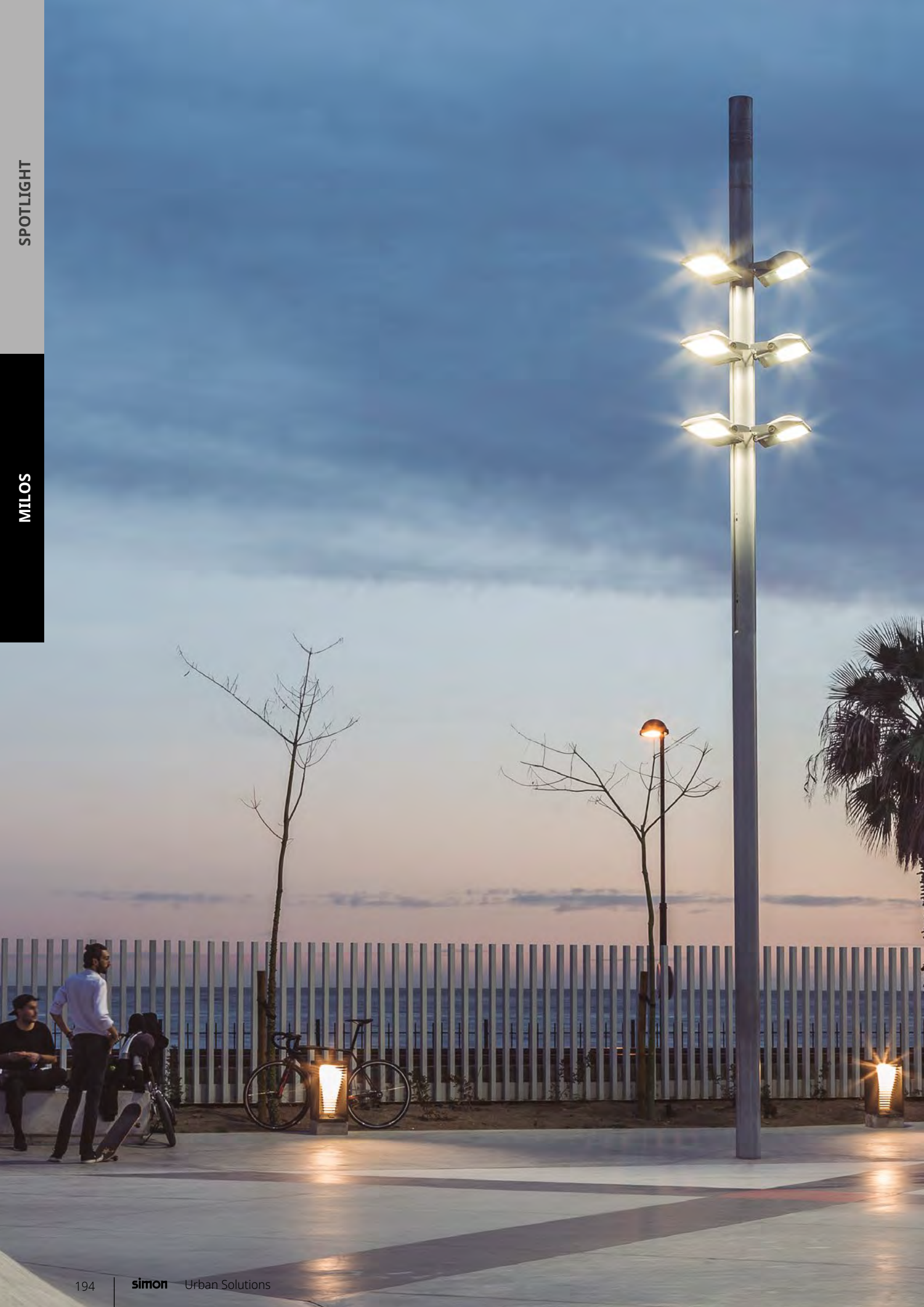
	Description	Finish	Order code
	Simple arm for flush spotlight	Galvanised	<b>5-531830</b>
		GYTECH	<b>5-531830-012</b>
		GYDECO	<b>5-531830-013</b>
	Simple arm for spotlight, 200 mm length	Galvanised	<b>5-531838</b>
		GYTECH	<b>5-531838-012</b>
		GYDECO	<b>5-531838-013</b>
	Double arm for spotlight, 200 mm length	Galvanised	<b>5-531839</b>
		GYTECH	<b>5-531839-012</b>
		GYDECO	<b>5-531839-013</b>
	Anti-vandalism protective grille	GY9006	<b>50-74603</b>
	Concentric anti-glare grille	Matt Black	<b>50-74605</b>

## LUMINAIRES IN THE COLLECTION



FOGO RGB









# MILOS

MXF / SXF

ISTANIUM<sup>LED</sup>®

Functional spotlight, ideal for the intensive introduction of LED technology



Main roads  
S / M



Industrial spaces  
S / M



Parking areas  
S / M



Green trails  
S / M



Avenues  
M



Streets  
S / M



Pedestrian streets  
S / M



Commercial areas  
S / M



Parks / Gardens  
S / M



Squares  
S / M



Urban cycle paths  
S / M



Roundabouts / Intersections  
S / M



Zebra crossings  
M



Tunnels  
S / M



Underpasses  
M



Monuments  
S / M



Bridges  
S / M



Façades  
S / M



Sports facilities  
M



Large areas  
M

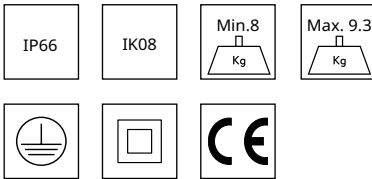




# MILOS MXF

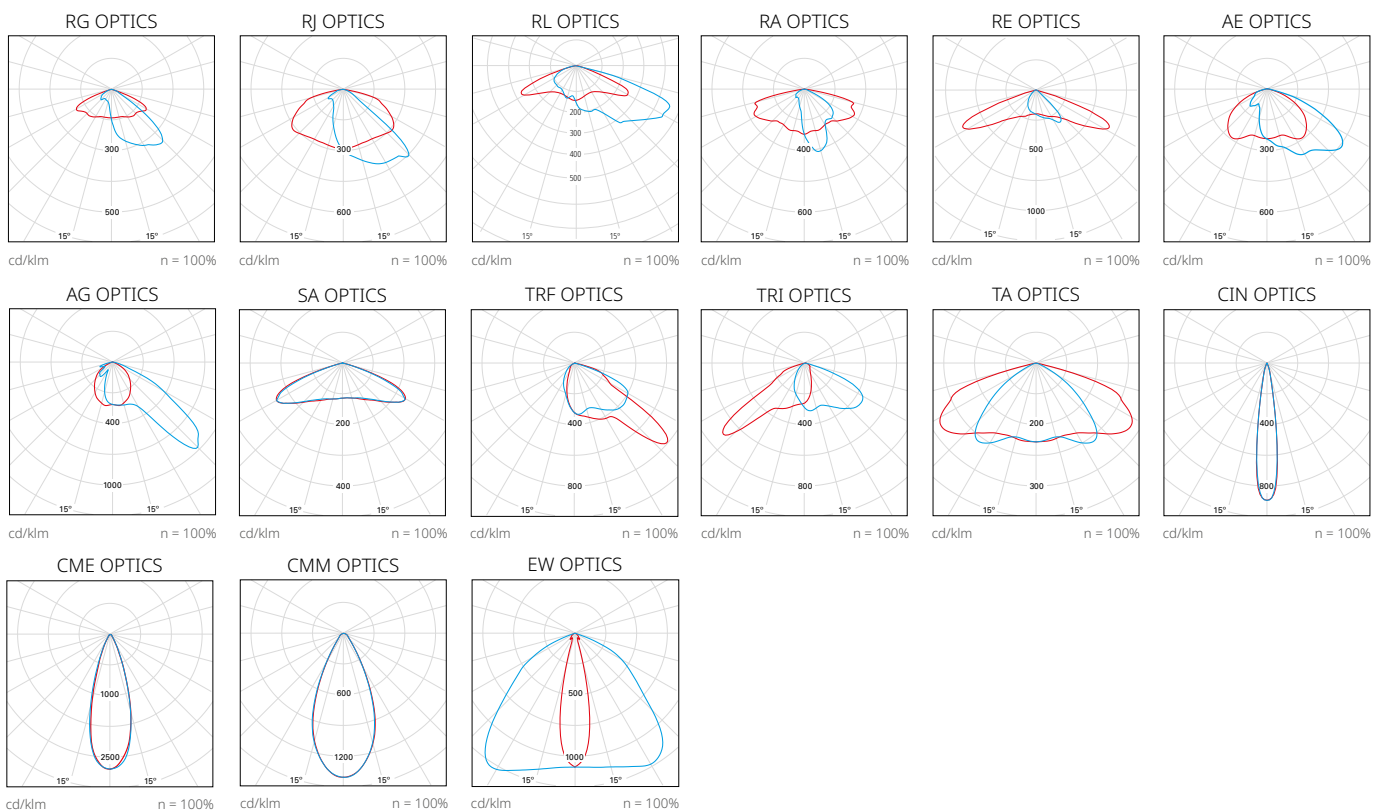
ISTANIUM<sup>LED</sup>®

## SPOTLIGHT LED LUMINAIRE



COLOUR TEMP.: ND L 4000 K | WDL 3000 K | SDL 2700 K | XDL 2200 K | PCA\*  
 COLOUR RENDERING INDEX: >70  
 UPWARD LIGHT OUTPUT RATIO (ULOR): <0.1 %\*\*  
 LED DURATION (L90 B10 AT T<sub>a</sub>=25 °C AND T<sub>j</sub>=95 °C): 100,000 h

\* Upon request \*\* Value may change depending on the optics

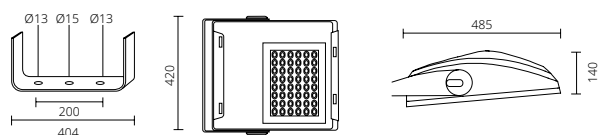




— C0 - C180 — C90 - C270 Rear hemisphere flux control visors available for RJ, RL, RE, E1, AE, SA and TA optics (see page 488 for more information).

Check other photometric distributions.

Simon **MILOS** LED spotlight, size M, made of die-cast aluminium. Bracket fastening. Flat cover. Internal refrigeration system through fins. Possibility of fitting an **upper Zhaga/NEMA** connector. Access to gear and maintenance from the bottom with front lever opening, without tools. Easy-clean transparent flat tempered glass diffuser to prevent UV radiation in the optics. **IP66** protection rating for full spotlight, and **IK08** impact resistance rating. Possibility of mounting up to sixteen multi-array optics. Possibility of four colour temperatures in white light, as well as PCA (Phosphor Converted Amber) for specially protected areas. Service life of LED **L90 B10 100,000 hours**. Istantium LED lighting groups can be replaced and updated even when the luminaire is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (**ULOR**) equal to **0%** with an angle from 0° to ± 5° (verify according to optics used). With **Class I** and **Class II** electronic control gear with 230 V AC/50-60 Hz supply voltage. Possibility of including additional protection against surges of **10 kV/10 kA**. Optional dimming with control line 2N+, without control line (Self-dimming) 2N-, by means of a flow dimmer from CAD cabinet amplitude dimming, for telemanagement with 1.10V or DALI input. Optional custom programming and maintenance of constant light output (**CLO**). Standard finish in Simon GYTECH colour. Possibility of Simon and RAL finishes, as well as Seafront paint for corrosive environments with high durability in a **C5M** environment. Dimensions 420x485x140 mm. **Zhaga-D4i** compatible luminaire.

## DIMENSIONS AND FASTENING SYSTEMS



Fastening	Bracket, Ø13 mm, Ø15 mm, Ø13 mm fastening holes
Wire inlet	Compression seal fittings Pg 13.5 (M20)
Distance of illuminated objects	1 m
Surface exposed to the wind	 0.05 m <sup>2</sup>  0.17 m <sup>2</sup>
Weight	Max. 9.3 kg Min. 8 kg

## PHYSICAL FEATURES AND MATERIALS

IP	IP66
IK	IK08
Body	Die-cast aluminium
Closure system	Painted die-cast aluminium lever
Fastening system	Painted galvanised sheet steel
Diffuser	Flat transparent shatter-proof tempered glass

## FINISHES

Body	Painted in GYTECH colour (Standard Paint) Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)
Bracket trim	Dark Grey

## REGULATIONS AND CERTIFICATES



Luminaire according to: EN 60598-2-5 / EN 62493 / EN 55015 / EN 61547 / EN 61000-3-2 / EN 50581

Warranty	5 years.
Supply and packaging	Packed in recycled cardboard with an identifying label to protect the product during transport and storage.
Maintenance	Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent. Lubricate the sealing gaskets and replace them when they are cracked. Lubricate the closures and/or hinges of the moving parts. Keep the thermal radiation surface clean to not lose light flux without shortening the life of the LEDs.

\* Values corresponding to the current state of technology. \*\* Check other regulations. \*\*\* Power values have a tolerance of ±7%

## ELECTRICAL PARAMETERS \* AND CONNECTIVITY

Temp.	-20 °C... +35 °C
Dimming**	<b>2N-</b> Without control line <b>Dxxx</b> Without custom programmed control line <b>2N+</b> With control line <b>CAD</b> Cabinet amplitude dimming <b>1N (100%)</b> Without dimming <b>1.10V</b> Dimming through 1.10V input protocol <b>DALI</b> Dimming through DALI input protocol

Possibility of activating the **CLO** function, which allows the depreciation of the light emitted by the LEDs to be compensated by gradually increasing the supply current to them.

Possibility of fitting a **Zhaga / NEMA** connector on the top of the luminaire according to Zhaga Consortium Book 18.

### Luminaires supplied by electrical grid

Supply voltage	220-240 V <sub>ac</sub>
Frequency	50/60 Hz
Protection against power surge	6 kV (Possibility of increasing to 10 kV / 10kA upon request)
Power factor (cos φ at max. charge)	≥ 0.95
Luminaire electrical protection	Class I or Class II
Optical group power by model***	12 LEDs 24 LEDs 36 LEDs 48 LEDs 60 LEDs 72 LEDs
Supply current	1mod. 2mod. 3mod. 4mod. 5mod. 6mod.
HIGH EFFICIENCY	12 W 24 W 35 W 47 W 59 W 71 W
HIGH BALANCE	18 W 36 W 54 W 73 W 91 W 109 W
HIGH FLUX	24 W 49 W 73 W - - -
VERY HIGH FLUX	- - - - -



## CONFIGURE YOUR MILOS M LUMINAIRE

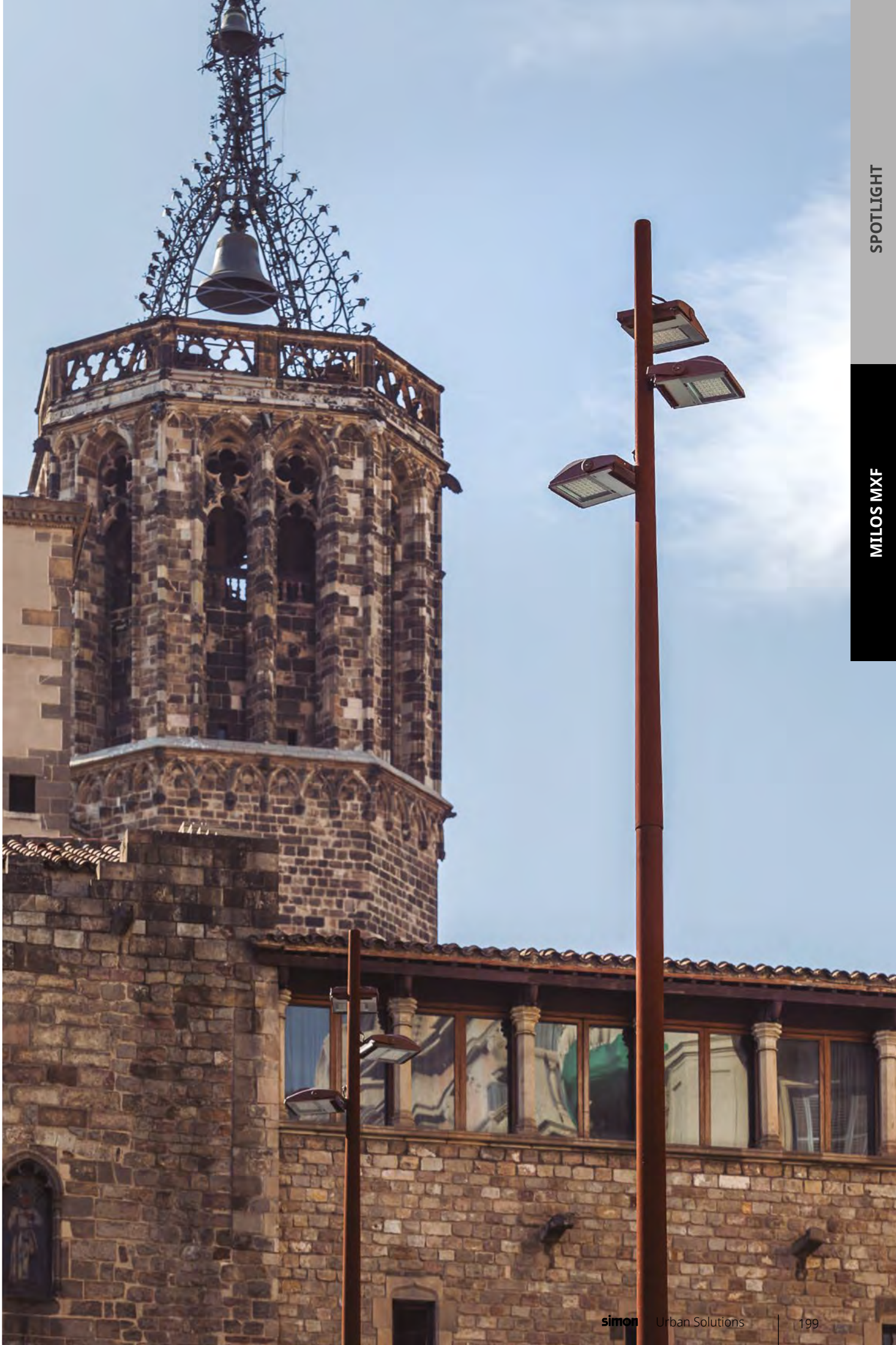
Model	Diffuser	Wire	Optics	Colour Temp.	Optical group power	Team	Dimming	Protection	Finish	Description
<b>MILMXF</b>										Simon MILOS Istanium® LED, size M, bracket fastening, flat cover
	<b>GTF</b>									Flat transparent shatter-proof tempered glass diffuser
		<b>0</b>								Without installation wire (0 m)
			<b>RG_</b>							G type front road light optics
			<b>RJ_</b>							J type front road light optics
			<b>RL_</b>							L type front road light optics
			<b>RA_</b>							A type extended road light optics
			<b>RE_</b>							E type extended road light optics
			<b>AE_</b>							E type asymmetric optics
			<b>AG_</b>							G Type Asymmetric Optics
			<b>SA_</b>							A Type Symmetric Optics
			<b>TRF</b>							Traffic optics
			<b>TRI</b>							Reverse traffic optics
			<b>TA_</b>							Overhead tunnel optics
			<b>CIN</b>							Reverse tapered optics
			<b>CME</b>							E type medium tapered optics
			<b>CMM</b>							M type medium tapered optics
			<b>EW_</b>							Wide elliptical optics
			<input type="radio"/> <b>NDL</b>							Neutral daylight - 4,000 K
			<input type="radio"/> <b>WDL</b>							Warm daylight – 3,000 K
			<input type="radio"/> <b>SDL</b>							Soft daylight - 2,700 K
			<input type="radio"/> <b>XDL</b>							Extra warm daylight – 2,200 K
					<b>_54W530</b>					54 W 530 mA      7,030 lm to 3,000 K      36 LEDs
					<b>_73W700</b>					73 W 700 mA      8,850 lm to 3,000 K      36 LEDs
					<b>_91W530</b>					91 W 530 mA      11,740 lm to 3,000 K      60 LEDs
						<b>IA23_</b>				Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, standard protection against 6 kV power surges
						<b>IA23S</b>				Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, additional protection against 10 kV power surges
						<b>IA12_</b>				Electronic control gear at 12/24 V <sub>ac</sub> C3 (solar). Only admits up to 36W and 1N and 2N-dimming
						<b>2N_</b>				Dimming without control line (self-dimming)
						<b>2N+</b>				Dimming with control line
						<b>1N_</b>				Without dimming (on/off)
						<b>CAD_</b>				Cabinet amplitude dimming (electrical box dimmer)
						<b>1-10</b>				Dimming through 1-10V input protocol
						<b>DALI</b>				Dimming through DALI input protocol
						<b>DXXX</b>				Dimming without control line (custom program)
							<b>C1</b>			Class I luminaire electrical protection
							<b>C2</b>			Class II luminaire electrical protection
							<b>C3</b>			Class III luminaire electrical protection
								<b>GYTECH</b>		Standard finish in Simon Technical Grey
								<b>xxxxxx</b>		Finish in Simon colours
								<b>xxxxxx</b>		Finish in Simon RAL classic chart colours
								<b>CMxxxx</b>		Seafront Paint Finish

### BASE REFERENCES

Power	No. of LEDs	Current	Configuration	Order code
54 W	36	530 mA	MILMXFGTF0RJ_WDL_54W530IA23_1N__C1GYTECH	<b>407-000761012</b>
73 W	36	700 mA	MILMXFGTF0RJ_WDL_73W700IA23_1N__C1GYTECH	<b>407-000675012</b>
91 W	60	530 mA	MILMXFGTF0RJ_WDL_91W530IA23_1N__C1GYTECH	<b>407-000760012</b>

The luminaire flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes. The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.







COMBINE YOUR MILOS M LUMINAIRE WITH:

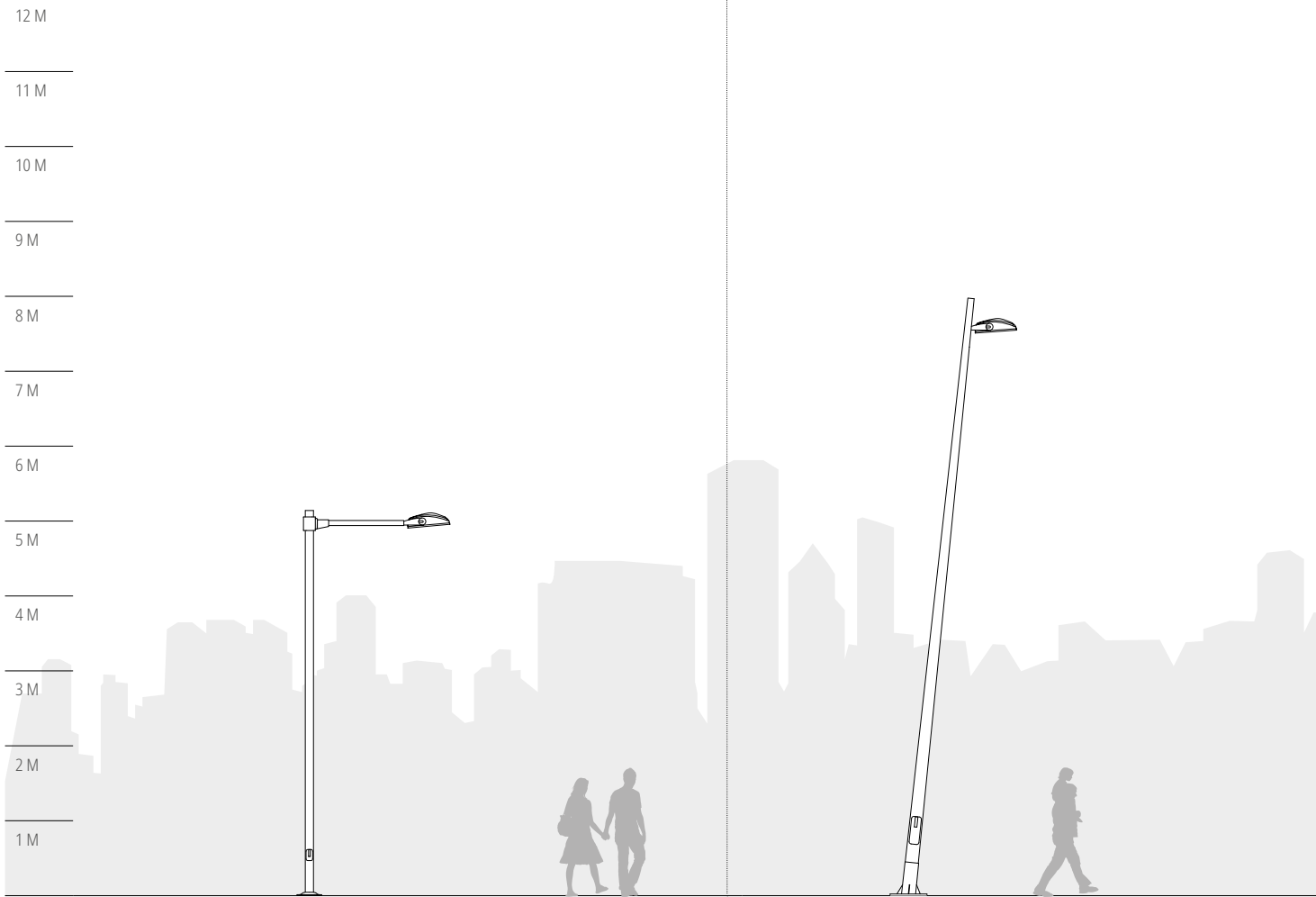
CUSTOM SOLUTIONS:

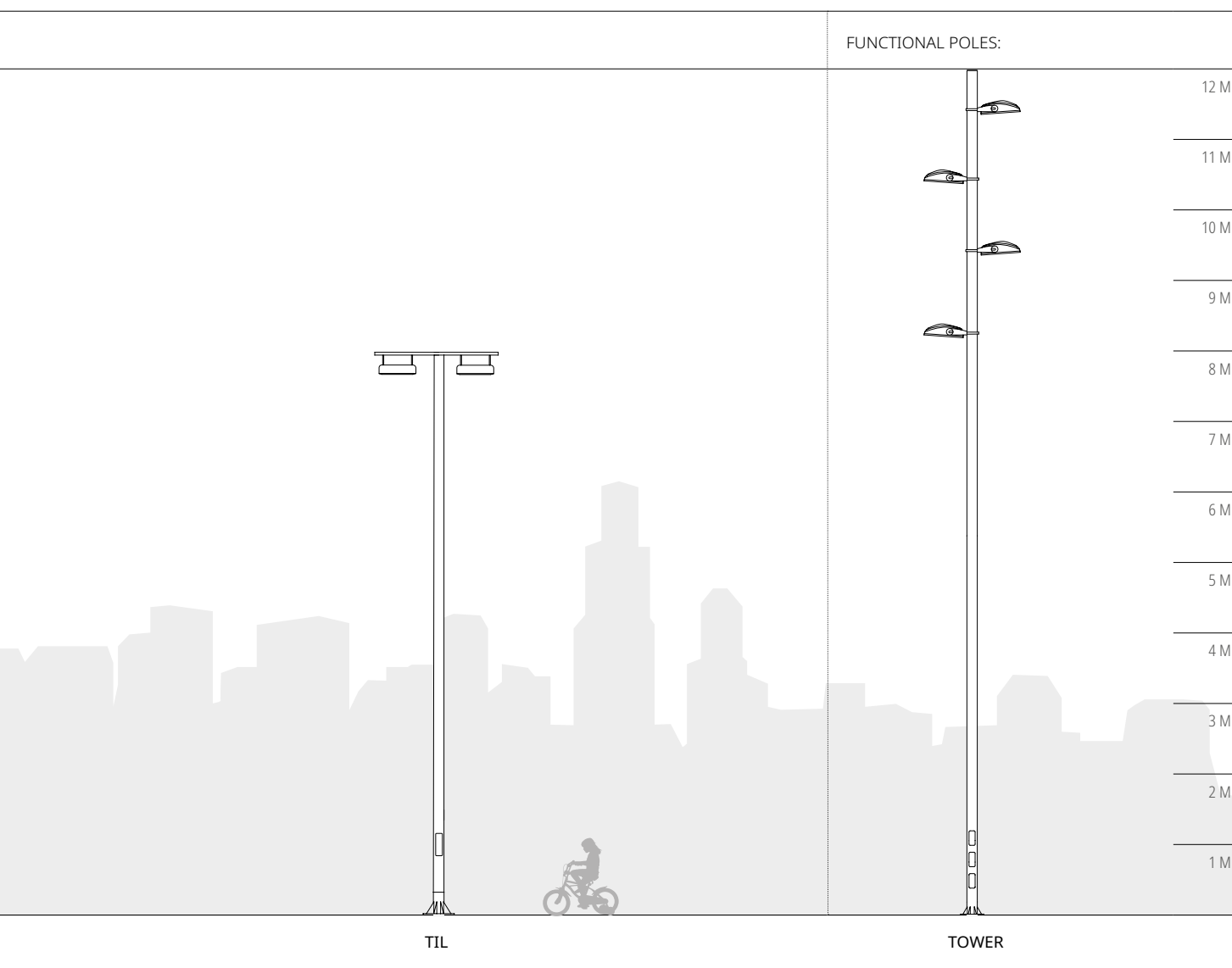
DECORATIVE POLES:

12 M  
11 M  
10 M  
9 M  
8 M  
7 M  
6 M  
5 M  
4 M  
3 M  
2 M  
1 M

TRAFIC MILOS

TORT





## ACCESSORIES / REPLACEMENTS

Description	Order code
Simple arm for spotlight, 150 mm length, fastening to Ø60 mm pole. Galvanised finish	<b>5-531857</b>
Double arm for spotlight, 150 mm length, fastening to Ø60 mm pole. Galvanised finish	<b>5-531858</b>
Flat transparent glass (GTF) replacement. Milos M model up to 60 LEDs 96 W	<b>50-73293</b>

## OTHER LUMINAIRES IN THE COLLECTION



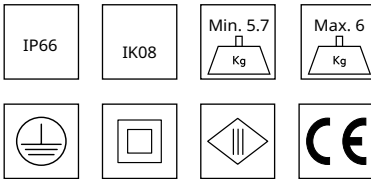
MILOS SXF



# MILOS SXF

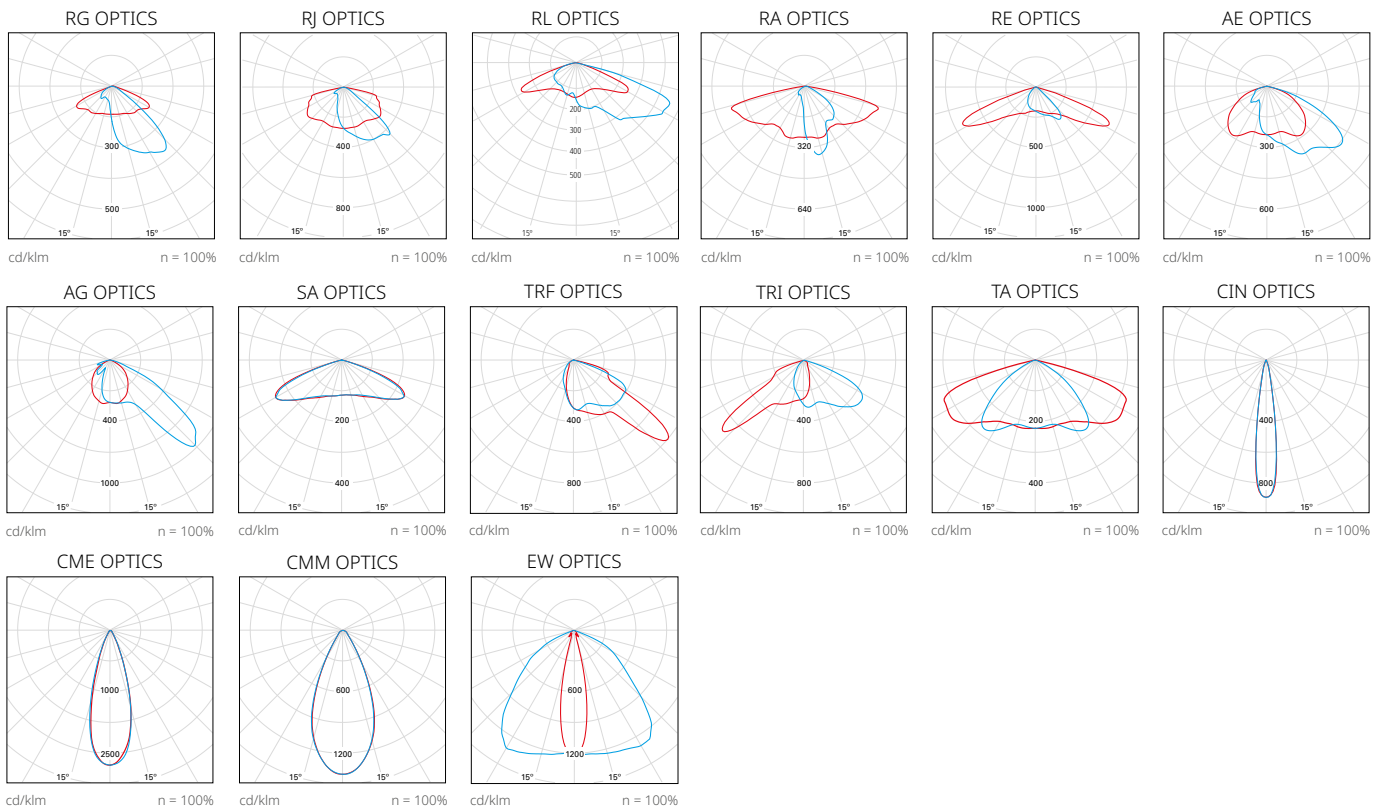
ISTANIUM<sup>LED</sup>®

## SPOTLIGHT LED LUMINAIRE



COLOUR TEMP.: ND L 4000 K | WDL 3000 K | SDL 2700 K | XDL 2200 K | PCA\*  
 COLOUR RENDERING INDEX: >70  
 UPWARD LIGHT OUTPUT RATIO (ULOR): <0.1 %\*\*  
 LED DURATION (L90 B10 AT T<sub>a</sub>=25 °C AND T<sub>j</sub>=95 °C): 100,000 h

\* Upon request \*\* Value may change depending on the optics



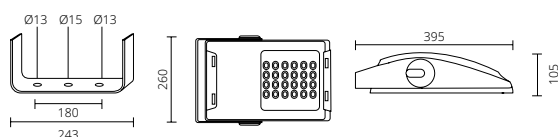
— C0 - C180 — C90 - C270 Rear hemisphere flux control visors available for RJ, RL, RE, E1, AE, SA and TA optics (see page 488 for more information).

Check other photometric distributions.

Simon **MILOS** LED spotlight, size S, made of die-cast aluminium. Bracket fastening. Flat cover. Internal refrigeration system through fins. Possibility of fitting an **upper Zhaga/NEMA** connector. Access to gear and maintenance from the bottom with front lever opening, without tools. Easy-clean transparent flat tempered glass diffuser to prevent UV radiation in the optics. **IP66** protection rating for full spotlight, and **IK08** impact resistance rating. Possibility of mounting up to sixteen multi-array optics. Possibility of four colour temperatures in white light, as well as PCA (Phosphor Converted Amber) for specially protected areas. Service life of LED **L90 B10 100,000 hours**. Istantium LED lighting groups can be replaced and updated even when the luminaire is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (**ULOR**) equal to **0%** with an angle from 0° to ± 5° (verify according to optics used). With **Class I** and **Class II** electronic control gear with 230 V AC/50-60 Hz supply voltage and Class III with A 12/24 VDC supply voltage. Possibility of including additional protection against surges of **10 kV/10 kA**. Optional dimming with control line 2N+, without control line (Self-dimming) 2N-, by means of a flow dimmer from CAD cabinet amplitude dimming, for telemanagement with 1.10V or DALI input. Optional custom programming and maintenance of constant light output (**CLO**). Standard finish in Simon GYTECH colour. Possibility of Simon and RAL finishes, as well as Seafront paint for corrosive environments with high durability in a **C5M** environment. Dimensions 260x395x105 mm.

**Zhaga-D4i** compatible luminaire.

## DIMENSIONS AND FASTENING SYSTEMS



Fastening	Bracket, Ø13 mm, Ø15 mm, Ø13 mm fastening holes
Wire inlet	Compression seal fittings Pg 13.5 (M20)
Distance of illuminated objects	1 m
Surface exposed to the wind	 0.03 m <sup>2</sup> 0.08 m <sup>2</sup>
Weight	Max. 6 kg Min. 5.7 kg

## PHYSICAL FEATURES AND MATERIALS

IP	IP66
IK	IK08
Body	Die-cast aluminium
Closure system	Painted die-cast aluminium lever
Fastening system	Painted galvanised sheet steel
Diffuser	Flat transparent shatter-proof tempered glass

## FINISHES

Body	Painted in GYTECH colour (Standard Paint) Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)
Closure	Dark Grey

## ELECTRICAL PARAMETERS \* AND CONNECTIVITY

Temp.	-20 °C... +35 °C
Dimming**	<b>2N-</b> Without control line <b>Dxxx</b> Without custom programmed control line <b>2N+</b> With control line <b>CAD</b> Cabinet amplitude dimming <b>1N (100%)</b> Without dimming <b>1.10V</b> Dimming through 1.10V input protocol <b>DALI</b> Dimming through DALI input protocol

Possibility of activating the **CLO** function, which allows the depreciation of the light emitted by the LEDs to be compensated by gradually increasing the supply current to them.

Possibility of fitting a **Zhaga / NEMA** connector on the top of the luminaire according to Zhaga Consortium Book 18.

	Luminaires supplied by electrical grid	Solar powered luminaires
Supply voltage	220-240 V <sub>AC</sub>	12/24 V <sub>DC</sub>
Frequency	50/60 Hz	-
Protection against power surge	6 kV (Possibility of increasing to 10 kV / 10kA upon request)	-
Power factor (cos φ at max. charge)	≥ 0.95	-
Luminaire electrical protection	Class I or Class II	Class III
Optical group power by model***	12 LEDs    24 LEDs	
Supply current	1mod.    2mod.	
HIGH EFFICIENCY	12 W    24 W	
HIGH BALANCE	18 W    36 W	
HIGH FLUX	24 W    49 W	
VERY HIGH FLUX	-    -	

## REGULATIONS AND CERTIFICATES



Luminaire according to: EN 60598-2-5 / EN 62493 / EN 55015 / EN 61547 / EN 61000-3-2 / EN 50581

Warranty	5 years.
Supply and packaging	Packed in recycled cardboard with an identifying label to protect the product during transport and storage.
Maintenance	Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent. Lubricate the sealing gaskets and replace them when they are cracked. Lubricate the closures and/or hinges of the moving parts. Keep the thermal radiation surface clean to not lose light flux without shortening the life of the LEDs.

\* Values corresponding to the current state of technology. \*\* Check other regulations. \*\*\* Power values have a tolerance of ±7%





## CONFIGURE YOUR MILOS S LUMINAIRE

Model	Diffuser	Wire	Optics	Colour Temp.	Optical group power	Team	Dimming	Protection	Finish	Description
<b>MILSXF</b>										Simon MILOS Istanium® LED, size S, bracket fastening, flat cover
	<b>GTF</b>									Flat transparent shatter-proof tempered glass diffuser
		<b>0</b>								Without installation wire (0 m)
			<b>RG_</b>							G type front road light optics
			<b>RJ_</b>							J type front road light optics
			<b>RL_</b>							L type front road light optics
			<b>RA_</b>							A type extended road light optics
			<b>RE_</b>							E type extended road light optics
			<b>AE_</b>							E type asymmetric optics
			<b>AG_</b>							G Type Asymmetric Optics
			<b>SA_</b>							A Type Symmetric Optics
			<b>TRF</b>							Traffic optics
			<b>TRI</b>							Reverse traffic optics
			<b>TA_</b>							Overhead tunnel optics
			<b>CIN</b>							Reverse tapered optics
			<b>CME</b>							E type medium tapered optics
			<b>CMM</b>							M type medium tapered optics
			<b>EW_</b>							Wide elliptical optics
				<input type="radio"/> <b>NDL</b>						Neutral daylight - 4,000 K
				<input type="radio"/> <b>WDL</b>						Warm daylight - 3,000 K
				<input type="radio"/> <b>SDL</b>						Soft daylight - 2,700 K
				<input type="radio"/> <b>XDL</b>						Extra warm daylight - 2,200 K
					<b>_12W350</b>					12 W 350 mA   1,670 lm to 3,000 K   12 LEDs
					<b>_24W700</b>					24 W 700 mA   3,190 lm to 3,000 K   12 LEDs
					<b>_36W530</b>					36 W 530 mA   4,720 lm to 3,000 K   24 LEDs
					<b>_49W700</b>					49 W 700 mA   6,030 lm to 3,000 K   24 LEDs
						<b>IA23_</b>				Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, standard protection against 6 kV power surges
						<b>IA23S</b>				Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, additional protection against 10 kV power surges
						<b>IA12_</b>				Electronic control gear at 12/24 V <sub>ac</sub> C3 (solar). Only admits up to 36W and 1N and 2N-dimming
						<b>2N-_</b>				Dimming without control line (self-dimming)
						<b>2N+_</b>				Dimming with control line
						<b>1N_</b>				Without dimming (on/off)
						<b>CAD_</b>				Cabinet amplitude dimming (electrical box dimmer)
						<b>1-10</b>				Dimming through 1-10V input protocol
						<b>DALI</b>				Dimming through DALI input protocol
						<b>DXXX</b>				Dimming without control line (custom program)
							<b>C1</b>			Class I luminaire electrical protection
							<b>C2</b>			Class II luminaire electrical protection
							<b>C3</b>			Class III luminaire electrical protection
								<b>GYTECH</b>		Standard finish in Simon Technical Grey
								<b>xxxxxx</b>		Finish in Simon colours
								<b>xxxxxx</b>		Finish in Simon RAL classic chart colours
								<b>CMxxxx</b>		Seafront Paint Finish

### BASE REFERENCES

Power	No. of LEDs	Current	Configuration	Order code
12 W	12	350 mA	MILSXF0R12_WDL_12W350IA23_1N_C1GYTECH	<b>406-000762012</b>
24 W	12	700 mA	MILSXF0R24_WDL_24W700IA23_1N_C1GYTECH	<b>406-000759012</b>
36 W	24	530 mA	MILSXF0R36_WDL_36W530IA23_1N_C1GYTECH	<b>406-000597012</b>
49 W	24	700 mA	MILSXF0R49_WDL_49W700IA23_1N_C1GYTECH	<b>406-000479012</b>

The luminaire flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes. The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.

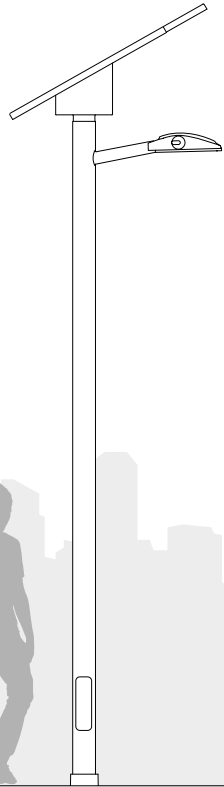




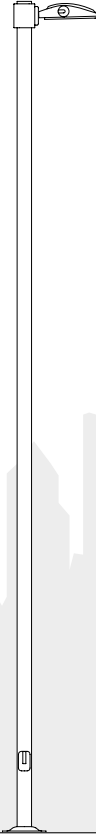


COMBINE YOUR MILOS S LUMINAIRE WITH:

CUSTOM SOLUTIONS:

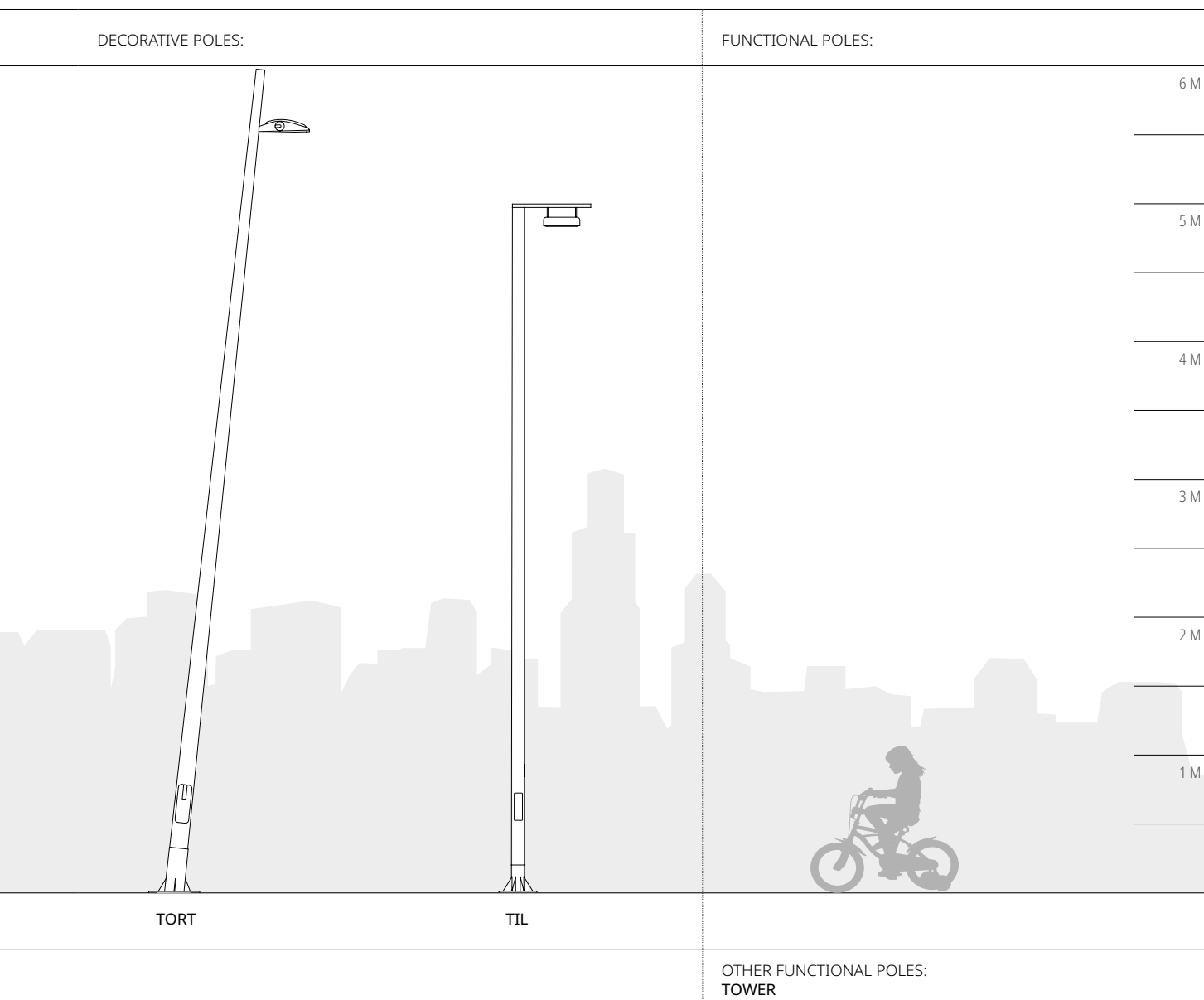


MAGNOLIA



TRAFIC  
MILOS S

OTHER CUSTOM SOLUTIONS:



ACCESSORIES / REPLACEMENTS

	Description	Finish	Order code
	Simple arm for flush spotlight	Galvanised GYTECH GYDECO	<b>5-531830</b> <b>5-531830-012</b> <b>5-531830-013</b>
	Simple arm for spotlight, 200 mm length	Galvanised GYTECH GYDECO	<b>5-531838</b> <b>5-531838-012</b> <b>5-531838-013</b>
	Double arm for spotlight, 200 mm length	Galvanised GYTECH GYDECO	<b>5-531839</b> <b>5-531839-012</b> <b>5-531839-013</b>
	Flat transparent glass (GTF) replacement. Milos S model up to 24 LEDs 54W		<b>50-73321</b>

OTHER LUMINAIRES IN THE COLLECTION



MILOS MXF













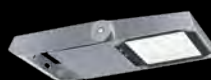
LUMINAIRES

# URBAN ARCHITECTURAL

## ISTANIUM<sup>LED</sup>®

### IRAYA

LXF RGB / MXF RGB



### FOGO

RGB



### IRIS GEN 2 LED



### PROTOPIXEL



Enhancing the value of heritage in cities is a key aspect in which lighting can play a vital role. Enhancing its architecture, discovering its history and highlighting its identity is possible with the right light and control.









# IRAYA

LXF RGB / MXF RGB

NEW

ISTANIUM®

IRAYA is a functional spotlight that balances technical performance, quality and price, allowing the intensive introduction of the most efficient LED technology when upgrading current technical lighting.

Light flux up to 30,000 lm.  
Multiple lighting solutions.  
Advanced thermal management.



Façades



Monuments



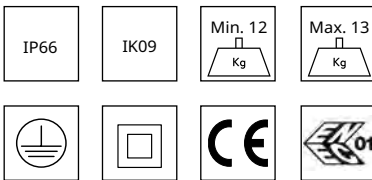
Bridges



# IRAYA LXF RGB

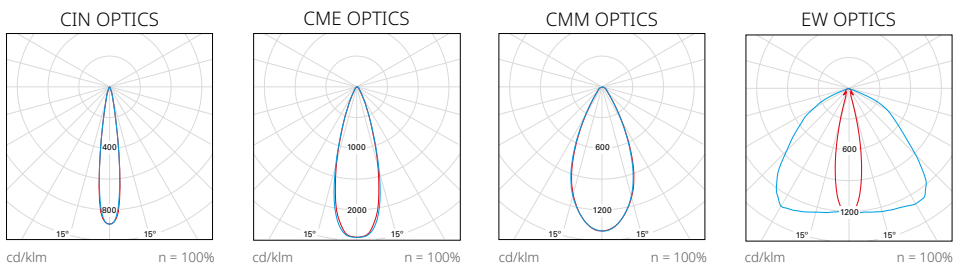
ISTANIUM<sup>LED</sup>®

## SPOTLIGHT LED LUMINAIRE



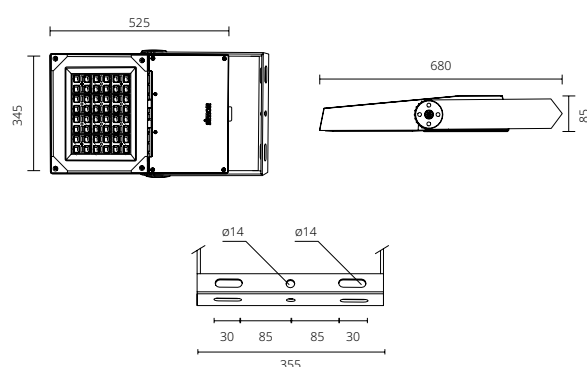
COLOUR TEMP.: RGB | R3W  
 COLOUR RENDERING INDEX: >70 (for operation with white light only)  
 UPWARD LIGHT OUTPUT RATIO (ULOR): <0.1 %  
 LED DURATION (L90 B10 AT T<sub>a</sub>=25 °C AND T<sub>j</sub>=95 °C): 100,000 h



\* The value may change depending on the optics.



Simon **IRAYA** LED spotlight, size L, made of die-cast aluminium. Bracket fastening. Flat cover with non-visible cooling fins in installed position. Self-cleaning system by means of rainwater, which allows its correct evacuation without dirtying the luminaire, preventing the lighting performance from being affected over time. Single body spotlight with two independent compartments for thermal separation, for the optical group and for the electric group. Access to gear and maintenance from the back with four-screw opening and a fastening system to prevent the lid from falling. Easy-clean transparent flat tempered glass diffuser to prevent UV radiation in the optics. **IP66** protection rating for the full spotlight, with a **pressure relief valve** to keep the pressure constant and prevent moisture from entering, and an impact resistance rating of **IK09**. With pre-wiring of 50 cm and IP67 connector. Possibility of mounting up to sixteen multi-array optics. Anti-glare, truncated pyramid-shaped reflector, matt with light flux recovery. Possibility of RGB and RGB plus white light. Service life of LED **L90 B10 100,000 hours**. Istantium LED lighting groups can be replaced and updated even when the luminaire is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (**ULOR**) equal to **0%** with an angle from 0° to ± 5° (verify according to optics used). With **Class I** electronic control gear with 230 V AC/50-60 Hz power supply. Possibility of including additional protection against surges of **10 kV/10 kA**. Dimming with DMX 512-A and DALI for models RGB and RGB plus white light. Standard finish in Simon GY9007 colour. Possibility of Simon and RAL finishes, as well as Seafront paint for corrosive environments with high durability in a **CSM** environment. Dimensions 365x680x80 mm. **ENEC**certified spotlight.

## DIMENSIONS AND FASTENING SYSTEMS



Fastening	Bracket, Ø14 mm, Ø14 mm, Ø14 mm fastening holes
Wire inlet	Compression seal fittings Pg 13.5 (m20)
Surface exposed to the wind	 0.027 m <sup>2</sup>  0.181 m <sup>2</sup>
Weight	Max. 13 kg Min. 12kg

## PHYSICAL FEATURES AND MATERIALS

IP	IP66
IK	IK09
Body	Die-cast aluminium
Closure system	Stainless steel screws
Fastening system	Painted galvanised sheet steel
Diffuser	Flat transparent shatter-proof tempered glass

## FINISHES

Body	Painted GY9007 colour (Standard Paint) Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)
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## REGULATIONS AND CERTIFICATES



Light group according to: EN 62031

Warranty	5 years for the light group (extended warranty upon request).
Supply and packaging	Pole and arms packed with foam reel protector and plate base with foam protector on edges
Maintenance	Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent. Lubricate the sealing gaskets and replace them when they are cracked. Lubricate the closures and/or hinges of the moving parts. Keep the thermal radiation surface clean to not lose light flux without shortening the life of the LEDs.

\* Depends on model \*\* Values corresponding to the current state of technology. \*\*\* The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.

## ELECTRICAL PARAMETERS \* AND CONNECTIVITY

Temp.	-20 °C... +35 °C
Dimming**	<b>DALI</b> Dimming through DALI input protocol <b>DMX</b> signal dimming with control line

### Luminaires supplied by electrical grid

Supply voltage	220-240 Vac
Frequency	50/60 Hz
Protection against power surge	10 kV
Power factor (cos φ at max. charge)	≥ 0.95
Luminaire electrical protection	Class I
Power according to models***	80 LEDs
Supply current	
HIGH EFFICIENCY	-
HIGH BALANCE	-
HIGH FLUX	150 W
VERY HIGH FLUX	-





## CONFIGURE YOUR IRAYA L RGB LUMINAIRE

Model	Diffuser	Wire	Optics	Colour Temp.	Optical group power	Team	Dimming	Protection	Finish	Description
<b>IRALXF</b>										Simon IRAYA Istanium® LED, Size L, bracket fastening, flat cover
	<b>GTF</b>									Flat transparent shatter-proof tempered glass diffuser
		<b>P</b>								With installation wiring (0.5 m) and IP67 watertight connector
			<b>CIN</b>							Reverse tapered optics
			<b>CME</b>							E type medium tapered optics
			<b>CMM</b>							M type medium tapered optics
			<b>EW_</b>							Wide elliptical optics
				<b>RGB</b>						RGB with DMX/DALI dimming
				<b>R3W</b>						RGB + Neutral daylight with DMX/DALI dimming
					<b>150W__</b>					150 W <span style="float: right;">80 LEDs</span>
						<b>IA23_</b>				Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, standard protection against 6 kV power surges
						<b>IA23S</b>				Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, additional protection against 10 kV power surges
							<b>DALI</b>			Dimming through DALI input protocol
							<b>DMX_</b>			Dimming through DMX input protocol
								<b>C1</b>		Class 1 Luminaire electrical protection
									<b>GY9007</b>	Standard finish in Simon RAL GY9007
									<b>xxxxxx</b>	Finish in Simon colours
									<b>xxxxxx</b>	Finish in Simon RAL classic chart colours
									<b>CMxxxx</b>	Seafront Paint Finish

### BASE REFERENCES

Power	No. of LEDs	Current	Configuration	Order code
150	80	-	IRALXFGTF_CMMR3W150W__IA23SDMX_C1GY9007	<b>419-004007016</b>

The luminaire flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes.  
The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.

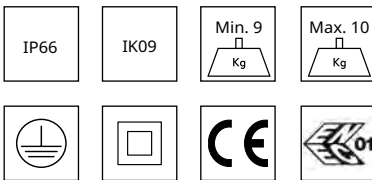




# IRAYA MXF RGB

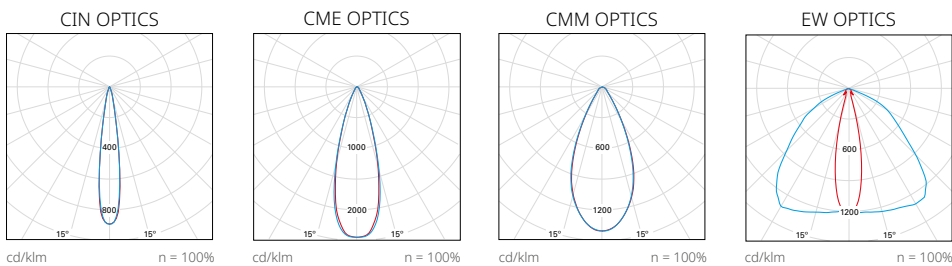
ISTANIUM<sup>LED</sup>®

## SPOTLIGHT LED LUMINAIRE



COLOUR TEMP.: RGB | R3W  
 COLOUR RENDERING INDEX: >70 (for operation with white light only)  
 UPWARD LIGHT OUTPUT RATIO (ULOR): <0.1%\*  
 LED DURATION (L90 B10 AT T<sub>a</sub>=25 °C AND T<sub>j</sub>=95 °C): 100,000 h

\* The value may change depending on the optics.

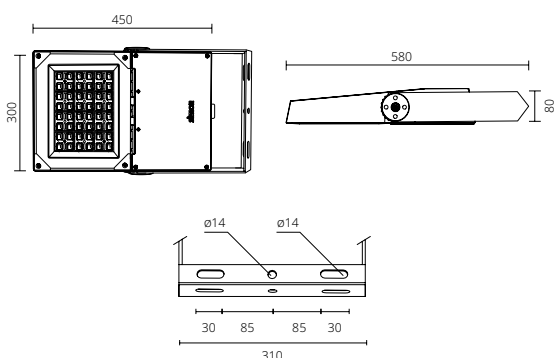




Simon **IRAYA** LED spotlight, size M, made of die-cast aluminium. Bracket fastening. Flat cover with non-visible cooling fins in installed position. Self-cleaning system by means of rainwater, which allows its correct evacuation without dirtying the luminaire, preventing the lighting performance from being affected over time. Single body spotlight with two independent compartments for thermal separation, for the optical group and for the electric group. Access to the gear and maintenance from the back with four-screw opening and a fastening system to prevent the lid from falling. Easy-clean transparent flat tempered glass diffuser to prevent UV radiation in the optics. **IP66** protection rating for the full spotlight, with a **pressure relief valve** to keep the pressure constant and prevent moisture from entering, and an impact resistance rating of **IK09**. With pre-wiring of 50 cm and IP67 connector. Possibility of mounting up to sixteen multi-array optics. Anti-glare, truncated pyramid-shaped reflector, matt with light flux recovery. Possibility of RGB and RGB plus white light. Service life of LED **L90 B10 100,000 hours**. Istantium LED lighting groups can be replaced and updated even when the luminaire is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (**ULOR**) equal to **0%** with an angle from 0° to ± 5° (verify according to optics used).

With **Class I** electronic control gear with 230 V AC/50-60 Hz power supply. Possibility of including additional protection against surges of **10 kV/10 kA**. Dimming with DMX 512-A and DALI for models RGB and RGB plus white light.

Standard finish in Simon GY9007 colour. Possibility of Simon and RAL finishes, as well as Seafront paint for corrosive environments with high durability in a **C5M** environment. Dimensions 320x582x80 mm. **ENEC** certified spotlight.

## DIMENSIONS AND FASTENING SYSTEMS



Fastening	Bracket, Ø14 mm, Ø14 mm, Ø14 mm fastening holes
Wire inlet	Compression seal fittings Pg 13.5 (m20)
Surface exposed to the wind	 0.024 m <sup>2</sup>
	 0.135 m <sup>2</sup>
Weight	Max. 10 kg Min. 9 kg

## PHYSICAL FEATURES AND MATERIALS

IP	IP66
IK	IK09
Body	Die-cast aluminium
Closure system	Stainless steel screws
Fastening system	Painted galvanised sheet steel
Diffuser	Flat transparent shatter-proof tempered glass

## FINISHES

Body	Painted GY9007 colour (Standard Paint) Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)
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## REGULATIONS AND CERTIFICATES



Luminaire according to: EN 60598-2-5 / EN 62493 / EN 55015 / EN 61547 / EN 61000-3-2 / EN 50581

Warranty	5 years
Supply and packaging	Packed in recycled cardboard with an identifying label to protect the product during transport and storage.
Maintenance	Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent. Lubricate the sealing gaskets and replace them when they are cracked. Lubricate the closures and/or hinges of the moving parts. Keep the thermal radiation surface clean to not lose light flux without shortening the life of the LEDs.

\* Depends on model \*\* Values corresponding to the current state of technology. \*\*\* The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.

## ELECTRICAL PARAMETERS \* AND CONNECTIVITY

Temp.	-20 °C... +35 °C
Dimming**	<b>DALI</b> Dimming through DALI input protocol <b>DMX</b> signal dimming with control line
Luminaires supplied by electrical grid	
Supply voltage	220-240 V <sub>AC</sub>
Frequency	50/60 Hz
Protection against power surge	6 kV (Possibility of increasing to 10 kV / 10 kA upon request)
Power factor (cos φ at max. charge)	≥ 0.95
Luminaire electrical protection	Class I
Power according to models***	48 LEDs
Supply current	
HIGH EFFICIENCY	-
HIGH BALANCE	-
HIGH FLUX	100 W
VERY HIGH FLUX	-





## CONFIGURE YOUR IRAYA M RGB LUMINAIRE

Model	Diffuser	Wire	Optics	Colour Temp.	Optical group power	Team	Dimming	Protection	Finish	Description
<b>IRAMXF</b>										Simon IRAYA Istanium® LED, size M, bracket fastening, flat cover
	<b>GTF</b>									Flat transparent shatter-proof tempered glass diffuser
		<b>P</b>								With installation wiring (0.5 m) and IP67 watertight connector
			<b>CIN</b>							Reverse tapered optics
			<b>CME</b>							E type medium tapered optics
			<b>CMM</b>							M type medium tapered optics
			<b>EW_</b>							Wide elliptical optics
				<b>RGB</b>						RGB with DMX/DALI dimming
				<b>R3W</b>						RGB + Neutral daylight with DMX/DALI dimming
					<b>100W__</b>					100 W <span style="float: right;">48 LEDs</span>
						<b>IA23_</b>				Electronic control gear at 230 V AC 50/60 Hz, standard protection against 6 kV power surges
						<b>IA23S</b>				Electronic control gear at 230 V AC 50/60 Hz, additional protection against 10 kV power surges
							<b>DALI</b>			Dimming through DALI input protocol
							<b>DMX_</b>			Dimming through DMX input protocol
								<b>C1</b>		Class 1 Luminaire electrical protection
									<b>GY9007</b>	Standard finish in Simon RAL GY9007
									<b>xxxxxx</b>	Finish in Simon colours
									<b>xxxxxx</b>	Finish in Simon RAL classic chart colours
									<b>CMxxxx</b>	Seafront Paint Finish

### BASE REFERENCES

Power	No. of LEDs	Current	Configuration	Order code
100	80	-	IRAMXFGTF_CMMR3W100W__IA23SDMX_C1GY9007	<b>417-004003016</b>

The luminaire flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes.  
The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.



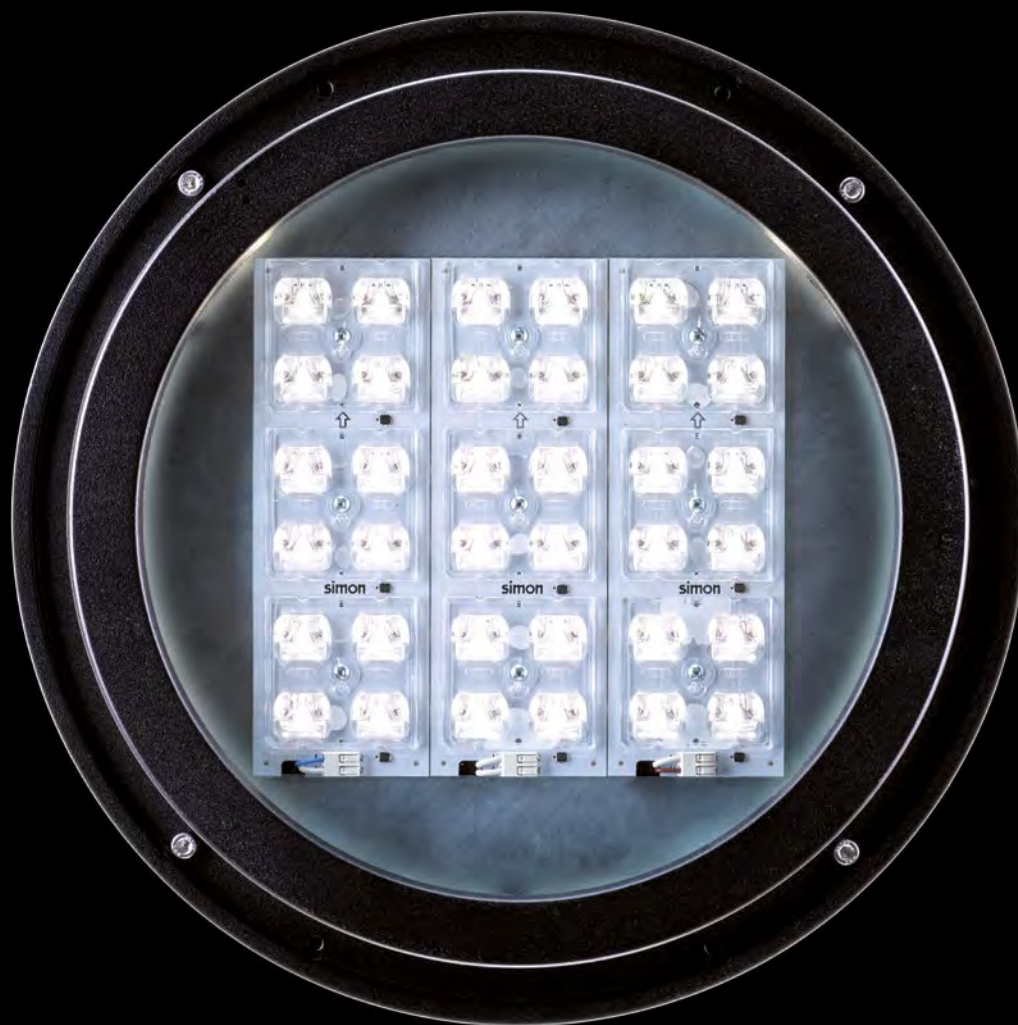




MEDECIN

AVOCAT





# FOGO

RGB

ISTANIUM<sup>LED</sup>®

Functional spotlight, ideal for the intensive introduction of LED technology



Parking areas



Streets



Pedestrian streets



Commercial areas



Parks / Gardens



Squares



Urban cycle path



Roundabouts / Intersections



Monuments



Bridges



Façades



Large areas

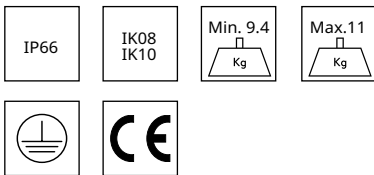




# FOGO RGB

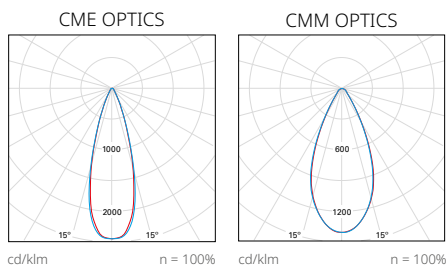
ISTANIUM<sup>LED</sup>®

## SPOTLIGHT LED LUMINAIRE



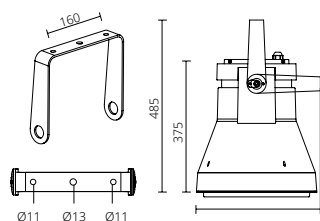
COLOUR TEMP.: RGB  
 UPWARD LIGHT OUTPUT RATIO (ULOR): <0.1% \*  
 LED DURATION (L90 B10 AT T<sub>a</sub>=25 °C AND T<sub>j</sub>=95 °C): 100,000 h

\* The value may change depending on the optics.



Simon **FOGO RGB** LED spotlight, size S, made of die-cast aluminium. Bracket fastening. Flat cover. Internal refrigeration system through fins. Access to gear and maintenance from the back with four-screw opening. Access to optical group from the front with four-screw opening. Easy-clean transparent flat tempered glass diffuser to prevent UV radiation in the optics. **IP66** protection rating for full spotlight and **IK08** impact resistance rating, or **IK10** with protective grille accessory. Possibility of mounting two multi-array optics. RGB light. LED service life **L90 B10 100,000 hours**. Istantium LED lighting groups can be replaced and updated even when the luminaire is installed, thereby extending its service life. Different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (**ULOR**) equal to **0%** with an angle from 0° to ± 5° (verify according to optics used). With **Class I** electronic control gear with 230 V AC/50-60 Hz power supply. Possibility of including additional protection against surges of **10 kV/10 kA**. Dimming through DMX protocol. Standard finish in Simon GYTECH colour, with bracket trim, front trim ring and back cover in Simon BKTECH colour, as well as Seafront paint for corrosive environments with high durability in a **C5M** environment. Possibility of Simon and RAL chart finishes. Dimensions 329x482x329 mm.

## DIMENSIONS AND FASTENING SYSTEMS



Fastening	Bracket, Ø11 mm, Ø13 mm, Ø11 mm
Distance of illuminated objects	1 m
Surface exposed to the wind	 0.085 m <sup>2</sup> 0.098 m <sup>2</sup>
Weight	Max. 11 kg Min. 9.4 kg

## PHYSICAL FEATURES AND MATERIALS

IP	IP66
IK	K08 IK10 (with protective grille)
Base	Die-cast aluminium
Closure system	With stainless steel screws
Fastening system	Painted galvanised sheet steel
Diffuser	Flat, transparent, tempered glass

## FINISHES

Body and bracket	Painted in GYTECH colour (Standard Paint) Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)
Lyre trim, front trim ring and back cap	BKTECH

## REGULATIONS AND CERTIFICATES



Luminaire according to: EN 60598-2-5 / EN 62493 / EN 55015 / EN 61547 / EN 61000-3-2 / EN 50581

Warranty	5 years.
Supply and packaging	Packed in recycled cardboard with an identifying label to protect the product during transport and storage.
Maintenance	Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent. Lubricate the sealing gaskets and replace them when they are cracked. Lubricate the closures and/or hinges of the moving parts. Keep the thermal radiation surface clean to not lose light flux without shortening the life of the LEDs.

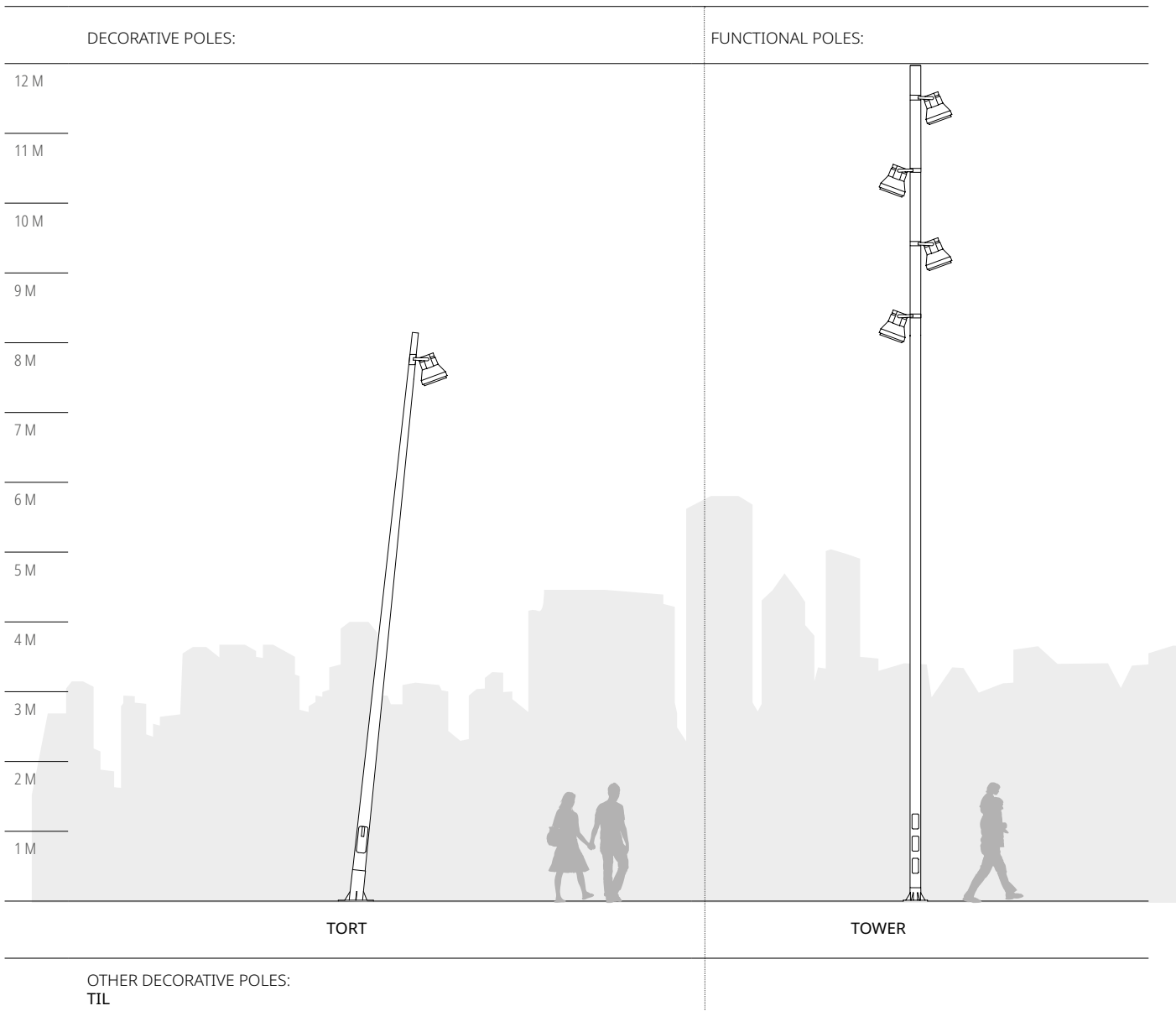
\* Values corresponding to the current state of technology. \*\* Check other regulations. \*\*\* Power values have a tolerance of ±7%



CONFIGURE YOUR FOGO RGB LUMINAIRE

Model	Diffuser	Wire	Optics	Colour Temp.	Optical group power	Team	Dimming	Protection	Finish	Description
<b>FOGSXF</b>										Simon FOGO Istanium® LED, size S, bracket fastening, flat cover
	<b>GTF</b>									Flat transparent shatter-proof tempered glass diffuser
		<b>0</b>								Without installation wire (0 m)
			<b>CME</b>							E type medium tapered optics
			<b>CMM</b>							M type medium tapered optics
			<b>RGB</b>							RGB with DMX/DALI dimming
					<b>_54W530</b>					54 W 530 mA 7,030 lm 36 LEDs
					<b>_73W700</b>					73 W 700 mA 8,850 lm 36 LEDs
						<b>IA23_</b>				Electronic control gear at 230 V <sub>AC</sub> 50/60 Hz, standard protection against 6 kV power surges
						<b>IA23S</b>				Electronic control gear at 230 V <sub>AC</sub> 50/60 Hz, additional protection against 10 kV power surges
							<b>DMX_</b>			Dimming through DMX input protocol
								<b>C1</b>		Class 1 Luminaire electrical protection
									<b>GYTECH</b>	Standard finish in Simon Technical Grey
									<b>XXXXXX</b>	Finish in Simon colours
									<b>XXXXXX</b>	Finish in Simon RAL classic chart colours

COMBINE YOUR FOGO LUMINAIRE:

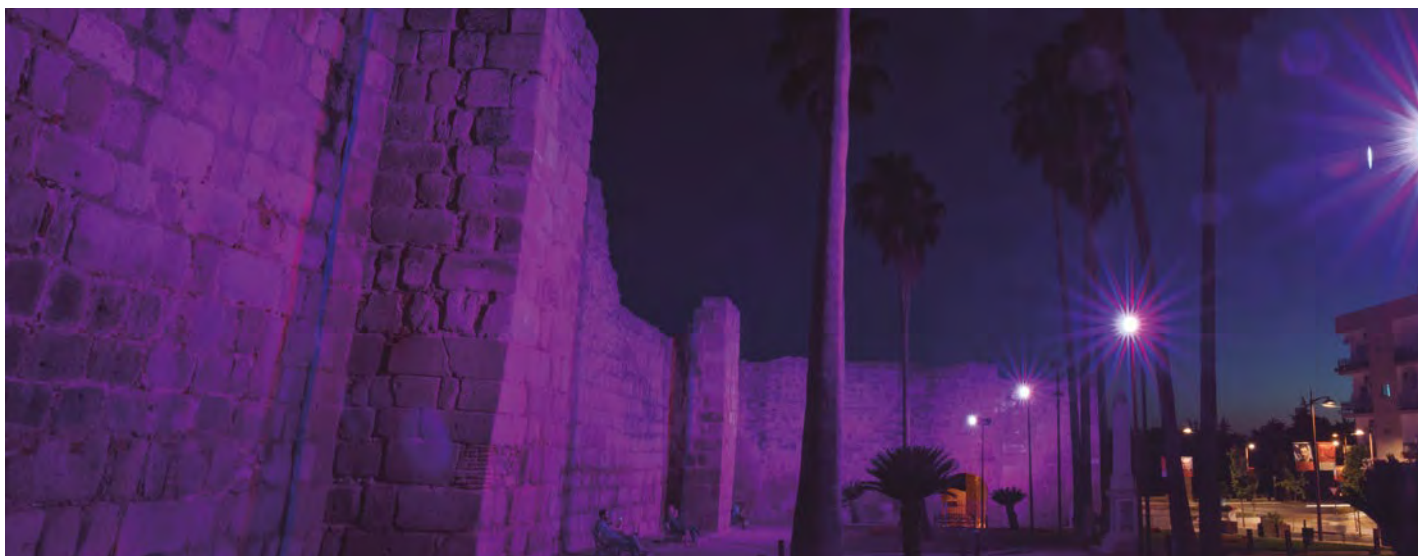


OTHER DECORATIVE POLES:  
TIL

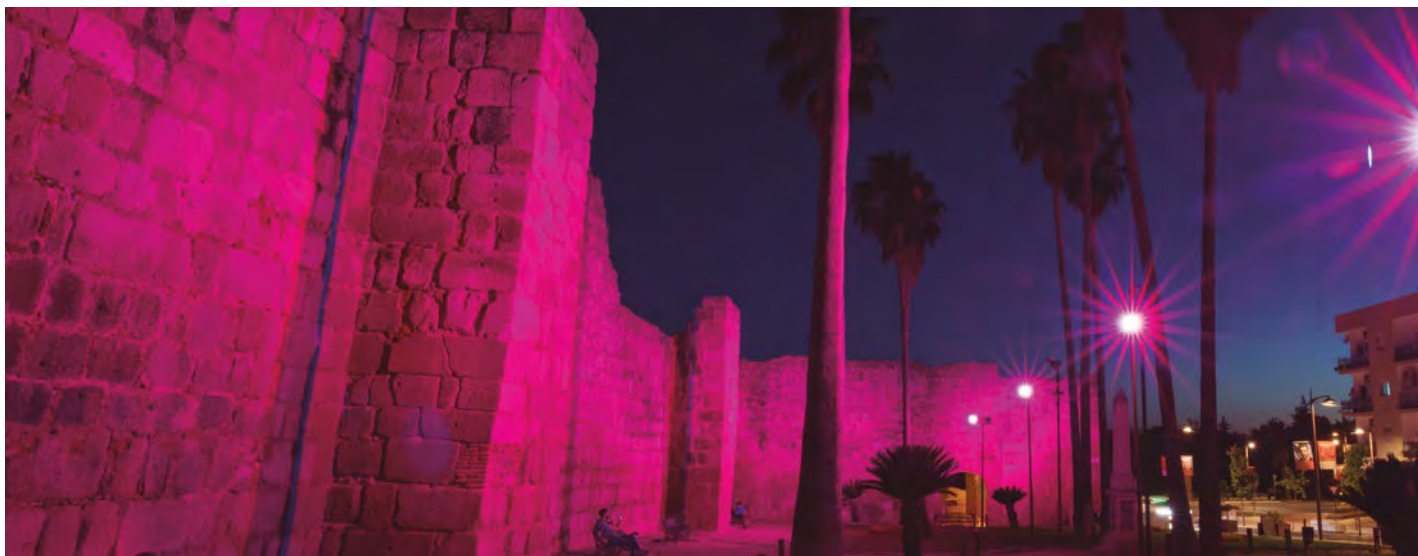
The luminaire flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes. The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes



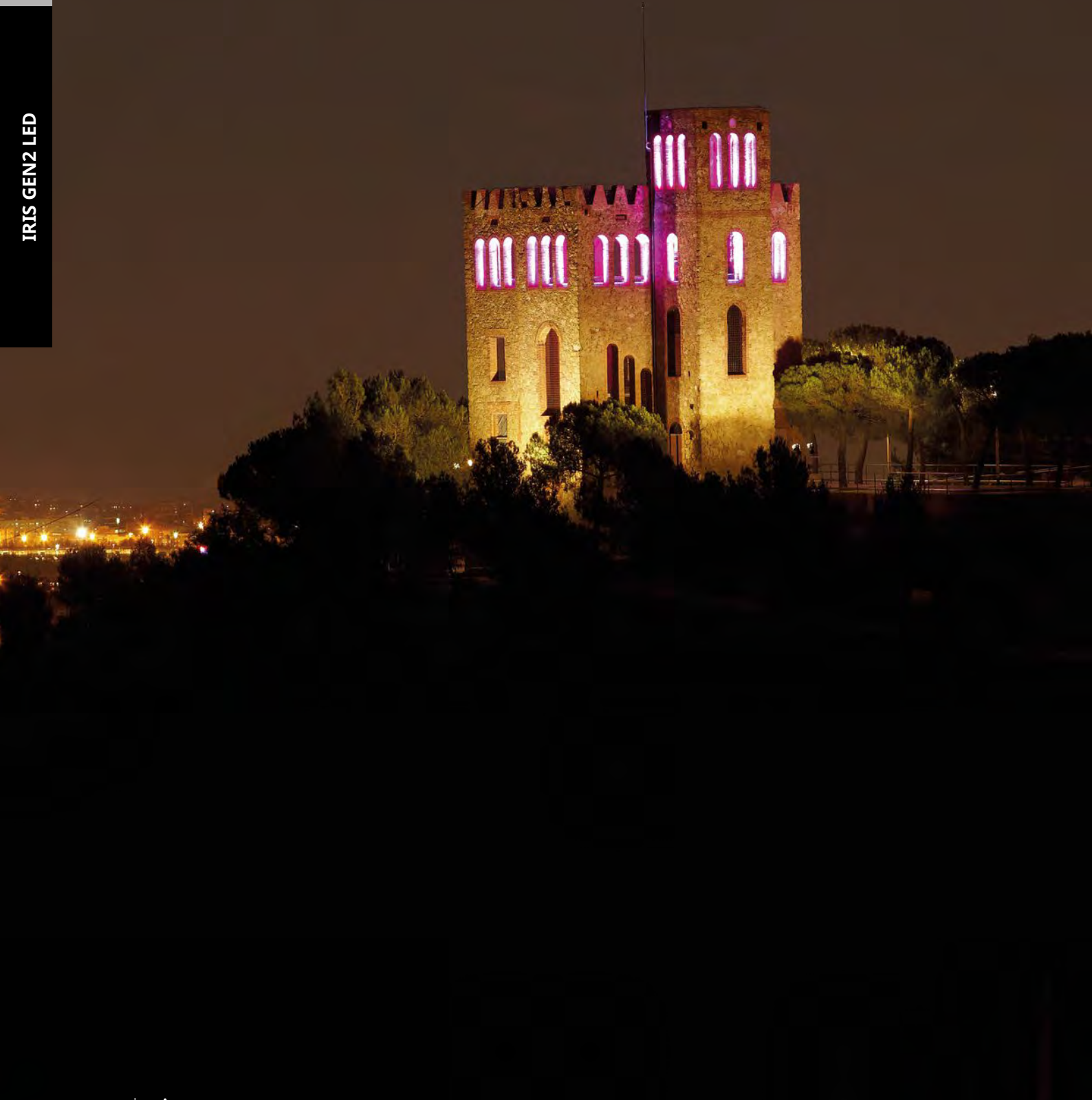
URBAN ARCHITECTURAL



FOGO RGB







# IRIS GEN2 LED

Simon linear spotlight for architectural lighting, with the possibility of installing four colour temperatures, RGB with white light and dynamic white light combined with optics with different apertures and photometric distributions.



Monuments



Bridges



Façades



Signalling



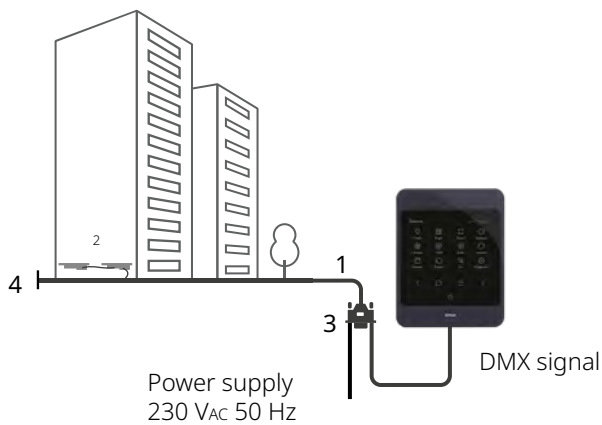


# IRIS GEN2 LED

## FEATURES

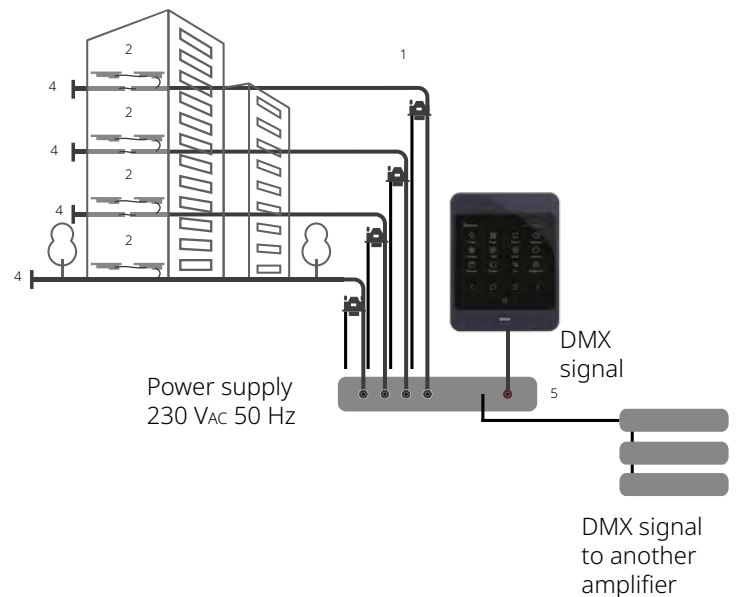
### CONNECTIONS DIAGRAM

Installation with maximum 15 Luminaires



1. Power cable 11-9010-030
2. Extension cable, see codes according to length needed
3. 5-pole connector 11-9060-900. In installations without DMX, use 5-pole connector 11-9060-901
4. IP68 end cap with 120  $\Omega$  resistance 11-9050-200

Installation with maximum 15 Luminaires



1. Power cable 11-9010-030
2. Extension cable, see codes according to length needed
3. 5-pole connector 11-9060-901. In installations without DMX, use 5-pole connector 11-9060-901
4. IP68 end cap with 120  $\Omega$  resistance 11-9050-200
5. DMX signal splitter and amplifier (not supplied)

**TECHNICAL DATA \***

Power cable: 3x1.5 mm<sup>2</sup> H07rn-F type

DMX signal wire: Belden 3105 A type

Maximum distance from DMX controller to last luminaire  
100 m

Maximum distance from DMX controller to amplifier 100 m

Maximum distance from DMX amplifier to last luminaire  
100 m

Maximum 15 luminaires per DMX output

For single colour or DALI installation, continue the connection with a maximum of 15 luminaires.

**SCENA LIGHTING CONTROL SYSTEMS**



Scena is Simon's professional solution for controlling and dimming light, allowing the integration of all customisable functions and the incorporation of new features for creating emotions.

With Scena, you can create unlimited effects by adjusting and configuring all the shades of light, including colour temperature, intensity and saturation, and also create or predefine static or dynamic lighting scenes.

**A UNIVERSAL SYSTEM**

Scena is compatible with most existing control protocols, which lets it interact with DMX, DALI, 1-10 V, PWM... systems.

**EASY CONFIGURATION**

Allows easy and intuitive direct programming from the screen. It also has USB input for software updates, as well as new programming and functions.

**FAST AND INTUITIVE**

Through multiple interfaces that allow continued access and control of all functions.

**UNLIMITED APPLICATIONS**

It offers virtually unlimited applications in different environments: residential, workspaces, hotels, hospitals... allowing their lighting to be moulded and adapted to all the activities that take place there.

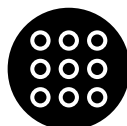
**TOTAL LIGHTING CONTROL**



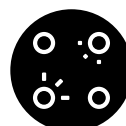
Dimming



Colour



Groups



Scenes



Sequences



Constant lighting control



Schedule



Occupation

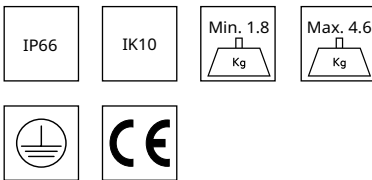
\* Note: Non-compliance with these restrictions can cause the installation to malfunction.





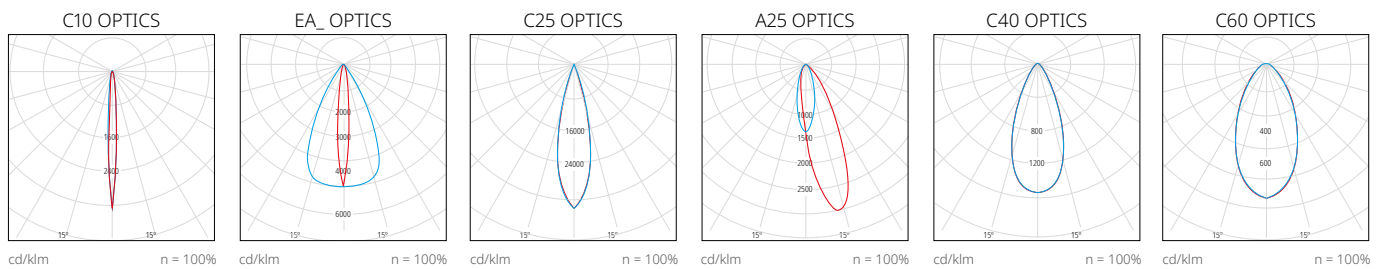
# IRIS GEN2 LED

## LINEAR SPOTLIGHT LED LUMINAIRE



COLOUR TEMP: NDM 4,000 K | WDM 3,000 K | SDM 2,700 K | TDL 1,800 K | DDL (1,800 K - 4,000 K) | R3W (RGB + NDM)  
 COLOUR RENDERING INDEX: > 80 (for 4,000 K, 3,000 K and 2,700 K) | > 70 (for 1,800 K)  
 UPWARD LIGHT OUTPUT RATIO (ULOR): <1% \*  
 DURATION OF THE LEDS (L80 B10 AT 25 °C): 60,000 h  
 DURATION OF THE LEDS FOR R3W (L90 B10 AT 25°C): 60,000 h

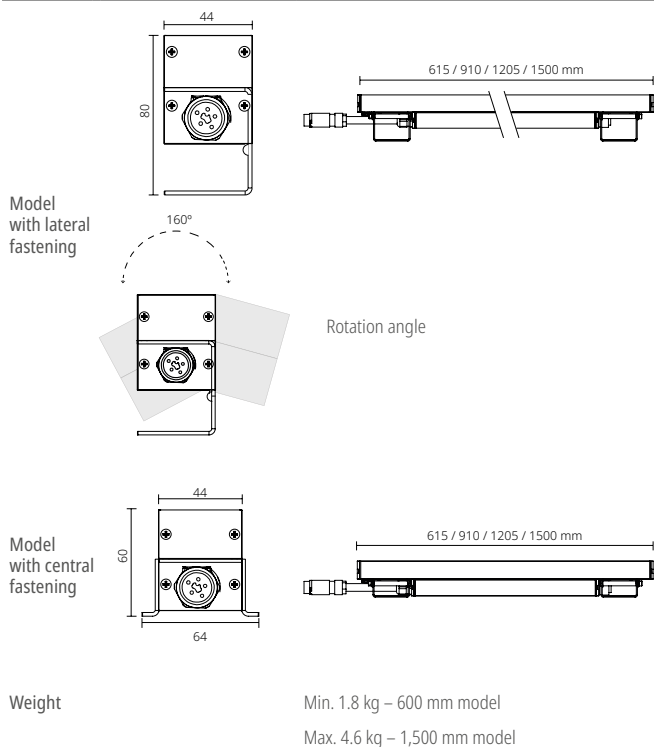
\* The value may change depending on the optics used and the angle.



— C0 - C180 — C90 - C270 Check other photometric distributions

**IRIS Gen2** LED linear spotlight, available in four different sizes, with aluminium body and fastening system. Lateral surface-mount fastening with 160° rotation radius, or non-orientable central surface-mount fastening. Flat cover. Easy-clean transparent flat tempered glass diffuser to prevent UV radiation in the optics. **IP66** protection rating for complete luminaire and **IK10** impact resistance rating. Hose wiring system between luminaires with five-pin connectors, upon request according to installation. Possibility of mounting up to six optics. Possibility of three colour temperatures in white light, dynamic white, as well as RGB plus white light. Service life of LED **L90 B10 60,000 hours** for the RGB plus white light model and **L80 B10 60,000 hours** for the white light models. Upward Light Output Ratio (**ULOR**) equal to **0%** (verify according to optics used) with angle from 0° to ± 5°. With **Class I** electronic control gear with 220-240V AC/50 Hz power supply. Optional dimming with DMX 512/RDM for RGB plus white light models and DALI for static and dynamic daylight models. Standard finish in AS colour (aluminium). Possibility of finishes in Simon BK9011 or WH9003 colour. Dimensions for lateral surface-mount models of 44x80x615 mm for size M, 44x80x910 mm for size L, 44x80x1205 mm for size H and 44x80x1500 mm for size E. Dimensions for centre surface-mount models of 64x60x615 mm for size M, 64x60x910 mm for size L, 64x60x1205 mm for size H and 64x60x1500 mm for size E.

## DIMENSIONS AND FASTENING SYSTEMS



## PHYSICAL FEATURES AND MATERIALS

IP	IP66
IK	IK10
Base	Aluminium
Body	Aluminium
Diffuser	Flat transparent tempered glass

## FINISHES

Body	AS (aluminium)
	BK9011
	WH9003

## ELECTRICAL PARAMETERS AND CONNECTIVITY\*

Temp.	-20 °C... +50 °C
Dimming*	<b>1N (100%)</b> No dimming for single-colour light models <b>DALI</b> For static light and dynamic daylight models <b>DMX-RDM</b> For RGB plus daylight neutral model

### Luminaires supplied by electrical grid

Supply voltage	220-240 V <sub>ac</sub>			
Frequency	50 Hz			
Protection against power surge	-			
Power factor (cos φ at max. charge)	≥ 0.95			
Luminaire electrical protection	Electronic - Class I			
Power according to models**	600mm	900mm	1200mm	1500mm
Static daylight models	38 W	55 W	73 W	91 W
RGB + neutral daylight models	45 W	68 W	90 W	112 W
Supply current	350mA			

## REGULATIONS AND CERTIFICATES



Luminaire according to: 60598-2-5 / EN 62493 / EN 55015 / EN 61547 / EN 61000-3-2 / EN 50581

Warranty	3 years.
Supply and packaging	Packed in recycled cardboard with an identifying label to protect the product during transport and storage.
Maintenance	Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent. Lubricate the sealing gaskets and replace them when they are cracked over time. Lubricate the closures and/or hinges of the moving parts. Keep the thermal radiation surface clean to ensure proper dissipation and not lose light flux without shortening the life of the LEDs.

\* Values corresponding to the current state of technology. \*\* The luminaire power can vary by around ± 7%.



CONFIGURE YOUR IRIS LED GEN2 LUMINAIRE

Model	Diffuser	Wire	Optics	Colour Temp.	Optical group power	Team	Dimming	Protection	Finish	Description
IR2MLF										Simon IRIS Gen2 LED Istanium® LED, size M (600 mm), lateral fastening, flat lateral covers with 160° rotation angle
IR2LLF										Simon IRIS Gen2 LED Istanium® LED, size L (900 mm), lateral fastening, flat lateral covers with 160° rotation angle
IR2HLF										Simon IRIS Gen2 LED Istanium® LED, size H (1,200 mm), lateral fastening, flat lateral covers with 160° rotation angle
IR2ELF										Simon IRIS Gen2 LED Istanium® LED, size E (1,500 mm), lateral fastening, flat lateral covers with 160° rotation angle
IR2MTF										Simon IRIS Gen2 LED Istanium® LED, size M (600 mm), central fastening, flat lateral covers, non-orientable
IR2LTF										Simon IRIS Gen2 LED Istanium® LED, size L (900 mm), central fastening, flat lateral covers, non-orientable
IR2HTF										Simon IRIS Gen2 LED Istanium® LED, size H (1,200 mm), central fastening, flat lateral covers, non-orientable
IR2ETF										Simon IRIS Gen2 LED Istanium® LED, size E (1,500 mm), central fastening, static flat lateral covers, non-orientable
<b>GTF</b>										Flat transparent shatter-proof tempered glass diffuser
<b>0</b>										Without installation wire (0 m)
<b>C10</b>										10° tapered optics
<b>C25</b>										25° tapered optics
<b>C40</b>										40° tapered optics
<b>C60</b>										60° tapered optics
<b>EA_</b>										15x55° elliptical optics
<b>A25</b>										25° asymmetric optics
<b>NDM</b>										Neutral daylight – 4,000 K – CRI > 80
<b>WDM</b>										Warm daylight – 3,000 K – CRI > 80
<b>SDM</b>										Soft daylight – 2,700 K – CRI > 80
<b>TDL</b>										Superior warm daylight - 1,800 K - CRI>70
<b>DDL</b>										Dynamic daylight – 1,800 K ~ 4,000 K (with DALI dimming)
<b>R3W</b>										RGB + Neutral daylight (with DMX dimming)
					<b>_38W700</b>					38 W 700 mA 3,738 lm to 3,000 K Size 600 mm, daylight and dynamic daylight
					<b>_45W500</b>					45 W 500 mA 2,191 lm at R3W Size 600 mm, RGB + neutral daylight
					<b>_55W700</b>					55 W 700 mA 5,606 lm to 3,000 K Size 900 mm, daylight and dynamic daylight
					<b>_68W500</b>					68 W 500 mA 3,286 lm at R3W Size 900 mm, RGB + neutral daylight
					<b>_73W700</b>					73 W 700 mA 7,475 lm to 3,000 K Size 1,200 mm, daylight and dynamic daylight
					<b>_90W500</b>					90 W 500 mA 4,382 lm at R3W Size 1,200 mm, RGB + neutral daylight
					<b>_91W700</b>					91 W 700 mA 9,344 lm to 3,000 K Size 1,500 mm, daylight and dynamic daylight
					<b>112W500</b>					112 W 500 mA 5,479 lm at R3W Size 1,500 mm, RGB + neutral daylight
<b>MA23_</b>										Electronic control gear at 230 V~ 50/60 Hz, standard protection against 6 kV power surges
<b>1N_</b>										Without dimming (on/off), for static daylight models
<b>DALI</b>										Dimming via DALI protocol input, for DDL and static daylight
<b>DMX_</b>										Dimming through DMX protocol for R3W
<b>C1</b>										Class 1 Luminaire electrical protection
<b>AS_</b>										Standard finish in Simon Anodised Grey
<b>BK9011</b>										Simon RAL 9011 finish
<b>WH9003</b>										Simon RAL 9003 finish

The luminaire flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes.  
The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.





## BASE REFERENCES

Power	No. of LEDs	Current	Configuration	Order code
38 W	16	700 mA	IR2MLFGTF0C10NDM_38W700MA23_1N_C1AS___	<b>11-2211-141</b>
38 W	16	700 mA	IR2MLFGTF0EA_NDM_38W700MA23_1N_C1AS___	<b>11-2211-142</b>
45 W	24	500 mA	IR2MLFGTF0EA_R3W_45W500MA23_DMXX_C1AS___	<b>11-2211-612</b>
55 W	24	700 mA	IR2LLFGTF0C10NDM_55W700MA23_1N_C1AS___	<b>11-2311-141</b>
55 W	24	700 mA	IR2LLFGTF0EA_NDM_55W700MA23_1N_C1AS___	<b>11-2311-142</b>
68 W	36	500 mA	IR2LLFGTF0EA_R3W_68W500MA23_DMXX_C1AS___	<b>11-2311-612</b>
73 W	32	700 mA	IR2HLFGTF0C10NDM_73W700MA23_1N_C1AS___	<b>11-2411-141</b>
73 W	32	700 mA	IR2HLFGTF0EA_NDM_73W700MA23_1N_C1AS___	<b>11-2411-142</b>
90 W	48	500 mA	IR2HLFGTF0EA_R3W_90W500MA23_DMXX_C1AS___	<b>11-2411-612</b>
91 W	40	700 mA	IR2ELFGTF0C10NDM_91W700MA23_1N_C1AS___	<b>11-2511-141</b>
91 W	40	700 mA	IR2ELFGTF0EA_NDM_91W700MA23_1N_C1AS___	<b>11-2511-142</b>
112 W	60	500 mA	IR2ELFGTF0EA_R3W112W500MA23_DMXX_C1AS___	<b>11-2511-612</b>

## ACCESSORIES / REPLACEMENTS

Description	Order code
5-Pole 2 m power cable	<b>11-9010-030</b>
1 m extension cable with IP68 connectors	<b>11-9020-110</b>
Extension cable for IP68 overhead connectors 1 m (connectors not included)	<b>11-9080-001</b>
IP68 5-pole male overhead connector. Allows for customisable extension cables	<b>11-9060-700</b>
IP68 5-pole female overhead connector. Allows for customisable extension cables	<b>11-9060-800</b>
IP68 end cap with 120 Ω resistance, terminal luminaire required for installations with DMX 512-A	<b>11-9050-200</b>

## ACCESSORIES / REPLACEMENTS

Description	Order code
IP68 end cap, terminal luminaire, mandatory for single-colour or DALI installations	<b>11-9050-001</b>
IP68 5-pole "I" connector without CPU, for single-colour installations, without dimming	<b>11-9060-901</b>
IP68 5-pole "Y" connector with CPU, for DMX or DALI controlled installations	<b>11-9060-900</b>
DMX router	<b>11-9102-000</b>







# ||| ProtoPixel

ProtoPixel is Simon Group's partner for the digitisation of light and the creation of innovative lighting experiences. With this alliance, Simon takes a step forward in dynamic, connective lighting and user experience.



Commercial areas



Façades



Monuments



Bridges



# NODE

The brain behind the installation, execute your lighting projects previously designed in ProtoPixel Create

Wi-Fi connection

Ethernet port for network connection

4 USB ports

Mini Jack audio input

Ethernet connection with DHCP and static configuration, integrating with your local network

Access to Mobile Application: SPACES

Possibility of remote control via My ProtoPixel



# DUO

Controls up to 600 pixels/LEDS @ 60 fps

Simple and intuitive

Configurable button for manual operation

Stand-alone function

Compatible with WS2811, WS2812b, WS2812d, Sk6812, WS2813, WS2815 protocols

Up to 3.5 m data cable lengths

Ethernet and Wi-Fi in a single device

Connection to Node through Art-Net

Connection of several controllers to the same local network

Powered directly through LED luminaires (5V or 12V); no extra cables or power supplies required





SPOTLIGHT

PROTOPIXEL







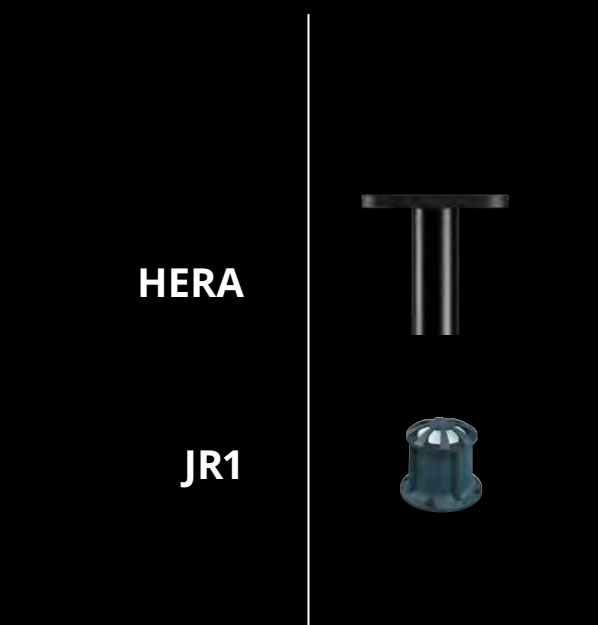
# ALIZZZ & AMAIA

SPOTLIGHT

PROTOPIXEL



LUMINAIRES

SIGNALLING  
AND BEACON

Providing orientation lighting helps us be aware of where we are in the space and also provides an interesting nocturnal landscape.









# HERA

NEW

## ISTANIUM<sup>®</sup>

HERA is Simon's range of beacons designed to offer solutions in different fields of application, thanks to its different heights, fastening options and installation accessories; as well as its lighting versatility, since its optical group has been designed to maximise lighting performance.

Light flux from 600 lm to 1,800 lm  
 Visual comfort  
 High resistance to impacts and vandalism



Parking area



Streets



Pedestrian streets



Commercial areas



Parks and gardens



Urban



Squares



Roundabouts / Intersections



Large areas



Signalling

# HERA

## FEATURES

### LIGHTING SOLUTIONS

Wide variety of lighting solutions to optimise and precisely direct light flux, adapting it to the needs of each project: single and double head; asymmetrical and symmetrical light distribution.



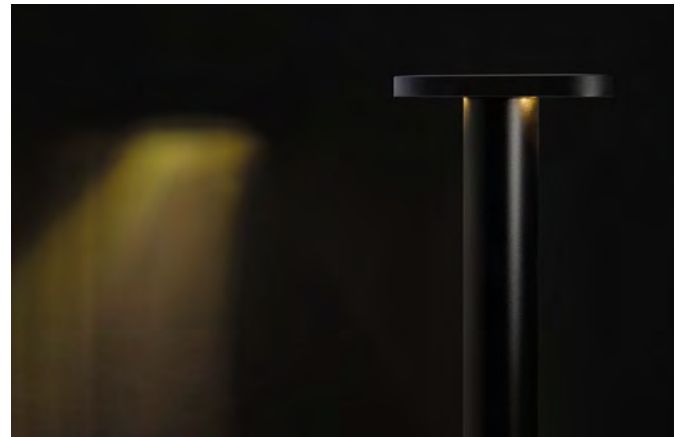
**Single head:**  
extended asymmetric  
and front asymmetric  
distribution.



**Double head:**  
extended asymmetric  
and symmetric  
distribution.

### NIGHT SKY PROTECTION: FHS<1

Directed light flux, without bothersome glare and complying with the standards for night sky protection.



### PROTECTION RATINGS

**IP66** with a pressure relief valve to keep the pressure constant and prevent moisture from entering the electro-light group.

**IK10** rating to guarantee the luminaire's resistance to vandalism and stainless steel screw for tamperproof security.



### LIGHT QUALITY

**CRI > 80** for 2,700 K, 3,000 K and 4,000 K  
High colour rendering and uniform distribution.



## FASTENING SYSTEMS

Maximum application and installation flexibility thanks to three mounting heights, two options for fastening base and various installation accessories depending on the terrain.



**Visible fastening:**  
maximum vandalism resistance.



**Concealed fastening:**  
maximum aesthetic integration.

## FASTENING ACCESSORIES



Foundation fastening for visible base



Foundation fastening for concealed base



Fastening for wood/terrace/old brickwork for concealed base

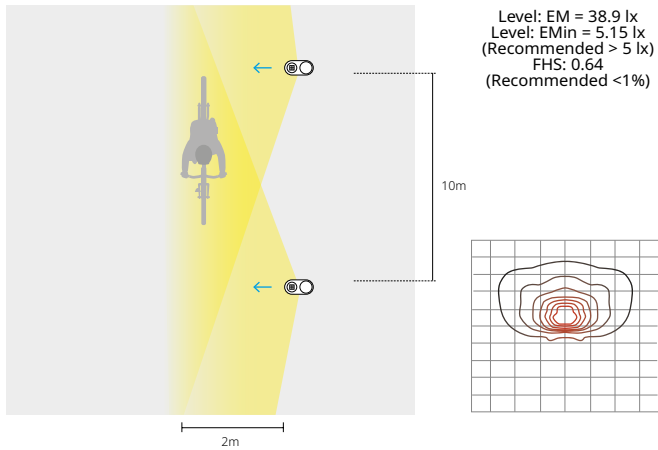


Ground fastening for concealed base

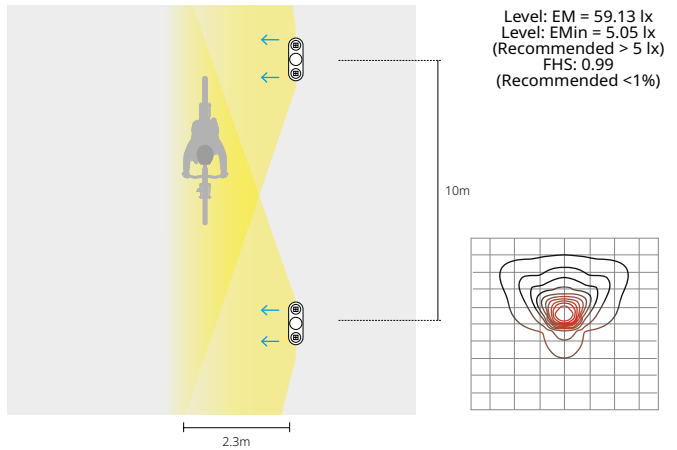
## APPLICATION EXAMPLES (MODEL: HERA 1 M)

Different heights and finishes to meet the needs of each project, maximum spacing and customisation of the series.

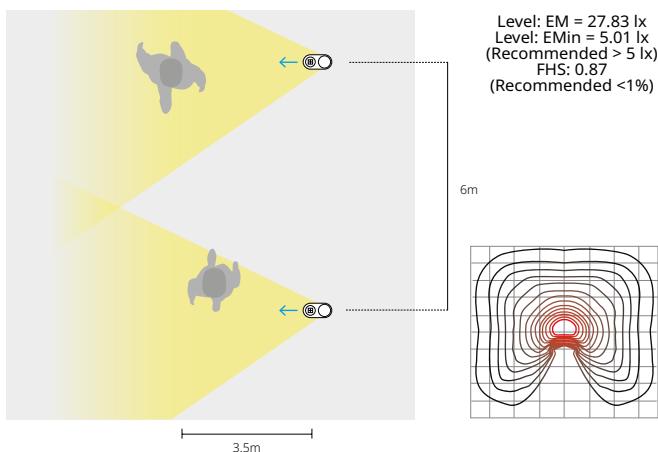
A TYPE ROAD LIGHTS - BE OPTICS (EXTENDED ASYMMETRIC)



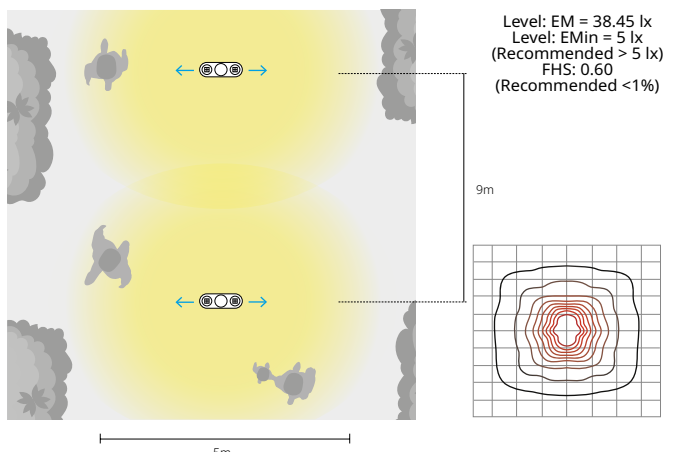
A TYPE ROAD LIGHTS - BE OPTICS (EXTENDED ASYMMETRIC)



B TYPE ROAD LIGHTS - BF OPTICS (FRONT ASYMMETRIC)



C TYPE ROAD LIGHTS - BS OPTICS (SYMMETRIC)



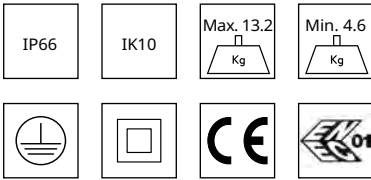




# HERA

## ISTANIUM®

### BEACON LUMINAIRE



COLOUR TEMP.: XDL 2,200 K | SDM 2,700 K | WDM 3,000 K | NDM 4,000 K | PCA\*

COLOUR RENDERING INDEX:

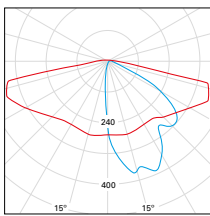
> 80 (for 4000 K, 3000 K and 2700 K) > 70 (for 2200 K)

UPWARD LIGHT OUTPUT RATIO (ULOR): < 1 %\*\*

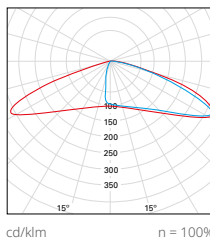
LED DURATION (L90 B10 AT T<sub>a</sub>=25 °C AND T<sub>j</sub>=95 °C): 100,000 h

\* Upon request \*\* Value may change depending on the optics

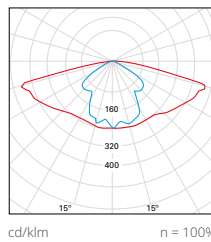
BE OPTICS



BF OPTICS



BS OPTICS



— C0 - C180 — C90 - C270

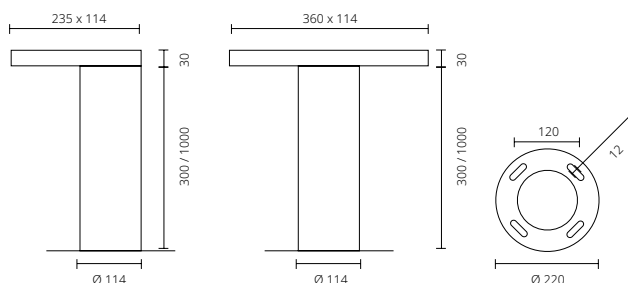
Rear hemisphere flux control visors available for RJ, RL, RE, SA and SB optics (see page 488 for more information).

Check other photometric distributions.

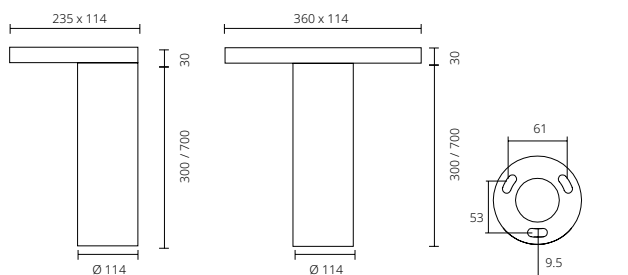
Simon **HERA** LED beacon luminaire, in different heights, with electro-light group in die-cast aluminium and painted galvanised steel support. With two floor-mounting options, by means of a visible fastening base for maximum vandalism resistance or a hidden base for fastening the support for maximum aesthetic integration. Possibility of specific fastening accessory for foundations with four structured bolts for the model with the visible fastening base. Possibility of specific fastening accessory for foundations with three structured bolts, or specific fastening accessory for terrazzo, wood or antique floors by means of a base plate, or specific fastening accessory for earth floors for the model with the concealed fixing base. Flat cover, with the possibility of single or double head. Internal housing of the electronic control gear in a cup-shaped structure made of cast aluminium to guarantee watertightness. Internal connection with a fuse box for the 1 m high models with a visible fastening base, or with a junction box for the 0.7 m high models with concealed base and for the 0.3 m high models, with visible or concealed fastening bases. Easy-clean transparent flat polycarbonate diffuser to prevent UV radiation in the optics. **IP66** protection rating for the electro-light group, with a **pressure relief valve** to keep the pressure constant and prevent moisture from entering, and **IK10** for the beacon assembly. No pre-wiring. Option of 2 m cabling. Possibility of mounting two multi-array optics with the possibility of up to four photometric distributions. Possibility of four colour temperatures in white light, with CRI greater than 80 in 4,000 K, 3,000 K and 2,700 K, and with CRI greater than 70 in 2,200 K, as well as APC (Amber Phosphor Converted) for specially protected areas. Service life of LED **L90 B10 100,000 hours**. Istantium LED lighting groups can be replaced and updated even when the luminaire is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (**ULOR**) less than **2.5%**. With **Class I** and **Class II** electronic control gear with 230 V AC/50-60 Hz supply voltage. Possibility of including additional protection against surges of **10 kV/10 kA**. Optional DALI dimming. Standard finish in Simon BKTECH colour. Possibility of Simon and RAL finishes, as well as Seafrost paint for corrosive environments with high durability in a **C5M** environment. Dimensions 235x115x1000 mm or 235x115x300 mm for models with visible base and single head. Dimensions 360x115x1000 mm or 360x115x300 mm for models with visible base and double head. Dimensions 360x115x700 mm or 360x115x300 mm for models with concealed base and single head. Dimensions 235x115x700 mm or 235x115x300 mm for models with concealed base and double head.

### DIMENSIONS AND FASTENING SYSTEMS

Fastening with visible base



Fastening with concealed base



Surface exposed to the wind



Weight

1,000mm: Min. 11.1 kg max. 13.2 kg  
700mm: Min. 8.7 kg max. 13.2 kg  
300mm: Min. 4.6 kg max. 8.2 kg

### PHYSICAL FEATURES AND MATERIALS

IP	IP66 (for the optical group)
IK	IK10 (for the beacon assembly)
Shaft	Painted galvanised steel
Electro-light group	Die-cast aluminium
Diffuser	Flat transparent polycarbonate with UV treatment

### FINISHES

Body and support	Painted in BKTECH colour (Standard Paint) Simon Colours (Standard Paint / Seafrost Paint) RAL chart colours (Standard Paint / Seafrost Paint)
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### ELECTRICAL PARAMETERS \*\*

Temp.	-20 °C... +35 °C
Dimming	<b>1N (100%)</b> Without dimming <b>DALI</b> Dimming via DALI protocol input

#### Luminaires supplied by electrical grid

Supply voltage	220-240 V <sub>AC</sub>
Frequency	50/60 Hz
Protection against power surge	6 kV (Possibility of increasing to 10 kV / 10 kA upon request)
Power factor (cos φ at max. charge)	≥ 0.95
Luminaire electrical protection	Class I or Class II
Power according to models***	4 LEDs    8 LEDs
Supply current	
HIGH BALANCE	6 W    13W
HIGH FLUX	8 W    17W
HIGH HIGH FLUX	12 W    26W

### REGULATIONS AND CERTIFICATES



Luminaire according to: EN 60598-1 and 2-3 / EN 61547 / EN 61000-3-2 and 3-3 / EN 62031 / EN 61347-2-13 / EN 62471 / EN 55015

Warranty 5 years (extended warranty upon request)

Supply and packaging Packed in recyclable cardboard to protect the product during transport and storage.

Maintenance Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent. Lubricate the sealing gaskets and replace them when they are cracked. Lubricate the closures and/or hinges of the moving parts. Keep the thermal radiation surface clean to not lose light flux without shortening the life of the LEDs.





\*\*Values corresponding to the current state of technology. \*\*\* Optical group power values have a tolerance of ±7%.



## CONFIGURE YOUR HERA S ISTANIUM® LED LUMINAIRE

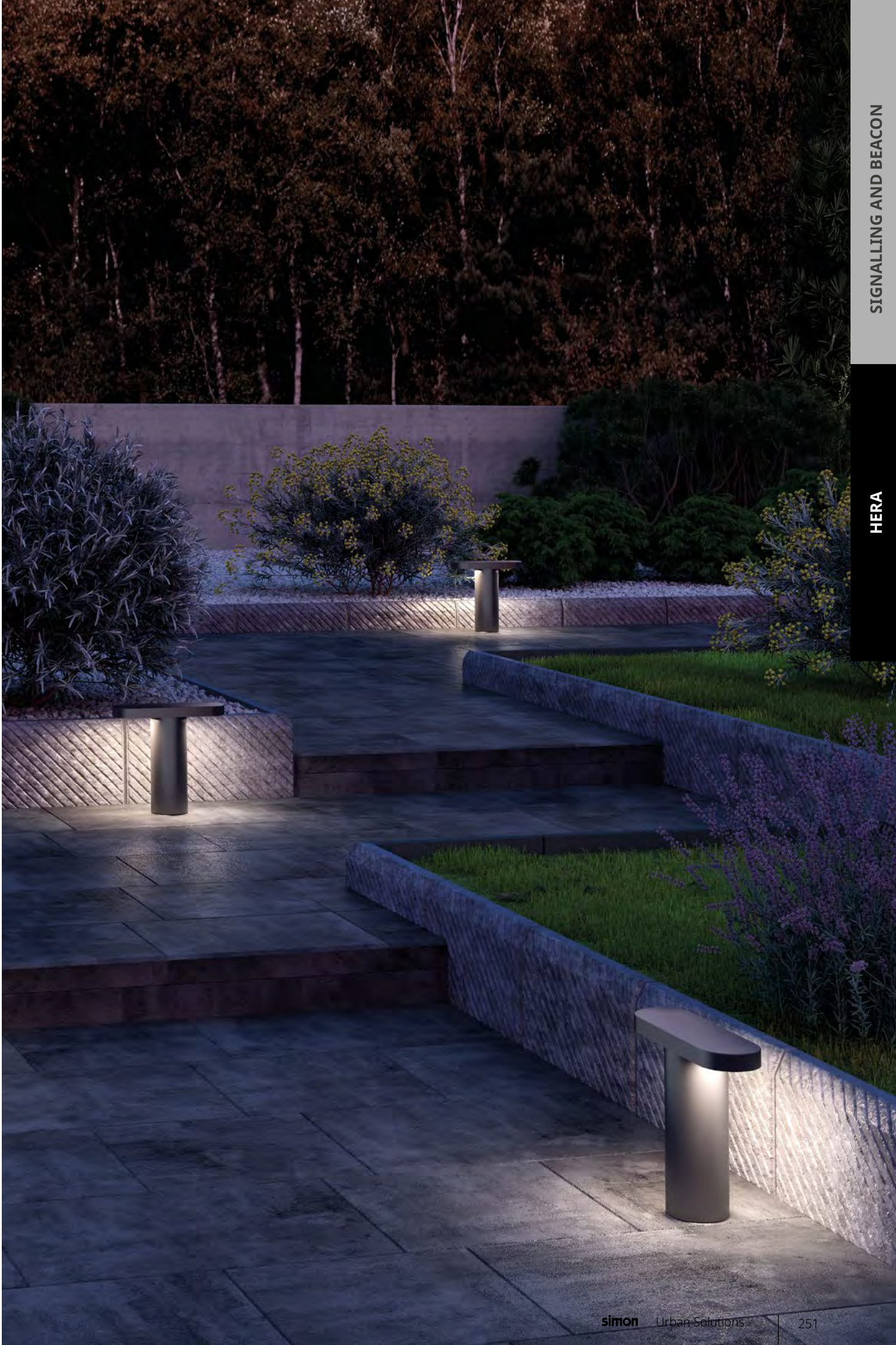
Model	Diffuser	Wire	Optics	Colour Temp.	Optical group power	Team	Dimming	Protection	Finish	Description
HERAPO										Simon HERA Istanium® LED, height 1,000 mm, visible fastening base, single head
HER7VO										Simon HERA Istanium® LED, height 700 mm, concealed fastening base, single head
HER3PO										Simon HERA Istanium® LED, height 300 mm, visible fastening base, single head
HER3VO										Simon HERA Istanium® LED, height 300 mm, concealed fastening base, single head
HERAPD										Simon HERA Istanium® LED, height 1,000 mm, visible fastening base, double head
HER7VD										Simon HERA Istanium® LED, height 700 mm, concealed fastening base, double head
HER3PD										Simon HERA Istanium® LED, height 300 mm, visible fastening base, double head
HER3VD										Simon HERA Istanium® LED, height 300 mm, concealed fastening base, double head
	PTF									Flat transparent polycarbonate diffuser
		0								Without installation wire (0 m)
			BE_							E type extended asymmetric beacon optics; available for single and double head
			BF_							F type asymmetric front beacon optics; available for single head
			BS_							S type symmetric beacon optics; available for double head
				<input type="radio"/> NDM						Neutral daylight – 4,000 K – IRC > 80
				<input type="radio"/> WDM						Warm daylight – 3,000 K – IRC > 80
				<input type="radio"/> SDM						Soft daylight – 2,700 K – IRC > 80
				<input type="radio"/> XDL						Extra warm daylight - 2.200 K - IRC > 70
					_6W550					6 W 550 mA, single head 630 lm to 3,000 K 4 LEDs
					_8W700					8 W 700 mA, single head 806 lm to 3,000 K 4 LEDs
					_12W_1K					12 W 1,050 mA, single head 1,100 lm to 3,000 K 4 LEDs
					_13W550					13 W 550 mA, double head 1,086 lm to 3,000 K 8 LEDs
					_17W700					17 W 700 mA, double head 1,331 lm to 3,000 K 8 LEDs
					_24W_1K					24 W 1,050 mA, double head 1,813 lm to 3,000 K 8 LEDs
						IA23				Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, standard protection against 6 kV power surges
						IA23S				Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, additional protection against 10 kV power surges
							1N_			Without dimming (on/off)
							DALI			Dimming through DALI input protocol
								C1		Class I luminaire electrical protection
								C2		Class II luminaire electrical protection
									BKTECH	Standard finish in Simon Technical Black
									xxxxxx	Finish in Simon colours
									xxxxxx	Finish in Simon RAL classic chart colours
									CMxxxx	Seafront Paint Finish

## ACCESSORIES / REPLACEMENTS

	Description	Order code
	Model with visible fastening base: fastening accessory for foundations	<b>5-531928</b>
	Model with concealed fastening base: fastening accessory for foundations	<b>5-531929</b>
	Model with concealed fastening base: fastening accessory for terrazzo, wood or antique floors	<b>5-513930</b>
	Model with concealed fastening base: fastening accessory for earth flooring	<b>5-531931</b>

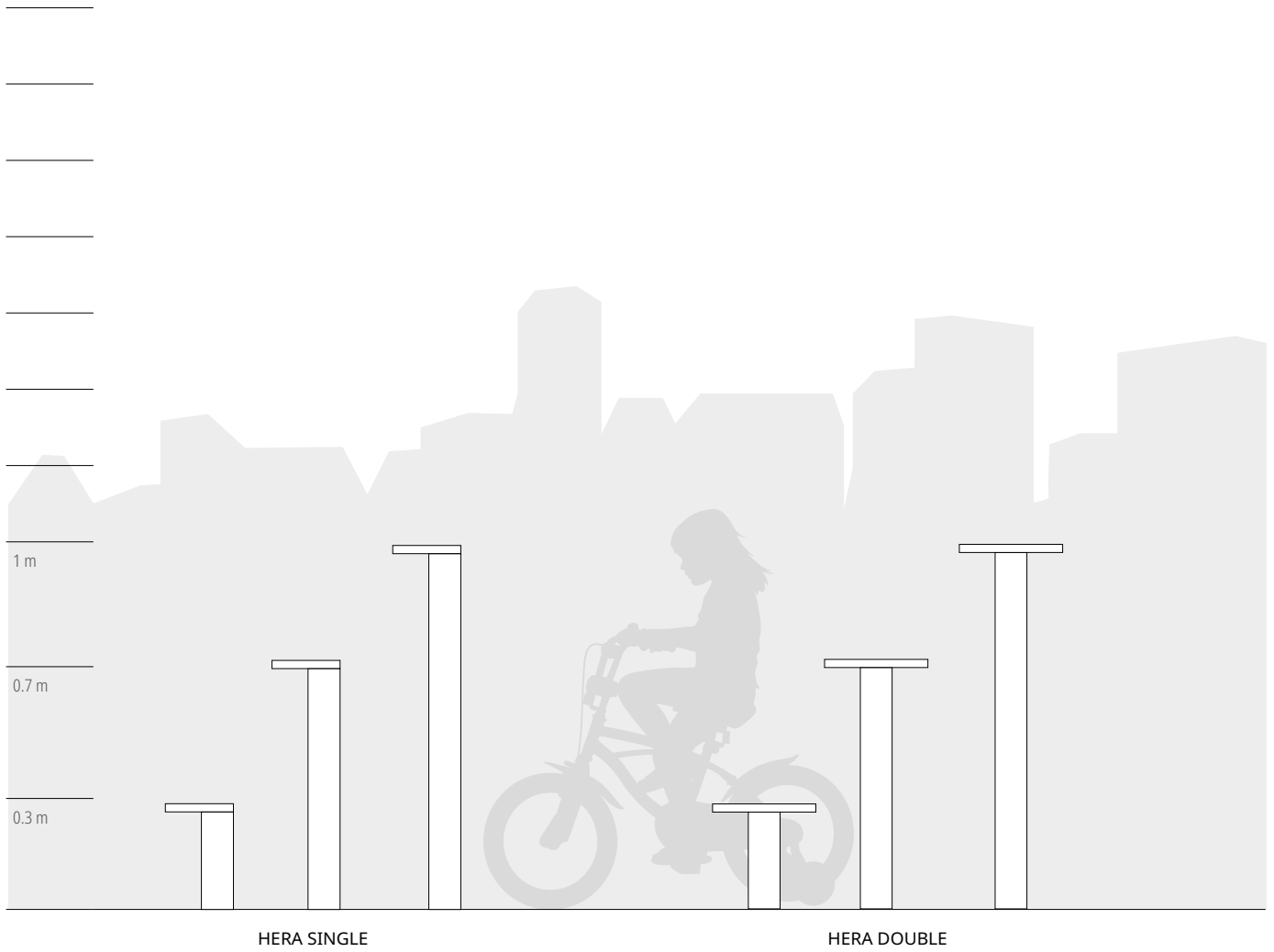
The luminaire flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes. The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.







YOUR HERA LUMINAIRE:











# JR1

Simon JR1 LED beacon luminaire, size S, made of die-cast aluminium. Above the floor installation or recessed installation in the floor.



Pedestrian streets



Commercial areas



Parks / gardens



Monuments



Signalling

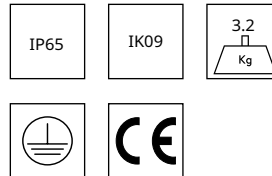






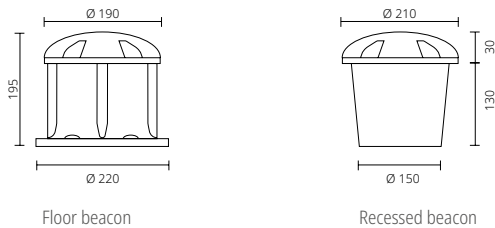
# JR1

Simon **JR1 LED** beacon luminaire, size **S**, made of die-cast aluminium. Above the floor installation or recessed installation in the floor. Possibility of an anchor tube to facilitate recessed installation in the floor. Lenticular cover with diffuser glass and protective structure. Opal tempered glass lenticular diffuser. **IP65** protection rating and **IK09** impact resistance rating. May be installed in one photometric distribution. Possibility of one colour temperature in white light. LED service life L70 B10 50,000 hours. With **Class I** electronic control gear with 230 V<sub>ac</sub>/50 Hz power supply. Standard finish in Simon DGCLAS colour. Dimensions: 220 x 195 x 220 mm for over the floor fastening and 210 x 160 x 210 mm for recessed installation in the floor model.



**COLOUR TEMP.:** CDL 5,600 K  
**COLOUR RENDERING INDEX:** >80  
**DURATION OF THE LEDS (L70 B10 AT 25°C)** 50,000 h

## DIMENSIONS AND FASTENING SYSTEMS



Diffuser beacon fastening	On floor with four M8 screws (not supplied)
Recessed beacon fastening	Inground uplight. Requires anchoring tube code 50-18801 for assembly on ground or cement/concrete: (See diagrams on following page)
Wire inlet	Seal fittings M25
Weight	3.2 kg

## PHYSICAL FEATURES AND MATERIALS

IP	IP65
IK	IK09
Body	Die-cast aluminium
Closure system	With stainless steel screws
Diffuser	Opal lenticular shatter-proof tempered glass

## FINISHES

Body DGCLAS

## ELECTRICAL PARAMETERS \*

Temp.	-20 °C... +35 °C
Dimming	<b>1N (100%)</b> Without dimming

### Luminaires supplied by electrical grid

Supply voltage	120-277 V <sub>ac</sub>
Frequency	50/60 Hz
Power factor (cos φ at max. charge)	≥ 0.9
Luminaire electrical protection	Class I
Number of LEDs	24 LEDs
Rated power	7 W

## REGULATIONS AND CERTIFICATES



Luminaire according to: EN 60598-1 / EN 62493 / EN 55015 / EN 61547 / EN 61000-3-2 / EN 50581

Warranty	5 years.
Supply and packaging	Packed in recycled cardboard with an identifying label to protect the product during transport and storage.
Maintenance	Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent. Lubricate the sealing gaskets and replace them when they are cracked. Lubricate the closures and/or hinges of the moving parts. Keep the thermal radiation surface clean to not lose light flux without shortening the life of the LEDs.

\*Values corresponding to the current state of technology.



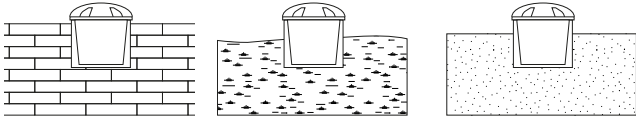
## CONFIGURE YOUR JR1 LUMINAIRE

Model	Diffuser	Wire	Optics	Colour Temp.	Optical group power	Team	Dimming	Protection	Finish	Description
JR1SRB										Simon JR1 LED, size S, floor fastening, lenticular cover
JR1SGB										Simon JR1 LED, size S, inground uplight fastening, lenticular cover
	GOL									Opal lenticular shatter-proof tempered glass diffuser
		0								Without installation wire (0 m)
			WB_							Extensive symmetrical distribution
				CDL						Neutral daylight - 5,600 K - CRI80
					_7W_30					7 W 30 mA      22 lm to 5,600 K      24 LEDs
						IA23_				Electronic gear at 230 V AC 50/60 Hz, standard protection against 6 kV power surges
							1N_			Without dimming (on/off)
								C1		Class I luminaire electrical protection
									DGCLAS	Standard finish in Simon Forged Sand Blasted Grey

## BASE REFERENCES

Power	No. of LEDs	Current	Configuration	Order code
7 W	24	30 mA	JR1SRBGOL0WB_CD_7W_30IA23_1N_C1DGCLAS	<b>50-18617</b>
7 W	24	30 mA	JR1SGBGOL0WB_CD_7W_30IA23_1N_C1DGCLAS	<b>50-18618</b>

## RECESSED MODELS



On concrete floor, without anchoring tube

Directly on the ground, with anchoring tube

In concrete, with anchoring tube

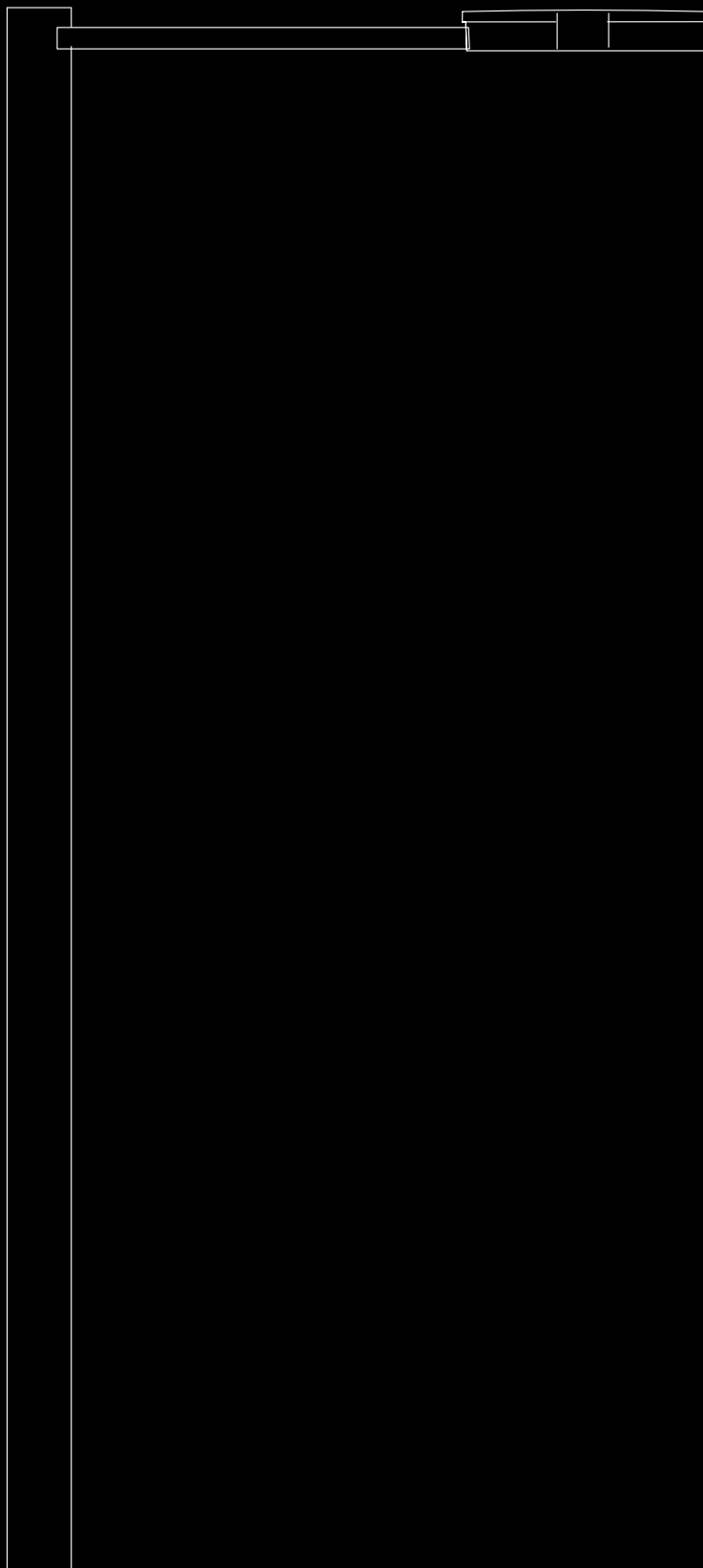
Drainage must be taken into account for proper installation of recessed models

## ACCESSORIES / REPLACEMENTS

Description	Order code
Anchoring tube for inground uplight model. Height 220 mm, outer Ø 180 mm, inner Ø 162 mm.	<b>50-18801</b>

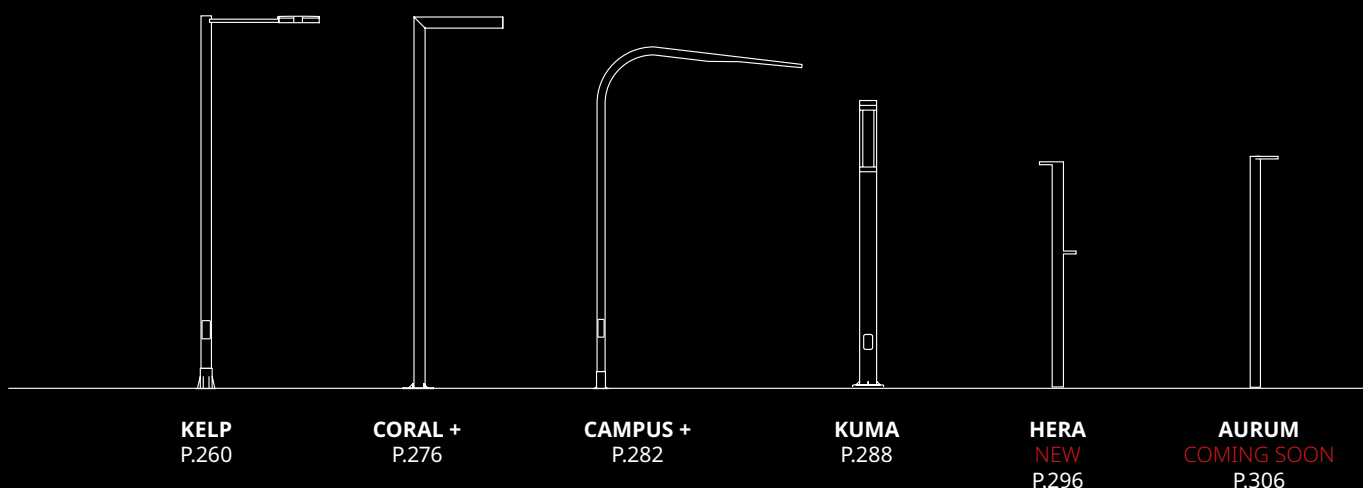


Upper cover replacement with light group **50-71227**



# LIGHTING POINTS

ISTANIUM<sup>LED</sup>®



Simon's full high-performance urban proposal, with an innovative design and equipped with an advanced thermal dissipation system, offering multiple photometric distributions for the development of highly efficient and precise lighting projects.





# KELP

MERAK / ALTAIR

ISTANIUM<sup>LED</sup>®

Complete the Merak and Altair Istanium LED ranges with the Kelp lighting point:

Direct arm-luminaire fastening system.  
Integration into any type of urban environment.  
Adaptable and updatable light group.  
Systems for steel support protection.



Parking areas



Avenues



Streets



Pedestrian streets



Commercial areas



Parks / Gardens



Squares



Roundabouts /  
Intersections



Large areas

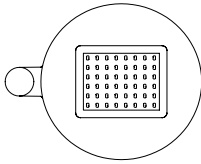


# KELP

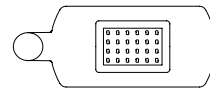
## FEATURES

### MERAK / ALTAIR LUMINAIRE ISTANIUM®

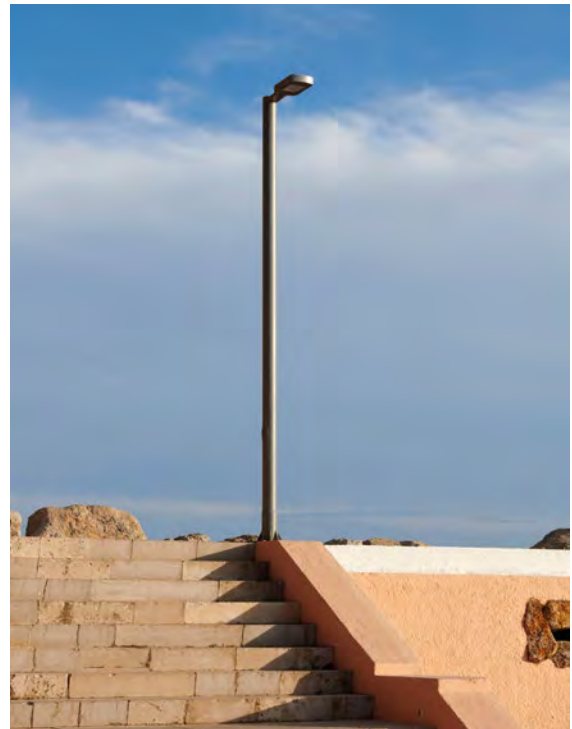
Configure your **KELP** lighting point with the con **Merak SXF** or **Altair IXF** Istanium LED road light luminaire. High-performance luminaires, with an innovative design and equipped with an advanced thermal dissipation system, offering multiple photometric distributions for the development of highly efficient and precise lighting projects.



MERAK



ALTAIR



## SUPPORT

Supported by a flat flange plate with reinforcing ring and gusset, shaft and arm(s) made of S235JR-quality sheet carbon steel.

Flush trapdoor with interior reinforcement.

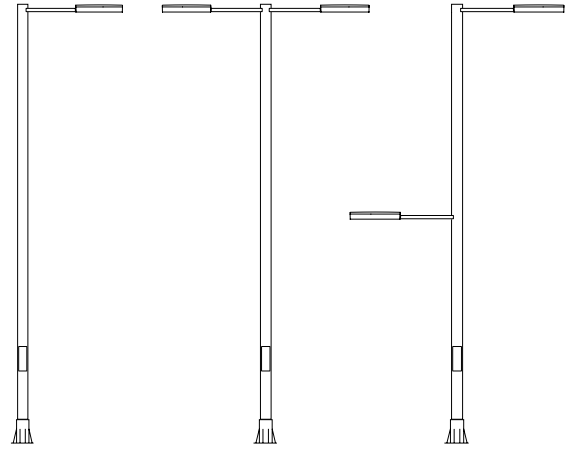
Lateral luminaire fastening via direct anchoring on the body, without coupling, Ø60 mm.

IP3X protection rating. To achieve IP44, it is necessary to use an internal junction box, not supplied.

Hot dip galvanised finish and painted in Simon GYDECO colour. Allows Simon and RAL chart finishes, as well as other protective finishes.

Supplied with anchoring bolts, template and double nut to level the base. Luminaires not included.

Pole with CE-certified constancy of performance.



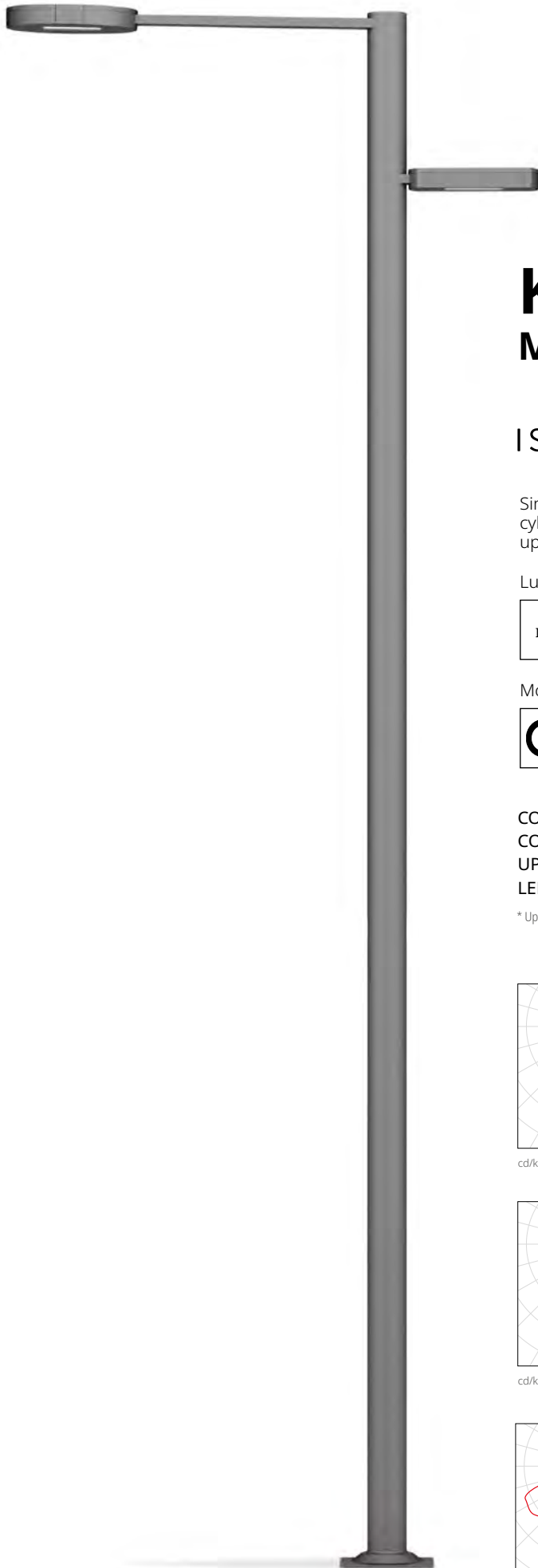
model 100

model 200

model 210





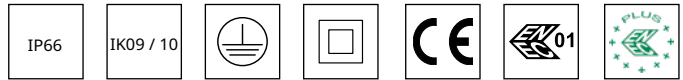


# KELP MERAК / ALTAIR

## ISTANIUM<sup>®</sup>

Simon KELP decorative lighting point, up to 9 m high, with cylindrical shaft and lateral luminaire fastening on arms up to 0.75 m long.

Luminaires:



Mount:



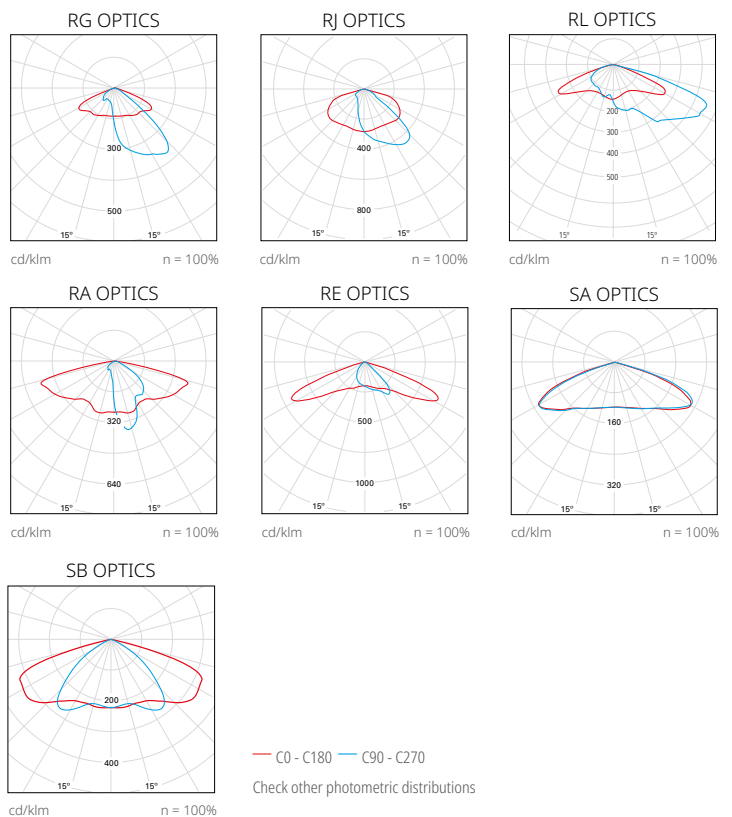
COLOUR TEMP.: NDЛ 4000 K | WDL 3000 K | SDL 2700 K | XDL 2200 K | PCA\*

COLOUR RENDERING INDEX: >70

UPWARD LIGHT OUTPUT RATIO (ULOR): <0.1 %\*\*

LED DURATION (L90 B10 AT T<sub>a</sub>=25 °C AND T<sub>j</sub>=95 °C): 100,000 h

\* Upon request \*\* Value may change depending on the optics



## KELP MERAK ISTANIUM<sup>®</sup>

Simon **KELP** decorative lighting point, up to 9 m high, with cylindrical shaft and lateral luminaire fastening on arms up to 0.75 m long. Supported by a flat flange plate with reinforcing ring and gusset, shaft and arm(s) made of S235JR-quality sheet carbon steel. Flush trapdoor with interior reinforcement. Lateral luminaire fastening via direct anchoring on the body, without coupling, Ø60 mm. IP3X protection rating. To achieve IP44, it is necessary to use an internal junction box, not supplied. Hot dip galvanised finish and painted in Simon GYDECO colour. Allows Simon and RAL chart finishes, as well as other protective finishes. Supplied with anchoring bolts, template and double nut to level the base. Luminaires not included. Pole with CE-certified constancy of performance. Specific decorative luminaires: Simon MERAK LED, size S, and Simon ALTAIR LED, size I, made of die-cast aluminium. Flat cover with internal honeycomb LED cooling system, no visible fins. Access to the electrical-optical group and maintenance via the top part with opening by means of two levers, without tools, or fastened with four captive screws that are invisible when installed, according to luminaire model. The electro-optical group is removable and upgradeable in a single piece, with a disconnecter for automatic disconnection and a three-guide alignment system to avoid incorrect assemblies, according to luminaire model. Possibility of fitting an **upper Zhaga/NEMA** connector for MERAK and ALTAIR luminaires, and a **lower Zhaga** connector for MERAK luminaires. 6 mm thick flat transparent tempered glass diffuser to facilitate cleaning and avoid UV radiation on the optics. **IP66** protection rating for the complete luminaire, with **pressure relief valve** to keep the pressure constant and prevent moisture from entering, and up to **IK10** impact resistance rating. Possibility of mounting up to nine multi-array optics. Anti-glare, truncated pyramid-shaped reflector, matt with light flux recovery. Possibility of four colour temperatures in white light, as well as PCA (Phosphor Converted Amber) for specially protected areas. Service life of LED **L90 B10 100,000 hours**. Istanium LED lighting groups can be replaced and updated even when the luminaire is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (**ULOR**) equal to **0%** (verify according to optics used). With **Class I** and **Class II** electronic control gear with 230 V AC/50-60 Hz supply voltage. Possibility of including additional protection against surges of **10 kV/10 kA**. With automatic disconnection when opening the gear compartment. Optional dimming with control line 2N+, without control line (Self-dimming) 2N-, by means of a flow dimmer from CAD cabinet amplitude dimming, for telemanagement with 1.10V or DALI input, according to luminaire model. Optional custom programming and maintenance of constant light output (**CLO**). Standard finish in Simon GYDECO colour. Possibility of Simon and RAL finishes, as well as Seafront paint for corrosive environments with high durability in a **C5M** environment. Dimensions 425x63x425 mm for MERAK luminaire and 425x63x220 mm for ALTAIR luminaire. ENEC+ and Zhaga-D4i certified MERAK luminaire. ALTAIR **ENEC** certified luminaire, compatible with **Zhaga-D4i**.

### LUMINAIRE

#### PHYSICAL FEATURES AND MATERIALS

IP	IP66
IK	From IK09 to IK10
Body	Die-cast aluminium
Cover	Die-cast aluminium
Closure system	Levers made of die-cast aluminium, tool-free opening
Diffuser	Flat transparent shatter-proof tempered glass

#### ELECTRICAL PARAMETERS \* AND CONNECTIVITY

Temp.	-20 °C... +35 °C			
Dimming**	<b>2N-</b> Without control line <b>Dxxx</b> Without custom programmed control line <b>2N+</b> With control line <b>CAD</b> Cabinet amplitude dimming <b>1N (100%)</b> Without dimming <b>1.10V</b> Dimming through 1.10V input protocol <b>DALI</b> Dimming through DALI input protocol  Possibility of activating the <b>CLO</b> function, which allows the depreciation of the light emitted by the LEDs to be compensated by gradually increasing the supply current to them.  Possibility of fitting a <b>Zhaga / NEMA</b> connector on the top of the luminaire and a <b>Zhaga</b> connector on the bottom of the luminaire according to Zhaga Consortium Book 18.  <b>Luminaires supplied by electrical grid</b>			
Supply voltage	220-240 V <sub>ac</sub>			
Frequency	50/60 Hz			
Protection against power surge	6 kV (Possibility of increasing to 10 kV / 10 kA upon request)			
Power factor (cos φ at max. charge)	≥ 0.95			
Luminaire electrical protection	Class I or Class II			
Optical group power by model***	16 LEDs	24 LEDs	40 LEDs	48 LEDs
Supply current				
HIGH EFFICIENCY	16 W	24 W	39 W	47 W
HIGH BALANCE	24 W	36 W	60 W	73 W
HIGH FLUX	32 W	49 W	81 W	97 W
VERY HIGH FLUX	50 W	75 W	-	-

\* Values corresponding to the current state of technology. \*\* Check other regulations. \*\*\* Power values have a tolerance of ±7%.

#### FINISHES

Luminaire	Painted in GYDECO colour (Standard Paint)
	Simon Colours (Standard Paint / Seafront Paint)
	RAL chart colours (Standard Paint / Seafront Paint)

### SUPPORT

#### FASTENING SYSTEMS

Luminaire fastening	Directly to arm, angled at 0°
Notes	Anchoring bolts and template provided

#### PHYSICAL FEATURES AND MATERIALS

IP	To achieve IP44, it is necessary to use the internal junction box with IP44 (not supplied with the pole).
Construction	Support manufactured in a single section
Shaft	Cylindrical
Arm	Rectangular section
Trapdoor	Flush
Arm	Structural steel sheet, S235JR quality
Arm trim	Die-cast aluminium
Shaft	Structural steel sheet, S235JR quality
Flange plate	Flat steel sheet, S235JR quality, with reinforcing ring and gussets

#### FINISHES

Support	Galvanised and painted in GYDECO colour (Standard Paint)
	Simon Colours (Standard Paint / Seafront Paint)
	RAL chart colours (Standard Paint / Seafront Paint)

## KELP ALTAIR ISTANIUM<sup>®</sup>

Simon **KELP** decorative lighting point, up to 9 m high, with cylindrical shaft and lateral luminaire fastening on arms up to 0.75 m long. Supported by a flat flange plate with reinforcing ring and gusset, shaft and arm(s) made of S235JR-quality sheet carbon steel. Flush trapdoor with interior reinforcement. Lateral luminaire fastening via direct anchoring on the body, without coupling, Ø60 mm. IP3X protection rating. To achieve IP44, it is necessary to use an internal junction box, not supplied. Hot dip galvanised finish and painted in Simon GYDECO colour. Allows Simon and RAL chart finishes, as well as other protective finishes. Supplied with anchoring bolts, template and double nut to level the base. Luminaires not included. Pole with CE-certified constancy of performance. Specific Simon ALTAIR LED decorative luminaire, size I, made of die-cast aluminium. Flat cover with internal honeycomb LED cooling system, no visible fins. Access to the electrical-optical group and maintenance via the top part, fastened with four captive screws that are invisible when installed. The electro-optic group is removable and upgradeable by means of a single piece, with a disconnection mechanism for automatic disconnection. 6 mm thick flat transparent tempered glass diffuser to facilitate cleaning and avoid UV radiation on the optics. **IP66** protection index for the complete luminaire, with pressure relief valve to keep the pressure constant and prevent moisture from entering, and an impact resistance index up to **IK10**. Possibility of mounting up to ten multi-array optics. Anti-glare, truncated pyramid-shaped reflector, matt with light flux recovery. Possibility of four colour temperatures in white light, as well as PCA (Phosphor Converted Amber) for specially protected areas. Service life of **LED L90 B10 100,000 hours**. Istanium LED lighting groups can be replaced and updated even when the luminaire is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (inst. ULOR) of less than 1%. With **Class I** and **Class II** electronic control gear with 230 V<sub>AC</sub> / 50 Hz supply voltage. Possibility of including additional protection against surges of **10 kV/10 kA**. With automatic disconnection when opening the gear compartment. Optional dimming without control line (self-dimming) 2N-. Optional custom programming and maintenance of constant light output (**CLO**). Standard finish in Simon GYDECO colour. Possibility of Simon and RAL chart finishes. Dimensions 425x63x220 mm. **ENEC** certified luminaire.

### LUMINAIRE

#### PHYSICAL FEATURES AND MATERIALS

IP	IP66
IK	From IK09 to IK10
Body	Die-cast aluminium
Cover	Die-cast aluminium
Closure system	Stainless steel screws
Diffuser	Flat transparent shatter-proof tempered glass

#### ELECTRICAL PARAMETERS \* AND CONNECTIVITY

Temp.	-20 °C... +35 °C		
Dimming**	<b>2N-</b> Without control line <b>2N+</b> With control line <b>CAD</b> Cabinet amplitude dimming <b>1N (100%)</b> Without dimming <b>1.10V</b> Dimming through 1.10V input protocol <b>DALI</b> Dimming through DALI input protocol		
	Possibility of activating the <b>CLO</b> function, which allows the depreciation of the light emitted by the LEDs to be compensated by gradually increasing the supply current to them.		
	Possibility of fitting a <b>Zhaga / NEMA</b> connector on the top of the luminaire and a <b>Zhaga</b> connector on the bottom of the luminaire according to Zhaga Consortium Book 18.		
	Luminaires supplied by electrical grid		
Supply voltage	220-240 V <sub>AC</sub>		
Frequency	50/60 Hz		
Protection against power surge	6 kV (Possibility of increasing to 10 kV / 10 kA upon request)		
Power factor (cos φ at max. charge)	≥ 0.95		
Luminaire electrical protection	Class I or Class II		
Optical group power by model***	12 LEDs	16 LEDs	24 LEDs
Supply current			
HIGH EFFICIENCY	12 W	16 W	24 W
HIGH BALANCE	18 W	24 W	36 W
HIGH FLUX	24 W	32 W	49 W
VERY HIGH FLUX	37 W	50 W	75 W

#### FINISHES

Luminaire	Painted in GYDECO colour (Standard Paint)
	Simon Colours (Standard Paint / Seafont Paint)
	RAL chart colours (Standard Paint / Seafont Paint)

#### SUPPORT

##### FASTENING SYSTEMS

Luminaire fastening	Directly to arm, angled at 0°
Notes	Anchoring bolts and template provided

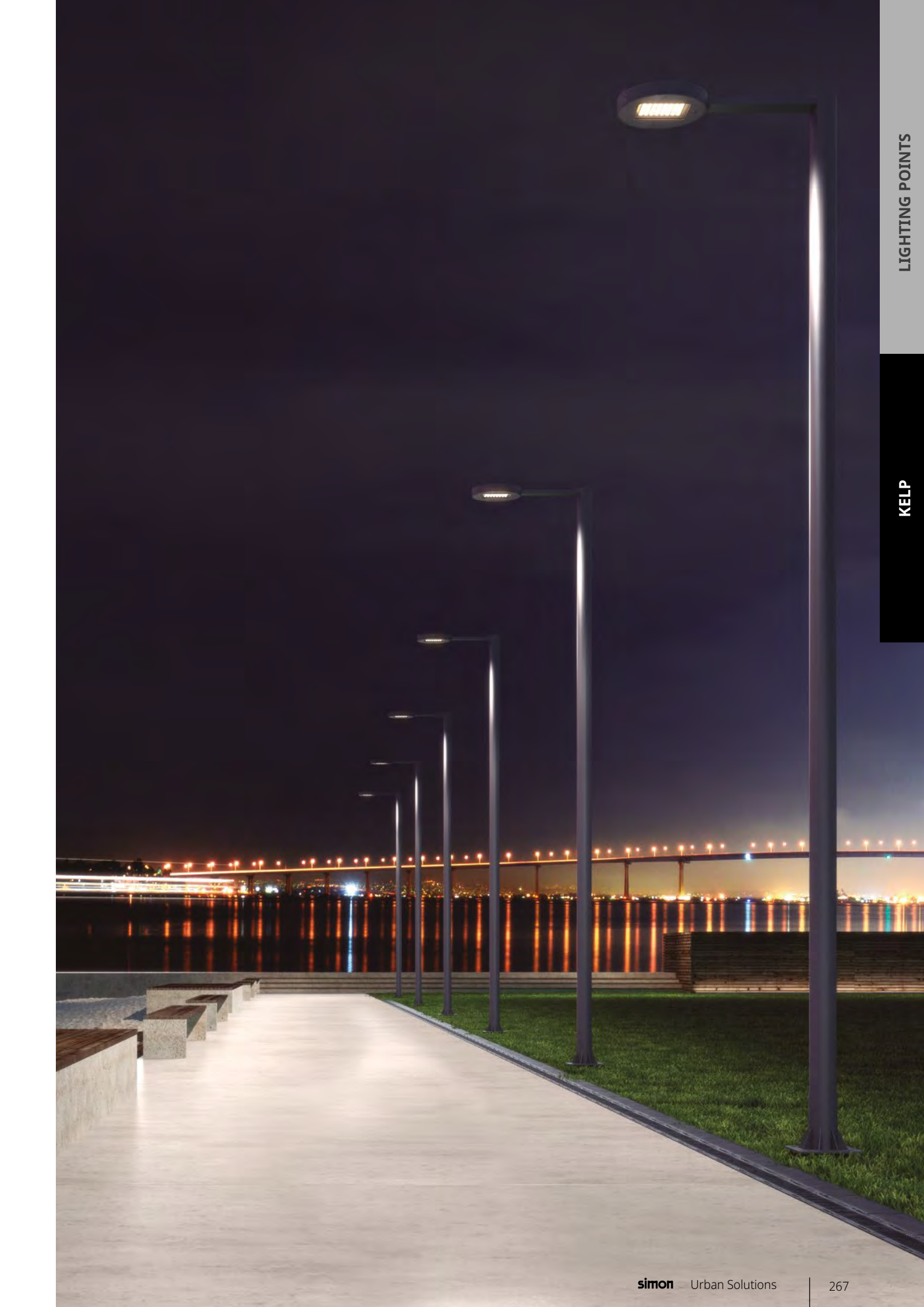
#### PHYSICAL FEATURES AND MATERIALS

IP	To achieve IP44, it is necessary to use the internal junction box with IP44 (not supplied with the pole).
Construction	Support manufactured in a single section
Arm	Rectangular section
Shaft	Cylindrical
Trapdoor	Flush
Arm	Structural steel sheet, S235JR quality
Arm trim	Die-cast aluminium
Shaft	Structural steel sheet, S235JR quality
Flange plate	Flat steel sheet, S235JR quality, with reinforcing ring and gussets

#### FINISHES

Support	Galvanised and painted in GYDECO colour (Standard Paint)
	Simon Colours (Standard Paint / Seafont Paint)
	RAL chart colours (Standard Paint / Seafont Paint)

\* Values corresponding to the current state of technology. \*\* Check other regulations. \*\*\* Power values have a tolerance of ±7%.



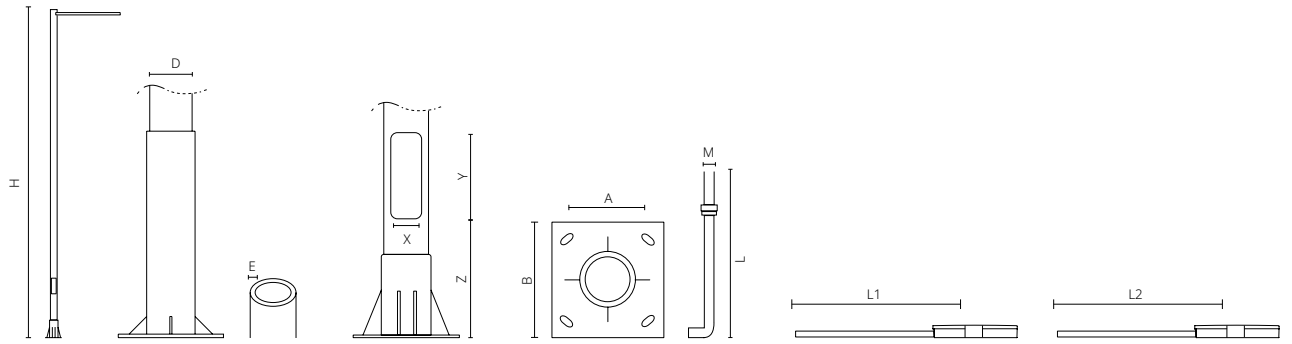








**TECHNICAL INFORMATION** (Units in mm)



Model	Height	Base	Thick-ness	Door			Flange plate		Bolts	1 <sup>st</sup> Arm		2 <sup>nd</sup> Arm	
	H	Ø D	E	X	Y	Z	A	B	M x L	H1	L1	H2	L2
<b>100</b>	4,000	127	3	100	300	700	210	300	M20 x 500	4,000	Tangential 250 / 500 / 750	-	-
	5,000	127	3	100	300	700	210	300	M20 x 500	5,000	Tangential 250 / 500 / 750	-	-
	6,000	127	3	100	300	700	300	400	M22 x 600	6,000	Tangential 250 / 500 / 750	-	-
	7,000	127	3	100	300	700	300	400	M22 x 600	7,000	Tangential 250 / 500 / 750	-	-
	8,000	152	4	100	300	700	300	400	M22 x 600	8,000	Tangential 250 / 500 / 750	-	-
	9,000	152	4	100	300	700	300	400	M22 x 600	9,000	Tangential 250 / 500 / 750	-	-
<b>200</b>	4,000	152	3	100	300	700	210	300	M20 x 500	4,000	Tangential 250 / 500 / 750	4,000	Tangential 250 / 500 / 750
	5,000	152	3	100	300	700	210	300	M20 x 500	5,000	Tangential 250 / 500 / 750	5,000	Tangential 250 / 500 / 750
	6,000	152	3	100	300	700	300	400	M22 x 600	6,000	Tangential 250 / 500 / 750	6,000	Tangential 250 / 500 / 750
	7,000	152	3	100	300	700	300	400	M22 x 600	7,000	Tangential 250 / 500 / 750	7,000	Tangential 250 / 500 / 750
	8,000	152	4	100	300	700	300	400	M22 x 600	8,000	Tangential 250 / 500 / 750	8,000	Tangential 250 / 500 / 750
	9,000	152	4	100	300	700	300	400	M22 x 600	9,000	Tangential 250 / 500 / 750	9,000	Tangential 250 / 500 / 750
<b>210</b>	5,000	152	3	100	300	700	210	300	M20 x 500	4,000	Tangential 250 / 500 / 750	5,000	Tangential 250 / 500 / 750
	6,000	152	3	100	300	700	300	400	M22 x 600	4,000 / 5,000	Tangential 250 / 500 / 750	6,000	Tangential 250 / 500 / 750
	7,000	152	3	100	300	700	300	400	M22 x 600	4,000 / 5,000 / 6,000	Tangential 250 / 500 / 750	7,000	Tangential 250 / 500 / 750
	8,000	152	4	100	300	700	300	400	M22 x 600	4,000 / 5,000 / 6,000 / 7,000	Tangential 250 / 500 / 750	8,000	Tangential 250 / 500 / 750
	9,000	152	4	100	300	700	300	400	M22 x 600	4,000 / 5,000 / 6,000 / 7,000 / 8,000	Tangential 250 / 500 / 750	9,000	Tangential 250 / 500 / 750

**REGULATIONS AND CERTIFICATES**



Light group according to: EN 60598-2-3 / EN 62493 / EN 55015 / EN 61547 / EN 61000-3-2 / EN 50581  
Support according to: EN 40-5

Warranty

5 years for luminaires and light groups.

Supply and packaging

Pole and arms packed with foam reel protector and plate base with foam protector on edges

Maintenance luminaire

Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent.  
Lubricate the sealing gaskets and replace them when they are cracked over time. Lubricate the closures and/or hinges of the moving parts.  
Keep the thermal radiation surface clean to ensure proper dissipation and to not lose light flux without shortening the life of the LEDs.









## CONFIGURE YOUR KELP LIGHTING POINT

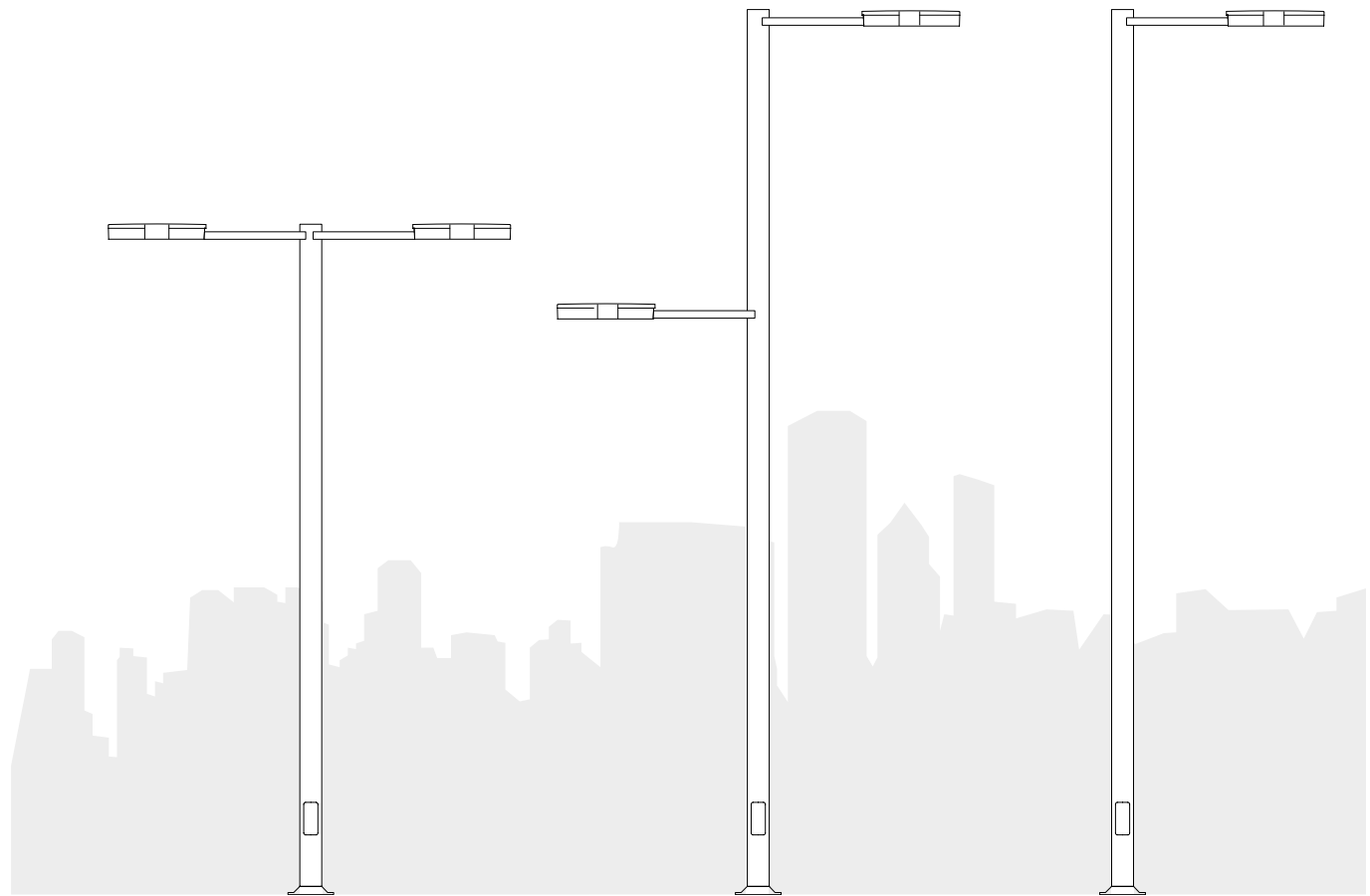
### SUPPORT

Model	Pole height	Arm length	Arm assembly height	Description	L1	L2
100				Simon KELP lighting point with one arm, located at the top of the shaft		
200				Simon KELP lighting point with 2 arms, at the top of the shaft, at the same height, opposite at 180°		
210				Simon KELP lighting point with 2 arms, the top arm and the bottom arm at mid-height, opposite at 180°		
				04SP 05SP 06SP 07SP 08SP 09SP		
				4 m height, flat base plate with reinforcing ring and flush trapdoor according to measurements		
				5 m height, flat base plate with reinforcing ring and flush trapdoor according to measurements		
				6 m height, flat base plate with reinforcing ring and flush trapdoor according to measurements		
				7 m height, flat base plate with reinforcing ring and flush trapdoor according to measurements		
				8 m height, flat base plate with reinforcing ring and flush trapdoor according to measurements		
				9 m height, flat base plate with reinforcing ring and flush trapdoor according to measurements		
				T R S M		
				Tangential arm		
				Reduced arm 250 mm long		
				Short arm 500 mm long		
				Medium arm 750 mm long		
				4M 5M 6M 7M 8M 9M		
				Arm 4 m high		
				Arm 5 m high		
				Arm 6 m high		
				Arm 7 m high		
				Arm 8 m high		
				Arm 9 m high		

### LUMINAIRE

Model	Optics	Colour temp.	Flux	Team	Dimming	Protection	Finish	Description	L1	L2
ALB								Simon ALTAIR luminaire for KELP, with IK10 protection		
ALG								Simon ALTAIR luminaire for KELP, with IK09 protection		
MEB								Simon MERAK luminaire for KELP, with IK10 protection		
MEG								Simon MERAK luminaire for KELP, with IK09 protection		
	RG_ RJ_ RL_ RA_ RE_ SA_ SB_							G Type Front Road Light Optics J Type Front Road Light Optics L Type Front Road Light Optics A Type Extended Road Light Optics E Type Extended Road Light Optics A Type Symmetric Optics B Type Symmetric Optics		
		○ NDL ○ WDL ○ SDL ○ XDL						Neutral daylight - 4000 K Warm daylight - 3000 K Soft daylight - 2700 K Extra warm daylight - 2,200 K		
			_12W350 _16W350 _18W530 _24W530 _24W700 _32W700 _36W530 _37W_1K _49W700 _50W_1K _75W_1K _81W700 _97W700					12 W 350 mA 1,970 lm @ 4,000 K 12 LEDs ALTAIR Istanium® LED luminaire 16 W 350 mA 2,550 lm @ 4,000 K 16 LEDs MERAK Istanium® LED luminaire 18 W 530 mA 2,790 lm @ 4,000 K 16 LEDs ALTAIR Istanium® LED luminaire 24 W 530 mA 3,630 lm @ 4,000 K 16 LEDs MERAK Istanium® LED luminaire 24 W 700 mA 3,530 lm @ 4,000 K 12 LEDs ALTAIR Istanium® LED luminaire 32 W 700 mA 4,520 lm @ 4,000 K 16 LEDs MERAK Istanium® LED luminaire 32 W 700 mA 4,560 lm @ 4,000 K 16 LEDs ALTAIR Istanium® LED luminaire 36 W 530 mA 5,300 lm @ 4,000 K 24 LEDs MERAK Istanium® LED luminaire 37 W 1050 mA 4,870 lm @ 4,000 K 12 LEDs ALTAIR Istanium® LED luminaire 49 W 700 mA 6,560 lm @ 4,000 K 24 LEDs MERAK Istanium® LED luminaire 50 W 1,050 mA 6,110 lm @ 4,000 K 16 LEDs ALTAIR Istanium® LED luminaire 75 W 1,050 mA 8,730 lm @ 4,000 K 24 LEDs MERAK Istanium® LED luminaire 81 W 700 mA 10,650 lm @ 4,000 K 40 LEDs MERAK Istanium® LED luminaire 97 W 700 mA 12,690 lm @ 4,000 K 48 LEDs MERAK Istanium® LED luminaire		
				IA23_ IA23S				Electronic control gear at 230 Vac 50/60 Hz, standard protection against 6 kV power surges Electronic control gear at 230 Vac 50/60 Hz, additional protection against 10 kV power surges		
				2N-_ 2N+_ 1N_ CAD_ 1-10 DALI DXXX				Dimming without control line (self-dimming) Dimming with control line* Without dimming (on/off) Cabinet amplitude dimming (electrical box dimmer)* Dimming through 1.10 V input protocol* Dimming through DALI input protocol* Dimming without control line (custom program)		
							C1 C2	Class 1 Luminaire electrical protection Class 2 Luminaire electrical protection		
							GYDECO ***** *****	Standard finish in Simon Decorative Grey Finish in Simon colours (see page 514) Finish in RAL classic chart colours		





KELP MERAK WALL ARM

KELP MERAK 200




KELP MERAK 210

KELP ALTAIR 100

ACCESSORIES / REPLACEMENTS

Description	Order code
Triangular 10 mm key to close trapdoor	50-73265

SUPPORT PROTECTIVE SYSTEMS AND FINISHES

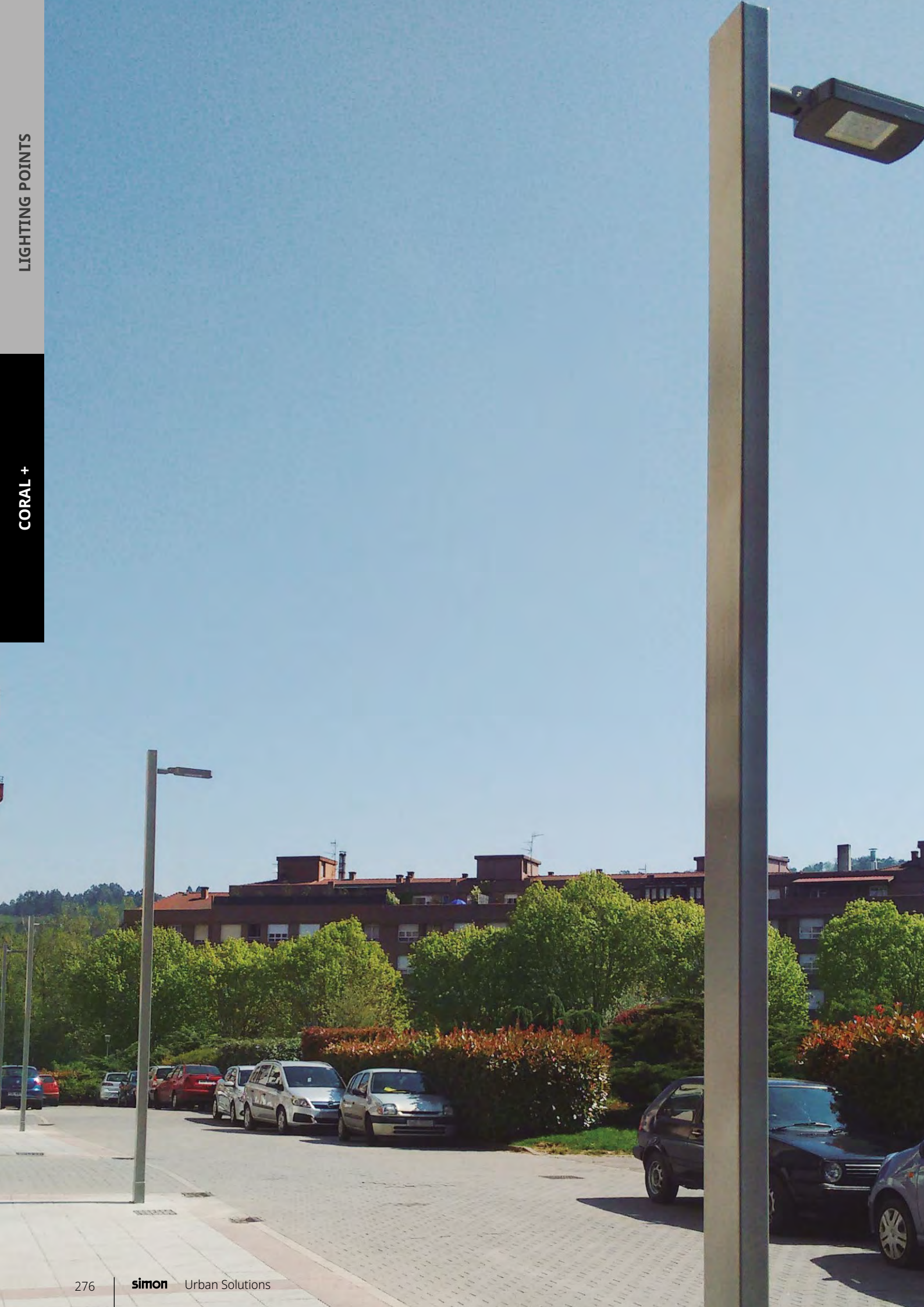
	Type of durability / atmospheric corrosion category*	Acid-less protection 	Stick-less protection 	Draw-less protection 
Standard Paint Finish: hot dip galvanised** and painted	Average durability in corrosive environment C4.	✓	✓	✓
Seafront Paint Finish: hot dip galvanised** and painted	High durability in corrosive environment C5M.	✓	✓	✓

\* According to EN ISO 12944 \*\* According to EN ISO 1461

See expanded information on protection systems and finishes on pages 28 and 514 respectively







# CORAL +

ISTANIUM<sup>LED</sup>®

Simon CORAL+ LED decorative lighting point, up to 6 m high, with rectangular shaft and lateral luminaire fastening for arm(s) up to 1.2 m long, with integrated light group.



Streets



Pedestrian streets



Commercial areas



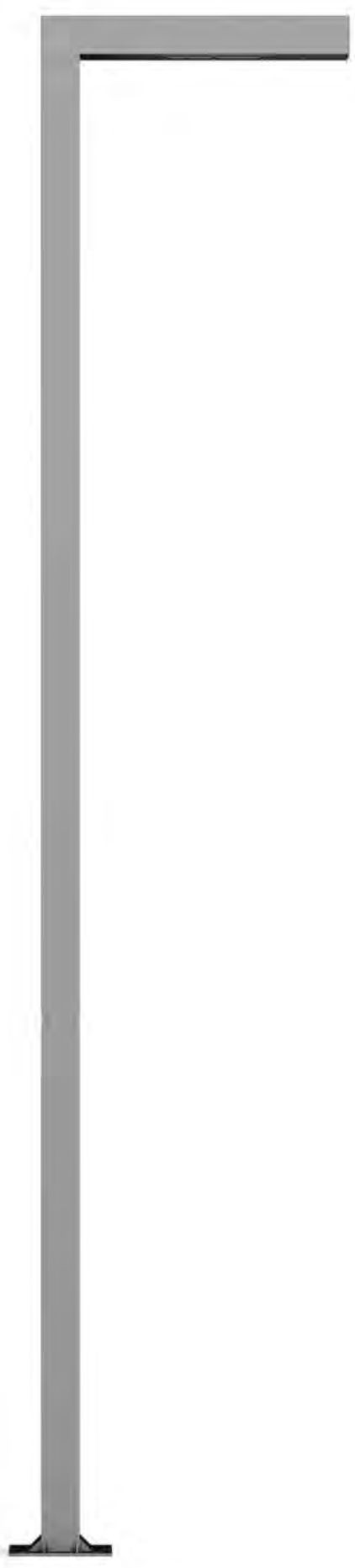
Parks / Gardens



Squares



Roundabouts / Intersections



# CORAL +

## ISTANIUM<sup>®</sup>

Simon CORAL+ LED decorative lighting point, up to 6 m high, with rectangular shaft and lateral luminaire fastening for arm(s) up to 1.2 m long, with integrated light group.

Light group:



Mount:



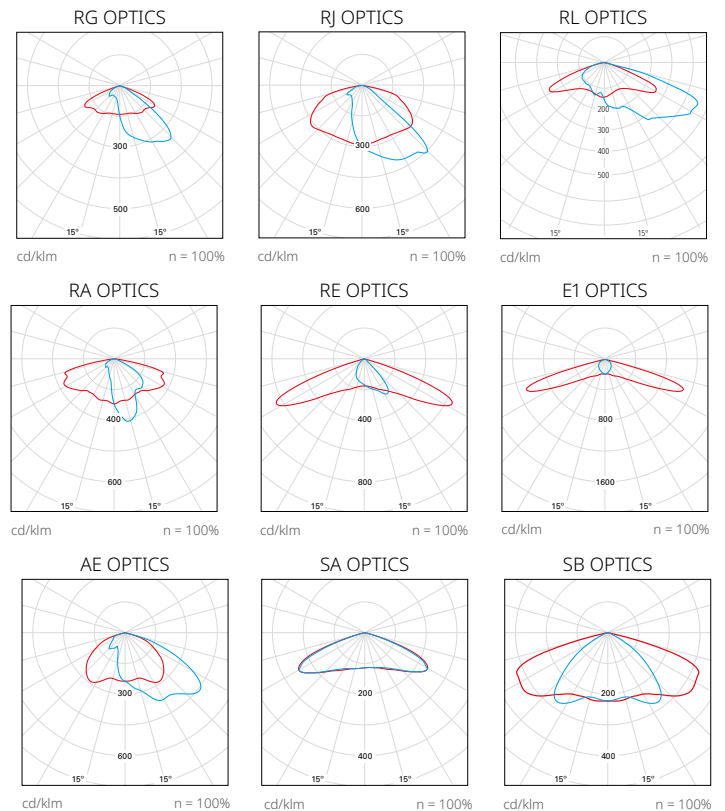
COLOUR TEMP.: NDL 4000 K | WDL 3000 K | SDL 2700 K | XDL 2200 K | PCA\*

COLOUR RENDERING INDEX: >70

UPWARD LIGHT OUTPUT RATIO (ULOR): <0.1 %\*\*

LED DURATION (L90 B10 AT T<sub>a</sub>=25 °C AND T<sub>j</sub>=95 °C): 100,000 h

\* Upon request \*\* Value may change depending on the optics



— C0 - C180 — C90 - C270

Check other photometric distributions

Simon **CORAL+** LED decorative lighting point, up to 6 m high, with rectangular shaft and lateral luminaire fastening for arm(s) up to 1.2 m long, with integrated light group. Supported by a flat flange plate gussets, shaft and arm(s) made of S235JR-quality carbon steel sheet. Flush trapdoor with interior reinforcement. IP3X protection rating. To achieve IP44, it is necessary to use an internal junction box, not supplied. Hot dip galvanised finish and painted in Simon CGCLAS colour. Possibility of Simon and RAL chart finishes, as well as other protection finishes and Seafront paint for corrosive environments with high durability in a **C5M** environment. Supplied with anchoring bolts, template and double nut to level the base.

Pole with CE-certified constancy of performance. Specific light group integrated into S235JR-quality carbon steel arm. Internal refrigeration system through fins. High resistance flat transparent PMMA diffuser to facilitate cleaning and avoid UV radiation on the optics. **IP66** protection rating for the Istantium LED optical group and **IK09** impact resistance rating. Possibility of mounting up to nine multi-array optics. Possibility of four colour temperatures in white light, as well as PCA (Phosphor Converted Amber) for specially protected areas. Service life of LED **L90 B10 100,000 hours**. Istantium LED lighting groups can be replaced and updated even when the light group is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (**ULOR**) equal to **0%** (verify according to optics used). With **Class I** and **Class II** electronic equipment with 230 V AC/50 Hz supply voltage. Possibility of including additional protection against surges of **10 kV/10 kA**.

Optional dimming with control line 2N+, without control line (Self-dimming) 2N-, by means of a flow dimmer from CAD cabinet amplitude dimming, for telemanagement with 1.10V or DALI input, according to luminaire model. Optional custom programming and maintenance of constant light output (**CLO**).

## LIGHT GROUP

### PHYSICAL FEATURES AND MATERIALS

IP	Optical group IP66 Electric group IP44
IK	IK09
Closure system	With stainless steel screws
Diffuser	Flat PMMA with high impact resistance

### ELECTRICAL PARAMETERS \* AND CONNECTIVITY

Temp.	-20 °C... +35 °C
Dimming**	<b>2N-</b> Without control line <b>Dxxx</b> Without custom programmed control line <b>2N+</b> With control line <b>CAD</b> Cabinet amplitude dimming <b>1N (100%)</b> Without dimming <b>1.10V</b> Dimming through 1.10V input protocol <b>DALI</b> Dimming through DALI input protocol
	Possibility of activating the <b>CLO</b> function, which allows the depreciation of the light emitted by the LEDs to be compensated by gradually increasing the supply current to them.

#### Luminaires supplied by electrical grid

Supply voltage	220-240 V <sub>AC</sub>			
Frequency	50/60 Hz			
Protection against power surge	6 kV (Possibility of increasing to 10 kV / 10 kA upon request)			
Power factor (cos φ at max. charge)	≥ 0.95			
Luminaire electrical protection	Class I or Class II			
Optical group power by model***	24 LEDs	36 LEDs	48 LEDs	60 LEDs
Supply current	2 module	3 module	4 module	5 module
HIGH EFFICIENCY	24 W	35 W	47 W	59 W
HIGH BALANCE	36 W	54 W	73 W	91 W
HIGH FLUX	49 W	73 W	-	-

## REGULATIONS AND CERTIFICATES



Light group according to: EN 62031 / EN 62471  
Support according to: EN 40-5

Warranty	5 years for luminaires and light groups.
Supply and packaging	Pole and arms packed with foam reel protector and plate base with foam protector on edges
Maintenance luminaire	Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent. Lubricate the sealing gaskets and replace them when they are cracked over time. Lubricate the closures and/or hinges of the moving parts. Keep the thermal radiation surface clean to ensure proper dissipation and to not lose light flux without shortening the life of the LEDs.

\* Values corresponding to the current state of technology. \*\* Check other regulations. \*\*\* Power values have a tolerance of ±7%.





SUPPORT

Model	Pole height*	Arm assembly height	Description	L 1	L 2
100			SIMON CORAL+ lighting point with one arm, located at the top of the shaft		
200			SIMON CORAL+ lighting point with two arms, located at the top of the shaft, at the same height, opposite at 180°		
210			SIMON CORAL+ lighting point with two arms, the top arm located at the top of the shaft and the bottom arm mid-height, opposite at 180°		
	04SP		4 m height, flat base plate and flush trapdoor according to measurements		
	05SP		5 m height, flat base plate and flush trapdoor according to measurements		
	06SP		6 m height, flat base plate and flush trapdoor according to measurements		
		4M	Arm 4 m high		
		5M	Arm 5 m high		
		6M	Arm 6 m high		

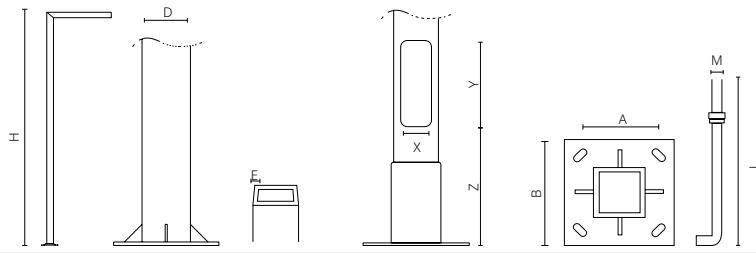
LIGHT GROUP

Optics	Colour temp.	Flux*	Team	Dimming*	Protection	Finish	Description	L 1	L 2
RG_							G Type Front Road Light Optics		
RJ_							J Type Front Road Light Optics		
RL_							L Type Front Road Light Optics		
RA_							A Type Extended Road Light Optics		
RE_							E Type Extended Road Light Optics		
E1							1 Type Front Road Light Optics		
AE							E Type Asymmetric Optics		
SA_							A Type Symmetric Optics		
SB_							B Type Symmetric Optics		
	<input type="radio"/> NDL						Neutral daylight - 4,000 K		
	<input type="radio"/> WDL						Warm daylight - 3,000 K		
	<input type="radio"/> SDL						Soft daylight - 2,700 K		
	<input type="radio"/> XDL						Extra warm daylight - 2,200 K		
		_24W350					24 W 350 mA	3,540 lm @ 4,000 K	24 LEDs
		_36W530					36 W 530 mA	4,960 lm @ 4,000 K	24 LEDs
		_49W700					49 W 700 mA	6,330 lm @ 4,000 K	24 LEDs
		_54W530					54 W 530 mA	7,390 lm @ 4,000 K	36 LEDs
		_73W700					73 W 700 mA	9,300 lm @ 4,000 K	36 LEDs
		_91W530					91 W 530 mA	12,340 lm @ 4,000 K	60 LEDs
			IA23_				Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, standard protection against 6 kV power surges		
			IA23S				Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, additional protection against 10 kV power surges		
				2N_-			Dimming without control line (self-dimming)		
				2N+_			Dimming with control line		
				1N_			Without dimming (on/off)		
				CAD_			Cabinet amplitude dimming (electrical box dimmer)		
				1-10			Dimming through 1.10 V input protocol		
				DALI			Dimming through DALI input protocol		
				DXXX			Dimming without control line (custom program)		
					C1		Class 1 Luminaire electrical protection		
					C2		Class 2 Luminaire electrical protection		
						CGCLAS	Standard finish in Simon Forged Sand Blasted Light Grey		
						*****	Finish in Simon colours (see page 514)		
						*****	Finish in RAL classic chart colours		

\* Check other options.

The luminaire flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes. The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.

## TECHNICAL INFORMATION (units in mm)






Model	Height	Base	Thickness	Door			Flange plate		Bolts	1 <sup>st</sup> Arm		2 <sup>nd</sup> Arm	
	H	Ø D		E	X	Y	Z	A		B	M x L	H1	L1
<b>100</b>	4,000	250x150	4	100	500	500	300	400	M22 x 600	4,000	1,200	-	-
	5,000	250x150	4	100	500	500	300	400	M22 x 600	5,000	1,200	-	-
	6,000	250x150	4	100	500	500	300	400	M22 x 600	6,000	1,200	-	-
<b>200</b>	4,000	250x150	4	100	500	500	300	400	M22 x 600	4,000	1,200	4,000	1,200
	5,000	250x150	4	100	500	500	300	400	M22 x 600	5,000	1,200	5,000	1,200
	6,000	250x150	4	100	500	500	300	400	M22 x 600	6,000	1,200	6,000	1,200
<b>210</b>	5,000	250x150	4	100	500	500	300	400	M22 x 600	4,000	1,200	5,000	1,200
	6,000	250x150	4	100	500	500	300	400	M22 x 600	4,000 / 5,000	1,200	6,000	1,200

## ACCESSORIES / REPLACEMENTS

Description	Order code
Triangular 10 mm key to close trapdoor	<b>50-73265</b>

## SUPPORT PROTECTIVE SYSTEMS AND FINISHES

	Type of durability / atmospheric corrosion category*			
		Acid-less protection	Stick-less protection	Draw-less protection
Standard Paint Finish: hot dip galvanised** and painted	Average durability in corrosive environment C4.	✓	✓	✓
Seafront Paint Finish: hot dip galvanised** and painted	High durability in corrosive environment C5M.	✓	✓	✓

\* According to EN ISO 12944 \*\* According to EN ISO 1461

See expanded information on protection systems and finishes on pages 28 and 514 respectively



# CAMPUS +

## ISTANIUM<sup>LED</sup>®

Simon CAMPUS+ LED decorative lighting point, up to 7.5 m high, with circular shaft and lateral luminaire fastening for arm with an overhang of up to 4.7 m, with integrated light group.



Streets



Pedestrian streets



Commercial areas



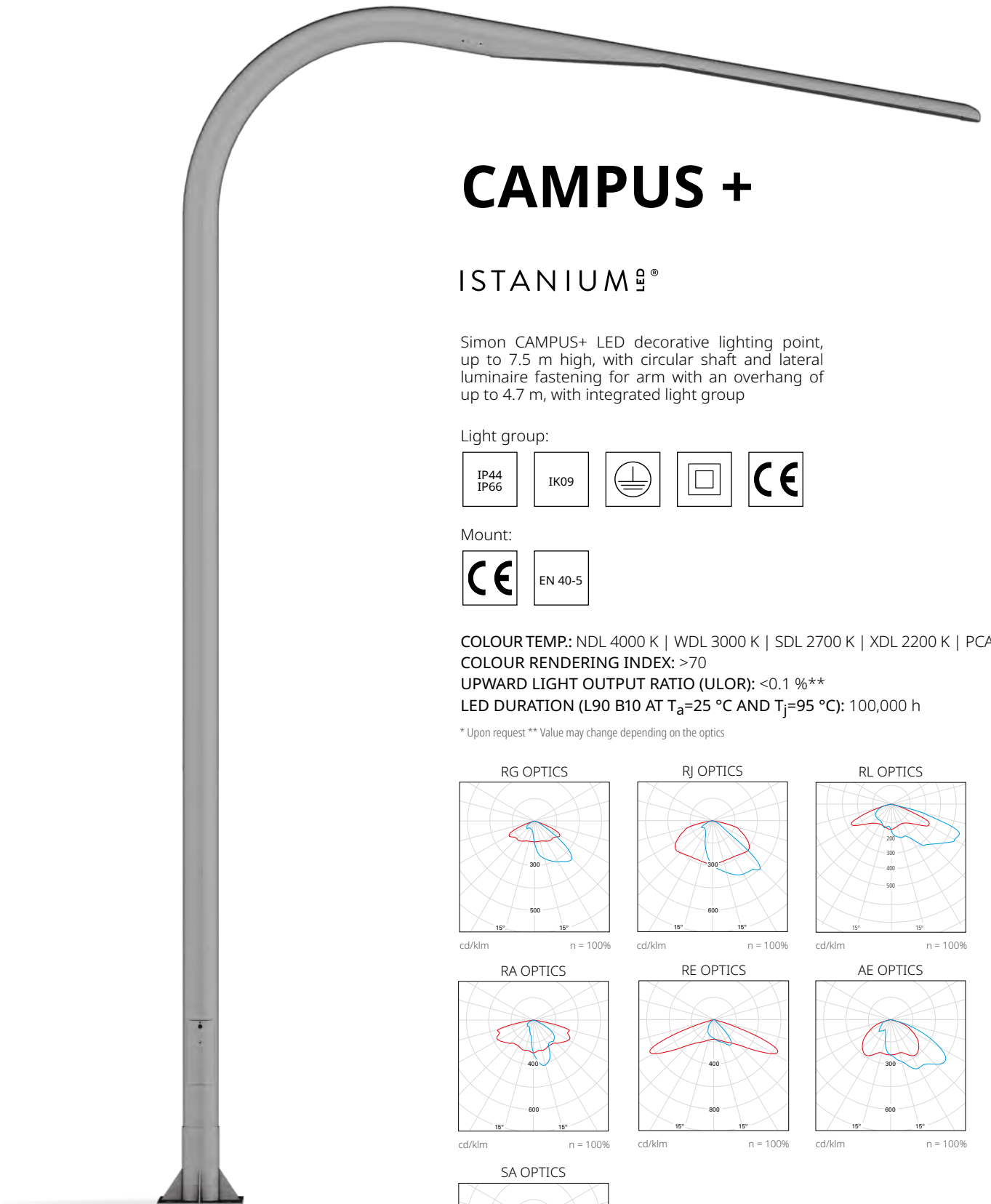
Parks / Gardens



Squares

Roundabouts /  
Intersections





# CAMPUS +

## ISTANIUM

Simon CAMPUS+ LED decorative lighting point, up to 7.5 m high, with circular shaft and lateral luminaire fastening for arm with an overhang of up to 4.7 m, with integrated light group

Light group:



Mount:



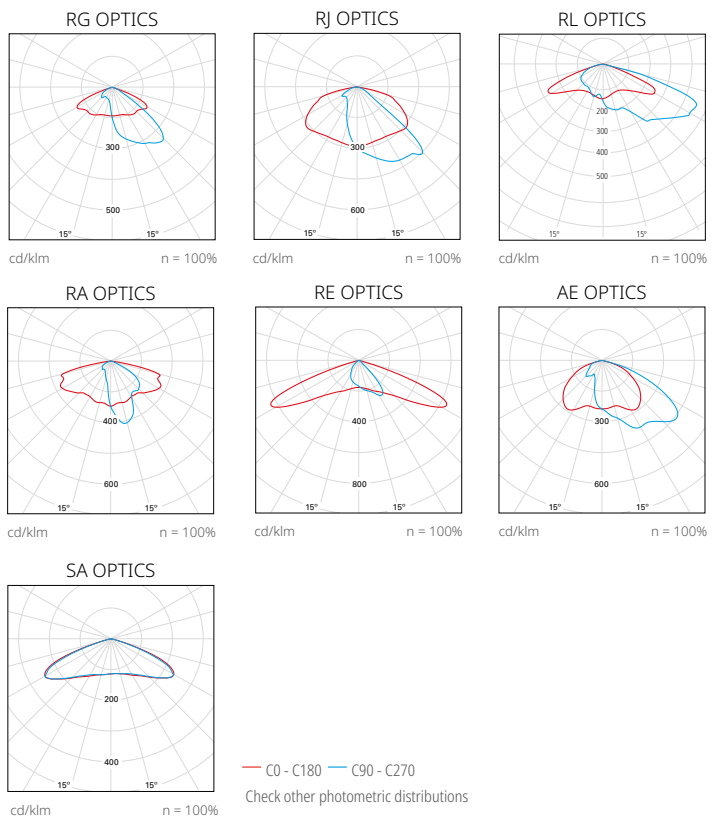
COLOUR TEMP.: ND 4000 K | WDL 3000 K | SDL 2700 K | XDL 2200 K | PCA\*

COLOUR RENDERING INDEX: >70

UPWARD LIGHT OUTPUT RATIO (ULOR): <0.1 %\*\*

LED DURATION (L90 B10 AT  $T_a=25\text{ °C}$  AND  $T_j=95\text{ °C}$ ): 100,000 h

\* Upon request \*\* Value may change depending on the optics



Simon **CAMPUS+** LED decorative lighting point, up to 7.5 m high, with circular shaft and lateral luminaire fastening for arm with an overhang of up to 4.7 m, with integrated light group. Supported by a flat flange plate with reinforcing ring and gusset, shaft and arm made of S235JR-quality sheet carbon steel. Flush trapdoor with interior reinforcement. Light group lateral fastening directly to arm angled at -10°. IP3X protection rating. To achieve IP44, it is necessary to use an internal junction box, not supplied. Hot dip galvanised finish and painted in Simon CGCLAS colour. Possibility of Simon and RAL chart finishes, as well as other protection finishes and Seafront paint for corrosive environments with high durability in a **C5M** environment. Supplied with anchoring bolts, template and double nut to level the base. Pole with CE-certified constancy of performance. Specific S235JR-quality carbon steel light group. Internal refrigeration system through fins. High resistance flat transparent PMMA diffuser to facilitate cleaning and avoid UV radiation on the optics. **IP66** protection rating for the Istanium LED optical group and **IK09** impact resistance rating. Possibility of mounting up to nine multi-array optics. Possibility of four colour temperatures in white light, as well as PCA (Phosphor Converted Amber) for specially protected areas. Service life of LED **L90 B10 100,000 hours**. Istanium LED lighting groups can be replaced and updated even when the light group is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (**ULOR**) less than **2.5%**. With **Class I** and **Class II** electronic control gear with 230 V AC/50 Hz supply voltage. Possibility of including additional protection against surges of **10 kV/10 kA**. Optional dimming with control line 2N+, without control line (Self-dimming) 2N-, by means of a flow dimmer from CAD cabinet amplitude dimming, for telemanagement with 1.10V or DALI input, according to luminaire model. Optional custom programming and maintenance of constant light output (**CLO**). Standard finish in Simon CGCLAS colour and lower trim in Simon GY7035 colour.

## LIGHT GROUP

### PHYSICAL FEATURES AND MATERIALS

IP	IP66 Optical group IP44 Electrical group
IK	IK09
Body	Carbon steel sheet, S235JR quality
Closure system	With stainless steel screws
Diffuser	High-strength flat transparent PMMA

### ELECTRICAL PARAMETERS \* AND CONNECTIVITY

Temp.	-20 °C... +35 °C
Dimming**	<b>2N-</b> Without control line <b>Dxxx</b> Without custom programmed control line <b>2N+</b> With control line <b>CAD</b> Cabinet amplitude dimming <b>1N (100%)</b> Without dimming <b>1.10V</b> Dimming through 1.10V input protocol <b>DALI</b> Dimming through DALI input protocol

Possibility of activating the **CLO** function, which allows the depreciation of the light emitted by the LEDs to be compensated by gradually increasing the supply current to them.

#### Luminaires supplied by electrical grid

Supply voltage	220-240 V <sub>ac</sub>
Frequency	50/60 Hz
Protection against power surge	6 kV (Possibility of increasing to 10 kV / 10 kA upon request)
Power factor (cos φ at max. charge)	≥ 0.95
Luminaire electrical protection	Class I or Class II
Optical group power by model***	84 LEDs
Supply current	7 module
HIGH EFFICIENCY	83 W
HIGH BALANCE	127 W
HIGH FLUX	-

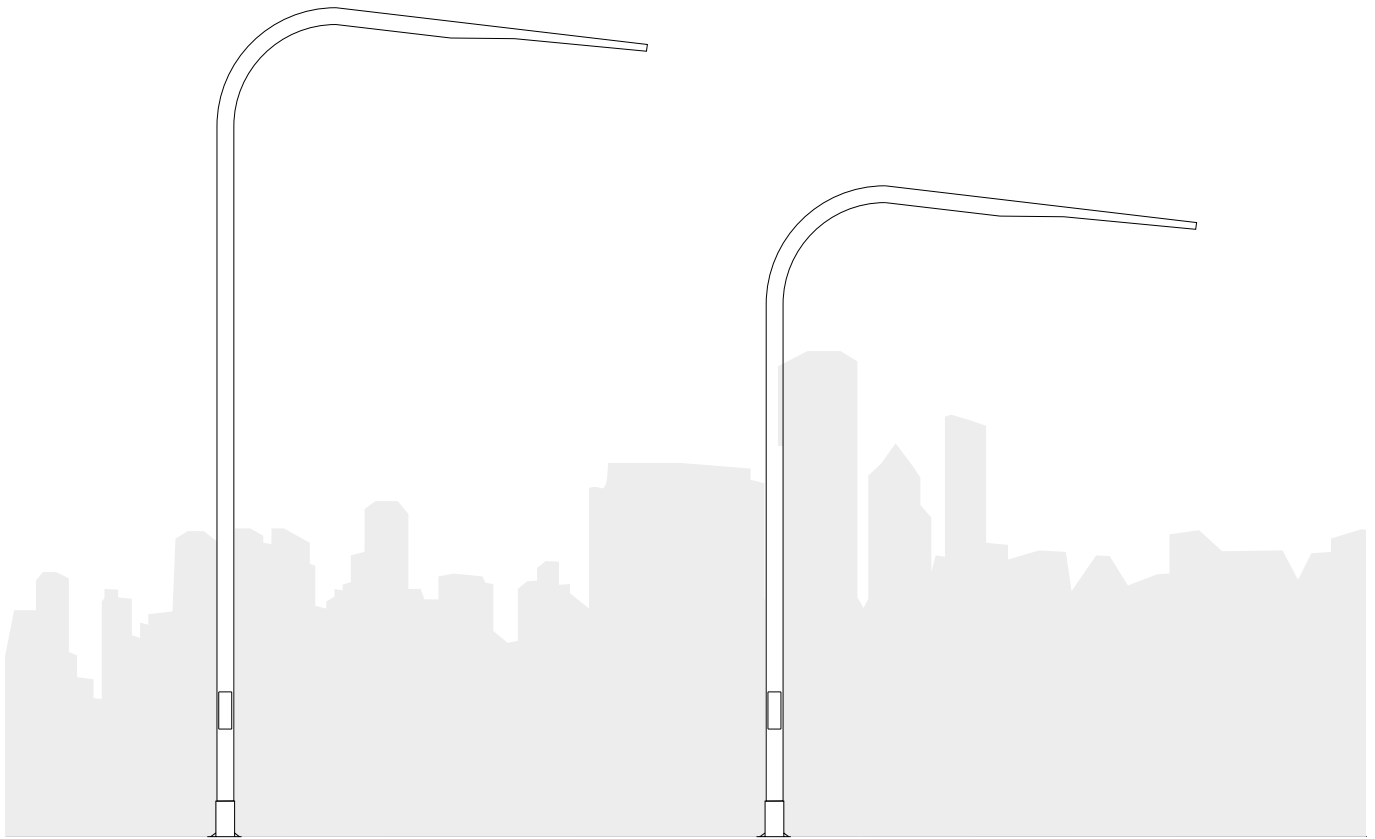
## REGULATIONS AND CERTIFICATES



Light group according to: EN 62031 / EN 62471  
Support according to: EN 40-5

Warranty	5 years for luminaires and light groups.
Supply and packaging	Luminaire packed with bubble wrap. Pole packed with foam reel protector and base plate with foam protector on edges.
Maintenance luminaire	Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent. Lubricate the sealing gaskets and replace them when they are cracked over time. Lubricate the closures and/or hinges of the moving parts. Keep the thermal radiation surface clean to ensure proper dissipation and not lose light flux without shortening the life of the LEDs.

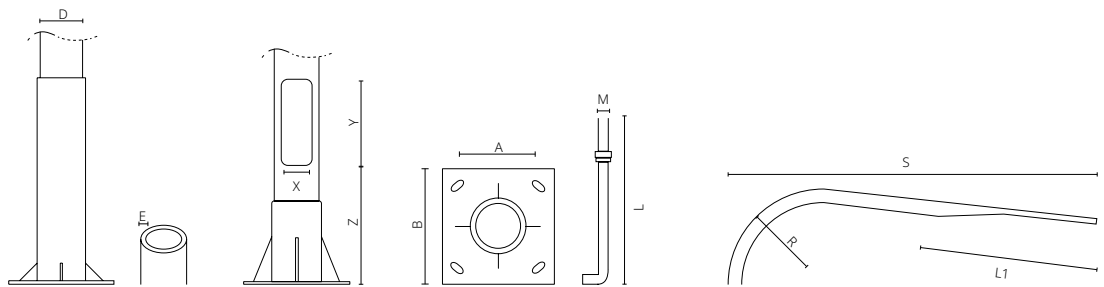
\* Values corresponding to the current state of technology. \*\* Check other regulations. \*\*\* Power values have a tolerance of ±7%.



CAMPUS +




CAMPUS +

TECHNICAL INFORMATION (Units in mm)



Model	Height	Base	Thickness	Door			Flange plate		Bolts	Arm			
	H	Ø D	E	X	Y	Z	A	B	M x L	H1	L1	S	R
<b>100</b>	5,700	168	4	120	300	550	300	400	M22 x 600	5,700	2,000	3,300	1,000
	7,500	168	4	120	300	550	300	400	M22 x 600	7,500	2,500	4,700	1,400

SUPPORT PROTECTIVE SYSTEMS AND FINISHES

Type of durability / atmospheric corrosion category*		 Acid-less protection	 Stick-less protection	 Draw-less protection
Standard Paint Finish: hot dip galvanised** and painted	Average durability in corrosive environment C4.	✓	✓	✓
Seafrost Paint Finish: hot dip galvanised** and painted	High durability in corrosive environment C5M.	✓	✓	✓

\* According to EN ISO 12944 \*\* According to EN ISO 1461

See expanded information on protection systems and finishes on pages 28 and 514 respectively



## CONFIGURE YOUR CAMPUS+ LIGHTING POINT

Model	Optics	Colour temp.	Flux	Team	Dimming	Protection	Finish	Description
<b>CMP10</b>								Simon CAMPUS+ Istanium® LED lighting point, 5.7 m high, trapdoor and flat base plate with gussets according to measurements
<b>CMP10075SP</b>								Simon CAMPUS+ Istanium® LED lighting point, 7.5 m high, trapdoor and flat base plate with gussets according to measurements
	RG_ RJ_ RL_ RA_ RE_ AE_ SA_							G Type Front Road Light Optics J Type Front Road Light Optics L Type Front Road Light Optics A Type Extended Road Light Optics E Type Extended Road Light Optics E Type Asymmetric Optics A Type Symmetric Optics
	<input type="radio"/> NDL <input type="radio"/> WDL <input type="radio"/> SDL <input type="radio"/> XDL							Neutral daylight - 4,000 K Warm daylight – 3,000 K Soft daylight - 2,700 K Extra warm daylight – 2,200 K
			<b>_83W350</b> <b>127W530</b>					83 W 350 mA      12,408 lm @ 4,000K      84 LEDs 127 W 530 mA      17,072 lm @ 4,000K      84 LEDs
				<b>IA23_</b> <b>IA23S</b>				Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, standard protection against 6 kV power surges Electronic control gear at 230 V <sub>ac</sub> 50/60 Hz, additional protection against 10 kV power surges
				<b>2N_</b> <b>2N+</b> <b>1N_</b> <b>CAD_</b> <b>1-10</b> <b>DALI</b> <b>DXXX</b>				Dimming without control line (self-dimming) Dimming with control line* Without dimming (on/off) Cabinet amplitude dimming (electrical box dimmer)* Dimming through 1.10 V input protocol Dimming through DALI input protocol Dimming without control line (custom program)
					<b>C1</b> <b>C2</b>			Class 1 Luminaire electrical protection Class 2 Luminaire electrical protection
						<b>CGCLAS</b> <b>*****</b> <b>*****</b>		Forged Sand Blasted Light Grey Finish Finish in Simon Lighting colours Finish in RAL classic chart colours

### BASE REFERENCES

Height	Power	Current	Configuration	Order code
5.7m	83 W	350 mA	CMP10057SPRJ_WDL_83W350IA23_1N_C1CGCLAS	<b>5-653005-028</b>
5.7m	127 W	530 mA	CMP10057SPRJ_WDL127W530IA23_1N_C1CGCLAS	<b>5-653006-028</b>
7.5m	83 W	350 mA	CMP10075SPRJ_WDL_83W350IA23_1N_C1CGCLAS	<b>5-653007-028</b>
7.5m	127 W	530 mA	CMP10075SPRJ_WDL127W530IA23_1N_C1CGCLAS	<b>5-653008-028</b>

### ACCESSORIES / REPLACEMENTS

Description	Order code
Triangular 10 mm key to close trapdoor	<b>50-73265</b>

The light group flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes. The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.







# KUMA

ISTANIUM <sup>LED</sup>®

Decorative lighting point, ideal for intensive introduction of LED technology

Futuristic design and advanced features for the KUMA lighting point, with a rectangular body and decorative arms.



Streets



Pedestrian streets



Commercial areas



Parks / gardens

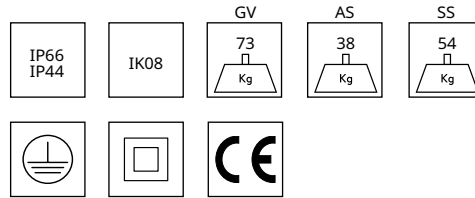


Squares



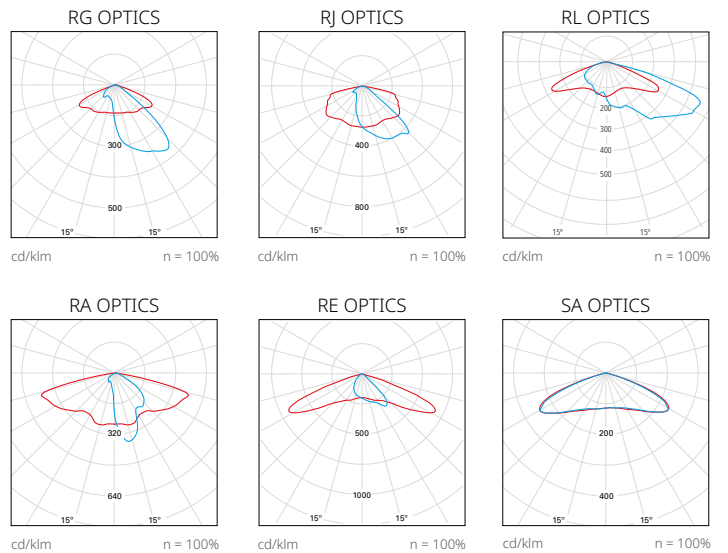
# KUMA

## ISTANIUM<sup>LED</sup>®



COLOUR TEMP.: NDL 4000 K | WDL 3000 K | SDL 2700 K | XDL 2200 K | PCA\*  
 COLOUR RENDERING INDEX: >70  
 UPWARD LIGHT OUTPUT RATIO (ULOR): <2.5% \*\*  
 LED DURATION (L90 B10 AT T<sub>a</sub>=25 °C AND T<sub>j</sub>=95 °C): 100,000 h

\* Upon request \*\* Value may change depending on the optics



— C0 - C180 — C90 - C270 Check other photometric distributions

Rear hemisphere flux control visors available for RJ, RL, RE and SA optics (see page 488 for more information).

Complete Simon **KUMA** lighting point, with die-cast aluminium light group and stainless steel support for the SS model, extruded aluminium in the AS model and painted galvanised steel in the DGCLAS model.

Floor fastening plate, side measures 400 mm and distance between bolts is 285 mm. Flat cover. Internal refrigeration system through fins. Access to the gear and maintenance by disassembling top light group. Trapdoor opening with Ø10-mm triangular key. Curved transparent PMMA high-impact resistant (HIR) diffuser to facilitate cleaning and prevent UV radiation in the optics. Possibility of diffuser with louvre at 180° and opal PMMA diffuser. **IP66** protection rating for light group and **IK08** impact resistance rating.

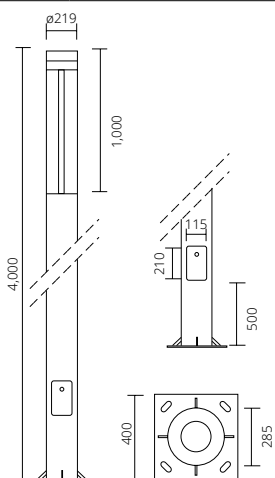
Possibility of mounting up to ten multi-array optics, to guarantee the homogeneity of the photometry.

Possibility of four colour temperatures in white light, as well as PCA (Phosphor Converted Amber) for specially protected areas.

Service life of **LED L90 B10 100,000 hours**. Istantium LED lighting groups can be replaced and updated even when the luminaire is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (ULOR) less than **2.5%**.

With **Class I** and **Class II** electronic control gear with 230 V<sub>AC</sub> / 50 Hz supply voltage. Possibility of including additional protection against surges of **10 kV/10 kA**. Optional dimming with control line 2N+, without control line (Self-dimming) 2N-, by means of cabinet amplitude dimming (CAD), for telemanagement with **1.10V** or **DALI** input. Optional custom programming and maintenance of constant light output (**CLO**). Standard stainless steel finish and trim in Simon DGCLAS colour for SS model, extruded aluminium and trim in Simon GY9006 colour for AS model, and DGCLAS colour and trim in Simon GY9006 colour for DGCLAS model. Possibility of Simon and RAL chart finishes. Dimensions 219x400x219 mm.

## DIMENSIONS AND FASTENING SYSTEMS



Floor fastening	Plate with gussets, bolts: M22x600 mm
Surface exposed to the wind	4 m: 0.88 m <sup>2</sup>
Weight	GV 73 kg AS 38 kg SS 54 kg

## PHYSICAL FEATURES AND MATERIALS

IP	IP66
IK	IK08
Shaft	Painted galvanised steel, AISI 316 stainless steel or extruded aluminium
Light group closure	Die-cast aluminium
Fastening system	Die-cast aluminium
Diffuser	Transparent PMMA with high impact resistance Opal PMMA

## FINISHES

Stainless steel	SS shaft / DGCLAS decorative rings
Extruded aluminium	AS shaft / GY9006 decorative rings
Galvanised and Painted Steel	Shaft painted in DGCLAS colour (Standard Paint) / Trim rings GY9006 Shaft painted in Simon colours (Standard Paint / Waterfront Paint) / Trim Rings GY9006 Shaft painted in RAL colours (Standard Paint / Waterfront Paint) / Trim rings GY9006

## ELECTRICAL PARAMETERS \*

Temp.	-20 °C... +35 °C
Dimming**	<b>2N-</b> Without control line <b>Dxxx</b> Without custom programmed control line <b>2N+</b> With control line <b>CAD</b> Cabinet amplitude dimming <b>1N (100%)</b> Without dimming <b>1.10V</b> Dimming through 1.10V input protocol <b>DALI</b> Dimming through DALI input protocol

### Luminaires supplied by electrical grid

Supply voltage	220-240 V <sub>AC</sub>	
Frequency	50/60 Hz	
Protection against power surge	6 kV (Possibility of increasing to 10 kV / 10 kA upon request)	
Power factor (cos φ at max. charge)	≥ 0.95	
Luminaire electrical protection	Class I or Class II	
Optical group power by model***	12 LEDs	24 LEDs
Supply current	1 module	2 module
HIGH EFFICIENCY	12 W	24 W
HIGH BALANCE	18 W	36 W
HIGH FLUX	24 W	49 W
VERY HIGH FLUX	-	-

## REGULATIONS AND CERTIFICATES



Luminaire according to: EN 60598-2-3 / EN 62493 / EN 55015 / EN 61547 / EN 61000-3-2 / EN 50581  
Supply according to: EN 40-5 (according to model)

Warranty	5 years.
Supply and packaging	Luminaire packed in recycled cardboard with an identifying label to protect the product during transport and storage. Pole packed with foam reel protector and plate base with foam protector on edges.
Maintenance	Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent. Lubricate the sealing gaskets and replace them when they are cracked. Lubricate the closures and/or hinges of the moving parts. Keep the thermal radiation surface clean to not lose light flux without shortening the life of the LEDs.

\* Values corresponding to the current state of technology. \*\* Check other regulations. \*\*\* Power values have a tolerance of ±7%.





## CONFIGURE YOUR KUMA LUMINAIRE

Model	Diffuser	Wire	Optics	Colour temp.	Optical group power	Team	Dimming	Protection	Finish	Description
<b>KUMSPF</b>										Simon KUMA Istanium® LED, fastening plate and door according to measurements, flat cover
	<b>ATH</b>									Cylindrical Transparent High Resistance PMMA with louvre at 180°
	<b>ATC</b>									Cylindrical Transparent High Resistance PMMA
	<b>MOC</b>									Cylindrical Opal PMMA
		<b>0</b>								Without installation wire (0 m)
			<b>RG_</b>							G Type Front Road Light Optics
			<b>RJ_</b>							J Type Front Road Light Optics
			<b>RL_</b>							L Type Front Road Light Optics
			<b>RA_</b>							A Type Extended Road Light Optics
			<b>RE_</b>							Extended Road Light Optics
			<b>SA_</b>							A Type Symmetric Optics
				<input type="radio"/> <b>NDL</b>						Neutral daylight - 4,000 K
				<input type="radio"/> <b>WDL</b>						Warm daylight – 3,000 K
				<input type="radio"/> <b>SDL</b>						Soft daylight - 2,700 K
				<input type="radio"/> <b>XDL</b>						Extra warm daylight – 2,200 K
					<b>_12W350</b>					12 W 350 mA      1,760 lm @ 4,000 K      12 LEDs
					<b>_24W700</b>					24 W 700 mA      3,360 lm @ 4,000 K      12 LEDs
					<b>_36W530</b>					36 W 530 mA      4,960 lm @ 4,000 K      24 LEDs
					<b>_49W700</b>					49 W 700 mA      6,330 lm @ 4,000 K      24 LEDs
						<b>IA23_</b>				Electronic control gear at 230 Vac 50/60 Hz, standard protection against 6 kV power surges
						<b>IA23S</b>				Electronic control gear at 230 Vac 50/60 Hz, additional protection against 10 kV power surges
						<b>2N-</b>				Dimming without control line (self-dimming)
						<b>2N+</b>				Dimming with control line
						<b>1N_</b>				Without dimming (on/off)
						<b>CAD_</b>				Cabinet amplitude dimming (electrical box dimmer)
						<b>1-10</b>				Dimming through 1.10 V input protocol
						<b>DALI</b>				Dimming through DALI input protocol
						<b>DXXX</b>				Dimming without control line (custom program)
							<b>C1</b>			Class 1 Luminaire electrical protection
							<b>C2</b>			Class 2 Luminaire electrical protection
								<b>SS_</b>		Stainless Steel Shaft, DGCLAS decorative rings
								<b>AS_</b>		Extruded Aluminium Shaft, GY9006 decorative rings
								<b>DGCLAS</b>		Forged Sand Blasted Dark Grey Finish. GY9006 decorative rings
								<b>*****</b>		Finish in Simon colours (see page 514). GY9006 decorative rings
								<b>*****</b>		Finish in RAL Classic chart colours. GY9006 decorative rings

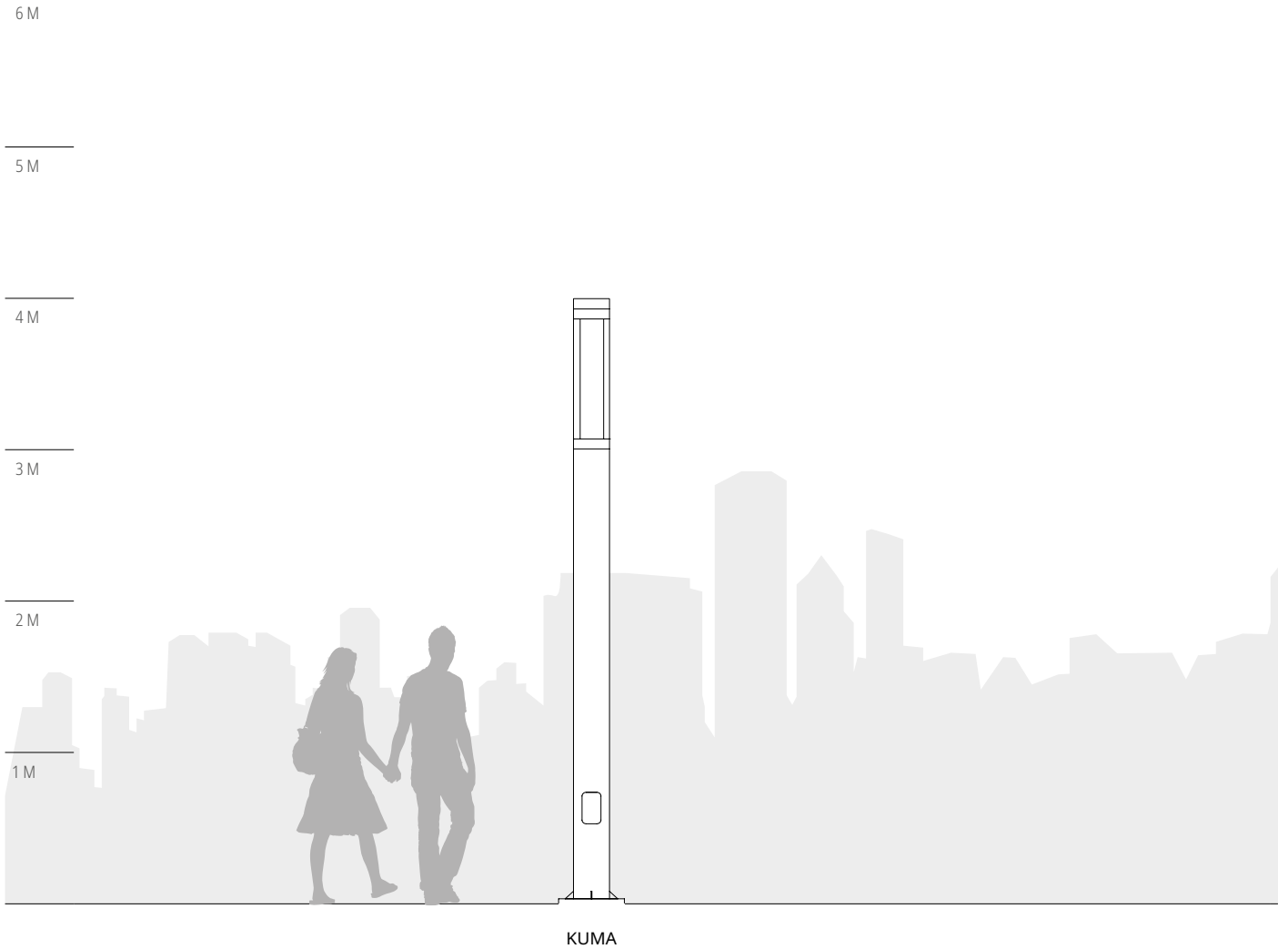
### BASE REFERENCES

Power	No. of LEDs	Current	Configuration	Order code
12 W	12	350 mA	KUMSPFATCORJ_WDL_12W350IA23_1N_C1SS_	<b>202-000762009</b>
12 W	12	350 mA	KUMSPFATCORJ_WDL_12W350IA23_1N_C1AS_	<b>202-000762004</b>
12 W	12	350 mA	KUMSPFATCORJ_WDL_12W350IA23_1N_C1DGCLAS	<b>202-000762029</b>
24 W	12	700 mA	KUMSPFATCORJ_WDL_24W700IA23_1N_C1SS_	<b>202-000759009</b>
24 W	12	700 mA	KUMSPFATCORJ_WDL_24W700IA23_1N_C1AS_	<b>202-000759004</b>
24 W	12	700 mA	KUMSPFATCORJ_WDL_24W700IA23_1N_C1DGCLAS	<b>202-000759029</b>
36 W	24	530 mA	KUMSPFATCORJ_WDL_36W530IA23_1N_C1SS_	<b>202-000597009</b>
36 W	24	530 mA	KUMSPFATCORJ_WDL_36W530IA23_1N_C1AS_	<b>202-000597004</b>
36 W	24	530 mA	KUMSPFATCORJ_WDL_36W530IA23_1N_C1DGCLAS	<b>202-000597029</b>
49 W	24	700 mA	KUMSPFATCORJ_WDL_49W700IA23_1N_C1SS_	<b>202-000479009</b>
49 W	24	700 mA	KUMSPFATCORJ_WDL_49W700IA23_1N_C1AS_	<b>202-000479004</b>
49 W	24	700 mA	KUMSPFATCORJ_NDL_49W700IA23_1N_C1DGCLAS	<b>202-000479029</b>






The luminaire flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes. The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.



## YOUR KUMA LUMINAIRE:



## ACCESSORIES / REPLACEMENTS

	Description	Order code
	Decorative ring for Stainless steel post base	<b>50-88802</b>
	Decorative ring for Extruded aluminium post base	<b>50-88803</b>
	Decorative ring for DGCLAS painted galvanised steel post base	<b>50-88801</b>
	Replacement PMMA diffuser, high-resistance, transparent cylindrical (ATB)	<b>50-88058</b>
	Replacement opal cylindrical PMMA diffuser (MOC)	<b>50-88059</b>
	Stainless steel door	<b>50-70913</b>
	Extruded aluminium door	<b>50-70914</b>
	DGCLAS painted galvanised steel door	<b>50-70912</b>









# HERA

NEW

## ISTANIUM®

The HERA lighting point completes the range of beacons, offering new solutions for lighting in areas of sustainable human mobility such as cycle path networks, pedestrian walkways and green areas where high quality light is required, with a wide variety of optics to optimise light flux and low light pollution.

Light flux from 600 lm to 1,800 lm.  
Visual comfort.  
High resistance to impacts and vandalism.



Pedestrian streets



Parks and gardens



Urban



Monuments



Bridges



Large areas



# HERA

## FEATURES

### LIGHTING SOLUTIONS

Wide variety of lighting solutions to optimise and precisely direct light flux, adapting it to the needs of each project: single and double head; asymmetrical and symmetrical light distribution.



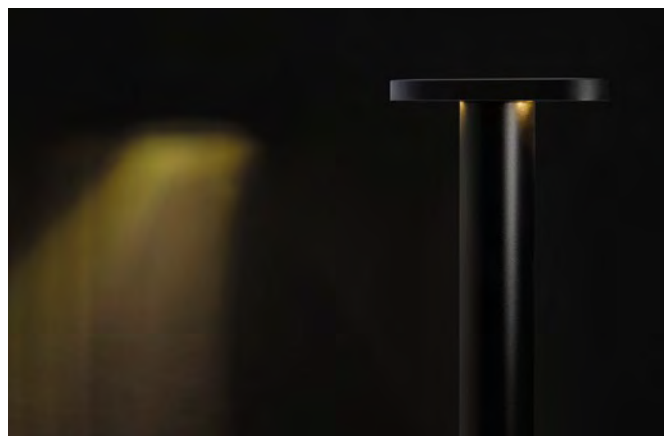
**Single head:** orientation and focus of the light flux to a single hemisphere.



**Double head:** increase in the hemispheres covered by the light flux obtaining greater coverage.

### NIGHT SKY PROTECTION: FHS<1

Directed light flux, without bothersome glare and complying with the standards for night sky protection.



### PROTECTION RATINGS

**IP66** with a pressure relief valve to keep the pressure constant and prevent moisture from entering the electro-light group.

**IK10** rating to guarantee the luminaire's resistance to vandalism and stainless steel screw for tamperproof security.

### LIGHT QUALITY

**CRI > 80** for 2,700 K, 3,000 K and 4,000 K  
High colour rendering and uniform distribution.





## FASTENING SYSTEM

---

Fastening system by means of recessed flange plate, without gussets. Flush trapdoor to locate the electrical connection point.



**Visible fastening:**  
maximum vandalism  
resistance.

**Concealed fastening:**  
maximum aesthetic  
integration.

## RANGE VERSATILITY

---

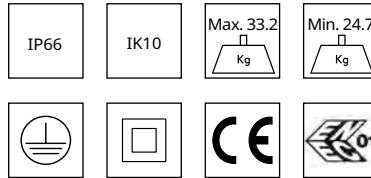
Available in various heights: 2 m, 2.5 m and 3 m.  
Available with two heads: single and double.





# HERA

ISTANIUM<sup>LED</sup>®



COLOUR TEMP.: XDL 2,200 K | SDM 2,700 K | WDM 3,000 K | NDM 4,000 K | PCA\*

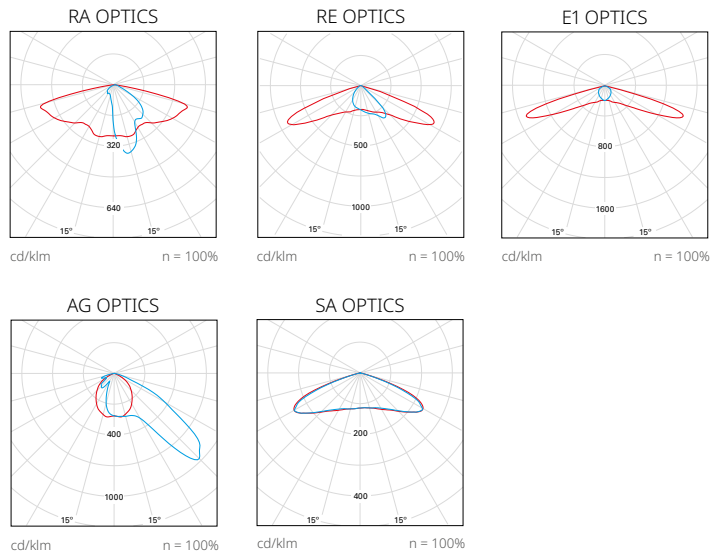
COLOUR RENDERING INDEX:

> 80 (for 4000 K, 3000 K and 2700 K) > 70 (for 2200 K)

UPWARD LIGHT OUTPUT RATIO (ULOR): <1 %\*\*

LED DURATION (L90 B10 AT T<sub>a</sub>=25 °C AND T<sub>j</sub>=95 °C): 100,000 h

\* Upon request \*\* Value may change depending on the optics



— C0 - C180 — C90 - C270 Check other photometric distributions

Rear hemisphere flux control visors available for RA, RE, E1, AG and SA optics (see page 488 for more information).

Simon **HERA** LED complete lighting point, in different heights, with electro-light group in die-cast aluminium and painted galvanised steel support. Floor fastening plate, side measures 300 mm and distance between bolts is 200 mm.

Flat cover, with the possibility of single or double head. Internal housing of the electronic control gear in a cup-shaped structure made of cast aluminium to guarantee watertightness.

Easy-clean transparent flat polycarbonate diffuser to prevent UV radiation in the optics. **IP66** protection rating for the electro-light group, with a **pressure relief valve** to keep the pressure constant and prevent moisture from entering, and **IK10** for the lighting point assembly. With pre-wiring of 3 m. Possibility of mounting up to five multi-array optics.

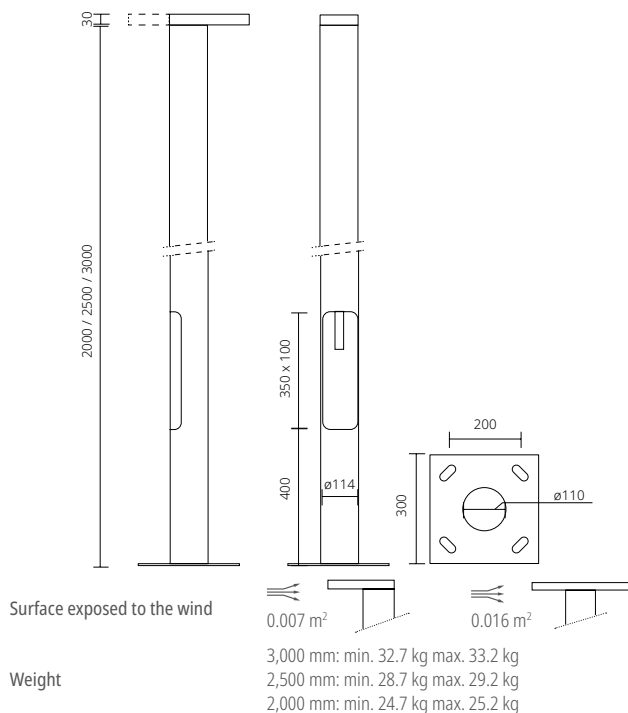
Possibility of four colour temperatures in white light, with CRI greater than 80 in 4,000 K, 3,000 K and 2,700 K, and with CRI greater than 70 in 2,200 K, as well as APC (Amber Phosphor Converted) for specially protected areas.

Service life of **LED L90 B10 100,000 hours**. Istantium LED lighting groups can be replaced and updated even when the luminaire is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (**ULOR**) less than **1%**.

With **Class I** and **Class II** electronic control gear with 230 V<sub>AC</sub> / 50 Hz supply voltage. Possibility of including additional protection against surges of 10 kV/10 kA. Optional DALI dimming. Standard finish in Simon BKTECH colour. Possibility of Simon and RAL finishes, as well as Seafront paint for corrosive environments with high durability in a C5M environment. Dimensions 235x114x3000 mm, 235x114x2500 mm or 235x114x2000 mm for models with single head. Dimensions 360x114x3000 mm, 360x114x2500 mm or 360x114x2000 mm for models with double head. **ENEC** certified luminaire.

## DIMENSIONS AND FASTENING SYSTEMS

Fastening with visible base



## PHYSICAL FEATURES AND MATERIALS

IP	IP66 (for the optical group)
IK	IK10 (for the light point assembly)
Shaft	Painted galvanised steel
Electro-light group	Die-cast aluminium
Diffuser	Flat transparent polycarbonate with UV treatment

## FINISHES

Body and support	Painted in BKTECH colour (Standard Paint) Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)
------------------	---

## ELECTRICAL PARAMETERS \*\*

Temp.	-20 °C... +35 °C
Dimming	<b>1N (100%)</b> Without dimming <b>DALI</b> Dimming via DALI protocol input
<b>Luminaires supplied by electrical grid</b>	
Supply voltage	220-240 V <sub>AC</sub>
Frequency	50/60 Hz
Protection against power surge	6 kV (Possibility of increasing to 10 kV / 10 kA upon request)
Power factor (cos φ at max. charge)	≥ 0.95
Luminaire electrical protection	Class I or Class II
Power according to models***	4 LEDs    8 LEDs
Supply current	
HIGH BALANCE	6 W    13W
HIGH FLUX	8 W    17W
HIGH HIGH FLUX	12 W    26W

## REGULATIONS AND CERTIFICATES



Luminaire according to: EN 60598-1 and 2-3 / EN 61547 / EN 61000-3-2 and 3-3 / EN 62031 / EN 61347-2-13 / EN 62471 / EN 55015

Warranty	5 years (extended warranty upon request)
Supply and packaging	Packed in recyclable cardboard to protect the product during transport and storage.
Maintenance	Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent. Lubricate the sealing gaskets and replace them when they are cracked. Lubricate the closures and/or hinges of the moving parts. Keep the thermal radiation surface clean to not lose light flux without shortening the life of the LEDs.

\*\*Values corresponding to the current state of technology. \*\*\* Optical group power values have a tolerance of ±7%.





## CONFIGURE YOUR HERA S ISTANIUM® LED LUMINAIRE

Model	Diffuser	Wire	Optics	Colour temp.	Optical group power	Team	Dimming	Protection	Finish	Description																								
HEREDO										Simon HERA Istanium® LED, height 2,000 mm, fastening plate and trapdoor according to measurements, single head																								
HERGDO										Simon HERA Istanium® LED, height 2,500 mm, fastening plate and trapdoor according to measurements, single head																								
HERIDO										Simon HERA Istanium® LED, height 3,000 mm, fastening plate and trapdoor according to measurements, single head																								
HEREDD										Simon HERA Istanium® LED, height 2,000 mm, fastening plate and trapdoor according to measurements, double head																								
HERGDD										Simon HERA Istanium® LED, height 2,500 mm, fastening plate and trapdoor according to measurements, double head																								
HERIDD										Simon HERA Istanium® LED, height 3,000 mm, fastening plate and trapdoor according to measurements, double head																								
	PTF									Flat transparent polycarbonate diffuser																								
		3								With installation wire (3 m)																								
			RA_ RE_ E1_ AG_ SA_							A Type Extended Road Light Optics E Type Extended Road Light Optics 1 type Extended Road Light Optics G Type Asymmetric Optics A Type Symmetric Optics																								
			<input type="radio"/> NDM <input type="radio"/> WDM <input type="radio"/> SDM <input type="radio"/> XDL							Neutral daylight – 4,000 K – IRC > 80 Warm daylight – 3,000 K – IRC > 80 Soft daylight – 2,700 K – IRC > 80 Extra warm daylight - 2.200 K - IRC > 70																								
										<table border="1"> <tr> <td>_6W550</td> <td>6 W 550 mA, single head</td> <td>630 lm @ 3,000 K</td> <td>4 LEDs</td> </tr> <tr> <td>_8W700</td> <td>8 W 700 mA, single head</td> <td>806 lm @ 3,000 K</td> <td>4 LEDs</td> </tr> <tr> <td>_12W_1K</td> <td>12 W 1,050 mA, single head</td> <td>1,100 lm @ 3,000 K</td> <td>4 LEDs</td> </tr> <tr> <td>_13W550</td> <td>13 W 550 mA, double head</td> <td>1,086 lm @ 3,000 K</td> <td>8 LEDs</td> </tr> <tr> <td>_17W700</td> <td>17 W 700 mA, double head</td> <td>1,331 lm @ 3,000 K</td> <td>8 LEDs</td> </tr> <tr> <td>_24W_1K</td> <td>24 W 1,050 mA, double head</td> <td>1,813 lm @ 3,000 K</td> <td>8 LEDs</td> </tr> </table>	_6W550	6 W 550 mA, single head	630 lm @ 3,000 K	4 LEDs	_8W700	8 W 700 mA, single head	806 lm @ 3,000 K	4 LEDs	_12W_1K	12 W 1,050 mA, single head	1,100 lm @ 3,000 K	4 LEDs	_13W550	13 W 550 mA, double head	1,086 lm @ 3,000 K	8 LEDs	_17W700	17 W 700 mA, double head	1,331 lm @ 3,000 K	8 LEDs	_24W_1K	24 W 1,050 mA, double head	1,813 lm @ 3,000 K	8 LEDs
_6W550	6 W 550 mA, single head	630 lm @ 3,000 K	4 LEDs																															
_8W700	8 W 700 mA, single head	806 lm @ 3,000 K	4 LEDs																															
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_24W_1K	24 W 1,050 mA, double head	1,813 lm @ 3,000 K	8 LEDs																															
										IA23_ IA23S																								
										Electronic control gear at 230 Vac 50/60 Hz, standard protection against 6 kV power surges Electronic control gear at 230 Vac 50/60 Hz, additional protection against 10 kV power surges																								
										1N_ DALI																								
										Without dimming (on/off) Dimming through DALI input protocol																								
										C1 C2																								
										Class 1 Luminaire electrical protection Class 2 Luminaire electrical protection																								
										BKTECH xxxxxx xxxxxx CMxxxx																								
										Standard finish in SIMON Technical Black Finish in Simon colours Finish in RAL classic chart colours Seafront Paint Finish																								

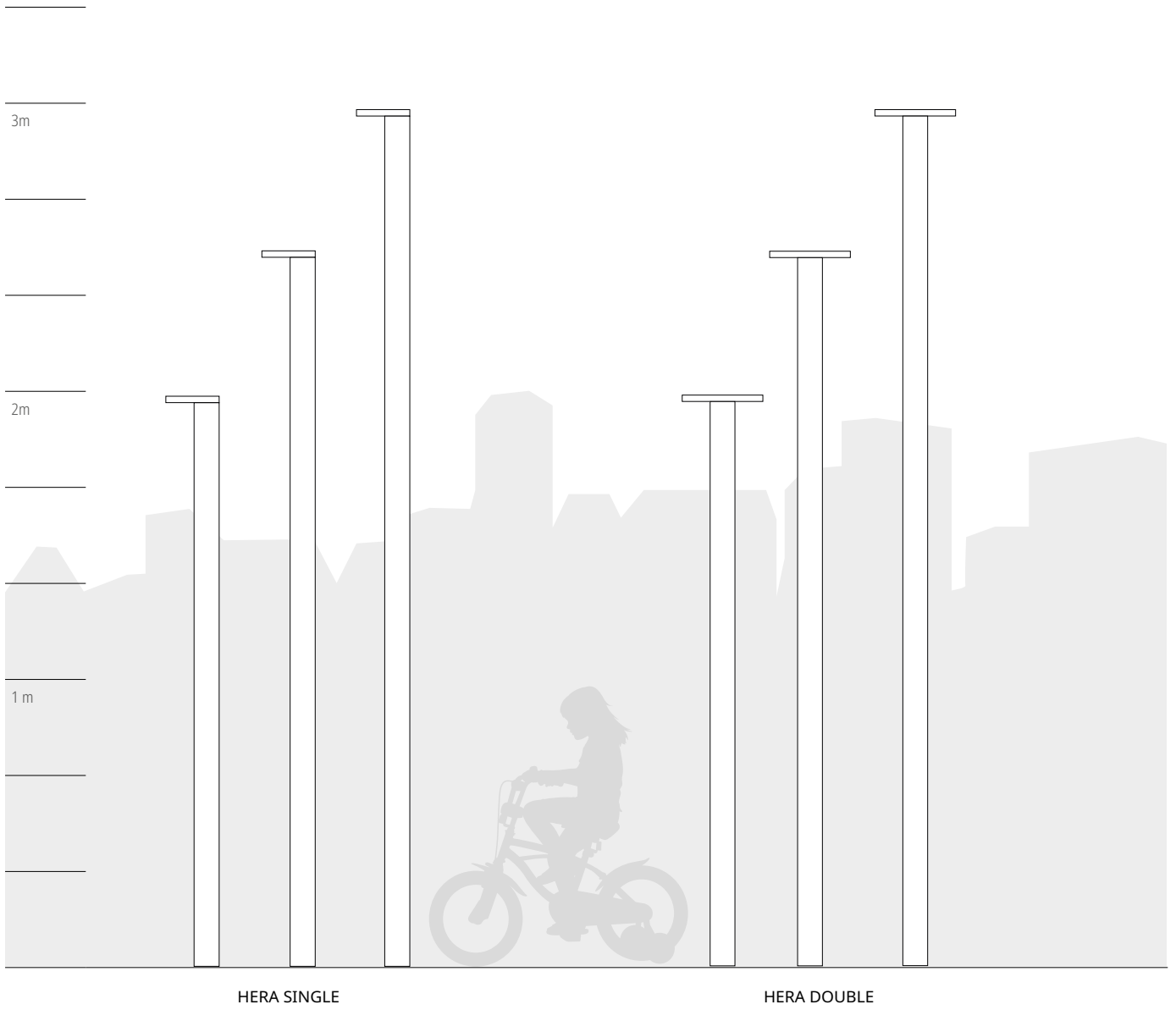
The luminaire flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes. The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.



LIGHTING POINTS

HERA

EXAMPLES OF THE HERA LIGHTING POINT:













NEXT RELEASE

# AURUM

ISTANIUM<sup>LED</sup>®

Family of light points with many combinations of heights and heads to adapt to all types of new city model projects.



Pedestrian streets



Parks and gardens



Urban



Monuments



Bridges

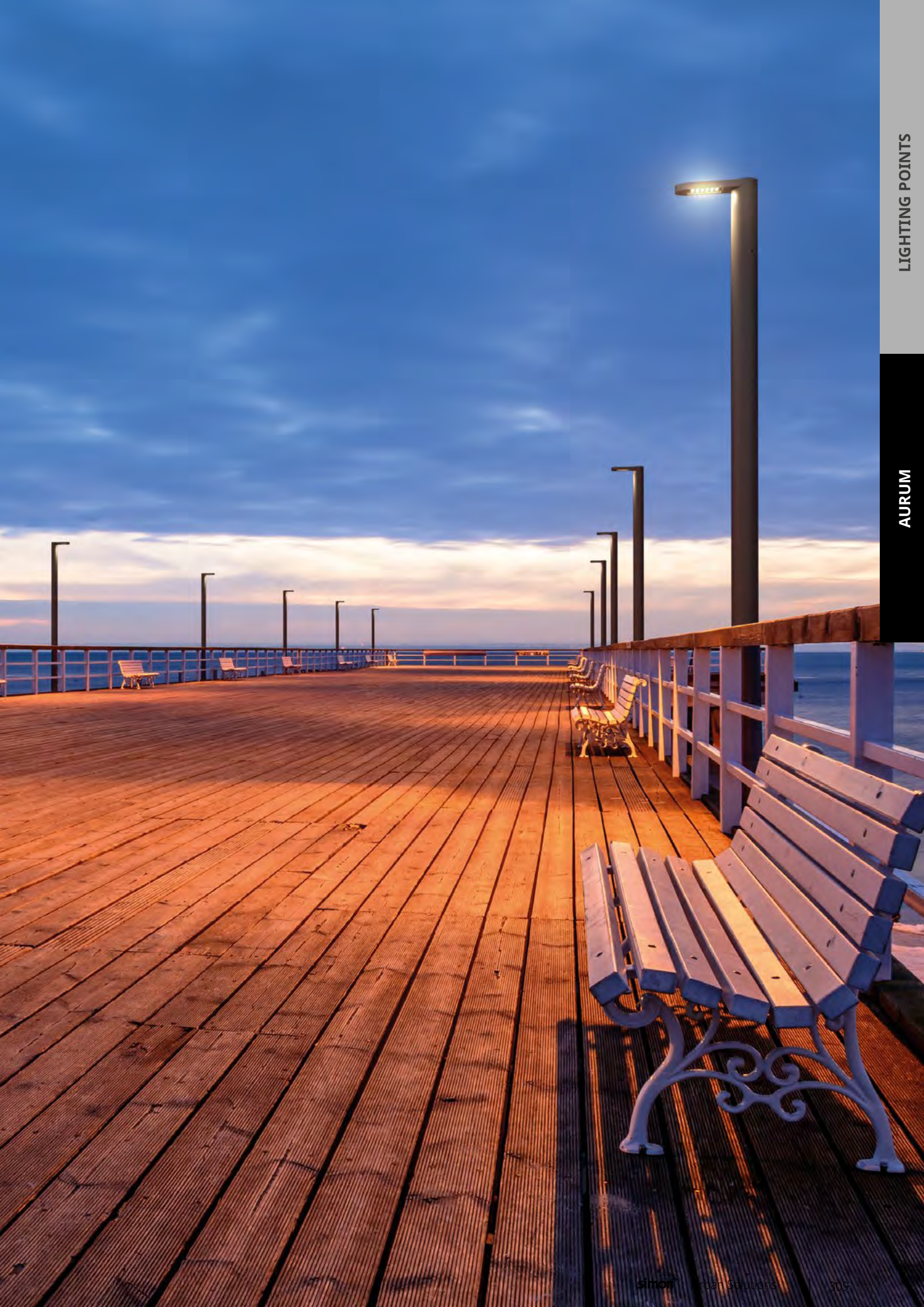


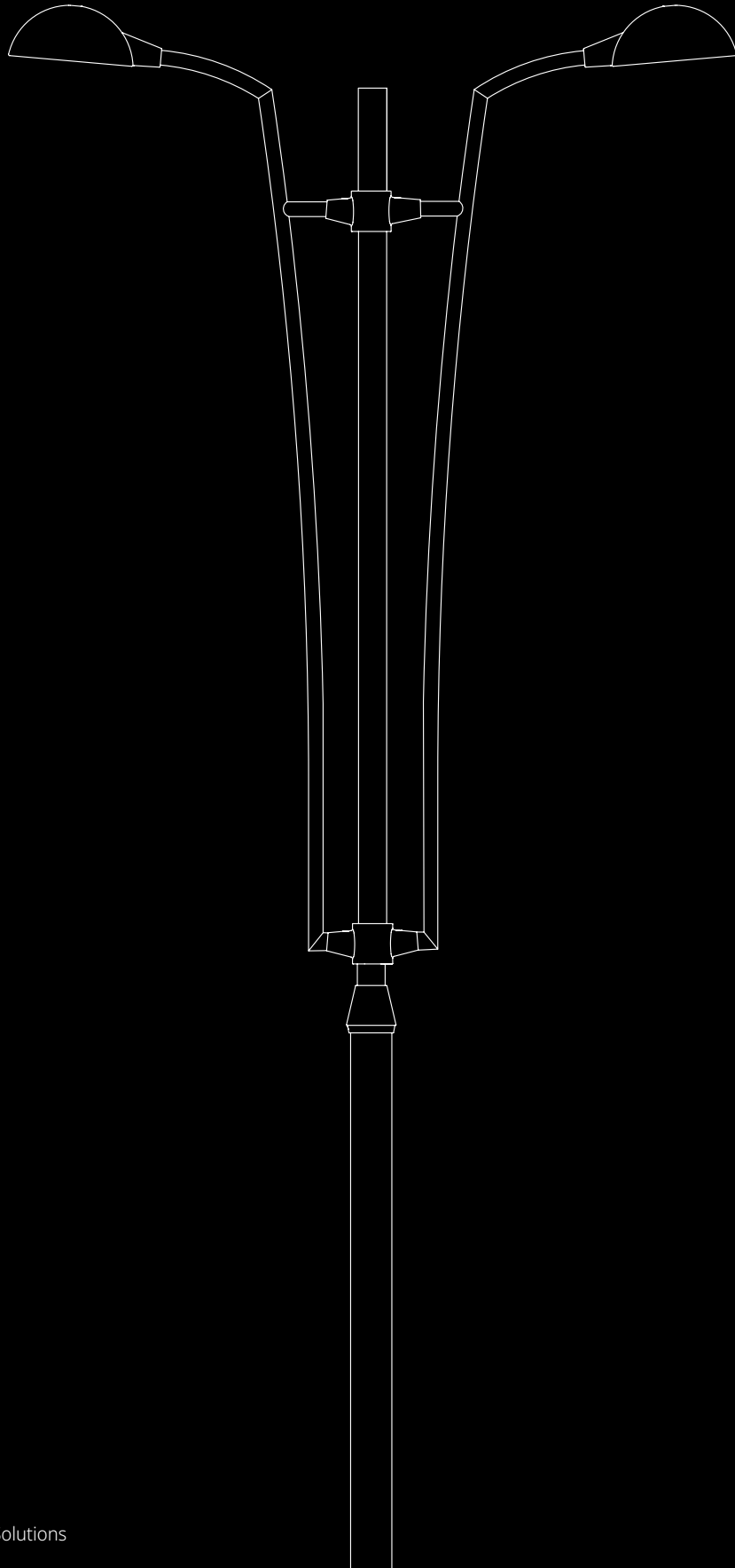
Large areas





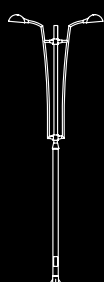




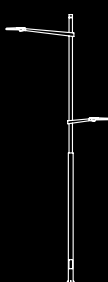




# DECORATIVE SUPPORTS



**LINK**  
P.312



**LIMA**  
P.322



**LIBRA**  
P.326



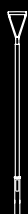
**CL22**  
P.330



**CL14**  
P.334



**CL12**  
P.338



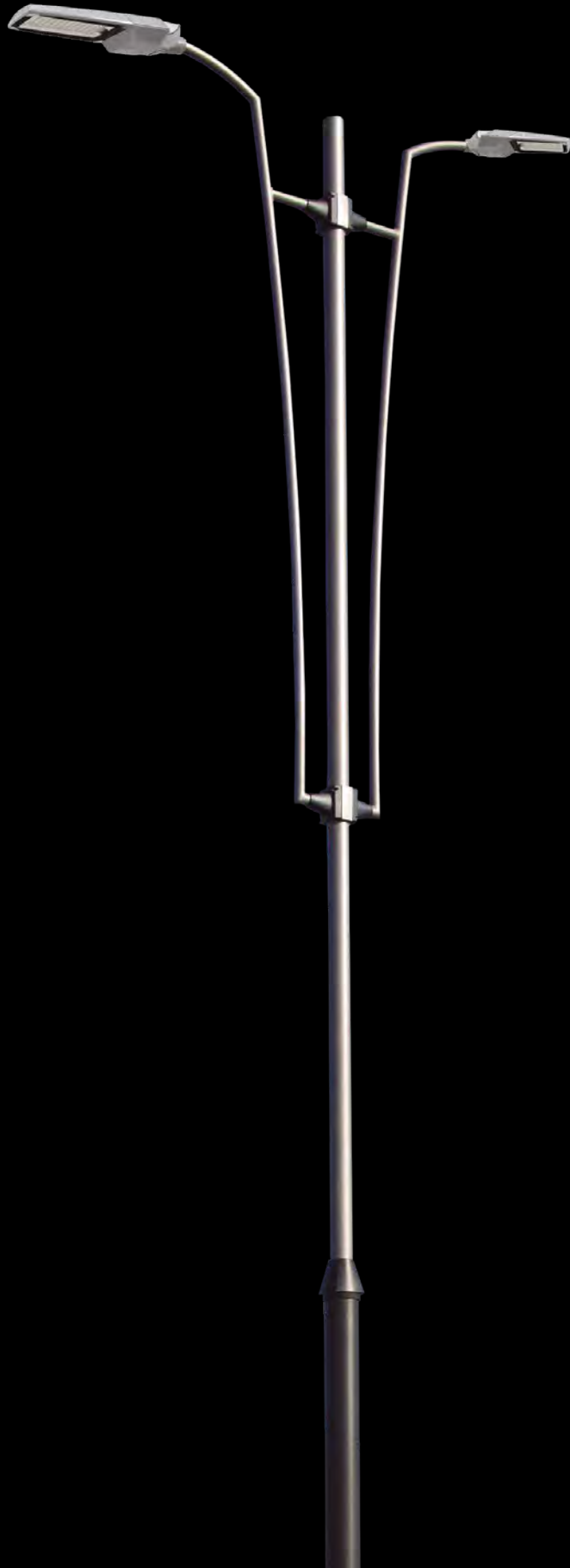
**CLA16**  
P.342



**TIL**  
P.346



**TORT**  
P.350



# LINK SYSTEM

Lighting point up to 10 m high comprising telescopic pole and different arm models with fastening cable tie. The arm design determines the ideal lighting point model for each setting:

Minimalist TECH, so it integrates into the architecture.

CLAS designed for historic areas.

DEC a touch of design for the urban landscape.



# LINK SYSTEM

## FEATURES

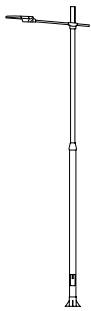
### CONFIGURATION EXAMPLES

#### TECH SERIES (technical)

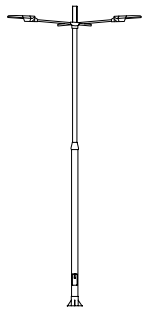
Minimalist appearance, so it integrates into the architecture.  
It consists of arms: Qtech and Linetech.

#### CLAS SERIES (classic)

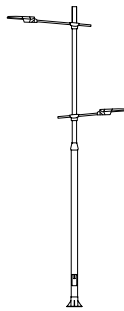
Designed for historic areas.  
It consists of arms: Ecoclas and Classic.



QTECH  
100 / 101



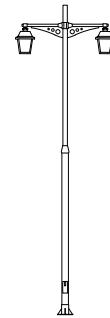
QTECH  
200



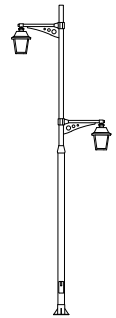
QTECH  
210 / 211



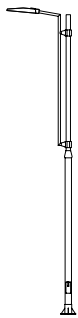
ECOCLAS  
100



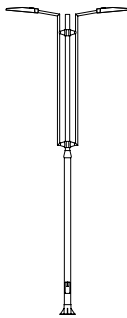
ECOCLAS  
200



ECOCLAS  
210



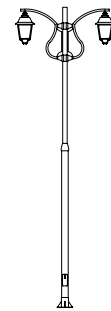
LINETECH  
100



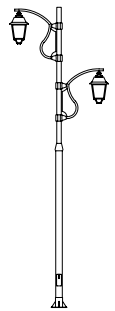
LINETECH  
200



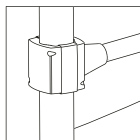
CLASSIC  
100



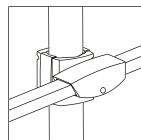
CLASSIC  
200



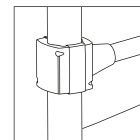
CLASSIC  
210



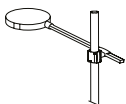
FRONT  
CABLE TIE



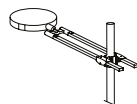
LATERAL  
CABLE TIE



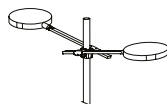
FRONT  
CABLE TIE



QTECH  
100 / 210



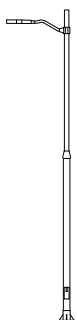
QTECH  
101 / 211



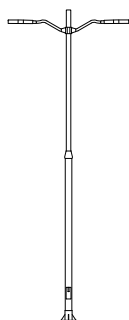
QTECH  
200

**DEC SERIES** (decorative)

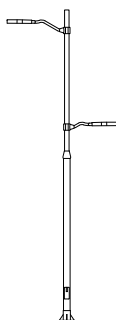
A touch of design for the urban landscape.  
It consists of arms: Ecodec, Sdec and Rdec.



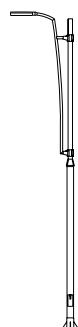
SDEC  
100



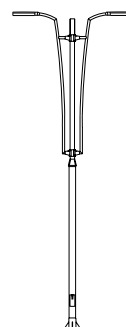
SDEC  
200



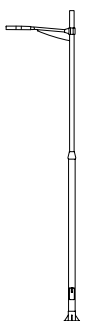
SDEC  
210



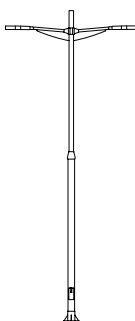
RDEC  
100



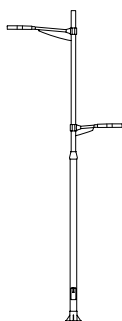
RDEC  
210



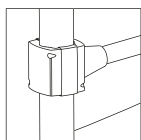
ECODEC  
100



ECODEC  
200



ECODEC  
210



FRONT  
CABLE TIE



# LINK SYSTEM

Simon LINK decorative pole, up to 10 m high, cylindrical base, telescopic cylindrical shaft and lateral or suspended luminaire fastening with arms.





Simon **LINK** decorative pole, up to 10 m high, cylindrical base, telescopic cylindrical shaft and lateral or suspended luminaire fastening with arms.

Flat flange plate with reinforcing ring and gussets, base and shaft made of S235JR-quality carbon steel sheet, arm(s) made of S235JR-quality carbon steel sheet or extruded aluminium, and arm-pole fastening cable tie(s) made of die-cast aluminium.

Flush trapdoor with interior reinforcement.

Allows lateral luminaire fastening through Ø60 mm x 120 mm coupling and arm angled between 0°, 5° or 10°, or lateral luminaire fastening through Ø60 mm x 120 mm coupling and 10° angle at end of arm, or lateral luminaire fastening through Ø60 mm x 100 mm coupling and 5° angle at end of arm, or lateral luminaire fastening through Ø60 mm x 120 mm coupling and 0° or 5° angle at end of arm, or lateral luminaire fastening through Ø60 mm x 120 mm coupling and 5° angle at end of arm, or suspended luminaire fastening by means of 3/4 "G screw.

IP3X protection rating. To achieve IP44, it is necessary to use an internal junction box, not supplied.

Hot dip galvanised and painted finish. Allows base and cable tie(s) painted in Simon BKTECH colour and shaft and arm(s) painted in Simon GYTECH colour, or base, shaft, cable tie(s) and arm(s) painted in Simon BKCLAS colour, or base and cable tie(s) painted in Simon BKCLAS colour and Shaft and arms painted in Simon GYDECO colour. Allows Simon and RAL chart finishes, as well as other protective finishes.

Supplied with anchoring bolts, template and double nut to level the base. Luminaires not included.

Pole with CE-certified constancy of performance.

Recommended luminaires: NATH LXF, NATH MXF, NATH SXF, TAU, ALTAIR IXF, MERAK SXF, PRAGA M PRO and PRAGA M BASIC.

## FASTENING SYSTEMS

Qttech model	Lateral fastening through Ø60 mm x 120 mm coupling at 0° / 5° / 10° arm angle
Linetech model	Lateral fastening through Ø60 mm arm and angled at 10°
Ecoclas model	Suspended fastening by means of 3/4 "G screw in vertical position
Classic model	Suspended fastening by means of 3/4 "G screw in vertical position
Sdec model	Lateral fastening through Ø60 mm x 120 mm coupling at 5° angle
Ecodec model	Lateral fastening through Ø60 mm x 120 mm arm at 0° / 5° angle
Rdec model	Lateral fastening through Ø60 mm x 120 mm arm at 5° angle
Notes	Anchoring bolts and template provided. Luminaires not included.

## PHYSICAL FEATURES AND MATERIALS

IP	IP3X. To achieve IP44, it is necessary to use the internal junction box with IP44 (not supplied with the pole).
Shaft	Telescopic cylindrical
Base	Cylindrical
Trapdoor	Flush with interior reinforcement
Construction	Made up of base, shaft and arm(s)
Arm	Carbon steel sheet, S235JR quality, or extruded aluminium.
Cable tie	Die-cast aluminium
Shaft	Carbon steel sheet, S235JR quality
Base	Carbon steel sheet, S235JR quality
Flange plate	Flat steel sheet, S235JR quality, with reinforcing ring and gussets

## FINISHES

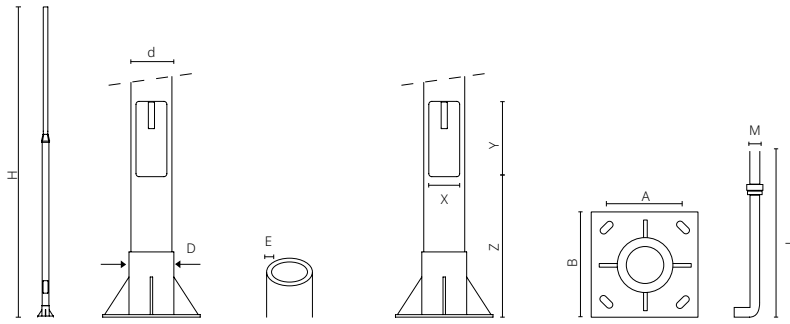
	Arm	Cable tie	Shaft	Base
Qttech+ model Linetech model	Galvanised and painted in GYTECH colour (Standard Paint)	Painted in BKTECH colour	Galvanised and painted in GYTECH colour (Standard Paint)	Galvanised and painted in GYTECH colour (Standard Paint)
Ecoclas model	Painted in BKCLAS colour (Standard Paint)	Painted in BKCLAS colour	Galvanised and painted in BKCLAS colour (Standard Paint)	Galvanised and painted in BKCLAS colour (Standard Paint)
Classic model	Galvanised and painted in BKCLAS colour (Standard Paint)	Painted in BKCLAS colour	Galvanised and painted in BKCLAS colour (Standard Paint)	Galvanised and painted in BKCLAS colour (Standard Paint)
Sdec model	Galvanised and painted in GYDECO colour (Standard Paint)	Painted in BKCLAS colour	Galvanised and painted in GYDECO colour (Standard Paint)	Galvanised and painted in BKCLAS colour (Standard Paint)
Ecodec model	Painted in GYDECO colour (Standard Paint)	Painted in BKCLAS colour	Galvanised and painted in GYDECO colour (Standard Paint)	Galvanised and painted in BKCLAS colour (Standard Paint)
Rdec model	Galvanised and painted in GYDECO colour (Standard Paint)	Painted in BKCLAS colour	Galvanised and painted in GYDECO colour (Standard Paint)	Galvanised and painted in BKCLAS colour (Standard Paint)

Simon Colours (Standard Paint / Seafront Paint)  
RAL chart colours (Standard Paint / Seafront Paint)

## REGULATIONS AND CERTIFICATES

Support according to REGULATION EN 40-5

TECHNICAL INFORMATION (Units in mm)



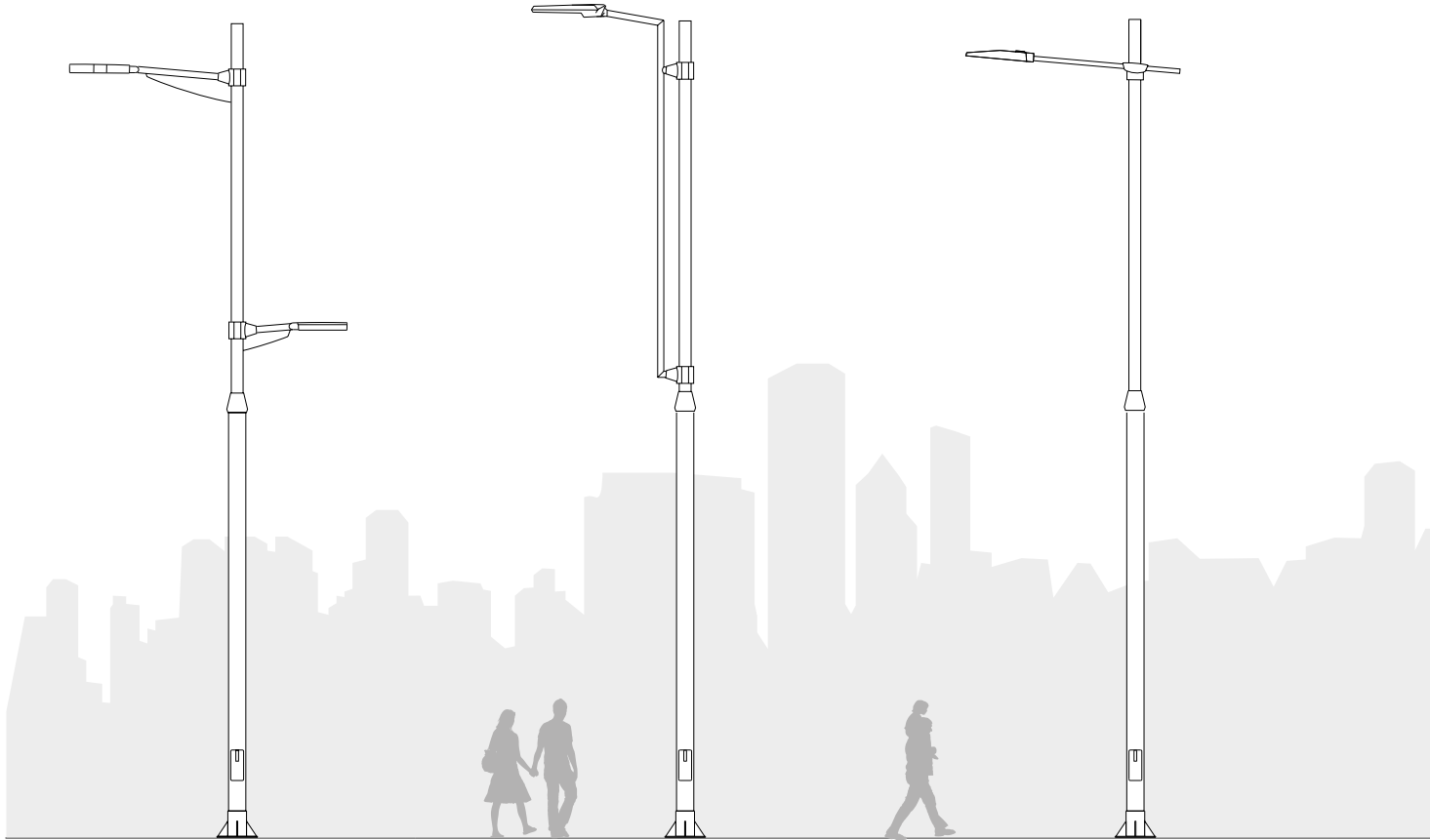
Model	Height*	Base		Thickness	Door			Flange plate		Bolts	1st Arm		2nd Arm		Code
	H	Ø D	Ø d	Base / Shaft	X	Y	Z	A	B	M x L	H1	L1	H2	L2	
<b>Qttech 100</b>	8,000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	7,500	1,400	-	-	<b>5-640001-051</b>
	10000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	9,500	1,400	-	-	<b>5-640006-051</b>
<b>Qttech 210</b>	8,000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	5,000	1,000	7,500	1,400	<b>5-640002-051</b>
	10000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	5,000	1,000	9,500	1,400	<b>5-640007-051</b>
<b>Qttech 200</b>	8,000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	7,500	1,400	7,500	1,400	<b>5-640003-051</b>
	10000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	9,500	1,400	9,500	1,400	<b>5-640008-051</b>
<b>Qttech 101</b>	8,000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	7,500	1,400	-	-	<b>5-640004-051</b>
	10000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	9,500	1,400	-	-	<b>5-640009-051</b>
<b>Qttech 211</b>	8,000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	5,000	1,000	7,500	1,400	<b>5-640005-051</b>
	10000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	5,000	1,000	9,500	1,400	<b>5-640010-051</b>
<b>Linetech 100</b>	8,000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	8,100	1,300	-	-	<b>5-640027-051</b>
	10000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	10100	1,300	-	-	<b>5-640029-051</b>
<b>Linetech 200</b>	8,000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	8,100	1,300	8,100	1,300	<b>5-640028-051</b>
	10000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	10100	1,300	10100	1,300	<b>5-640030-051</b>
<b>Ecoclas 100</b>	8,000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	7,500	1,000	-	-	<b>5-640031-014</b>
	10000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	9,500	1,000	-	-	<b>5-640034-014</b>
<b>Ecoclas 200</b>	8,000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	7,500	1,000	7,500	1,000	<b>5-640033-014</b>
	10000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	9,500	1,000	9,500	1,000	<b>5-640036-014</b>
<b>Ecoclas 210</b>	8,000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	5,000	1,000	7,500	1,000	<b>5-640032-014</b>
	10000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	5,000	1,000	9,500	1,000	<b>5-640035-014</b>
<b>Classic 100</b>	8,000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	7,500	1,000	-	-	<b>5-640037-014</b>
	10000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	9,500	1,000	-	-	<b>5-640040-014</b>
<b>Classic 200</b>	8,000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	7,500	1,000	7,500	1,000	<b>5-640039-014</b>
	10000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	9,500	1,000	9,500	1,000	<b>5-640042-014</b>
<b>Classic 210</b>	8,000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	6,000	1,000	7,500	1,000	<b>5-640038-014</b>
	10000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	6,000	1,000	9,500	1,000	<b>5-640041-014</b>
<b>Sdec 100</b>	8,000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	7,500	1,200	-	-	<b>5-640011-061</b>
	10000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	9,500	1,200	-	-	<b>5-640014-061</b>
<b>Sdec 200</b>	8,000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	7,500	1,200	7,500	1,200	<b>5-640013-061</b>
	10000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	9,500	1,200	9,500	1,200	<b>5-640016-061</b>
<b>Sdec 210</b>	8,000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	5,000	1,000	7,500	1,200	<b>5-640012-061</b>
	10000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	5,000	1,000	9,500	1,200	<b>5-640015-061</b>
<b>Ecodec 100</b>	8,000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	7,500	1,400	-	-	<b>5-640017-061</b>
	10000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	9,500	1,400	-	-	<b>5-640020-061</b>
<b>Ecodec 200</b>	8,000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	7,500	1,400	7,500	1,400	<b>5-640019-061</b>
	10000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	9,500	1,400	9,500	1,400	<b>5-640022-061</b>
<b>Ecodec 210</b>	8,000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	5,000	1,000	7,500	1,400	<b>5-640018-061</b>
	10000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	5,000	1,000	9,500	1,400	<b>5-640021-061</b>
<b>Rdec 100</b>	8,000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	8,100	1,300	-	-	<b>5-640023-061</b>
	10000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	10100	1,300	-	-	<b>5-640024-061</b>
<b>Rdec 200</b>	8,000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	8,100	1,300	8,100	1,300	<b>5-640024-061</b>
	10000	168	115	3.6 / 4	137	310	545	285	400	M22 x 600	10100	1,300	10100	1,300	<b>5-640026-061</b>

\* Check other heights





RECOMMENDED LUMINAIRES (NOT INCLUDED)






ECODEC 210 WITH MERAK SXF AND ALTAIR IXF

LINETECH 100 WITH NATH L / M / S

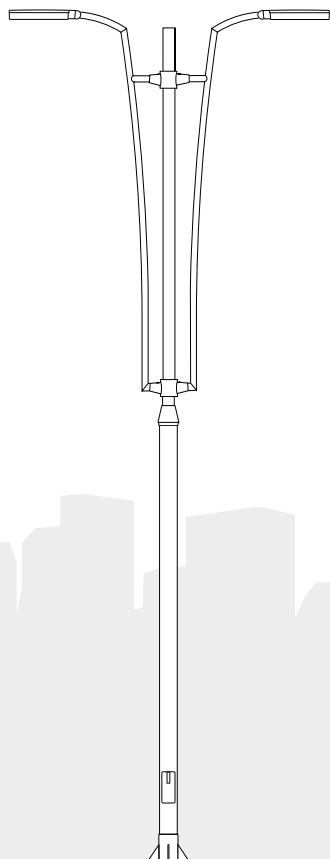
QTECH 100 / 101 WITH TAU

SUPPORT PROTECTIVE SYSTEMS AND FINISHES

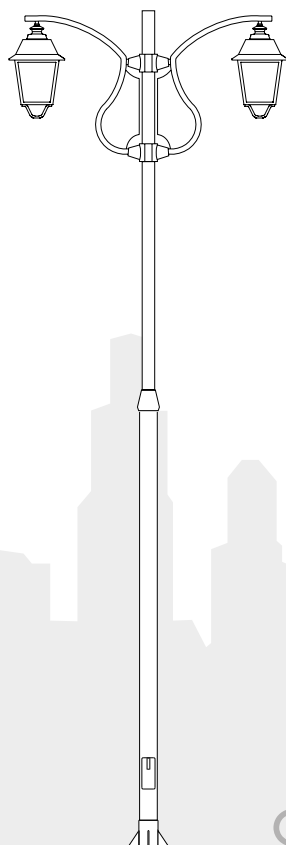
	Type of durability / atmospheric corrosion category*	Acid-less protection 	Stick-less protection 	Draw-less protection 
Standard Paint Finish: hot dip galvanised** and painted	Average durability in corrosive environment C4.	✓	✓	✓
Seafront Paint Finish: hot dip galvanised** and painted	High durability in corrosive environment C5M.	✓	✓	✓

\* According to EN ISO 12944 \*\* According to EN ISO 1461

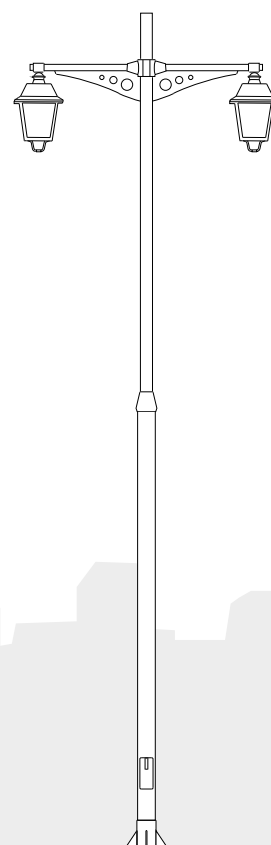
See expanded information on protection systems and finishes on pages 28 and 514 respectively



LINETECH 200 WITH  
ALTAIR IXF



CLASSIC 200 WITH  
PRAGA M BASIC



ECOCLASS 200 WITH  
PRAGA M PRO

## ACCESSORIES / REPLACEMENTS

Description	Finish	Order code
Triangular 10 mm key to close trapdoor	-	50-73265
Link banderole 200 d76-115 BKTECH	<b>BKTECH</b>	5-630102
Link banderole 200 d76-115 BKCLAS	<b>BKCLAS</b>	5-630202



# LIMA

Simon LIMA decorative pole, up to 10.5 m high, square base, cylindrical shaft and lateral luminaire fastening with arms.





Simon **LIMA** decorative pole, up to 10.5 m high, prismatic square base, cylindrical shaft and lateral luminaire fastening with arms. Flat flange plate with reinforcing ring and gussets, base, shaft and arm(s) made of S235JR-quality carbon steel sheet.

Flush trapdoor with interior reinforcement.

Lateral luminaire fastening through Ø60 mm x 250 mm cylindrical coupling, and 5° angle at end of arm.

IP3X protection rating. To achieve IP44, it is necessary to use an internal junction box, not supplied.

Hot dip galvanised and painted finish. Base and arm(s) painted in Simon DGCLAS colour. Shaft painted in Simon GY9006 colour. Allows Simon and RAL chart finishes, as well as other protective finishes.

Supplied with anchoring bolts, template and double nut to level the base. Luminaires not included.

Pole with CE-certified constancy of performance.

Recommended luminaires: NATH LXf, NATH MXf, NATH SXf, TAU, ALTAIR IXf and MERAK SXf.

### FASTENING SYSTEMS

Luminaire fastening	Lateral fastening through Ø60 mm x 250 mm coupling at 5° angle
Notes	Anchoring bolts and template provided. Luminaires not included.

### FINISHES

Arm	Galvanised and painted in DGCLAS colour (Standard Paint)
Shaft	Galvanised and painted in GY9006 colour (Standard Paint)
Base	Galvanised and painted in DGCLAS colour (Standard Paint) Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)

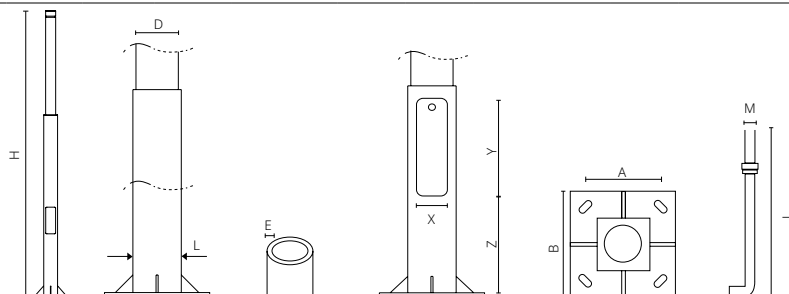
### PHYSICAL FEATURES AND MATERIALS

IP	IP3X. To achieve IP44, it is necessary to use the internal junction box with IP44 (not supplied with the pole).
Shaft	Cylindrical
Base	Prismatic square
Trapdoor	Flush with interior reinforcement
Construction	Made up of base, shaft and arm(s)
Arm	Carbon steel sheet, S235JR quality
Shaft	Carbon steel sheet, S235JR quality
Base	Carbon steel sheet, S235JR quality
Flange plate	Flat steel sheet, S235JR quality, with reinforcing ring and gussets.

### REGULATIONS AND CERTIFICATES

Support according to	REGULATION EN 40-5
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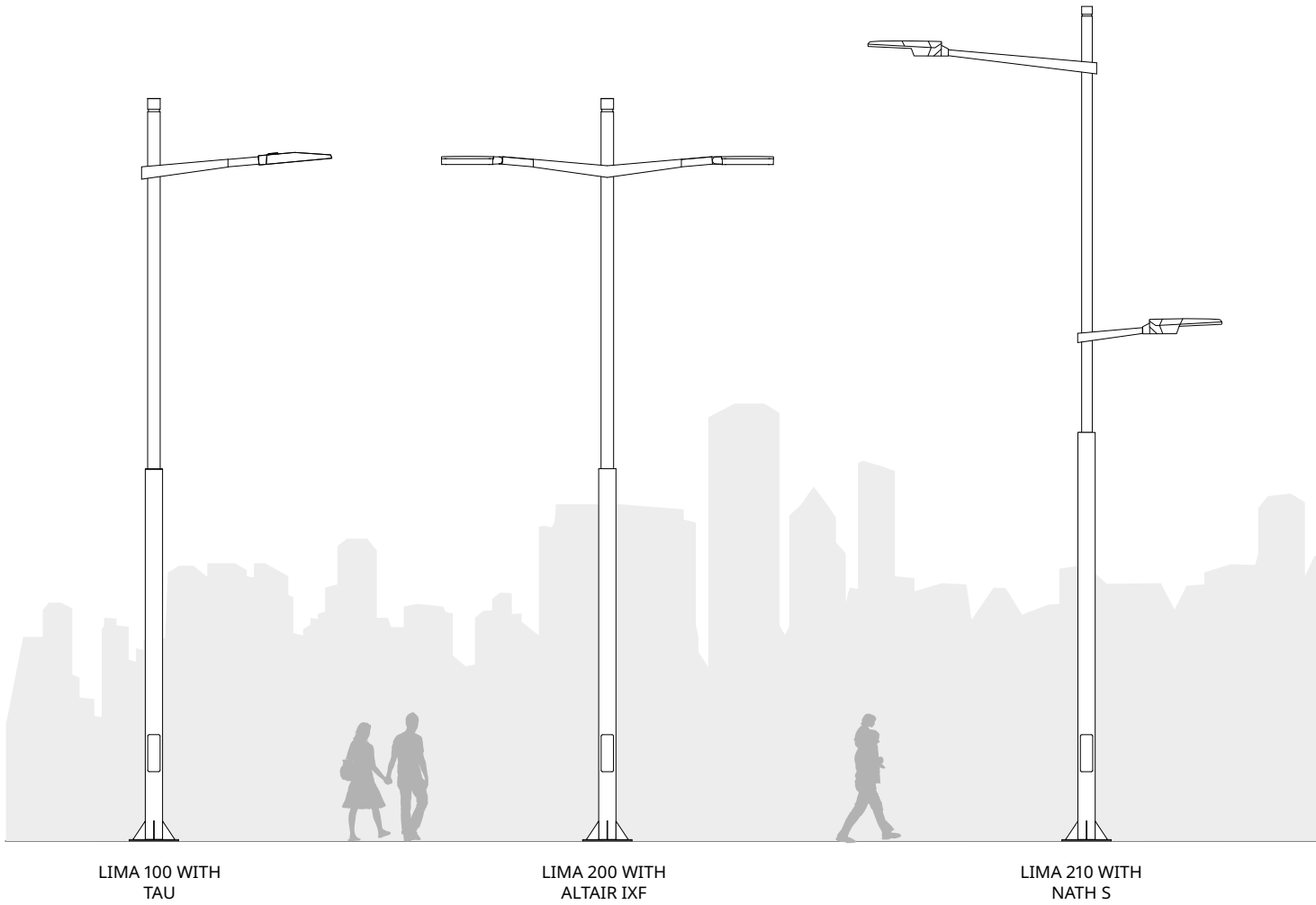
### TECHNICAL INFORMATION\* (Units in mm)



Model	Height	Base		Thickness	Door			Flange plate		Bolts M x L	1 <sup>st</sup> Arm		2 <sup>nd</sup> Arm		Code
	H	Ø D	L	Base / Shaft	X	Y	Z	A	B		H1	L1	H2	L2	
<b>100</b>	6,000	100	140	4 / 3	100	300	550	285	400	M22 x 600	5,500	600	-	-	<b>5-511821</b>
	9,000	114	160	4 / 3	120	300	550	285	400	M22 x 600	8,500	1,500	-	-	<b>5-511824</b>
<b>200</b>	6,000	100	140	4 / 3	100	300	550	285	400	M22 x 600	5,500	600	5,500	600	<b>5-511822</b>
	10,500	140	175	4 / 3	130	300	550	350	500	M24 x 800	10,000	1,500	10,000	1,500	<b>5-511825</b>
<b>210</b>	8,500	114	160	4 / 3	120	300	550	285	400	M22 x 600	5,500	600	8,000	1,500	<b>5-511823</b>

\* Check other measurements or configurations

RECOMMENDED LUMINAIRES (NOT INCLUDED)






LIMA 100 WITH TAU

LIMA 200 WITH ALTAIR IXF

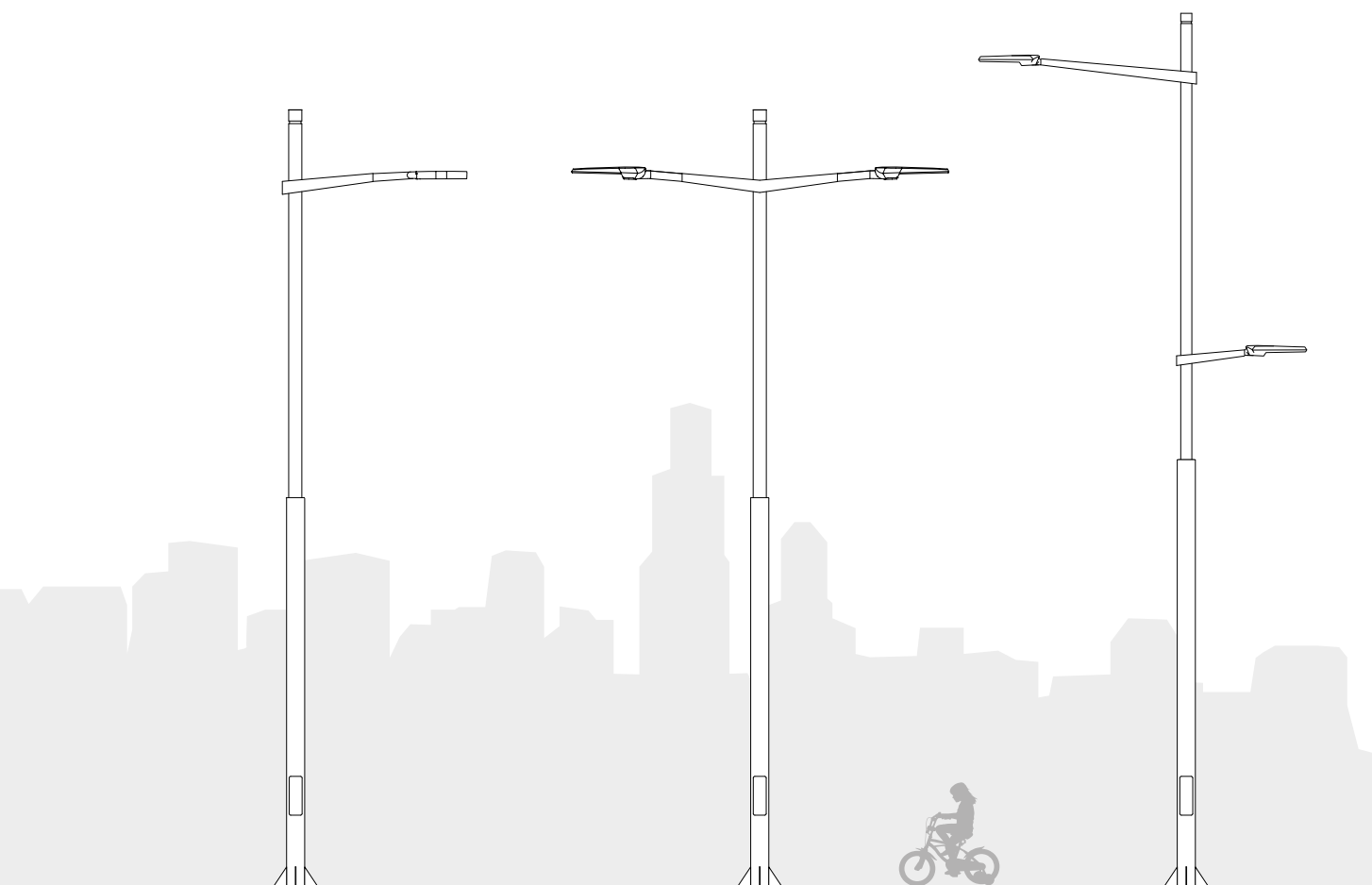
LIMA 210 WITH NATH S

SUPPORT PROTECTIVE SYSTEMS AND FINISHES

	Type of durability / atmospheric corrosion category*	Acid-less protection 	Stick-less protection 	Draw-less protection 
Standard Paint Finish: hot dip galvanised** and painted	Average durability in corrosive environment C4.	✓	✓	✓
Seafront Paint Finish: hot dip galvanised** and painted	High durability in corrosive environment C5M.	✓	✓	✓

\* According to EN ISO 12944 \*\* According to EN ISO 1461

See expanded information on protection systems and finishes on pages 28 and 514 respectively



LIMA 100 WITH  
MERAK SXF

LIMA 200 WITH  
NATH L

LIMA 210 WITH  
NATH M

## ACCESSORIES / REPLACEMENTS

Description	Order code
Triangular 10 mm key to close trapdoor	50-73265





# LIBRA

Simon LIBRA decorative pole, up to 8 m high, conical tapering, and post top or arm luminaire fastening.



Simon **LIBRA** decorative pole, up to 8 m high, conical tapering, and post top or arm luminaire fastening. Flat flange plate with reinforcing ring and gussets, shaft and arm made of S235JR-quality carbon steel sheet. Flush trapdoor with interior reinforcement. Post-top luminaire fastening through Ø60 mm x 100 mm cylindrical coupling on Ø76 mm tapered pole tip, or arm tip fastening through Ø60 mm x 100 mm cylindrical coupling in vertical position. IP3X protection rating. To achieve IP44, it is necessary to use an internal junction box, not supplied. Hot dip galvanised finish. Base and arm(s) painted in Simon GY9007, GYDECO or GYTECH colour. Allows Simon and RAL chart finishes, as well as other protective finishes. Supplied with anchoring bolts, template and double nut to level the base. Luminaires not included. Pole with CE-certified constancy of performance. Recommended luminaires: NATH LXF, NATH MXF, NATH SXF, TAU, ALTAIR IXF, ALTAIR IYF, MERAK SXF, MERAK SYF, HYDRA and SKAT.

### FASTENING SYSTEMS

Luminaire fastening	Post-top luminaire fastening through Ø60 mm x 100 mm coupling in vertical position
Notes	Anchoring bolts and template provided Luminaires not included

### FINISHES

Arm	Galvanised and painted in GYDECO, GY9007 or GYTECH colour (Standard Paint)
Shaft	Galvanised and painted in GYDECO, GY9007 or GYTECH colour (Standard Paint) Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)

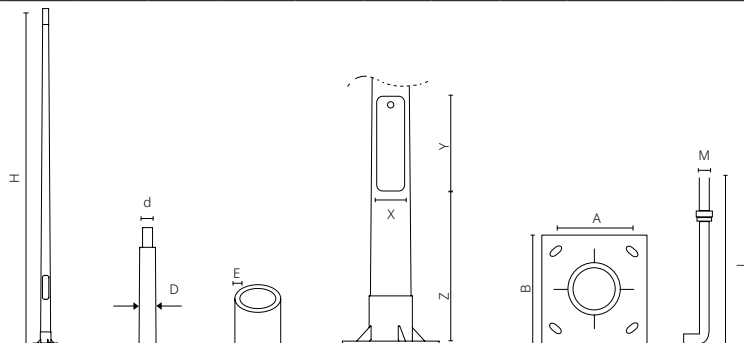
### PHYSICAL FEATURES AND MATERIALS

IP	IP3X. To achieve IP44, it is necessary to use an internal junction box with IP44 (not supplied on the pole).
Arm	Structural cylindrical tube
Shaft	Conical tapering
Trapdoor	Flush with interior reinforcement
Construction	Support manufactured in a single section (TOP model) Support manufactured in a single section and arm(s) (100 and 200 model)
Arm	Carbon steel sheet, S235JR quality
Shaft	Carbon steel sheet, S235JR quality
Flange plate	Square flat steel sheet, S235JR quality, with reinforcing ring and gussets

### REGULATIONS AND CERTIFICATES

Support according to: REGULATION EN 40-5

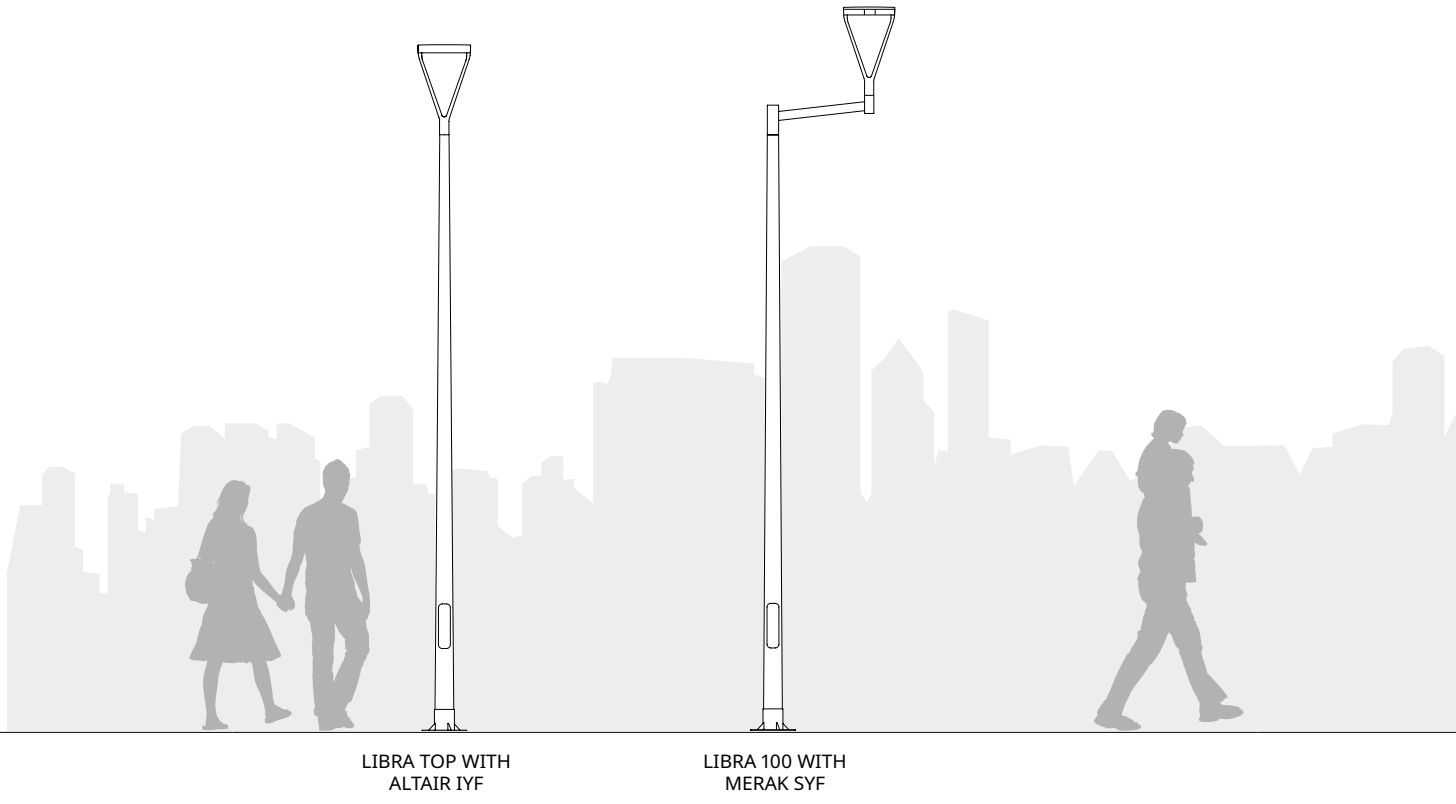
### TECHNICAL INFORMATION\* (Units in mm)



Model	Height	Base		Thickness	Door			Flange plate		Bolts	1 <sup>st</sup> Arm		2 <sup>nd</sup> Arm		Finish	Code
		Ø d	Ø D		E	X	Y	Z	A		B	M x L	H1	L1		
<b>TOP</b>	4,000	60	76	3	100	300	550	215	300	M18x500	-	-	-	-	GYDECO	<b>5-640501-013</b>
	5,000	60	76	3	105	300	550	215	300	M18x500	-	-	-	-	GYDECO	<b>5-640502-013</b>
	6,000	60	76	3	105	300	550	215	300	M18x500	-	-	-	-	GYDECO	<b>5-640503-013</b>
	7,000	60	76	3	110	300	550	285	400	M22x600	-	-	-	-	GYDECO	<b>5-640504-013</b>
	8,000	60	76	3	125	300	550	285	400	M22x600	-	-	-	-	GYDECO	<b>5-640505-013</b>
<b>100</b>	4,000	60	76	3	100	300	550	215	300	M18x500	250	650	-	-	GYDECO	<b>5-640511-013</b>
	5,000	60	76	3	105	300	550	215	300	M18x500	250	650	-	-	GYDECO	<b>5-640512-013</b>
	6,000	60	76	3	105	300	550	215	300	M18x500	250	650	-	-	GYDECO	<b>5-640513-013</b>
	7,000	60	76	3	110	300	550	285	400	M22x600	250	650	-	-	GYDECO	<b>5-640514-013</b>
	8,000	60	76	3	125	300	550	285	400	M22x600	250	650	-	-	GYDECO	<b>5-640515-013</b>
<b>200</b>	4,000	60	76	3	100	300	550	215	300	M18x500	250	650	250	650	GYDECO	<b>5-640530-013</b>
	5,000	60	76	3	105	300	550	215	300	M18x500	250	650	250	650	GYDECO	<b>5-640531-013</b>
	6,000	60	76	3	105	300	550	215	300	M18x500	250	650	250	650	GYDECO	<b>5-640532-013</b>
	7,000	60	76	3	110	300	550	285	400	M22x600	250	650	250	650	GYDECO	<b>5-640533-013</b>
	8,000	60	76	3	125	300	550	285	400	M22x600	250	650	250	650	GYDECO	<b>5-640534-013</b>
<b>Wall Arm</b>											250	650			GYDECO	<b>5-640570-013</b>

\* Check other measurements or configurations

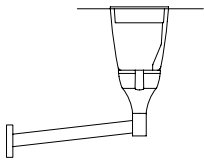
RECOMMENDED LUMINAIRES (NOT INCLUDED)



LIBRA TOP WITH ALTAIR IYF

LIBRA 100 WITH MERAK SYF

WALL ARM:



LIBRA WITH HYDRA MPB

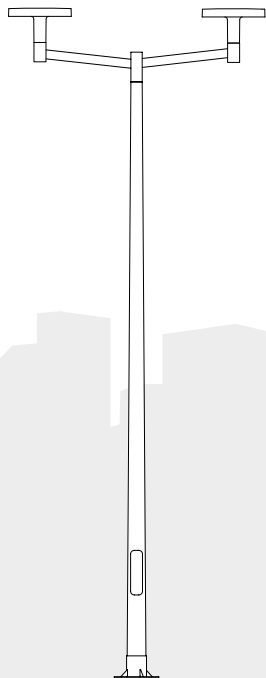
SUPPORT PROTECTIVE SYSTEMS AND FINISHES

Type of durability / atmospheric corrosion category*	Acid-less protection	Stick-less protection	Draw-less protection
Standard Paint Finish: hot dip galvanised** and painted Average durability in corrosive environment C4.	✓	✓	✓
Seafront Paint Finish: hot dip galvanised** and painted High durability in corrosive environment C5M.	✓	✓	✓

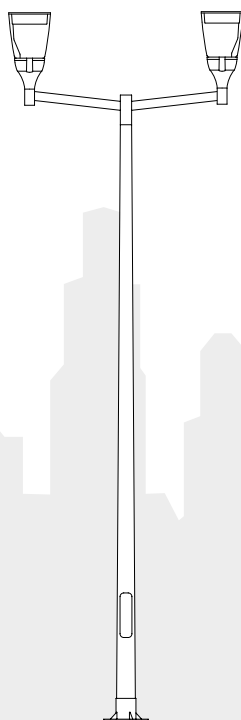
\* According to EN ISO 12944 \*\* According to EN ISO 1461

See expanded information on protection systems and finishes on pages 28 and 514 respectively





LIBRA 200  
WITH SKAT



LIBRA 200  
WITH HYDRA

## ACCESSORIES / REPLACEMENTS

Description	Order code
Triangular 10 mm key to close trapdoor	<b>50-73265</b>



## CL22

Simon CL22 decorative pole, up to 10 m high, with die-cast base of different heights, cylindrical shaft, and post-top luminaire fastening, or lateral luminaire fastening with arms.



Simon **CL22** decorative pole, up to 10 m high, with die-cast base of different heights, cylindrical shaft, and post-top luminaire fastening, or lateral luminaire fastening with arms.

Base with flange plate made of die-cast iron. Shaft and arm(s) made of S235JR-quality carbon steel sheet.

Flush trapdoor. Lateral luminaire fastening through Ø60 mm x 90 mm cylindrical coupling in horizontal position at end of arm, or post-top fastening through Ø60 mm x 100 mm cylindrical coupling or 3/4 "G screw.

IP3X protection rating. To achieve IP44, it is necessary to use an internal junction box, not supplied.

Finish for base painted in Simon DGCLAS, GY9007, GYDECO, BKCLAS, BKTECH or BK9005 colour. Finish for shaft and arm(s) hot dip galvanised and painted in Simon DGCLAS, GY9007, GYDECO, BKCLAS, BKTECH or BK9005 colour. Allows Simon and RAL chart finishes, as well as other protective finishes. Supplied with anchoring bolts, template and double nut to level the base. Luminaires not included. Recommended luminaires: NATH LXF, NATH MXF, NATH SXF, TAU, ALTAIR IXF, ALTAIR IYF, MERAK SXF, MERAK SYF, PRAGA M PRO and PRAGA M BASIC.

## FASTENING SYSTEMS

Luminaire fastening	Post-top luminaire fastening through Ø60 mm x 100 mm coupling or 3/4 "G screw in vertical position Arm(s): Lateral fastening through Ø60 mm x 90 mm coupling in horizontal position
Notes	Anchoring bolts and template provided Luminaires not included

## FINISHES

Arm	Galvanised and painted in DGCLAS, GY9007, GYDECO, BKCLAS, BKTECH or BK9005 colour (Standard Paint)
Shaft	Galvanised and painted in DGCLAS, GY9007, GYDECO, BKCLAS, BKTECH or BK9005 colour (Standard Paint)
Base	Painted in DGCLAS, GY9007, GYDECO, BKCLAS, BKTECH or BK9005 colour (Standard Paint) Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)

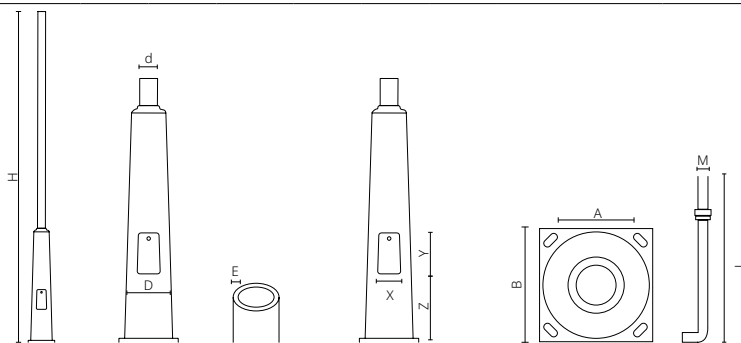
## PHYSICAL FEATURES AND MATERIALS

IP	IP3X. To achieve IP44, it is necessary to use an internal junction box with IP44 (not supplied with the pole)
Shaft	Cylindrical
Trapdoor	850 mm base: flush on plate vertex 1320 mm base: flush on side of plate 2000 mm base: flush on side of plate
Construction	Cylindrical die-cast base assembly through stainless steel screws
Arm	Carbon steel sheet, S235JR quality
Shaft	Carbon steel sheet, S235JR quality
Base	Die-cast iron
Flange plate	Die-cast iron

## REGULATIONS AND CERTIFICATES

Support according to: -

## TECHNICAL INFORMATION\* (Units in mm)






Model	Height	Base		Thickness	Door			Flange plate		Bolts M x L	1 <sup>st</sup> Arm		2 <sup>nd</sup> Arm		Finish	Code
	H	Ø d	Ø D		E	X	Y	Z	A		B	H1	L1	H2		
<b>850 mm base</b>	3,500	60	100	3	137	225	392	260	312	M18x500	-	-	-	-	DGCLAS	<b>S-590926</b>
	3,500	¾"G	100	3	137	225	392	260	312	M18x500	-	-	-	-	DGCLAS	<b>S-591001</b>
	3,500	-	100	3	137	225	392	260	312	M18x500	3,100	400	-	-	DGCLAS	<b>S-590915</b>
	3,500	-	100	3	137	225	392	260	312	M18x500	3,100	400	3,100	400	DGCLAS	<b>S-590918</b>
	4,000	60	100	3	137	225	392	260	312	M18x500	-	-	-	-	DGCLAS	<b>S-590927</b>
	4,000	¾"G	100	3	137	225	392	260	312	M18x500	-	-	-	-	DGCLAS	<b>S-591002</b>
	4,000	-	100	3	137	225	392	260	312	M18x500	3,600	400	-	-	DGCLAS	<b>S-590916</b>
	4,000	-	100	3	137	225	392	260	312	M18x500	3,600	400	3,600	400	DGCLAS	<b>S-590919</b>
	4,500	60	100	3	137	225	392	260	312	M18x500	-	-	-	-	DGCLAS	<b>S-590928</b>
	4,500	¾"G	100	3	137	225	392	260	312	M18x500	-	-	-	-	DGCLAS	<b>S-591003</b>
	4,500	-	100	3	137	225	392	260	312	M18x500	4,100	400	-	-	DGCLAS	<b>S-590917</b>
	4,500	-	100	3	137	225	392	260	312	M18x500	4,100	400	4,100	400	DGCLAS	<b>S-590920</b>

\* Check other measurements or configurations



1320 mm base	3,500	60	100	3	151	240	400	260	312	M18x500	-	-	-	-	DGCLAS	S-590922
	3,500	¾"G	100	3	151	240	400	260	312	M18x500	-	-	-	-	DGCLAS	S-591011
	3,500	-	100	3	151	240	400	260	312	M18x500	3,100	400	-	-	DGCLAS	S-590908
	3,500	-	100	3	151	240	400	260	312	M18x500	3,100	400	3,100	400	DGCLAS	S-590911
	4,000	60	100	3	151	240	400	260	312	M18x500	-	-	-	-	DGCLAS	S-590923
	4,000	¾"G	100	3	151	240	400	260	312	M18x500	-	-	-	-	DGCLAS	S-591012
	4,000	-	100	3	151	240	400	260	312	M18x500	3,600	400	-	-	DGCLAS	S-590923
	4,000	-	100	3	151	240	400	260	312	M18x500	3,600	400	3,600	400	DGCLAS	S-590909
	4,500	60	100	3	151	240	400	260	312	M18x500	-	-	-	-	DGCLAS	S-590924
	4,500	¾"G	100	3	151	240	400	260	312	M18x500	-	-	-	-	DGCLAS	S-591013
	4,500	-	100	3	151	240	400	260	312	M18x500	4,100	400	-	-	DGCLAS	S-590910
	4,500	-	100	3	151	240	400	260	312	M18x500	4,100	400	4,100	400	DGCLAS	S-590913
	5,000	60	100	3	151	240	400	260	312	M18x500	-	-	-	-	DGCLAS	S-590925
	5,000	¾"G	100	3	151	240	400	260	312	M18x500	-	-	-	-	DGCLAS	S-591014
	5,000	-	100	3	151	240	400	260	312	M18x500	4,600	400	-	-	DGCLAS	S-590921
	5,000	-	100	3	151	240	400	260	312	M18x500	4,600	400	4,600	400	DGCLAS	S-590914
	2000 mm base	5,500	60	133	3	150	350	520	300	400	M22x600	-	-	-	-	DGCLAS
5,500		¾"G	133	3	150	350	520	300	400	M22x600	-	-	-	-	DGCLAS	S-591021
5,500		-	133	3	150	350	520	300	400	M22x600	5,100	400	-	-	DGCLAS	S-590982
5,500		-	133	3	150	350	520	300	400	M22x600	5,100	400	5,100	400	DGCLAS	S-590992
6,000		60	133	3	150	350	520	300	400	M22x600	-	-	-	-	DGCLAS	S-590973
6,000		¾"G	133	3	150	350	520	300	400	M22x600	-	-	-	-	DGCLAS	S-591022
6,000		-	133	3	150	350	520	300	400	M22x600	5,600	400	-	-	DGCLAS	S-590983
6,000		-	133	3	150	350	520	300	400	M22x600	5,600	400	5,600	400	DGCLAS	S-590993
6,500		60	133	3	150	350	520	300	400	M22x600	-	-	-	-	DGCLAS	S-590974
6,500		¾"G	133	3	150	350	520	300	400	M22x600	-	-	-	-	DGCLAS	S-591023
6,500		-	133	3	150	350	520	300	400	M22x600	6,100	400	-	-	DGCLAS	S-590984
6,500		-	133	3	150	350	520	300	400	M22x600	6,100	400	6,100	400	DGCLAS	S-590994
7,000		60	133	3	150	350	520	300	400	M22x600	-	-	-	-	DGCLAS	S-590975
7,000		¾"G	133	3	150	350	520	300	400	M22x600	-	-	-	-	DGCLAS	S-591024
7,000		-	133	3	150	350	520	300	400	M22x600	6,600	400	-	-	DGCLAS	S-590985
7,000		-	133	3	150	350	520	300	400	M22x600	6,600	400	6,600	400	DGCLAS	S-590995
7,500		¾"G	133	3	150	350	520	300	400	M22x600	-	-	-	-	DGCLAS	S-591025
7,500		-	133	3	150	350	520	300	400	M22x600	7,100	400	-	-	DGCLAS	S-590986
7,500		-	133	3	150	350	520	300	400	M22x600	7,100	400	7,100	400	DGCLAS	S-590996
8,000		60	133	3	150	350	520	300	400	M22x600	-	-	-	-	DGCLAS	S-590977
8,000		¾"G	133	3	150	350	520	300	400	M22x600	-	-	-	-	DGCLAS	S-591026
8,000		-	133	3	150	350	520	300	400	M22x600	7,600	400	-	-	DGCLAS	S-590987
8,000		-	133	3	150	350	520	300	400	M22x600	7,600	400	7,600	400	DGCLAS	S-590997
9,000		60	133	3	150	350	520	300	400	M22x600	-	-	-	-	DGCLAS	S-590978
9,000		¾"G	133	3	150	350	520	300	400	M22x600	-	-	-	-	DGCLAS	S-591027
9,000		-	133	3	150	350	520	300	400	M22x600	8,600	400	-	-	DGCLAS	S-590988
9,000		-	133	3	150	350	520	300	400	M22x600	8,600	400	8,600	400	DGCLAS	S-590998
10,000		60	133	3	150	350	520	300	400	M22x600	-	-	-	-	DGCLAS	S-590979
10,000		¾"G	133	3	150	350	520	300	400	M22x600	-	-	-	-	DGCLAS	S-591028
10,000		-	133	3	150	350	520	300	400	M22x600	9,600	400	-	-	DGCLAS	S-590989
10,000		-	133	3	150	350	520	300	400	M22x600	9,600	400	9,600	400	DGCLAS	S-590999

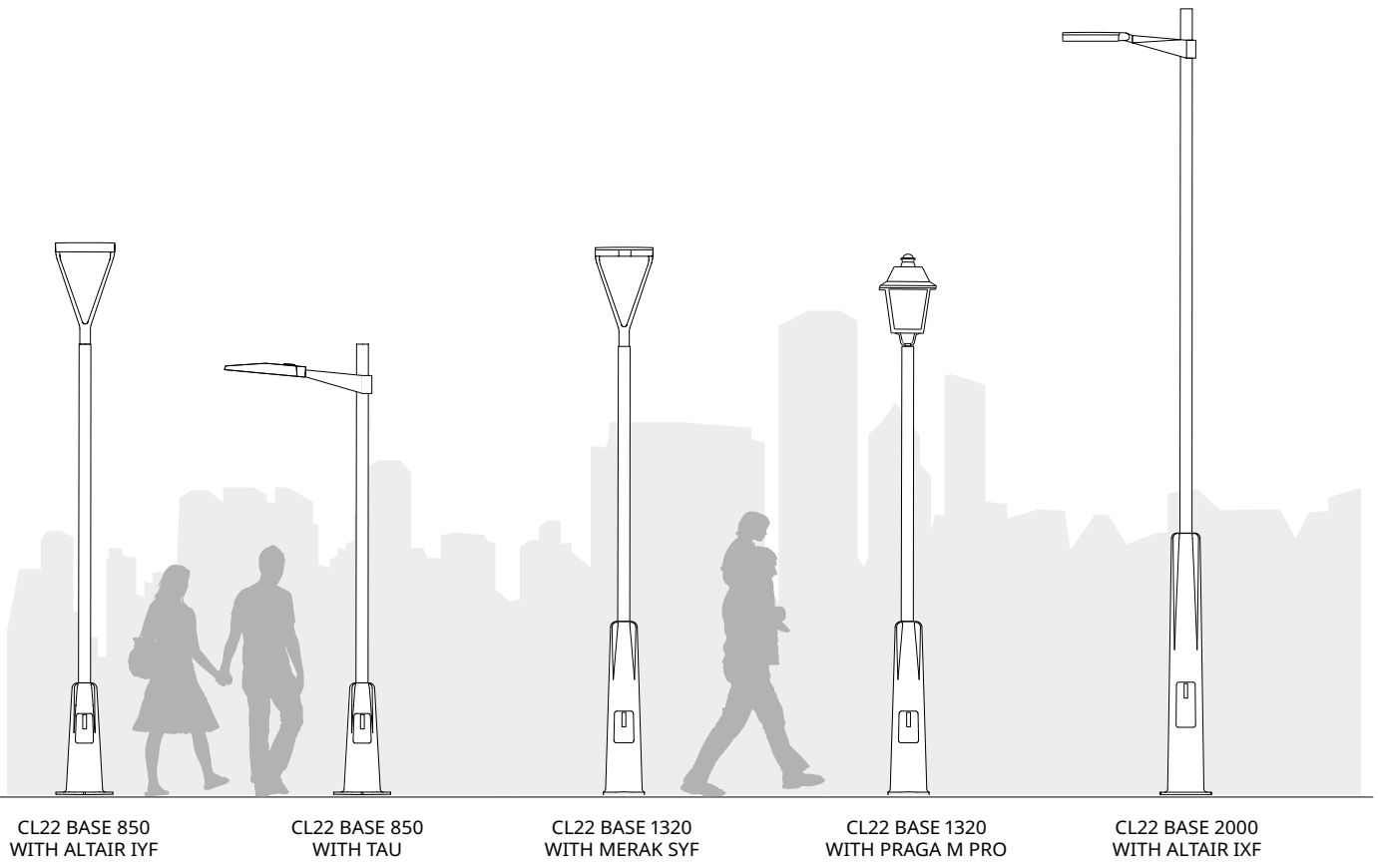
## SUPPORT PROTECTIVE SYSTEMS AND FINISHES

Type of durability / atmospheric corrosion category*		 Acid-less protection	 Stick-less protection	 Draw-less protection
Standard Paint Finish: hot dip galvanised** and painted	Average durability in corrosive environment C4.	✓	✓	✓
Seafront Paint Finish: hot dip galvanised** and painted	High durability in corrosive environment C5M.	✓	✓	✓

\* According to EN ISO 12944 \*\* According to EN ISO 1461

See expanded information on protection systems and finishes on pages 28 and 514 respectively

RECOMMENDED LUMINAIRES (NOT INCLUDED)



CL22 BASE 850  
WITH ALTAIR IYF

CL22 BASE 850  
WITH TAU

CL22 BASE 1320  
WITH MERAK SYF

CL22 BASE 1320  
WITH PRAGA M PRO

CL22 BASE 2000  
WITH ALTAIR IXF

ACCESSORIES / REPLACEMENTS

Description	Order code
Triangular 10 mm key to close trapdoor	50-73265



## CL14

Simon CL14 decorative pole, up to 4 m high, with cylindrical base, cylindrical shaft with two or three sections, and post-top luminaire fastening.



Simon **CL14** decorative pole, up to 4 m high, with cylindrical base, cylindrical shaft with one or two sections, and post-top luminaire fastening.

Flat flange plate with reinforcing ring, base and shaft, with two or three sections, made of S235JR-quality sheet carbon steel. Trim manufactured in die-cast aluminium.

Flush trapdoor with interior reinforcement.

Post-top luminaire fastening through Ø60 mm x 100 mm cylindrical coupling, Ø60 mm shaft or 3/4 "G screw.

IP3X protection rating. To achieve IP44, it is necessary to use an internal junction box, not supplied.

Hot dip galvanised finish and painted in Simon GYDECO, BKCLAS, BKTECH or BK9005 colour. Allows Simon and RAL chart finishes, as well as other protective finishes.

Supplied with anchoring bolts, template and double nut to level the base. Luminaires not included.

Pole with CE-certified constancy of performance.

Recommended luminaires: ALTAIR IYF, MERAK SYF, HYDRA, SKAT, PRAGA M PRO and PRAGA M BASIC.

### FASTENING SYSTEMS

Luminaire fastening	Post-top through Ø60 mm x 100 mm cylindrical coupling, Ø60 mm shaft or 3/4 "G screw in vertical position.
Notes	Anchoring bolts and template provided Luminaires not included

### FINISHES

Shaft	Galvanised and painted in GYDECO, BKCLAS, BKTECH or BK9005 colour (Standard Paint)
Base	Galvanised and painted in GYDECO, BKCLAS, BKTECH or BK9005 colour (Standard Paint)  Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)

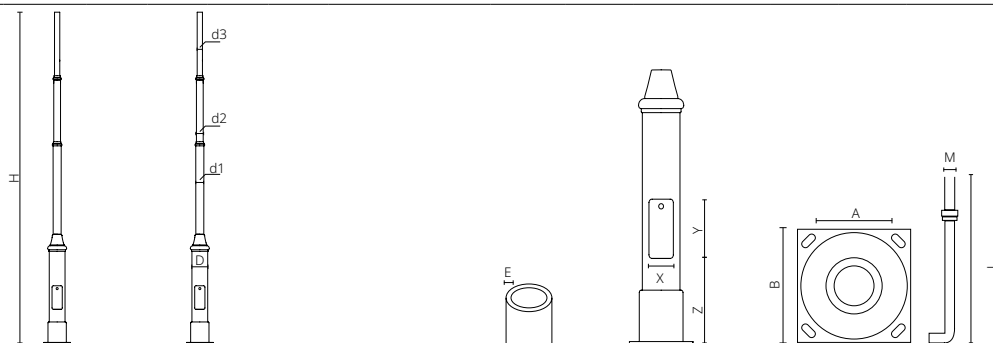
### PHYSICAL FEATURES AND MATERIALS

IP	IP3X. To achieve IP44, it is necessary to use an internal junction box with IP44 (not supplied with the pole)
Shaft	Cylindrical with two or three sections
Base	Cylindrical
Trapdoor	Flush with interior reinforcement
Construction	Models with two or three cylindrical sections
Shaft	Carbon steel sheet, S235JR quality
Trim	Die-cast aluminium
Base	Carbon steel sheet, S235JR quality
Flange plate	Flat steel sheet, S235JR quality, with reinforcing ring.

### REGULATIONS AND CERTIFICATES

Support according to: REGULATION EN 40-5

### TECHNICAL INFORMATION\* (Units in mm)

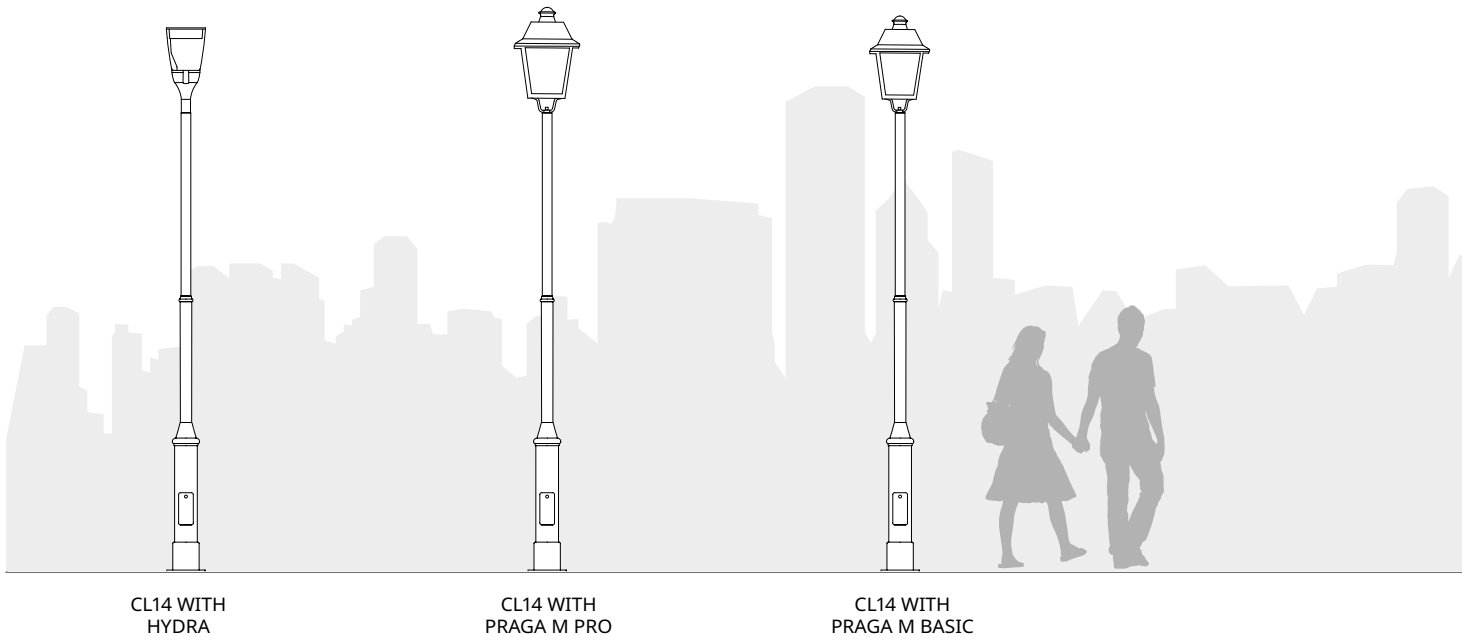


Model	Height	Base				Luminaire fastening	Thick-ness	Door			Flange plate		Bolts	Finish	Code
		Ø D	Ø d1	Ø d2	Ø d3			X	Y	Z	A	B			
Shaft with 2 sections	3,000	178	90	76	-	Ø60 coupling	3	115	250	350	215	300	M18x500	BK9005	<b>N-469300</b>
	3,500	178	90	76	-	Ø60 coupling	3	115	250	350	215	300	M18x500	BK9005	<b>N-469350</b>
	4,000	178	90	76	-	Ø60 coupling	3	115	250	350	215	300	M18x500	BK9005	<b>N-469400</b>
Shaft with 3 sections	3,500	178	90	76	60	Ø60	3	115	250	350	215	300	M18x500	BK9005	<b>N-479350</b>
	4,000	178	90	76	60	Ø60	3	115	250	350	215	300	M18x500	BK9005	<b>N-479400</b>

\* Check other measurements or configurations



RECOMMENDED LUMINAIRES (NOT INCLUDED)



CL14 WITH HYDRA

CL14 WITH PRAGA M PRO

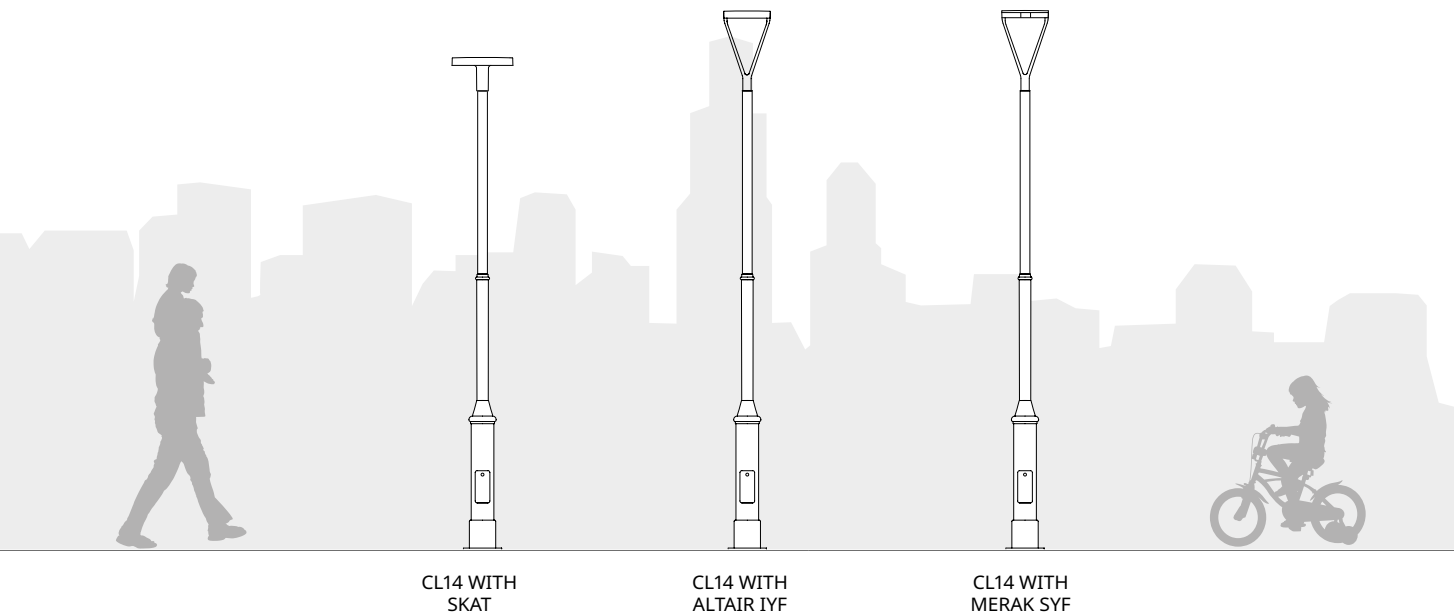
CL14 WITH PRAGA M BASIC

SUPPORT PROTECTIVE SYSTEMS AND FINISHES

Type of durability / atmospheric corrosion category*	Acid-less protection	Stick-less protection	Draw-less protection
Standard Paint Finish: hot dip galvanised** and painted	Average durability in corrosive environment C4. ✓	✓	✓
Seafront Paint Finish: hot dip galvanised** and painted	High durability in corrosive environment C5M. ✓	✓	✓

\* According to EN ISO 12944 \*\* According to EN ISO 1461

See expanded information on protection systems and finishes on pages 28 and 514 respectively



CL14 WITH SKAT

CL14 WITH ALTAIR IYF

CL14 WITH MERAK SYF

ACCESSORIES / REPLACEMENTS

Description	Order code
Triangular 10 mm key to close trapdoor	50-73265



## CL12

Simon CL12 decorative pole, up to 3.5 m high, cylindrical base and shaft and post-top luminaire fastening.



Simon **CL12** decorative pole, up to 3.5 m high, cylindrical base and shaft and post-top luminaire fastening. Flat flange plate with reinforcing ring, base and shaft made of S235JR-quality sheet carbon steel. Trim manufactured in die-cast aluminium. Flush trapdoor with interior reinforcement. Post-top luminaire fastening through  $\varnothing 60$  mm x 100 mm cylindrical coupling or 3/4 "G screw. IP3X protection rating. To achieve IP44, it is necessary to use an internal junction box, not supplied. Hot dip galvanised finish and painted in Simon GYDECO, BKCLAS, BKTECH or BK9005 colour. Allows Simon and RAL chart finishes, as well as other protective finishes. Supplied with anchoring bolts, template and double nut to level the base. Luminaires not included. Pole with CE-certified constancy of performance. Recommended luminaires: ALTAIR IYF, MERAK SYF, HYDRA, SKAT, PRAGA M PRO and PRAGA M BASIC.

## FASTENING SYSTEMS

Luminaire fastening	Post-top through $\varnothing 60$ mm x 100 mm cylindrical coupling or 3/4 "G screw in vertical position.
Notes	Anchoring bolts and template provided Luminaires not included

## PHYSICAL FEATURES AND MATERIALS

IP	IP3x. To achieve IP44, it is necessary to use an internal junction box with IP44 (not supplied with the pole)
Shaft	Cylindrical
Base	Cylindrical
Trapdoor	Flush with interior reinforcement
Construction	Two cylindrical sections in different diameters
Shaft	Carbon steel sheet, S235JR quality
Trim	Die-cast aluminium
Base	Carbon steel sheet, S235JR quality
Flange plate	Flat steel sheet, S235JR quality, with reinforcing ring.
Trim	Gravity die-cast aluminium

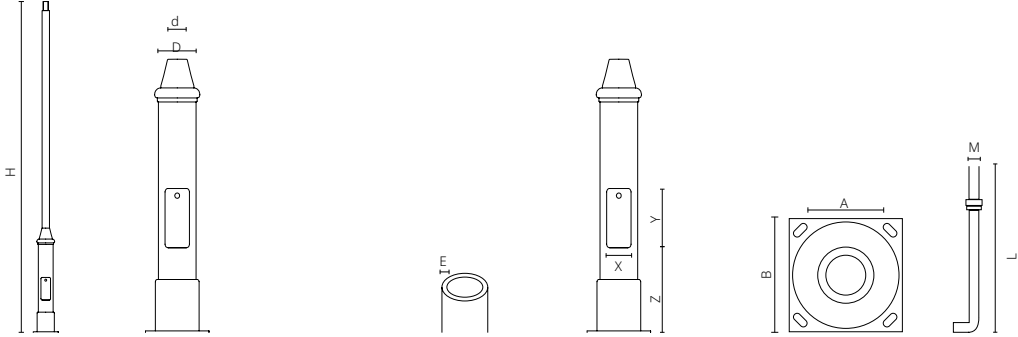
## FINISHES

Arm	Galvanised and painted in GYDECO, BKCLAS, BKTECH or BK9005 colour (Standard Paint)
Shaft	Galvanised and painted in GYDECO, BKCLAS, BKTECH or BK9005 colour (Standard Paint) Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)

## REGULATIONS AND CERTIFICATES

Support according to: REGULATION EN 40-5

## TECHNICAL INFORMATION\* (Units in mm)

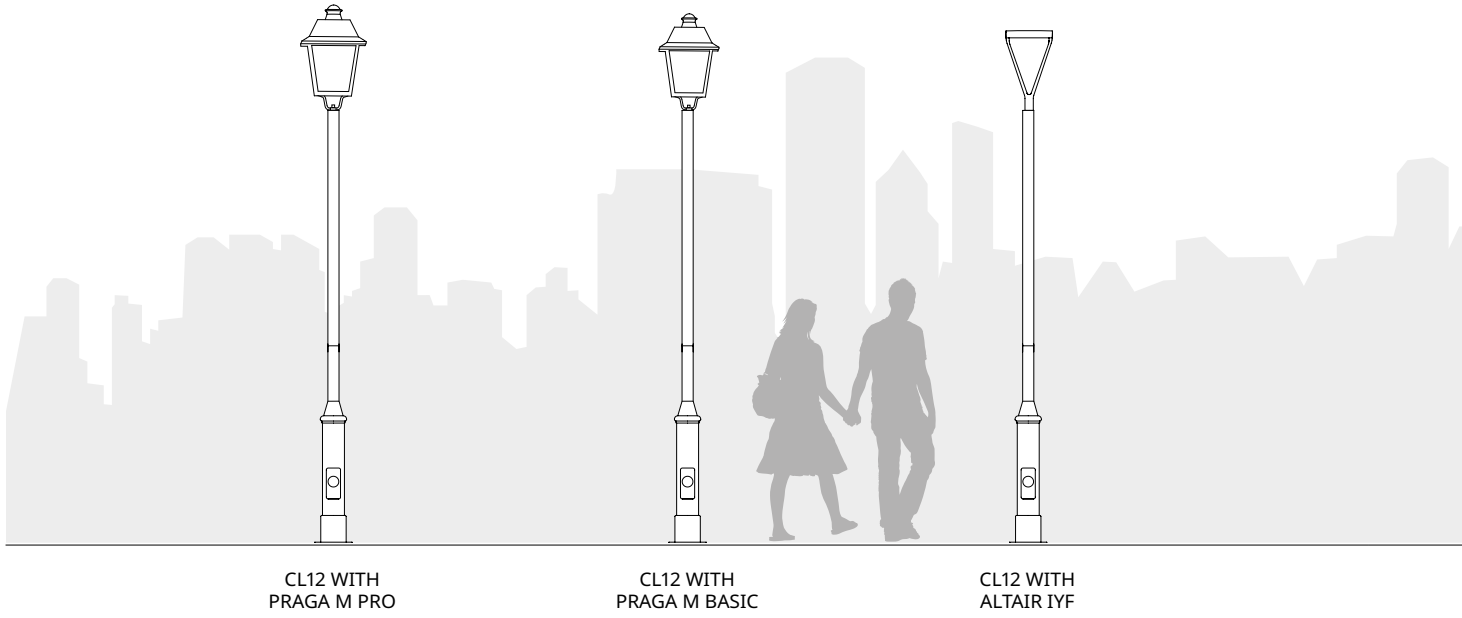


Height	Base		Luminaire fastening	Thickness	Door			Flange plate		Bolts	Finish	Code
H	$\varnothing D$	$\varnothing d$		E	X	Y	Z	A	B	M x L		
3,000	178	90	$\varnothing 60$ coupling	3	115	250	350	215	300	M18x500	BK9005	<b>N-486300</b>
3,500	178	90	$\varnothing 60$ coupling	3	115	250	350	215	300	M18x500	BK9005	<b>N-486350</b>

\* Check other measurements or configurations



RECOMMENDED LUMINAIRES (NOT INCLUDED)






CL12 WITH PRAGA M PRO

CL12 WITH PRAGA M BASIC

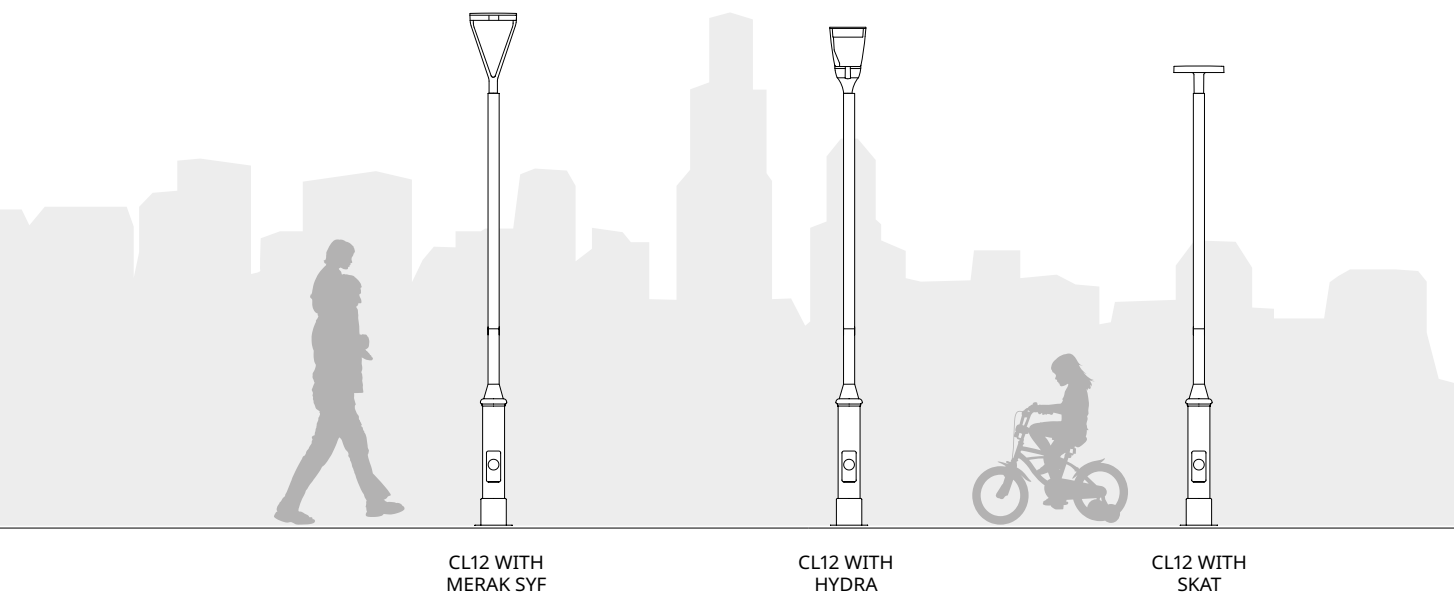
CL12 WITH ALTAIR IYF

SUPPORT PROTECTIVE SYSTEMS AND FINISHES

	Type of durability / atmospheric corrosion category*	Acid-less protection 	Stick-less protection 	Draw-less protection 
Standard Paint Finish: hot dip galvanised** and painted	Average durability in corrosive environment C4.	✓	✓	✓
Seafront Paint Finish: hot dip galvanised** and painted	High durability in corrosive environment C5M.	✓	✓	✓

\* According to EN ISO 12944 \*\* According to EN ISO 1461

See expanded information on protection systems and finishes on pages 28 and 514 respectively



ACCESSORIES / REPLACEMENTS

Description	Order code
Triangular 10 mm key to close trapdoor	50-73265



# CLA16

Simon CLA16 decorative pole, up to 3.9 m high, cylindrical base and cylindrical shaft, and post-top luminaire fastening.



Simon **CLA16** decorative pole, up to 3.9 m high, cylindrical base and cylindrical shaft, and post-top luminaire fastening. Flat flange plate with gussets, base, trim and shaft made of S235JR-quality carbon steel sheet. Flush trapdoor with interior reinforcement.  
 Post-top luminaire fastening through Ø60 mm x 100 mm cylindrical coupling or 3/4 "G screw.  
 IP3X protection rating. To achieve IP44, it is necessary to use an internal junction box, not supplied.  
 Hot dip galvanised finish. Allows Simon and RAL chart finishes, as well as other protective finishes. Supplied with anchoring bolts, template and double nut to level the base. Luminaires not included.  
 Pole with CE-certified constancy of performance.  
 Recommended luminaires: ALTAIR IXF, ALTAIR IYF, MERAK SXF, MERAK SYF, HYDRA and SKAT.

**FASTENING SYSTEMS**

Luminaire fastening	Post-top through Ø60 mm x 100 mm cylindrical coupling or 3/4 "G screw in vertical position.
Notes	Anchoring bolts and template provided Luminaires not included

**FINISHES**

Arm	Galvanised
Shaft	Galvanised
	Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)

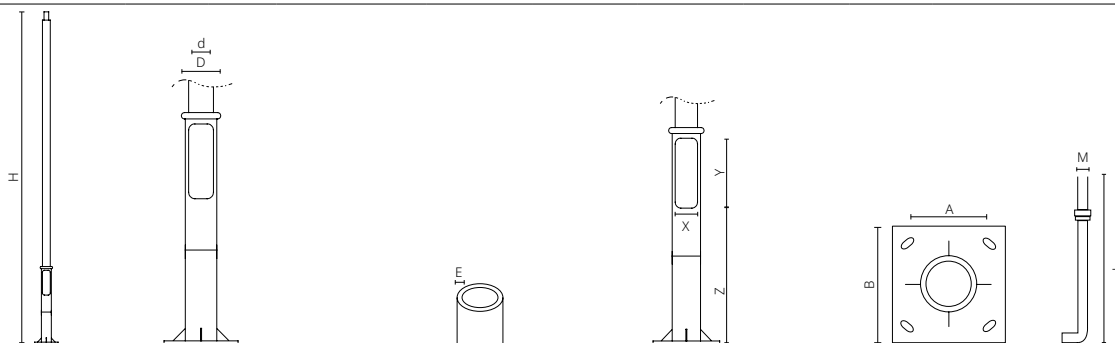
**PHYSICAL FEATURES AND MATERIALS**

IP	IP3x. To achieve IP44, it is necessary to use an internal junction box with IP44 (not supplied with the pole)
Shaft	Cylindrical
Base	Cylindrical
Trapdoor	Flush with interior reinforcement
Construction	Two cylindrical sections in different diameters
Shaft	Carbon steel sheet, S235JR quality
Base	Carbon steel sheet, S235JR quality
Flange plate	Flat steel sheet, S235JR quality with gussets

**REGULATIONS AND CERTIFICATES**

Support according to: REGULATION EN 40-5

**TECHNICAL INFORMATION\*** (Units in mm)

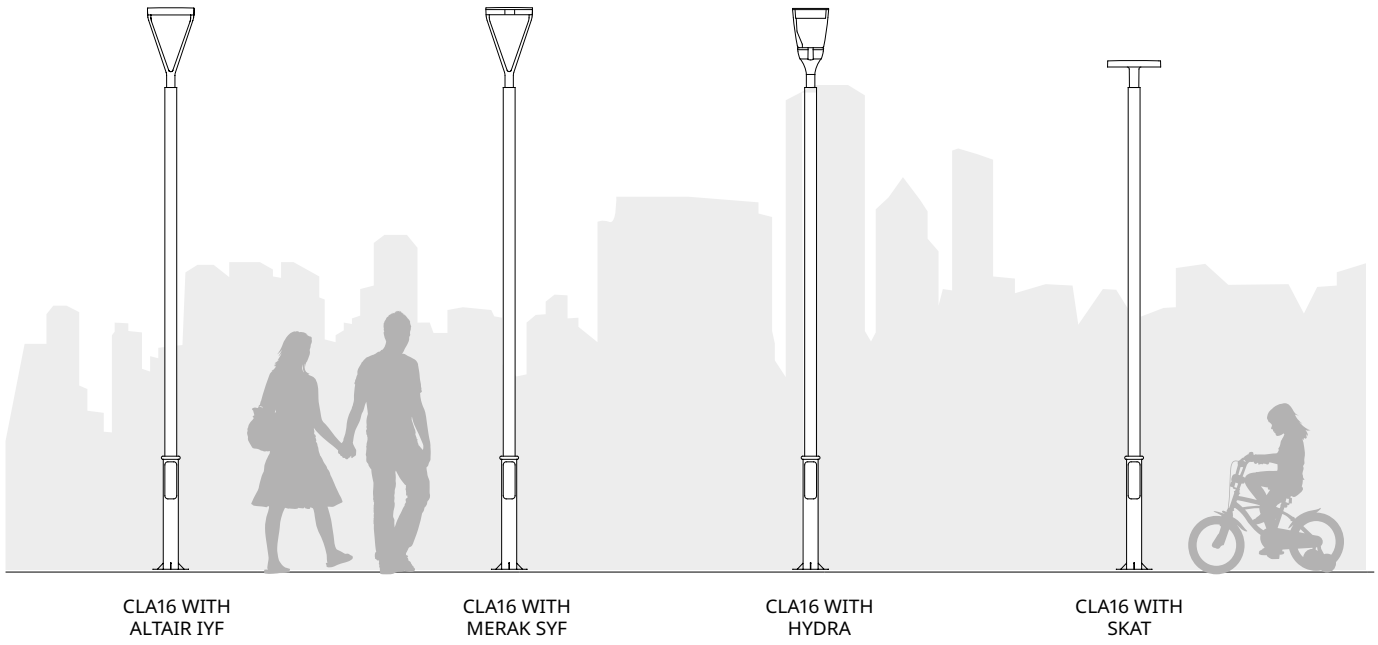


Height	Base		Luminaire fastening	Thickness	Door			Flange plate		Bolts	Code
H	Ø D	Ø d		E	X	Y	Z	A	B	M x L	
3,600	127	100	Ø60 coupling	3	100	300	650	215	300	M18x500	<b>D-480036</b>
3,600	127	100	3/4 "G	3	100	300	650	215	300	M18x500	<b>5-512752</b>
3,900	127	100	Ø60 coupling	3	100	300	650	215	300	M18x500	<b>D-480039</b>
3,900	127	100	3/4 "G	3	100	300	650	215	300	M18x500	<b>5-512753</b>

\* Check other measurements or configurations






RECOMMENDED LUMINAIRES (NOT INCLUDED)



ACCESSORIES / REPLACEMENTS

Description	Order code
Triangular 10 mm key to close trapdoor	50-73265
Flush door replacement, up to 4 m pole height, galvanised finish.	5-531790

SUPPORT PROTECTIVE SYSTEMS AND FINISHES

Type of durability / atmospheric corrosion category*	Acid-less protection 	Stick-less protection 	Draw-less protection 
Standard finish: hot dip galvanised**	✓		
Standard Paint Finish: hot dip galvanised** and painted	✓	✓	✓
Seafront Paint Finish: hot dip galvanised** and painted	✓	✓	✓

\* According to EN ISO 12944 \*\* According to EN ISO 1461

See expanded information on protection systems and finishes on pages 28 and 514 respectively





# TIL

Simon TIL decorative pole, up to 9 m high, cylindrical, and suspended fastening for spotlights with arms.



Simon **TIL** decorative pole, up to 9 m high, cylindrical, and suspended fastening for spotlights with arms. Flat flange plate with reinforcing ring and gussets, shaft and arm(s) made of S235JR-quality carbon steel sheet. Flush trapdoor with interior reinforcement. Suspended fastening for spotlight through three holes of Ø11 mm, Ø18 mm y Ø11 mm in the arm. IP3X protection rating. To achieve IP44, it is necessary to use an internal junction box, not supplied. Hot dip galvanised finish. Allows Simon and RAL chart finishes, as well as other protective finishes. Supplied with anchoring bolts, template and double nut to level the base. Luminaires not included. Pole with CE-certified constancy of performance. Pole meets City of Barcelona product specifications. Recommended luminaires: LORE, KOS, IRAYA LXF, IRAYA MXF, FOGO, MILOS MXF and MILOS SXF.

### FASTENING SYSTEMS

Luminaire fastening	Suspended fastening with three holes of Ø11 mm, Ø18 mm and Ø11 mm in the arm
Notes	Anchoring bolts and template provided Luminaires not included

### FINISHES

Arm	Galvanised
Shaft	Galvanised
	Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)

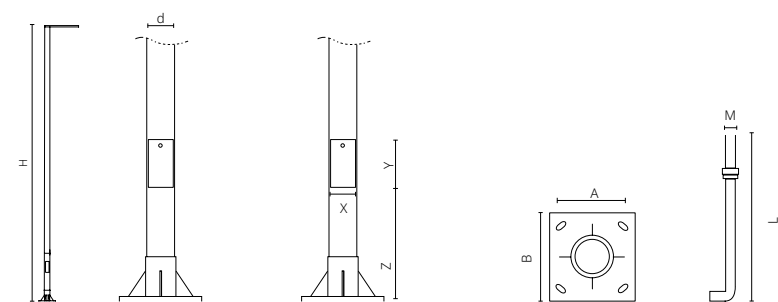
### PHYSICAL FEATURES AND MATERIALS

IP	IP3x. To achieve IP44, it is necessary to use an internal junction box with IP44 (not supplied with the pole)
Shaft	Cylindrical
Trapdoor	Flush with interior reinforcement
Construction	Made up of shaft and arm(s)
Arm	Carbon steel sheet, S235JR quality
Shaft	Carbon steel sheet, S235JR quality
Flange plate	Flat steel sheet, S235JR quality, with reinforcing ring and gussets

### REGULATIONS AND CERTIFICATES

Support according to:	REGULATION EN 40-5 Barcelona City Hall Conditions
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### TECHNICAL INFORMATION\* (Units in mm)

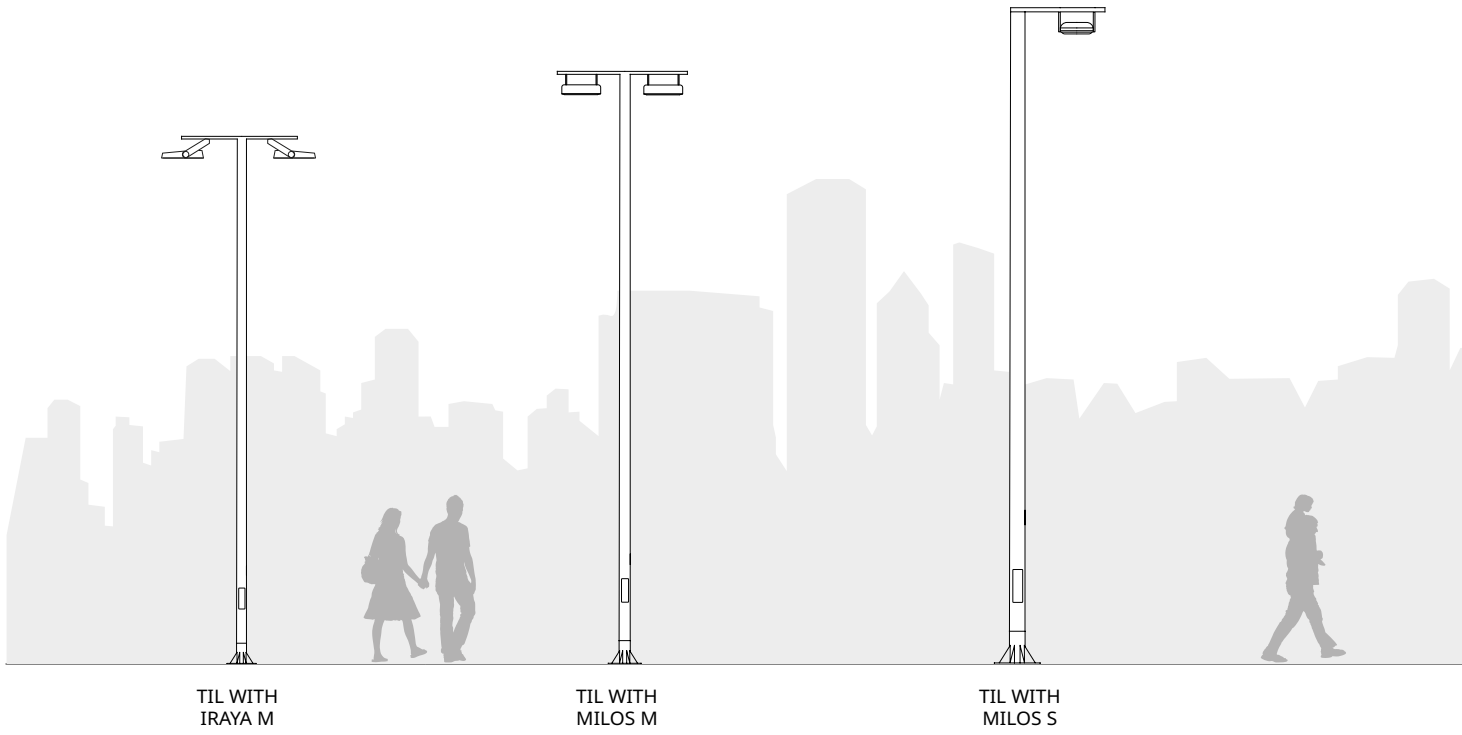


Height	Base	Door			Flange plate		Bolts	1 <sup>st</sup> Arm		2 <sup>nd</sup> Arm		Code
		H	Ø d	X	Y	Z		A	B	M x L	H1	
4,000	127	100	300	700	210	300	M20 x 500	4,000	770	-	-	<b>S-592140</b>
4,000	127	100	300	700	210	300	M20 x 500	4,000	770	4,000	770	<b>S-592240</b>
4,500	127	100	300	700	210	300	M20 x 500	4,500	770	-	-	<b>S-592145</b>
4,500	127	100	300	700	210	300	M20 x 500	4,500	770	4,500	770	<b>S-592245</b>
5,000	127	100	300	700	210	300	M20 x 500	5,000	770	-	-	<b>S-592150</b>
5,000	127	100	300	700	210	300	M20 x 500	5,000	770	5,000	770	<b>S-592250</b>
5,500	127	100	300	700	210	300	M20 x 500	5,500	770	-	-	<b>S-592155</b>
5,500	127	100	300	700	210	300	M20 x 500	5,500	770	5,500	770	<b>S-592255</b>
6,000	127	100	300	700	300	400	M22 x 600	6,000	770	-	-	<b>S-592160</b>
6,000	127	100	300	700	300	400	M22 x 600	6,000	770	6,000	770	<b>S-592260</b>
6,500	127	100	300	700	300	400	M22 x 600	6,500	770	-	-	<b>S-592165</b>
6,500	127	100	300	700	300	400	M22 x 600	6,500	770	6,500	770	<b>S-592265</b>
7,000	127	100	300	700	300	400	M22 x 600	7,000	770	-	-	<b>S-592171</b>
7,000	127	100	300	700	300	400	M22 x 600	7,000	770	7,000	770	<b>S-592271</b>
7,500	127	100	300	700	300	400	M22 x 600	7,500	770	-	-	<b>S-592176</b>
7,500	127	100	300	700	300	400	M22 x 600	7,500	770	7,500	770	<b>S-592276</b>
8,000	152	100	300	700	300	400	M22 x 600	8,000	770	-	-	<b>S-592180</b>
8,000	152	100	300	700	300	400	M22 x 600	8,000	770	8,000	770	<b>S-592280</b>
8,500	152	100	300	700	300	400	M22 x 600	8,500	770	-	-	<b>S-592185</b>
8,500	152	100	300	700	300	400	M22 x 600	8,500	770	8,500	770	<b>S-592285</b>
9,000	152	100	300	700	300	400	M22 x 600	9,000	770	-	-	<b>S-592190</b>
9,000	152	100	300	700	300	400	M22 x 600	9,000	770	9,000	770	<b>S-592290</b>




\* Check other measurements or configurations



RECOMMENDED LUMINAIRES (NOT INCLUDED)

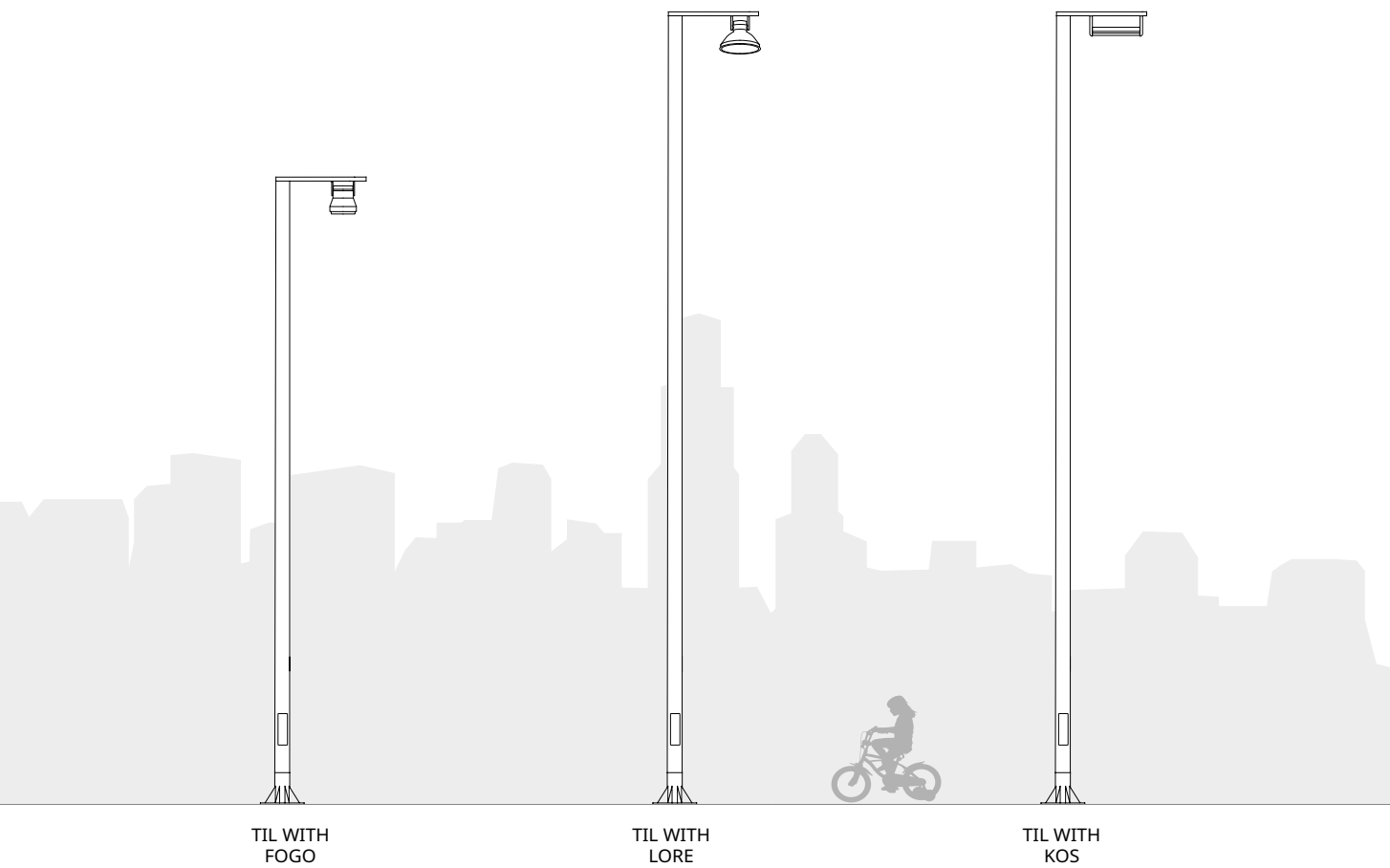


SUPPORT PROTECTIVE SYSTEMS AND FINISHES

	Type of durability / atmospheric corrosion category*	Acid-less protection 	Stick-less protection 	Draw-less protection 
Standard finish: hot dip galvanised**	-	✓		
Standard Paint Finish: hot dip galvanised** and painted	Average durability in corrosive environment C4.	✓	✓	✓
Seafront Paint Finish: hot dip galvanised** and painted	High durability in corrosive environment C5M.	✓	✓	✓

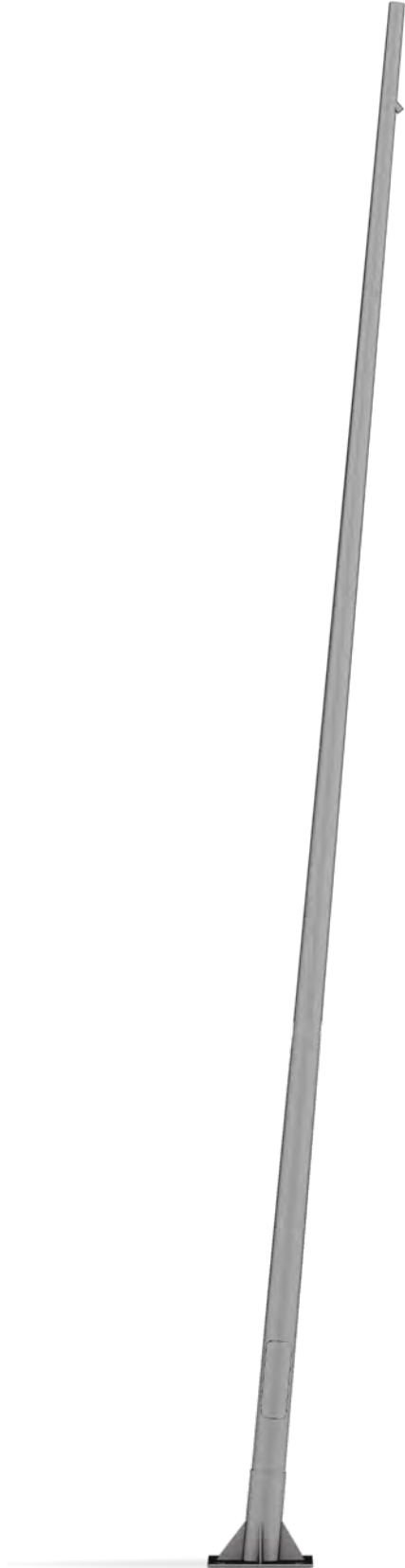
\* According to EN ISO 12944 \*\* According to EN ISO 1461

See expanded information on protection systems and finishes on pages 28 and 514 respectively



ACCESSORIES / REPLACEMENTS

Description	Order code
Triangular 10 mm key to close trapdoor	50-73265



# TORT

(CL1 5°)

Simon TORT (CL1 5°) decorative pole, up to 9 m high, conical tapering, 5° angle to vertical axis, and lateral fastening for spotlights.



Simon **TORT (CL1 5°)** decorative pole, up to 9 m high, conical tapering, 5° angle to vertical axis, and lateral fastening for spotlights. Flange plate with reinforcing ring and gussets, and shaft made of S235JR-quality carbon steel sheet. Flush trapdoor with interior reinforcement and interior sleeve. Lateral fastening for spotlights through M12 screw terminals on falling part of angle, 500 mm under the top. IP3X protection rating. To achieve IP44, it is necessary to use an internal junction box, not supplied. Hot dip galvanised and painted finish. Allows Simon and RAL chart finishes, as well as other protective finishes. Supplied with anchoring bolts, template and double nut to level the base, as well as screws for spotlight fastening. Luminaires not included. Pole with CE-certified constancy of performance. Pole meets City of Barcelona product specifications. Recommended luminaires: LORE, KOS, IRAYA LXf, IRAYA MXf, FOGO, MILOS MXf and MILOS SXf.

**FASTENING SYSTEMS**

Luminaire fastening	Lateral fastening through M12 screw terminal 500 mm under the top and wire outlet
Notes	Anchoring bolts and template provided Supplied with spotlight fastening screw and nut Luminaires not included

**FINISHES**

Shaft	Galvanised  Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)
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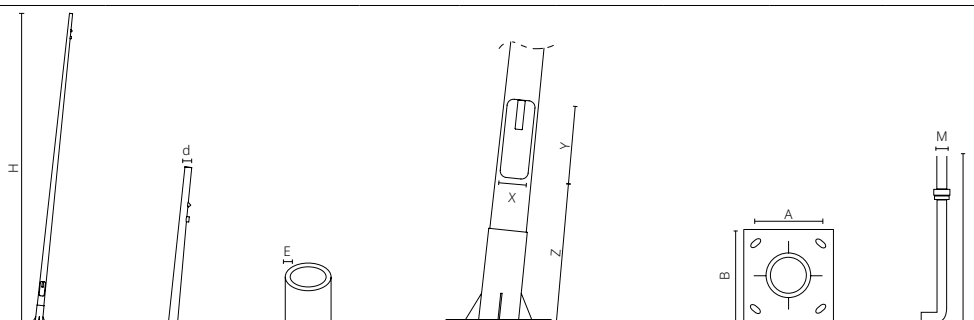
**PHYSICAL FEATURES AND MATERIALS**

IP	IP3X. To achieve IP44, it is necessary to use an internal junction box with IP44 (not supplied on the pole).
Shaft	Conical tapering
Trapdoor	Flush with interior reinforcement and interior sleeve.
Construction	Support manufactured in a single section
Shaft	Carbon steel sheet, S235JR quality
Flange plate	Carbon steel sheet, S235JR quality

**REGULATIONS AND CERTIFICATES**

Support according to	REGULATION EN 40-5
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**TECHNICAL INFORMATION\*** (Units in mm)



Model	Height	Diameter	Thickness	Door			Flange plate		Bolts	Code
	H			Ø d	E	X	Y	Z		
<b>100</b>	5,000	60	4	95	300	550	210	300	M20 x 500	<b>S-586005</b>
	6,000	60	4	110	300	550	300	400	M22 x 600	<b>S-586006</b>
	7,000	60	4	115	300	550	300	400	M22 x 600	<b>S-586007</b>
	8,000	76	4	120	300	550	300	400	M22 x 600	<b>S-586008</b>
	9,000	76	4	125	300	550	300	400	M22 x 600	<b>S-586009</b>
	10,000	76	4	130	300	550	350	500	M24 x 800	<b>S-586010</b>

\* Check other measurements or configurations



RECOMMENDED LUMINAIRES (NOT INCLUDED)

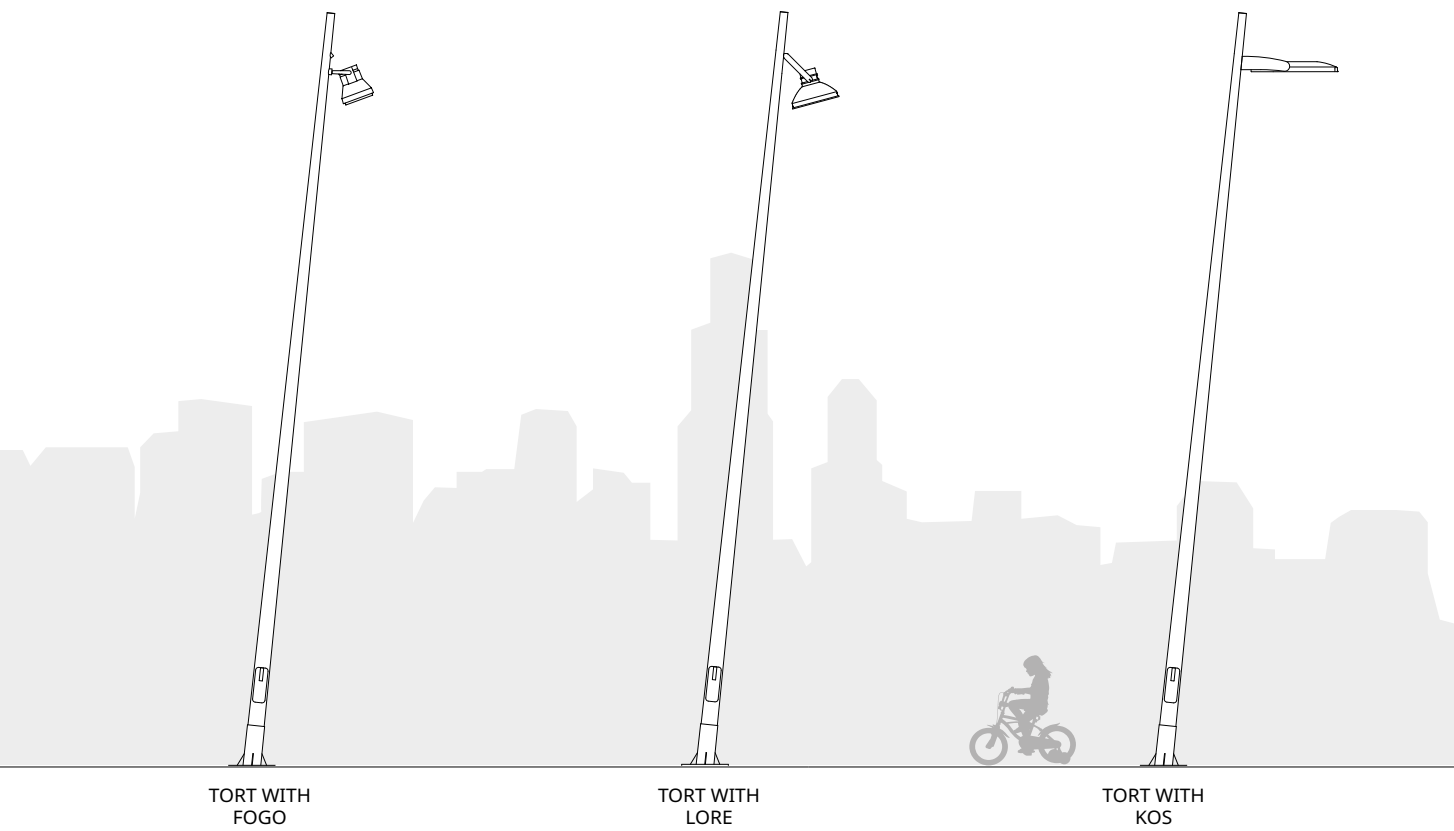


SUPPORT PROTECTIVE SYSTEMS AND FINISHES

Type of durability / atmospheric corrosion category*	Acid-less protection	Stick-less protection	Draw-less protection
Standard finish: hot dip galvanised**	✓		
Standard Paint Finish: hot dip galvanised** and painted	✓	✓	✓
Seafront Paint Finish: hot dip galvanised** and painted	✓	✓	✓

\* According to EN ISO 12944 \*\* According to EN ISO 1461

See expanded information on protection systems and finishes on pages 28 and 514 respectively



TORT WITH FOGO

TORT WITH LORE

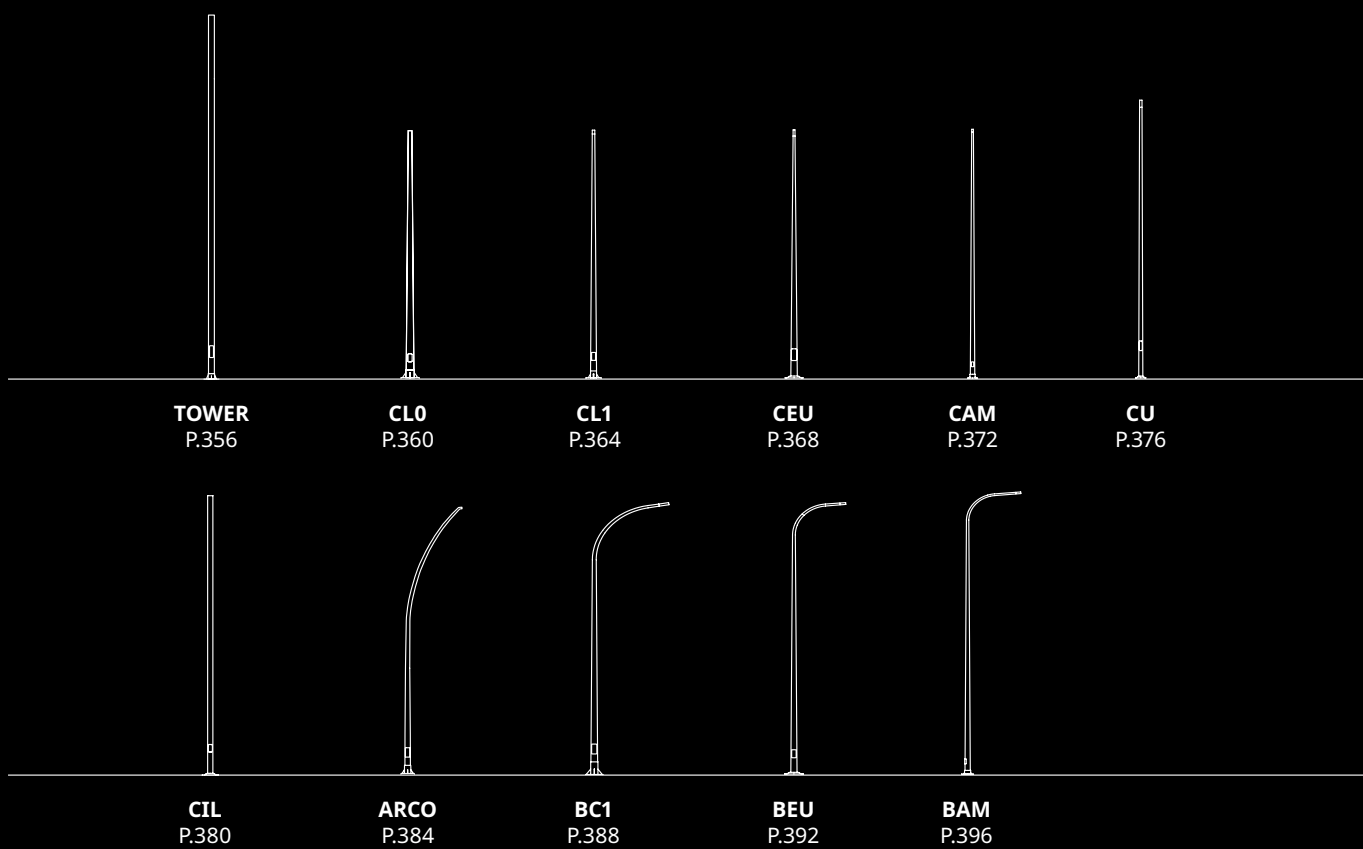
TORT WITH KOS

### ACCESSORIES / REPLACEMENTS

Description	Order code
Triangular 10 mm key to close trapdoor	50-73265



# FUNCTIONAL SUPPORTS



Simon's full high-performance functional support proposal, both straight and curved poles, with different options of protection finishes.





# TOWER

Simon TOWER decorative pole, up to 16 m high, cylindrical, lateral fastening for spotlights.



Simon **TOWER** decorative pole, up to 16 m high, cylindrical, lateral fastening for spotlights.  
 Flat flange plate with reinforcing ring and gussets, shaft and fastening rings made of S235JR-quality sheet carbon steel.  
 Three flush trapdoors with interior reinforcement.  
 Lateral spotlight fastening with rings, with three M12 screw terminals located at 120°, with various ring orientations.  
 IP3X protection rating. To achieve IP44, it is necessary to use an internal junction box, not supplied.  
 Hot dip galvanised finish. Allows Simon and RAL chart finishes, as well as other protective finishes.  
 Supplied with anchoring bolts, template and double nut to level the base. Luminaires not included.  
 Pole with CE-certified constancy of performance.  
 Recommended luminaires: LORE, KOS, IRAYA LXF, IRAYA MXF, FOGO, MILOS MXF and MILOS SXF.

## FASTENING SYSTEMS

Luminaire fastening	Lateral fastening through separate rings with three M12 screw terminals placed at 120°
Notes	14 and 16 m models are supplied disassembled Anchoring bolts and template provided. Luminaires not included.

## FINISHES

Shaft	Galvanised  Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)
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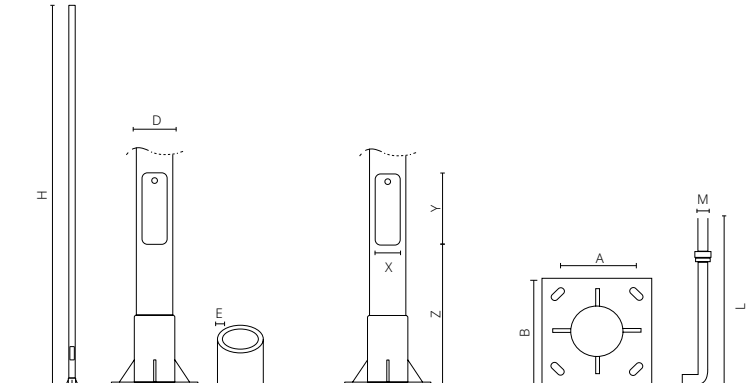
## PHYSICAL FEATURES AND MATERIALS

IP	IP3X. To achieve IP44, it is necessary to use an internal junction box with IP44 (not supplied on the pole).
Shaft	Cylindrical
Trapdoor	Three flush doors with interior reinforcement
Construction	Support manufactured in one or two sections
Shaft	Carbon steel sheet, S235JR quality
Flange plate	Recessed steel sheet, S235JR quality

## REGULATIONS AND CERTIFICATES

Support according to	REGULATION EN 40-5
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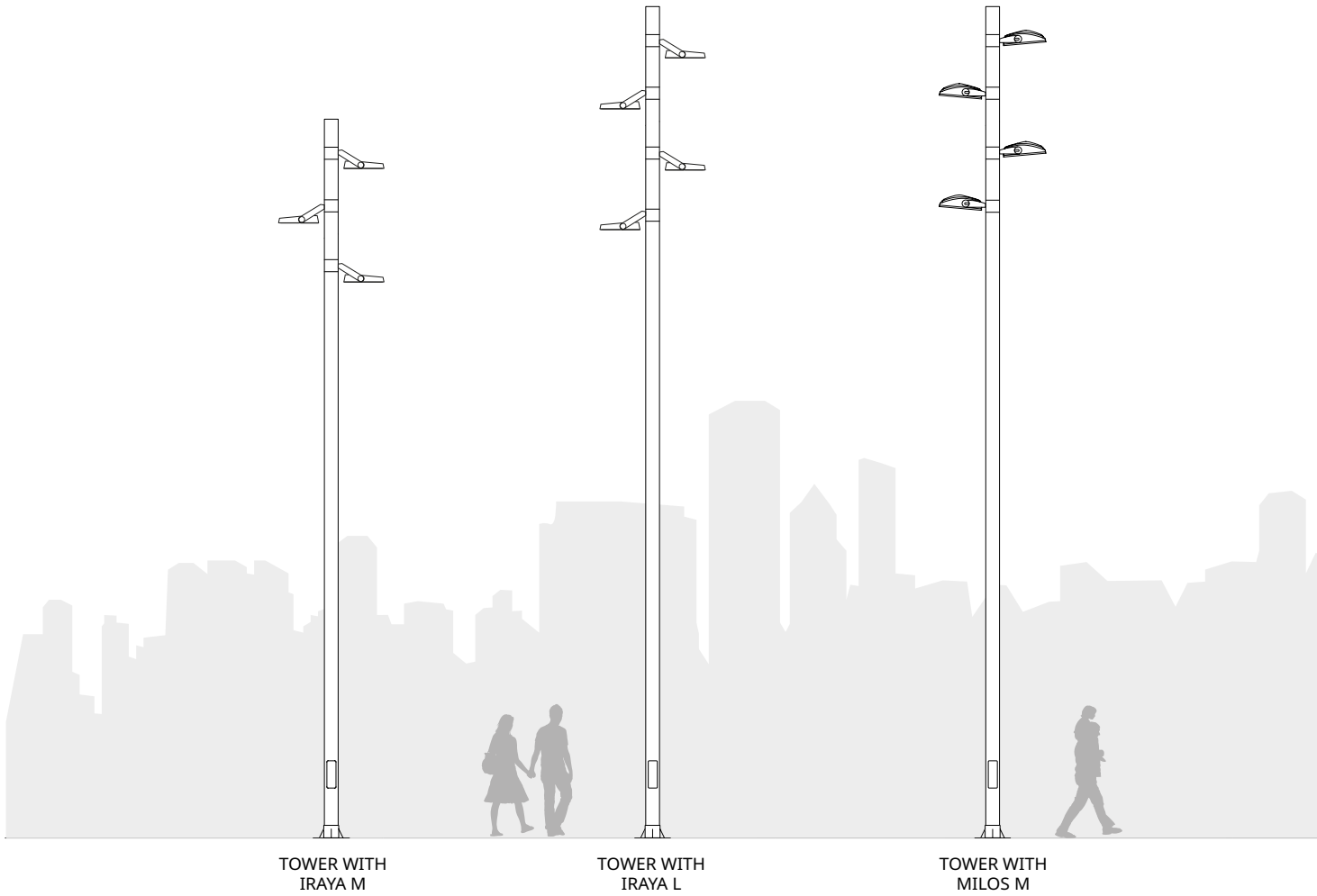
## TECHNICAL INFORMATION\* (Units in mm)



Height	Diameter	Thickness	Door			Flange plate		Bolts	H1	H2	H3	H4	H5	H6	Code
H	∅ D	E	X	Y	Z	A	B	M x L							
9,000	219	4	140	300	550	350	500	M24x800	6,200	7,250	8,300				<b>S-580009</b>
12,000	219	4	140	300	550	350	500	M24x800	8,300	9,300	10,300	11,300			<b>S-580012</b>
14,000	219	8	140	300	550	350	500	M24x800	9,300	10,300	11,300	12,300	13,300		<b>S-580014</b>
16,000	244	8	140	300	550	350	500	M24x800	10,300	11,300	12,300	13,300	14,300	15,300	<b>S-580016</b>

\* Check other measurements or configurations

RECOMMENDED LUMINAIRES (NOT INCLUDED)






TOWER WITH IRAYA M

TOWER WITH IRAYA L

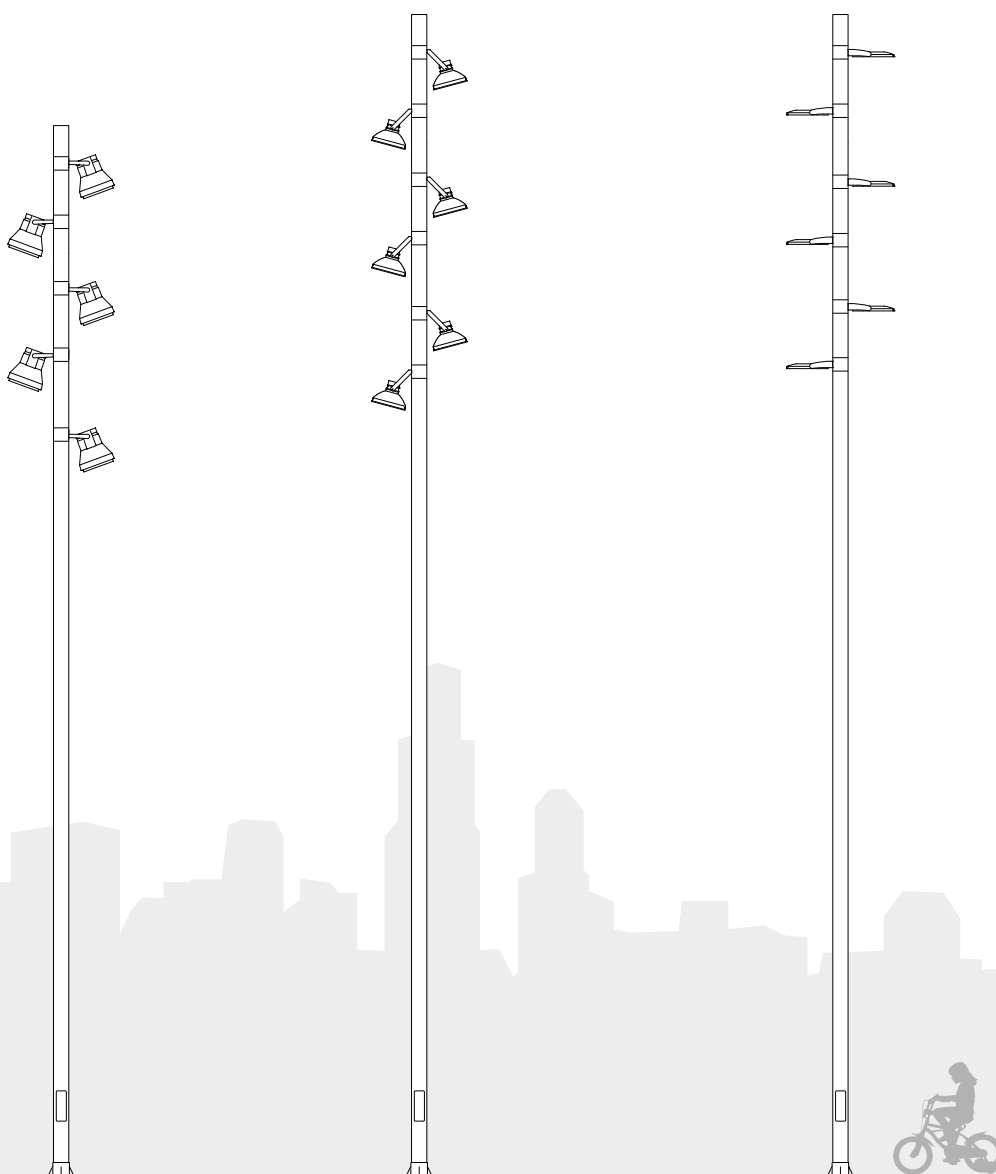
TOWER WITH MILOS M

SUPPORT PROTECTIVE SYSTEMS AND FINISHES

Type of durability / atmospheric corrosion category*	Acid-less protection 	Stick-less protection 	Draw-less protection 
Standard finish: hot dip galvanised**	✓		
Standard Paint Finish: hot dip galvanised** and painted	✓	✓	✓
Seafrost Paint Finish: hot dip galvanised** and painted	✓	✓	✓

\* According to EN ISO 12944 \*\* According to EN ISO 1461

See expanded information on protection systems and finishes on pages 28 and 514 respectively



TOWER WITH  
FOGO

TOWER WITH  
LORE

TOWER WITH  
KOS

ACCESSORIES / REPLACEMENTS

Description	Order code
Triangular 10 mm key to close trapdoor	50-73265





# CLO

Simon CL0 functional pole, up to 12 m high, conical tapering and post-top luminaire fastening.



Simon **CLO** functional pole, up to 12 m high, conical tapering and post-top luminaire fastening.  
Flat flange plate with reinforcing ring and gussets and shaft made of S235JR-quality sheet carbon steel.  
Flush trapdoor with interior reinforcement.

Post-top luminaire fastening using Ø60 mm x 100 mm or Ø76 mm x 100 mm cylindrical terminal, and using conical finish for tops with larger diameters. IP3X protection rating. To achieve IP44, it is necessary to use an internal junction box, not supplied.

Hot dip galvanised finish. Allows Simon and RAL chart finishes, as well as other protective finishes.

Supplied with anchoring bolts, template and double nut to level the base. Luminaires not included.

Pole with CE-certified constancy of performance.

Recommended luminaires: NATH LXF, NATH MXF, NATH SXF, TAU, ALTAIR IXF, ALTAIR IYF, MERAK SXF, MERAK SYF, HYDRA and SKAT.

## FASTENING SYSTEMS

**Luminaire fastening** Post top through Ø60 mm x 100 mm or Ø76 mm x 100 mm cylindrical terminal. Tapered finish for larger diameters.

**Notes** Anchoring bolts and template provided.  
Luminaires not included.

## FINISHES

**Shaft** Galvanised  
Simon Colours (Standard Paint / Seafront Paint)  
RAL chart colours (Standard Paint / Seafront Paint)

## PHYSICAL FEATURES AND MATERIALS

**IP** IP3X. To achieve IP44, it is necessary to use an internal junction box with IP44 (not supplied on the pole).

**Shaft** Conical tapering

**Trapdoor** Flush with interior reinforcement

**Construction** Support manufactured in a single section

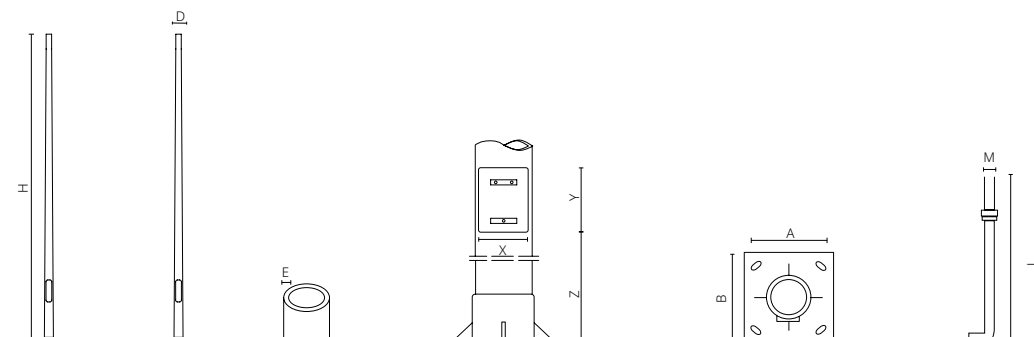
**Shaft** Carbon steel sheet, S235JR quality

**Flange plate** Flat steel sheet, S235JR quality, with reinforcing ring and gussets

## REGULATIONS AND CERTIFICATES

**Support according to** REGULATION EN 40-5

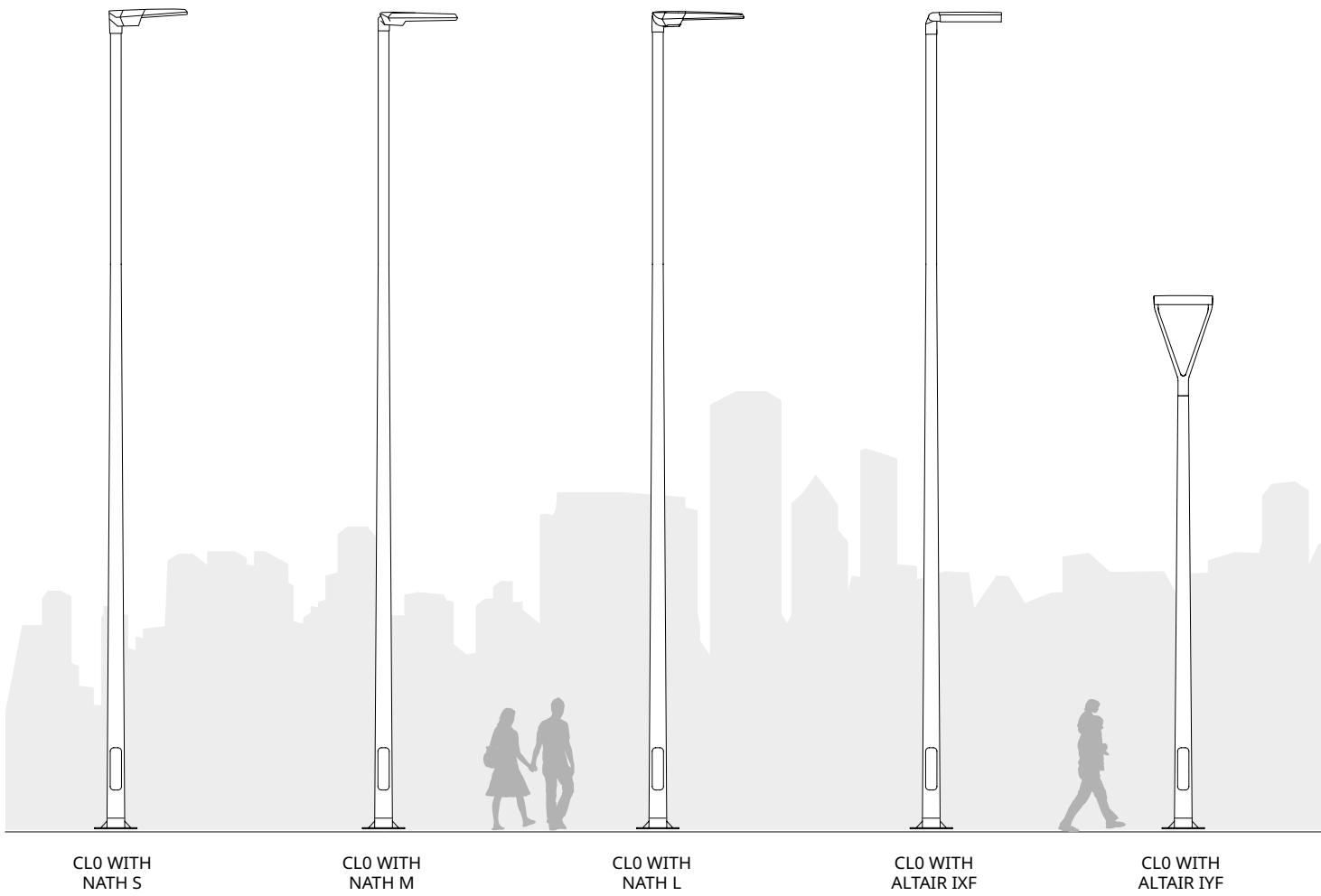
## TECHNICAL INFORMATION\* (Units in mm)



Height	Diameter	Thickness	Door			Flange plate		Bolts	Code
H	Ø D	E	X	Y	Z	A	B	M x L	
3,500	60	3	75	135	385	175	250	M14x350	<b>S-553335</b>
4,000	60	3	75	135	550	215	300	M18x500	<b>S-553304</b>
5,000	60	3	95	300	550	215	300	M18x500	<b>S-553305</b>
6,000	60	3	110	300	550	215	300	M18x500	<b>S-553306</b>
7,000	60	3	115	300	550	285	400	M22x600	<b>S-553307</b>
8,000	60	3	120	300	550	285	400	M22x600	<b>S-553308</b>
8,000	76	3	120	300	550	285	400	M22x600	<b>S-554308</b>
9,000	60	3	125	300	550	285	400	M22x600	<b>S-553309</b>
9,000	76	4	125	300	550	285	400	M22x600	<b>S-554409</b>
10,000	60	4	130	300	550	285	400	M22x600	<b>S-553410</b>
10,000	76	4	130	300	550	285	400	M22x600	<b>S-554410</b>
10,000	88	4	130	300	550	285	400	M22x600	<b>S-555410</b>
12,000	60	4	140	300	550	285	400	M22x600	<b>S-553412</b>
12,000	76	4	140	300	550	285	400	M22x600	<b>S-554412</b>
12,000	88	4	140	300	550	285	400	M22x600	<b>S-555412</b>

\* Check other measurements or configurations

RECOMMENDED LUMINAIRES (NOT INCLUDED)



CLO WITH NATH S

CLO WITH NATH M

CLO WITH NATH L

CLO WITH ALTAIR IXF

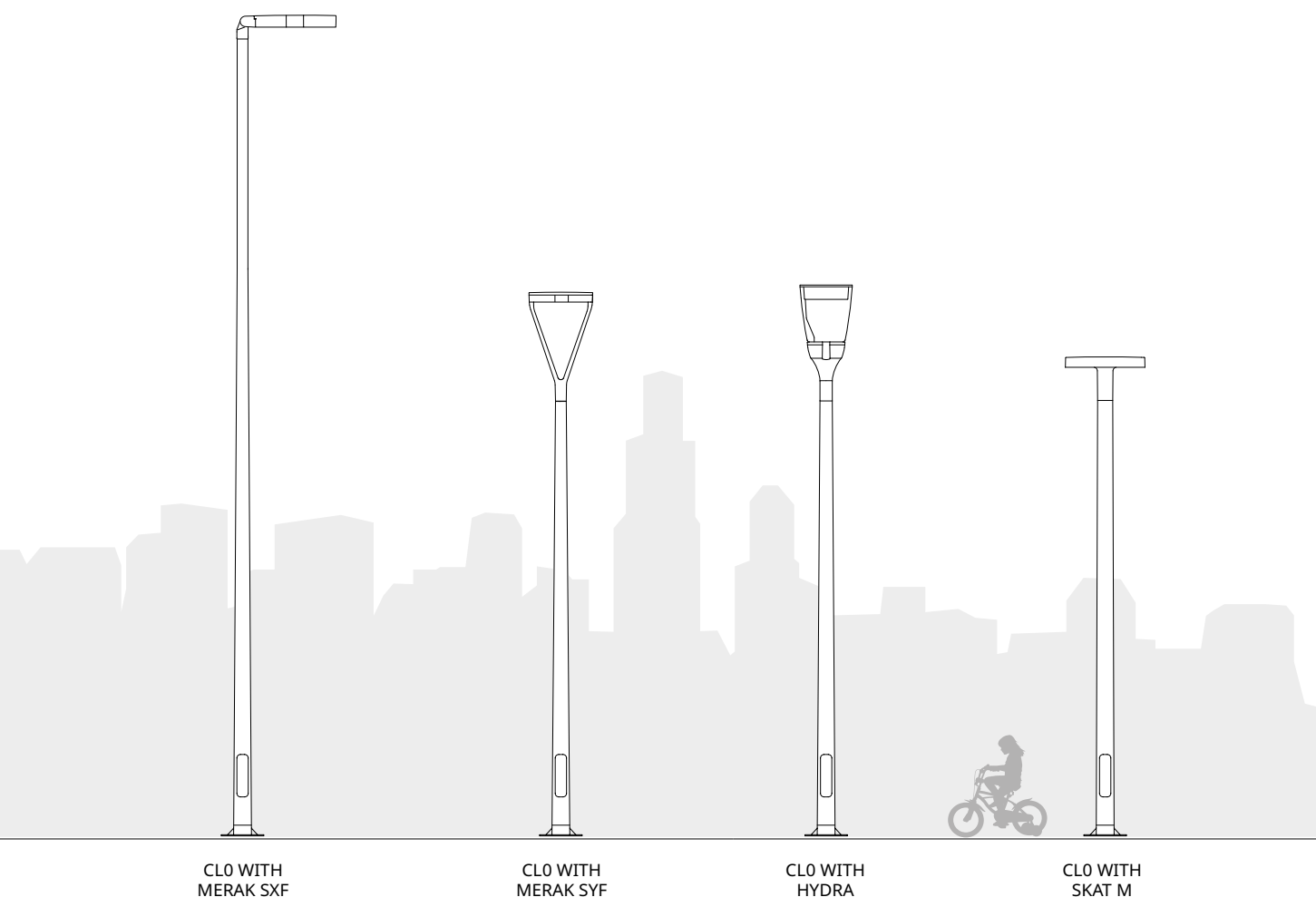
CLO WITH ALTAIR IYF

SUPPORT PROTECTIVE SYSTEMS AND FINISHES

Type of durability / atmospheric corrosion category*	Acid-less protection	Stick-less protection	Draw-less protection
Standard finish: hot dip galvanised**	✓		
Standard Paint Finish: hot dip galvanised** and painted	✓	✓	✓
Seafront Paint Finish: hot dip galvanised** and painted	✓	✓	✓

\* According to EN ISO 12944 \*\* According to EN ISO 1461

See expanded information on protection systems and finishes on pages 28 and 514 respectively

CLO WITH  
MERAK SXFCLO WITH  
MERAK SYFCLO WITH  
HYDRACLO WITH  
SKAT M

## ACCESSORIES / REPLACEMENTS

Description	Order code
Triangular 10 mm key to close trapdoor	<b>50-73265</b>
Flush door replacement, 3.5 m pole height, 60 mm post-top diameter, galvanised finish	<b>S-550356</b>
Flush door replacement, 4 m pole height, 60 mm post-top diameter, galvanised finish	<b>S-550406</b>
Flush door replacement, 5 m pole height, 60 mm post-top diameter, galvanised finish	<b>S-550507</b>
Flush door replacement, 6 and 7 m pole height, 60 mm post-top diameter, galvanised finish	<b>S-550606</b>
Flush door replacement, 8 m pole height, 60 mm post-top diameter, galvanised finish	<b>S-550806</b>
Flush door replacement, 8 m pole height, 76 mm post-top diameter, galvanised finish	<b>S-550807</b>
Flush door replacement, 9 m pole height, 60 mm post-top diameter, galvanised finish	<b>S-550906</b>

## ACCESSORIES / REPLACEMENTS

Description	Order code
Flush door replacement, 9 m pole height, 76 mm post-top diameter, galvanised finish	<b>S-550907</b>
Flush door replacement, 10 m pole height, 60 mm post-top diameter, galvanised finish	<b>S-551006</b>
Flush door replacement, 10 m pole height, 76 mm post-top diameter, galvanised finish	<b>S-551007</b>
Flush door replacement, 10 m pole height, 88 mm post-top diameter, galvanised finish	<b>S-551008</b>
Flush door replacement, 12 m pole height, 60 mm post-top diameter, galvanised finish	<b>S-551206</b>
Flush door replacement, 12 m pole height, 76 mm post-top diameter, galvanised finish	<b>S-551207</b>
Flush door replacement, 12 m pole height, 88 mm post-top diameter, galvanised finish	<b>S-551208</b>





# CL1

Simon CL1 functional pole, up to 12 m high, conical tapering and post-top luminaire fastening.



Simon **CL1** functional pole, up to 12 m high, conical tapering, and post-top luminaire fastening.

Flat flange plate with reinforcing ring and gussets and shaft made of S235JR-quality sheet carbon steel.

Flush trapdoor with interior reinforcement and interior sleeve.

Post-top luminaire fastening using Ø60 mm x 100 mm or Ø76 mm x 100 mm cylindrical terminal, or using conical finish for tops with larger diameters.

IP3X protection rating. To achieve IP44, it is necessary to use an internal junction box, not supplied.

Hot dip galvanised finish. Allows Simon and RAL chart finishes, as well as other protective finishes.

Supplied with anchoring bolts, template and double nut to level the base. Luminaires not included.

Pole with CE-certified constancy of performance. Pole meets City of Barcelona product specifications.

Recommended luminaires: NATH LXF, NATH MXF, NATH SXF, TAU, ALTAIR IXF, ALTAIR IYF, MERAK SXF, MERAK SYF and SKAT.

## FASTENING SYSTEMS

**Luminaire fastening** Post top through Ø60 mm x 100 mm or Ø76 mm x 100 mm cylindrical terminal. Tapered finish for larger diameters.

**Notes** Anchoring bolts and template provided.  
Luminaires not included.

## FINISHES

**Shaft** Galvanised  
Simon Colours (Standard Paint / Seafront Paint)  
RAL chart colours (Standard Paint / Seafront Paint)

## PHYSICAL FEATURES AND MATERIALS

**IP** IP3X. To achieve IP44, it is necessary to use an internal junction box with IP44 (not supplied on the pole).

**Shaft** Conical tapering

**Trapdoor** Flush with interior reinforcement and interior sleeve

**Construction** Support manufactured in a single section

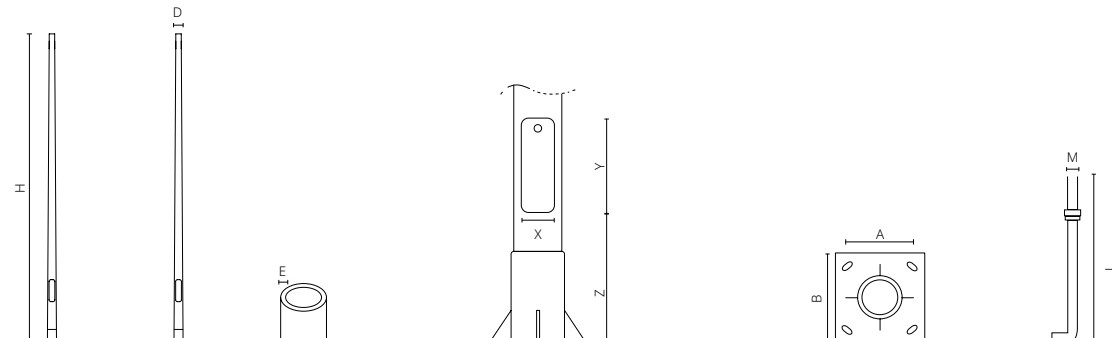
**Shaft** Carbon steel sheet, S235JR quality

**Flange plate** Carbon steel sheet, S235JR quality

## REGULATIONS AND CERTIFICATES

**Support according to** REGULATION EN 40-5

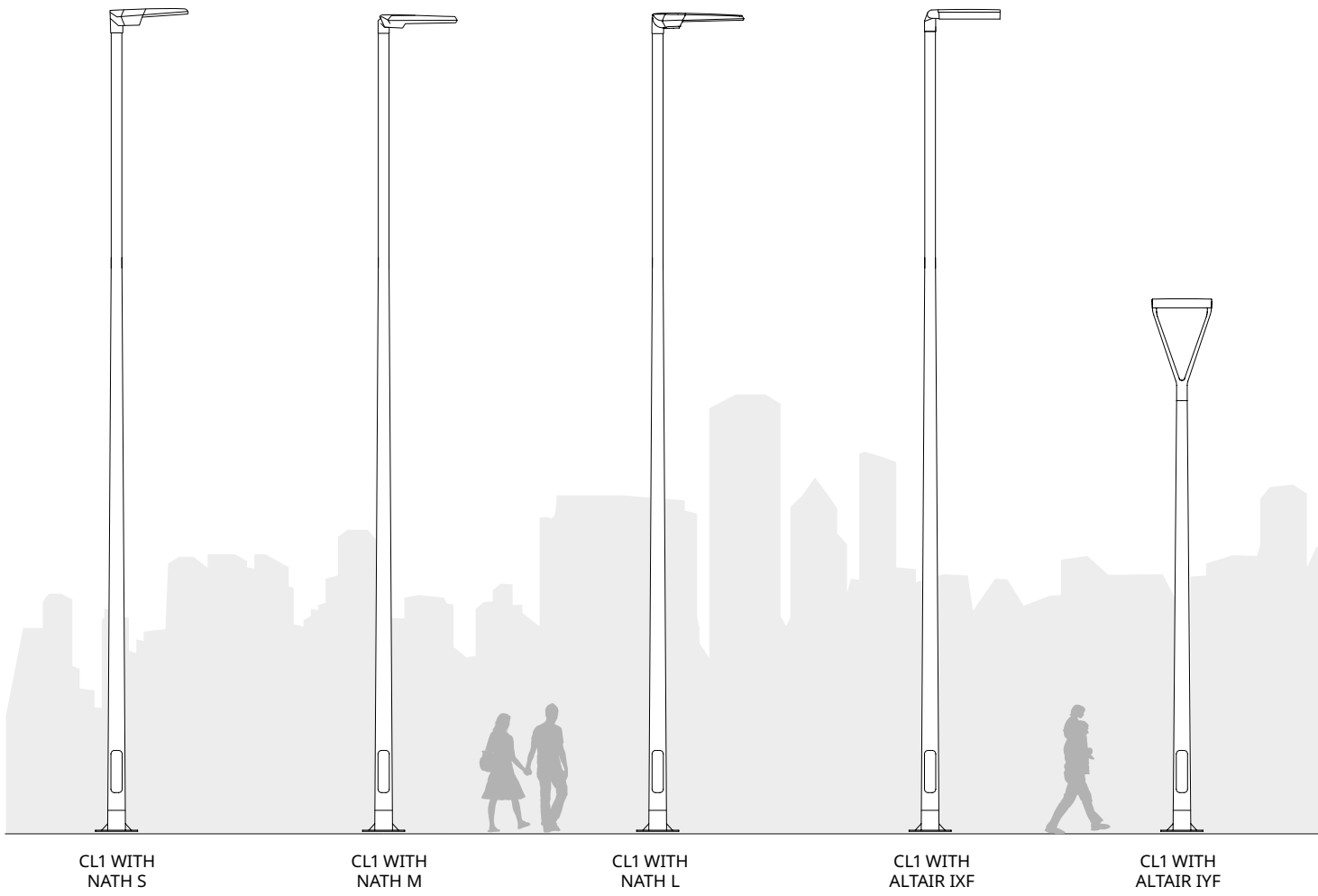
## TECHNICAL INFORMATION\* (Units in mm)



Height	Diameter	Thickness	Door			Flange plate		Bolts	Code
H	Ø D	E	X	Y	Z	A	B	M x L	
5,000	60	3	95	300	550	210	300	M20x500	<b>S-583005</b>
6,000	60	3	110	300	550	300	400	M22x600	<b>S-583006</b>
7,000	60	3	115	300	550	300	400	M22x600	<b>S-583007</b>
7,500	60	3	120	300	550	300	400	M22x600	<b>S-583075</b>
8,000	60	3	120	300	550	300	400	M22x600	<b>S-583008</b>
9,000	60	3	125	300	550	300	400	M22x600	<b>S-583009</b>
9,000	76	3	125	300	550	300	400	M22x600	<b>S-584009</b>
10,000	60	4	130	300	550	350	500	M24x800	<b>S-583010</b>
10,000	76	4	130	300	550	350	500	M24x800	<b>S-584010</b>
11,000	60	4	135	300	550	350	500	M24x800	<b>S-583011</b>
11,000	76	4	135	300	550	350	500	M24x800	<b>S-584011</b>
12,000	60	4	140	300	550	350	500	M24x800	<b>S-583012</b>
12,000	76	4	140	300	550	350	500	M24x800	<b>S-584012</b>

\* Check other measurements or configurations

RECOMMENDED LUMINAIRES (NOT INCLUDED)

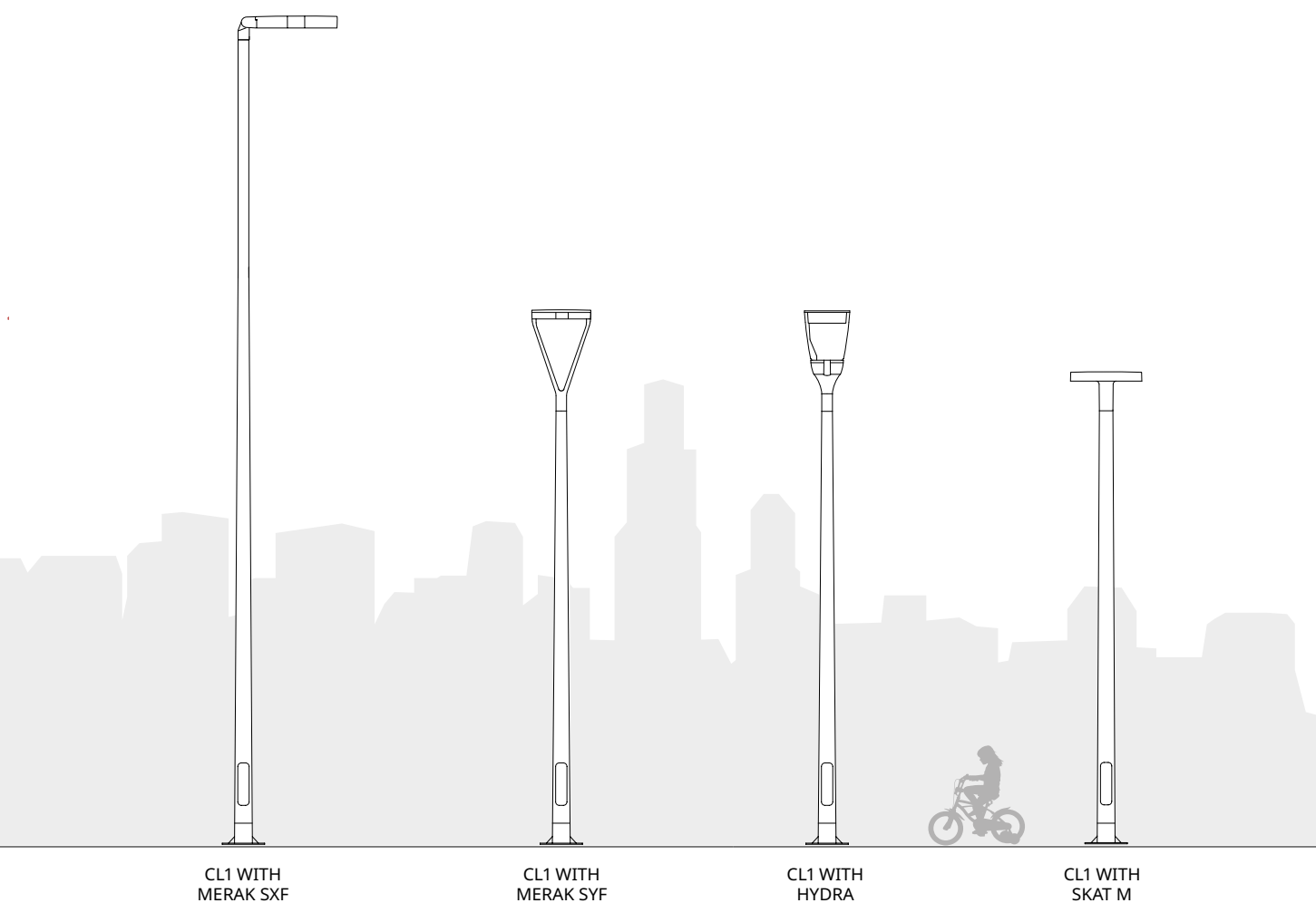


SUPPORT PROTECTIVE SYSTEMS AND FINISHES

Type of durability / atmospheric corrosion category*	Acid-less protection	Stick-less protection	Draw-less protection
Standard finish: hot dip galvanised**	✓		
Standard Paint Finish: hot dip galvanised** and painted	✓	✓	✓
Seafront Paint Finish: hot dip galvanised** and painted	✓	✓	✓

\* According to EN ISO 12944 \*\* According to EN ISO 1461

See expanded information on protection systems and finishes on pages 28 and 514 respectively

CL1 WITH  
MERAK SXFCL1 WITH  
MERAK SYFCL1 WITH  
HYDRACL1 WITH  
SKAT M

## ACCESSORIES / REPLACEMENTS

Description	Order code
Triangular 10 mm key to close trapdoor	<b>50-73265</b>
Flush door replacement, 5 m pole height, 60 mm post-top diameter, galvanised finish	<b>S-550406</b>
Flush door replacement, 6 m pole height, 60 mm post-top diameter, galvanised finish	<b>S-550507</b>
Flush door replacement, 7 m pole height, 60 mm post-top diameter, galvanised finish	<b>S-550606</b>
Flush door replacement, 7.5 m pole height, 60 mm post-top diameter, galvanised finish	<b>S-550756</b>
Flush door replacement, 8 m pole height, 60 mm post-top diameter, galvanised finish	<b>S-550806</b>
Flush door replacement, 9 m pole height, 60 mm post-top diameter, galvanised finish	<b>S-550906</b>

## ACCESSORIES / REPLACEMENTS

Description	Order code
Flush door replacement, 9 m pole height, 76 mm post-top diameter, galvanised finish	<b>S-550907</b>
Flush door replacement, 10 m pole height, 60 mm post-top diameter, galvanised finish	<b>S-551006</b>
Flush door replacement, 10 m pole height, 76 mm post-top diameter, galvanised finish	<b>S-551007</b>
Flush door replacement, 11 m pole height, 60 mm post-top diameter, galvanised finish	<b>S-551106</b>
Flush door replacement, 11 m pole height, 76 mm post-top diameter, galvanised finish	<b>S-551107</b>
Flush door replacement, 12 m pole height, 60 mm post-top diameter, galvanised finish	<b>S-551206</b>
Flush door replacement, 12 m pole height, 76 mm post-top diameter, galvanised finish	<b>S-551207</b>





# CEU

Simon CEU functional pole, up to 12 m high, conical tapering, and post-top luminaire fastening.



Simon **CEU** functional pole, up to 12 m high, conical tapering, and post-top luminaire fastening.

Recessed flange plate and shaft made of S235JR-quality sheet carbon steel.

Flush trapdoor with interior reinforcement.

Post-top luminaire fastening using Ø60 mm x 100 mm or Ø76 mm x 100 mm cylindrical terminal, and using conical finish for tops with larger diameters.

IP3X protection rating. To achieve IP44, it is necessary to use an internal junction box, not supplied.

Hot dip galvanised finish. Allows Simon and RAL chart finishes, as well as other protective finishes.

Supplied with anchoring bolts, template and double nut to level the base. Luminaires not included.

Pole with CE-certified constancy of performance.

Recommended luminaires: NATH LXF, NATH MXF, NATH SXF, TAU, ALTAIR IXF, ALTAIR IYF, MERAK SXF, MERAK SYF, HYDRA and SKAT.

## FASTENING SYSTEMS

**Luminaire fastening** Post top through Ø60 mm x 100 mm or Ø76 mm x 100 mm cylindrical terminal. Tapered finish for larger diameters.

**Notes** Anchoring bolts and template provided.  
Luminaires not included.

## FINISHES

**Shaft** Galvanised  
Simon Colours (Standard Paint / Seafront Paint)  
RAL chart colours (Standard Paint / Seafront Paint)

## PHYSICAL FEATURES AND MATERIALS

**IP** IP3X. To achieve IP44, it is necessary to use an internal junction box with IP44 (not supplied on the pole).

**Shaft** Conical tapering

**Trapdoor** Flush with interior reinforcement

**Construction** Support manufactured in a single section

**Shaft** Carbon steel sheet, S235JR quality

**Flange plate** Flat steel sheet, S235JR quality, recessed

## REGULATIONS AND CERTIFICATES

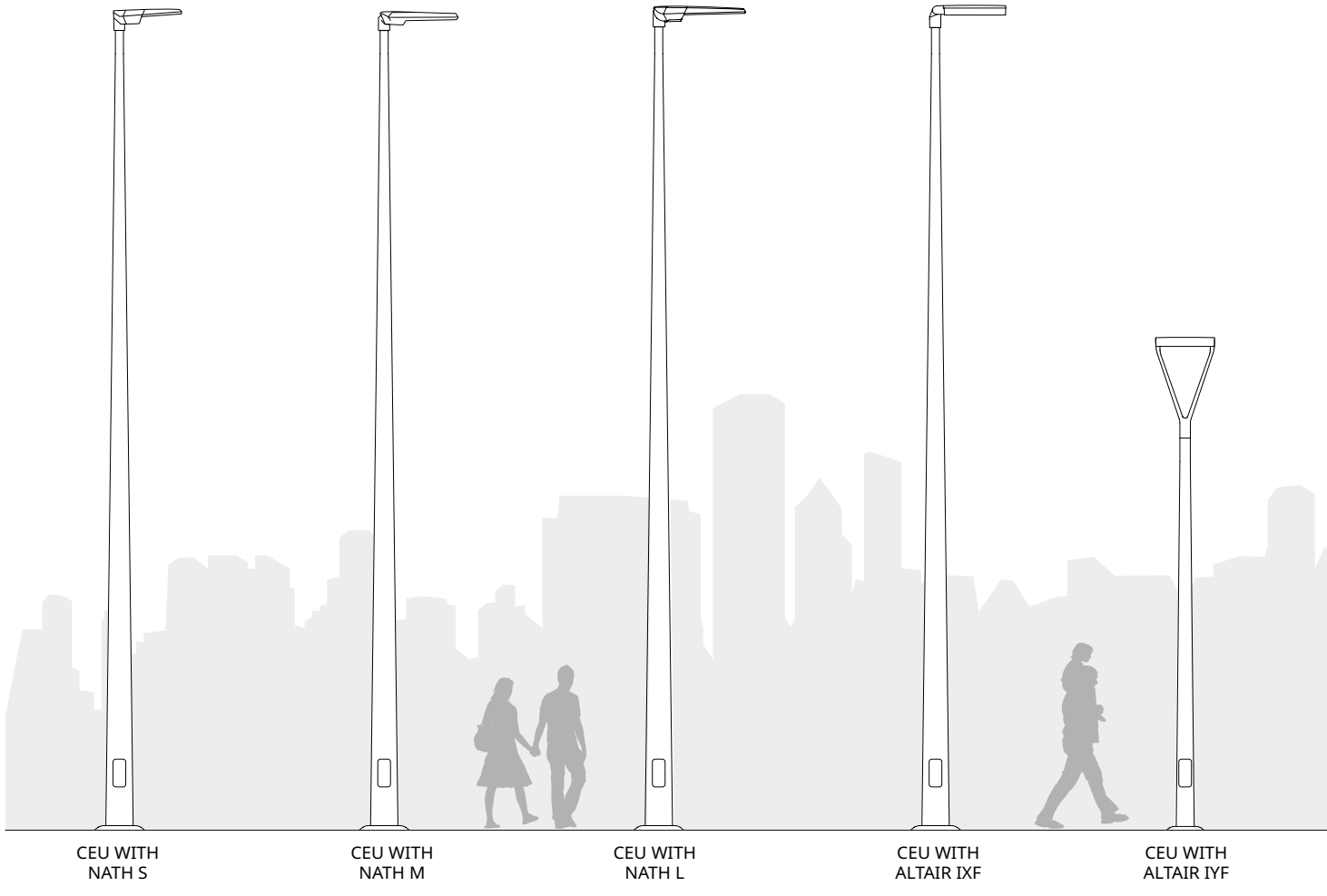
**Support according to** REGULATION EN 40-5

## TECHNICAL INFORMATION\* (Units in mm)

Height	Diameter	Thickness	Door			Flange plate		Bolts	Code
H	Ø D	E	X	Y	Z	A	B	M x L	
4,000	60	3	90	300	550	215	300	M16x400	<b>CEU04603</b>
5,000	60	3	100	300	550	215	300	M16x400	<b>CEU05603</b>
6,000	60	3	105	300	550	215	300	M18x500	<b>CEU06603</b>
7,000	60	3	115	300	550	285	400	M20x500	<b>CEU07603</b>
8,000	60	3	120	300	550	285	400	M20x500	<b>CEU08603</b>
8,000	60	4	120	300	550	285	400	M20x500	<b>CEU08604</b>
9,000	60	3	125	300	550	285	400	M20x500	<b>CEU09603</b>
9,000	60	4	125	300	550	285	400	M20x500	<b>CEU09604</b>
10,000	60	3	125	300	550	285	400	M22x600	<b>CEU10603</b>
10,000	60	4	125	300	550	285	400	M22x600	<b>CEU10604</b>
12,000	60	4	130	300	550	285	400	M22x600	<b>CEU12604</b>
12,000	76	4	130	300	550	285	400	M22x600	<b>CEU12764</b>

\* Check other measurements or configurations

RECOMMENDED LUMINAIRES (NOT INCLUDED)

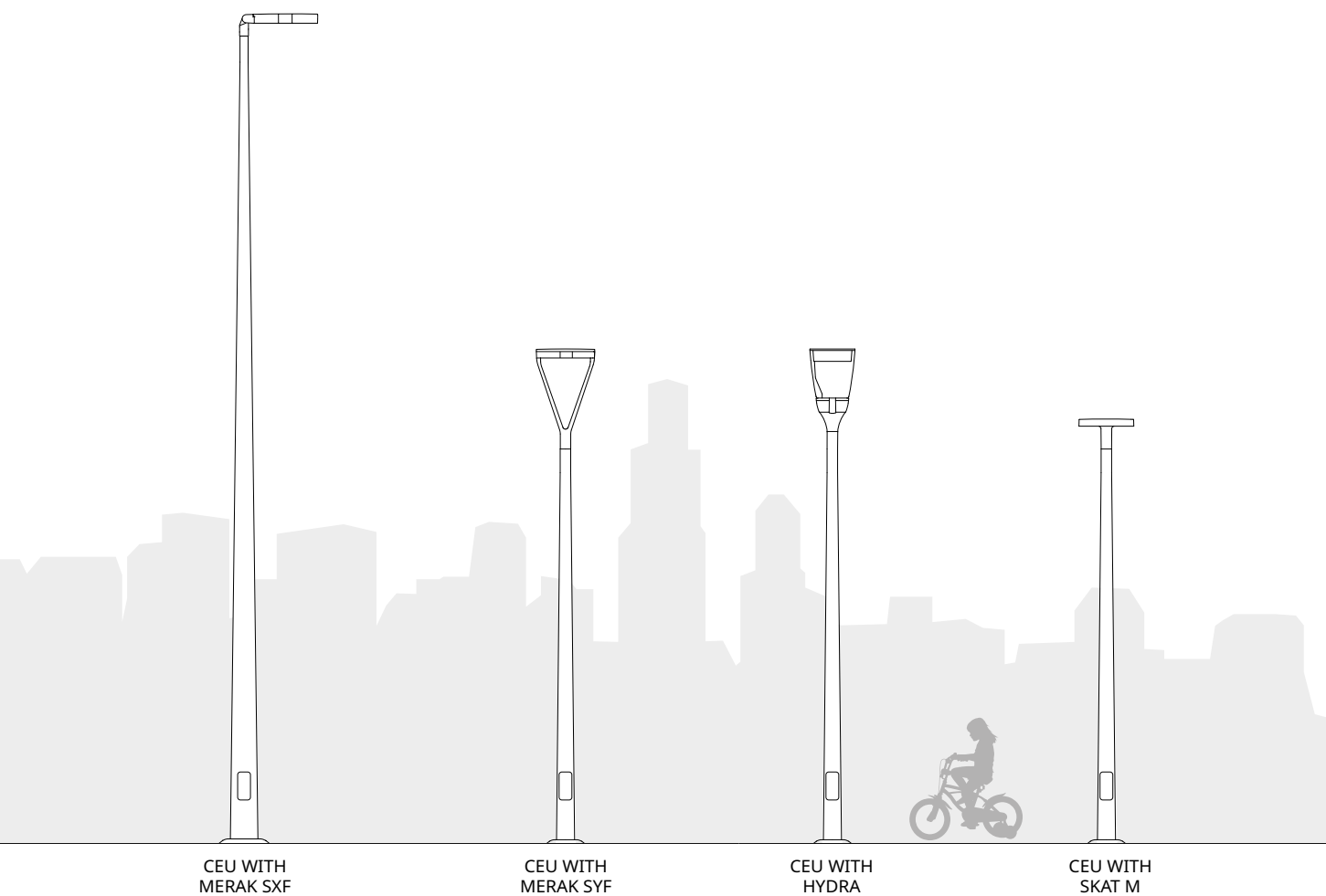


SUPPORT PROTECTIVE SYSTEMS AND FINISHES

Type of durability / atmospheric corrosion category*	Acid-less protection	Stick-less protection	Draw-less protection
Standard finish: hot dip galvanised**	✓		
Standard Paint Finish: hot dip galvanised** and painted	✓	✓	✓
Seafront Paint Finish: hot dip galvanised** and painted	✓	✓	✓

\* According to EN ISO 12944 \*\* According to EN ISO 1461

See expanded information on protection systems and finishes on pages 28 and 514 respectively



## ACCESSORIES / REPLACEMENTS

Description	Order code
Triangular 10 mm key to close trapdoor	<b>50-73265</b>
Flush door replacement, 4 and 5 m pole height, 60 mm post-top diameter, galvanised finish	<b>S-550406</b>
Flush door replacement, 6 m pole height, 60 mm post-top diameter, galvanised finish	<b>S-550507</b>
Flush door replacement, 7 m pole height, 60 mm post-top diameter, galvanised finish	<b>S-550606</b>
Flush door replacement, 7.5 m pole height, 60 mm post-top diameter, galvanised finish	<b>S-550756</b>
Flush door replacement, 8 m pole height, 60 mm post-top diameter, galvanised finish	<b>S-550806</b>

## ACCESSORIES / REPLACEMENTS

Description	Order code
Flush door replacement, 9 m pole height, 60 mm post-top diameter, galvanised finish	<b>S-550906</b>
Flush door replacement, 10 m pole height, 60 mm post-top diameter, galvanised finish	<b>S-551006</b>
Flush door replacement, 11 m pole height, 60 mm post-top diameter, galvanised finish	<b>S-551106</b>
Flush door replacement, 12 m pole height, 60 mm post-top diameter, galvanised finish	<b>S-551206</b>
Flush door replacement, 12 m pole height, 76 mm post-top diameter, galvanised finish	<b>S-551007</b>





# CAM

Simon CAM functional pole, up to 12 m high, conical tapering, and post-top luminaire fastening.



Simon **CAM** functional pole, up to 12 m high, conical tapering, and post-top luminaire fastening. Flat flange plate with reinforcing ring and gussets and shaft made of S235JR-quality sheet carbon steel. Flat trapdoor with exterior reinforcement frame. Post-top luminaire fastening using  $\varnothing 60$  mm x 100 mm or  $\varnothing 76$  mm x 100 mm cylindrical terminal, and using conical finish for tops with larger diameters. Allows post-top fastening using a  $\varnothing 50$  mm x 100 mm cylindrical terminal or  $\varnothing 60$  mm x 100 mm cylindrical coupling on the pole's  $\varnothing 76$  mm tapered tip. IP3X protection rating. To achieve IP44, it is necessary to use an internal junction box, not supplied. Hot dip galvanised finish. Allows Simon and RAL chart finishes, as well as other protective finishes. Supplied with anchoring bolts, template and double nut to level the base. Luminaires not included.

Pole with CE-certified constancy of performance. Recommended luminaires: NATH LXF, NATH MXF, NATH SXF, TAU, ALTAIR IXF, ALTAIR IYF, MERAK SXF, MERAK SYF, HYDRA and SKAT.

## FASTENING SYSTEMS

**Luminaire fastening** Post top through  $\varnothing 60$  mm x 100 mm or  $\varnothing 76$  mm x 100 mm cylindrical terminal. Tapered finish for larger diameters. Models whose reference number ends in P50 are supplied with the luminaire coupling tip reduced to 50 mm. Models whose reference number ends in M60 are manufactured based on a post-top  $\varnothing 76$  mm conical tapering tube with a  $\varnothing 60$  mm coupling.

**Notes** Anchoring bolts and template provided. Luminaires not included.

## PHYSICAL FEATURES AND MATERIALS

**IP** IP3X. To achieve IP44, it is necessary to use an internal junction box with IP44 (not supplied on the pole).

**Shaft** Conical tapering

**Trapdoor** With exterior reinforcement frame

**Construction** Support manufactured in a single section

**Shaft** Carbon steel sheet, S235JR quality

**Flange plate** Flat steel sheet, S235JR quality, with reinforcing ring and gussets

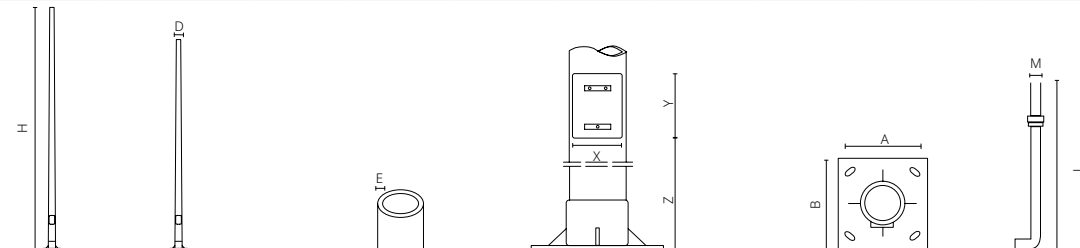
## FINISHES

**Shaft** Galvanised  
Simon Colours (Standard Paint / Seafront Paint)  
RAL chart colours (Standard Paint / Seafront Paint)

## REGULATIONS AND CERTIFICATES

Support according to REGULATION EN 40-5

## TECHNICAL INFORMATION\* (Units in mm)



Height	Diameter	Coupling	Thickness	Door			Flange plate		Bolts	Code
H	$\varnothing D$		E	X	Y	Z	A	B	M x L	
4,000	60	-	3	102	162	410	215	300	M16x400	<b>CAM04603</b>
4,000	76	60	3	102	162	410	215	300	M16x400	<b>CAM04763M60</b>
5,000	60	-	3	102	162	410	215	300	M16x400	<b>CAM05603</b>
5,000	76	60	3	102	162	410	215	300	M16x400	<b>CAM05763M60</b>
6,000	60	-	3	102	162	410	215	300	M18x500	<b>CAM06603</b>
6,000	50	50	3	102	162	410	215	300	M18x500	<b>CAM06603P50</b>
6,000	76	60	3	102	162	410	215	300	M18x500	<b>CAM06763M60</b>
7,000	60	-	3	102	162	410	285	400	M20x500	<b>CAM07603</b>
8,000	60	-	3	140	192	440	285	400	M20x500	<b>CAM08603</b>
8,000	60	-	4	140	192	440	285	400	M20x500	<b>CAM08604</b>
8,000	76	-	3	140	192	440	285	400	M20x500	<b>CAM08763</b>
8,000	76	-	4	140	192	440	285	400	M20x500	<b>CAM08764</b>
9,000	60	-	3	140	192	440	285	400	M20x500	<b>CAM09603</b>
9,000	60	-	4	140	192	440	285	400	M20x500	<b>CAM09604</b>
9,000	76	-	3	140	192	440	285	400	M20x500	<b>CAM09763</b>
9,000	76	-	4	140	192	440	285	400	M20x500	<b>CAM09764</b>
9,000	88	-	3	140	192	440	285	400	M20x500	<b>CAM09883</b>
9,000	88	-	4	140	192	440	285	400	M20x500	<b>CAM09884</b>
10,000	60	-	3	140	192	440	285	400	M22x600	<b>CAM10603</b>
10,000	60	-	4	140	192	440	285	400	M22x600	<b>CAM10604</b>
10,000	76	-	3	140	192	440	285	400	M22x600	<b>CAM10763</b>
10,000	76	-	4	140	192	440	285	400	M22x600	<b>CAM10764</b>
10,000	88	-	3	140	192	440	285	400	M22x600	<b>CAM10883</b>
10,000	88	-	4	140	192	440	285	400	M22x600	<b>CAM10884</b>
12,000	60	-	4	140	192	440	285	400	M22x600	<b>CAM12604</b>
12,000	76	-	4	140	192	440	285	400	M22x600	<b>CAM12764</b>
12,000	76	60	4	140	192	440	285	400	M22x600	<b>CAM12764M60</b>
12,000	88	-	4	140	192	440	285	400	M22x600	<b>CAM12884</b>

\* Check other measurements or configurations

RECOMMENDED LUMINAIRES (NOT INCLUDED)



CAM WITH NATH S

CAM WITH NATH M

CAM WITH NATH L

CAM WITH ALTAIR IXF

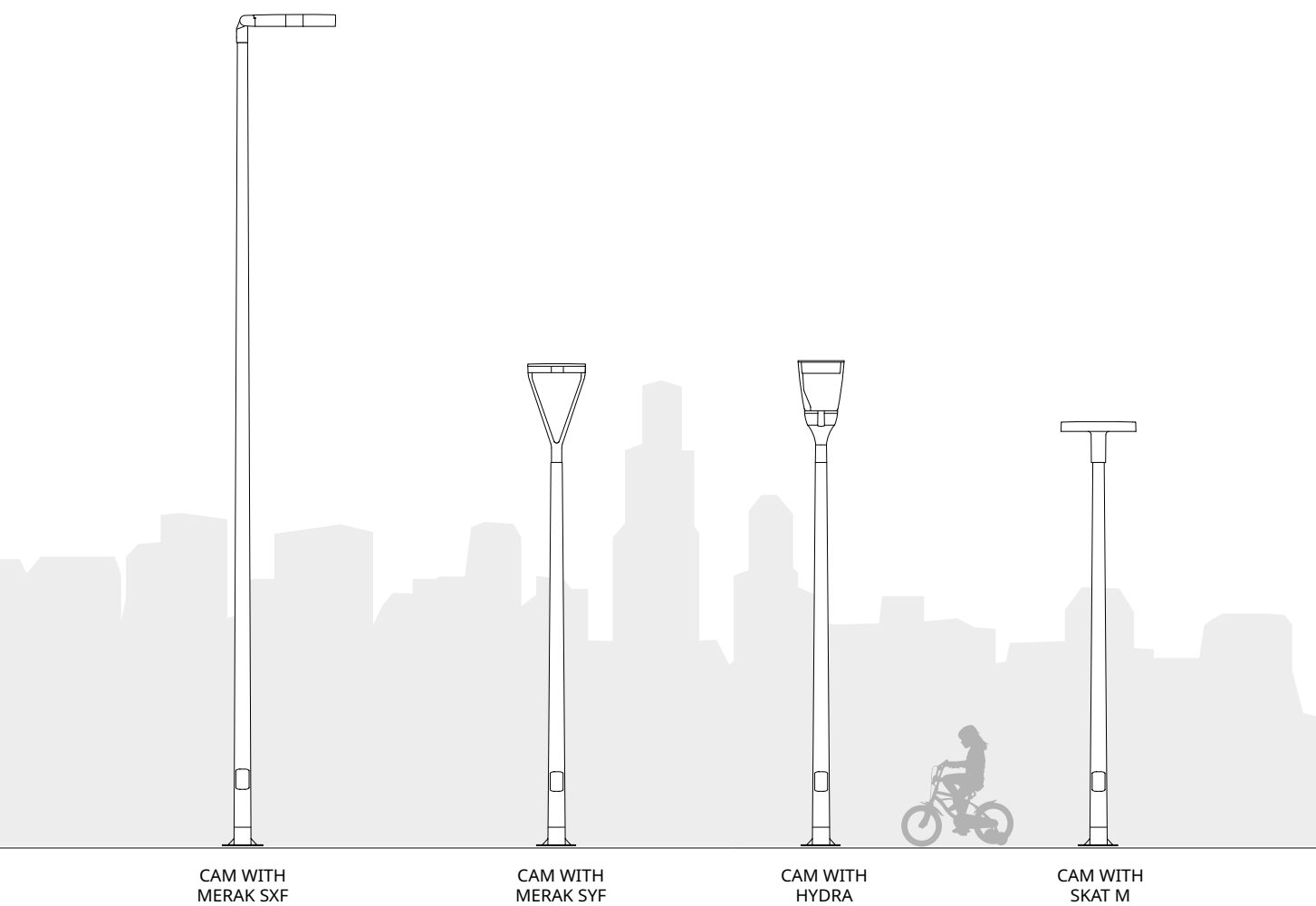
CAM WITH ALTAIR IYF

SUPPORT PROTECTIVE SYSTEMS AND FINISHES

Type of durability / atmospheric corrosion category*	Acid-less protection	Stick-less protection	Draw-less protection
Standard finish: hot dip galvanised**	✓		
Standard Paint Finish: hot dip galvanised** and painted	✓	✓	✓
Seafront Paint Finish: hot dip galvanised** and painted	✓	✓	✓

\* According to EN ISO 12944 \*\* According to EN ISO 1461

See expanded information on protection systems and finishes on pages 28 and 514 respectively

CAM WITH  
MERAK SXFCAM WITH  
MERAK SYFCAM WITH  
HYDRACAM WITH  
SKAT M

## ACCESSORIES / REPLACEMENTS

Description	Order code
Triangular 10 mm key to close trapdoor	<b>50-73265</b>
Flush door replacement, 4 to 7 m pole height, galvanised finish	<b>50-70988</b>
Flush door replacement, 8 to 12 m pole height, galvanised finish	<b>50-71269</b>





# CU

Simon CU functional pole, up to 3.9 m high, conical tapering, and post-top luminaire fastening.



Simon **CU** functional pole, up to 3.9 m high, conical tapering, and post-top luminaire fastening.

Recessed flange plate and shaft made of S235JR-quality sheet carbon steel.

Overlapping trapdoor with interior reinforcement.

Post-top luminaire fastening using Ø50 mm x 100 mm or Ø60 mm x 100 mm cylindrical terminal.

IP3X protection rating. To achieve IP44, it is necessary to use an internal junction box, not supplied.

Hot dip galvanised finish. Allows Simon and RAL chart finishes, as well as other protective finishes.

Supplied with anchoring bolts, template and double nut to level the base. Luminaires not included.

Pole with CE-certified constancy of performance.

Recommended luminaires: NATH LXF, NATH MXF, NATH SXF, TAU, ALTAIR IXF, ALTAIR IYF, MERAK SXF, MERAK SYF, HYDRA and SKAT.

## FASTENING SYSTEMS

Luminaire fastening	Post top through Ø50 mm x Ø 100 mm or Ø60 mm cylindrical terminal
Notes	Anchoring bolts and template provided. Luminaires not included.

## FINISHES

Shaft	Galvanised
	Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)

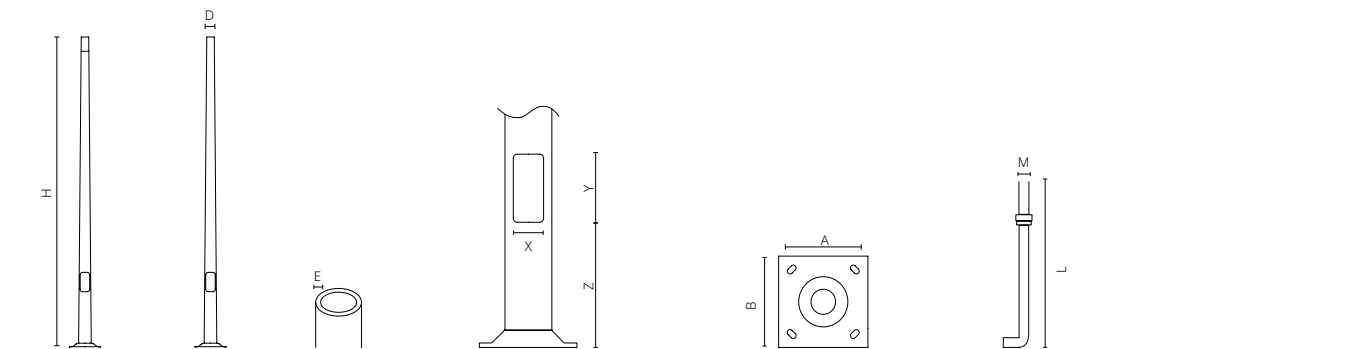
## PHYSICAL FEATURES AND MATERIALS

IP	IP3X. To achieve IP44, it is necessary to use an internal junction box with IP44 (not supplied on the pole).
Shaft	Conical tapering
Trapdoor	Overlapping tabs with interior reinforcement
Construction	Support manufactured in a single section
Shaft	Carbon steel sheet, S235JR quality
Flange plate	Flat steel sheet, S235JR quality, recessed

## REGULATIONS AND CERTIFICATES

Support according to	REGULATION EN 40-5
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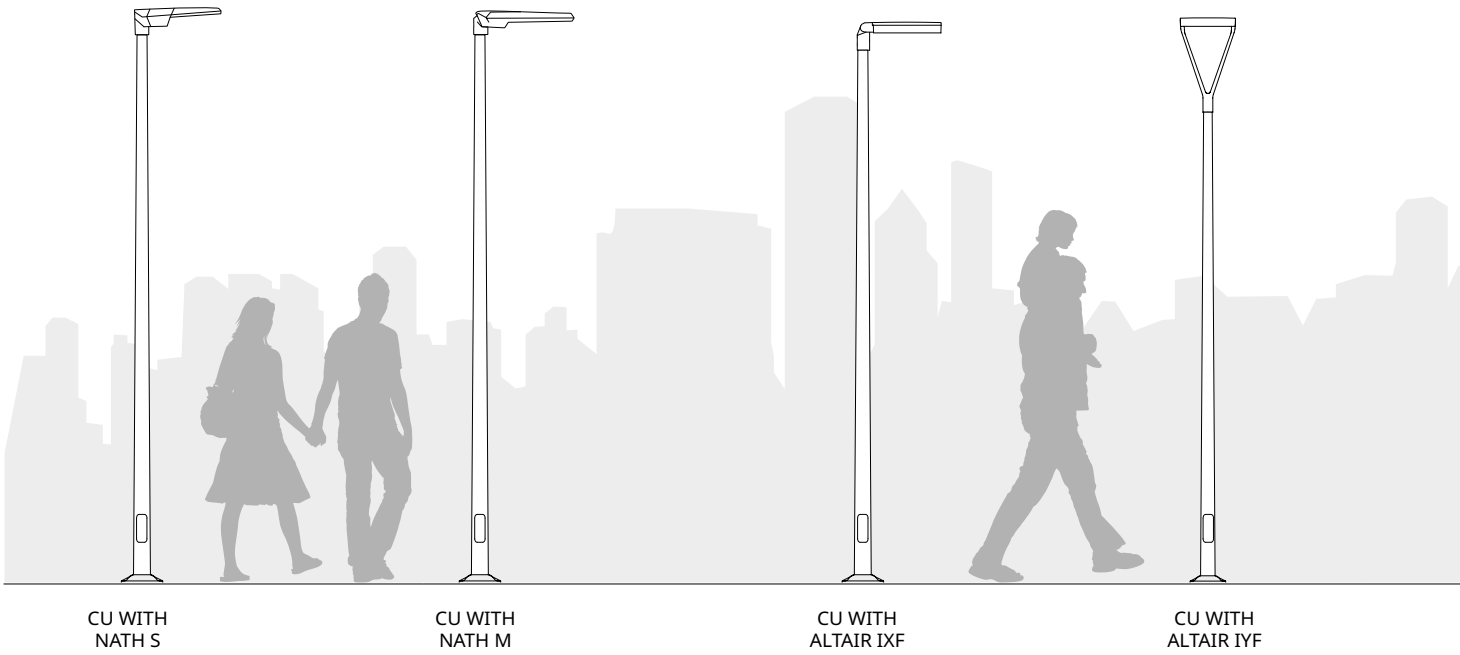
## TECHNICAL INFORMATION\* (Units in mm)



Height	Diameter	Thickness	Door			Flange plate		Bolts	Code
H	Ø D	E	X	Y	Z	A	B	M x L	
3,000	50	3	70	135	380	185	250	M14x350	<b>CU30503</b>
3,000	60	3	74	135	380	185	250	M14x350	<b>CU30603</b>
3,500	50	3	74	135	380	185	250	M14x350	<b>CU35503</b>
3,500	60	3	74	135	380	185	250	M14x350	<b>CU35603</b>
3,900	50	3	78	135	380	185	250	M14x350	<b>CU39503</b>
3,900	60	3	78	135	380	185	250	M14x350	<b>CU39603</b>

\* Check other measurements or configurations

RECOMMENDED LUMINAIRES (NOT INCLUDED)



CU WITH NATH S

CU WITH NATH M

CU WITH ALTAIR IXF

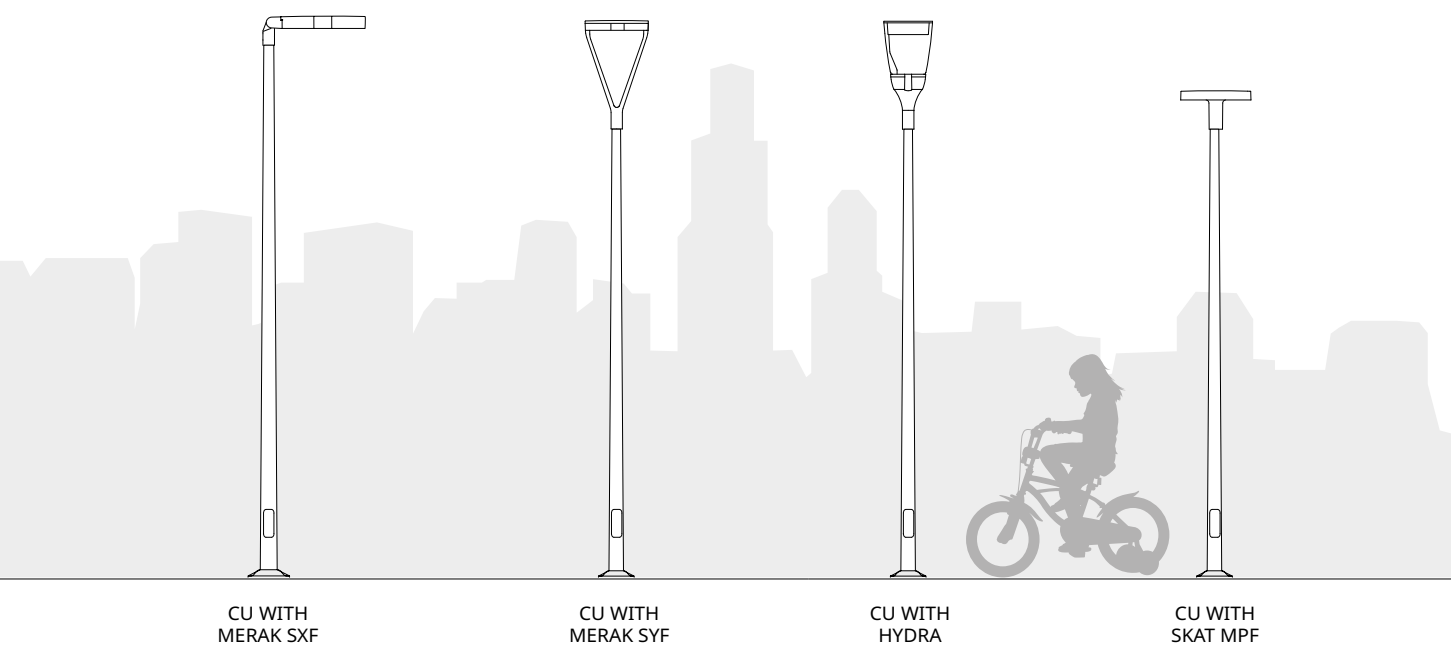
CU WITH ALTAIR IYF

SUPPORT PROTECTIVE SYSTEMS AND FINISHES

Type of durability / atmospheric corrosion category*	Acid-less protection	Stick-less protection	Draw-less protection
Standard finish: hot dip galvanised**	✓		
Standard Paint Finish: hot dip galvanised** and painted	✓	✓	✓
Seafront Paint Finish: hot dip galvanised** and painted	✓	✓	✓

\* According to EN ISO 12944 \*\* According to EN ISO 1461

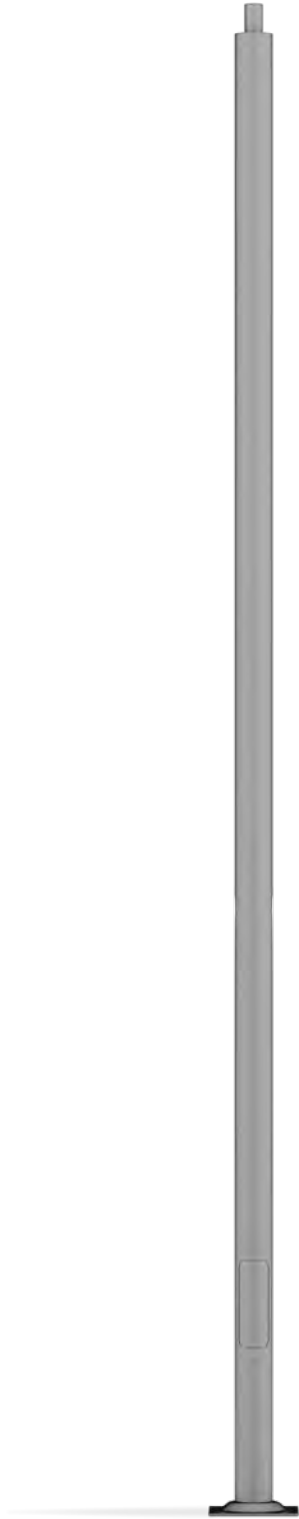
See expanded information on protection systems and finishes on pages 28 and 514 respectively

CU WITH  
MERAK SXFCU WITH  
MERAK SYFCU WITH  
HYDRACU WITH  
SKAT MPF

## ACCESSORIES / REPLACEMENTS

Description	Order code
Triangular 10 mm key to close trapdoor	<b>50-73265</b>
Overlapping door replacement, 3 m pole height, 50 mm post-top diameter, galvanised finish	<b>50-73077</b>
Overlapping door replacement, 3 m pole height, 60 mm post-top diameter, and 3.5 m pole height, 50 mm and 60 mm post-top diameter, galvanised finish	<b>50-73076</b>
Overlapping door replacement, 3.9 m pole height, 50 mm and 60 mm post-top diameter, galvanised finish	<b>50-73003</b>





# CIL

Simon CIL functional pole, up to 7 m high, cylindrical, and post-top luminaire fastening.



Simon **CIL** functional pole, up to 7 m high, cylindrical, and post-top luminaire fastening.

Recessed flange plate and shaft made of S235JR-quality sheet carbon steel.

Flush trapdoor with interior reinforcement.

Post-top luminaire fastening through Ø60 mm x 100 mm cylindrical coupling.

IP3X protection rating. To achieve IP44, it is necessary to use an internal junction box, not supplied.

Hot dip galvanised finish. Allows Simon and RAL chart finishes, as well as other protective finishes.

Supplied with anchoring bolts, template and double nut to level the base. Luminaires not included.

Pole with CE-certified constancy of performance.

Recommended luminaires: NATH LXF, NATH MXF, NATH SXF, TAU, ALTAIR IXF, ALTAIR IYF, MERAK SXF, MERAK SYF, HYDRA and SKAT.

## FASTENING SYSTEMS

Luminaire fastening Post top through Ø60 mm x 100 mm cylindrical terminal

Notes Anchoring bolts and template provided.  
Luminaires not included.

## FINISHES

Shaft Galvanised  
Simon Colours (Standard Paint / Seafront Paint)  
RAL chart colours (Standard Paint / Seafront Paint)

## PHYSICAL FEATURES AND MATERIALS

IP IP3X. To achieve IP44, it is necessary to use an internal junction box with IP44 (not supplied on the pole).

Shaft Cylindrical

Trapdoor Flush with interior reinforcement

Construction Support manufactured in a single section

Shaft Carbon steel sheet, S235JR quality

Flange plate Flat steel sheet, S235JR quality, recessed

## REGULATIONS AND CERTIFICATES

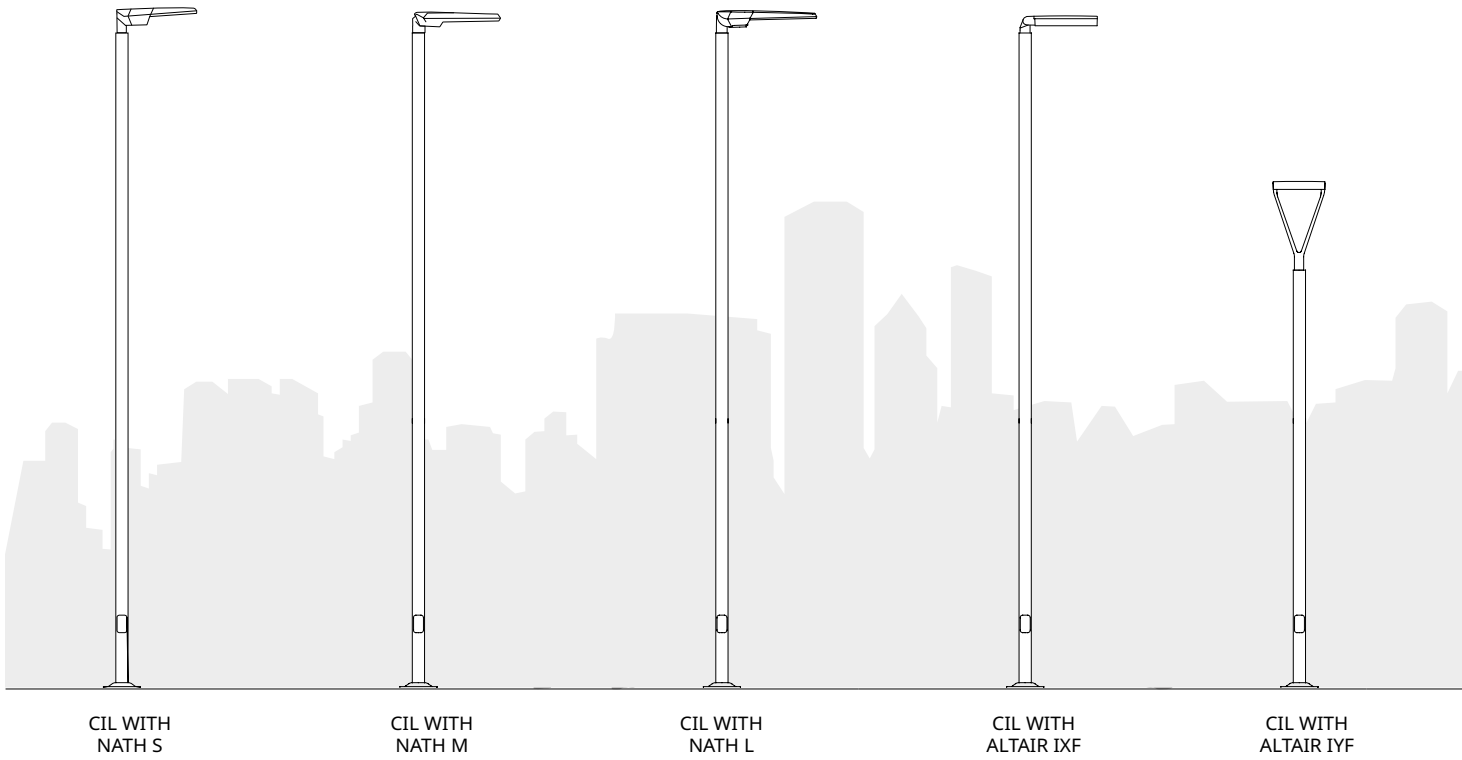
Support according to REGULATION EN 40-5

## TECHNICAL INFORMATION\* (Units in mm)

Height	Diameter	Coupling	Thickness	Door			Flange plate		Bolts	Code
H	Ø D	Ø d	E	X	Y	Z	A	B	M x L	
3,000	100	60	3	80	135	385	185	250	M14x350	<b>CIL30100</b>
3,500	100	60	3	80	135	385	185	250	M14x350	<b>CIL35100</b>
4,000	100	60	3	80	135	385	215	300	M16x400	<b>CIL40100</b>
5,000	100	60	3	80	135	385	215	300	M16x400	<b>CIL50100</b>
6,000	127	60	3	100	300	550	215	300	M18x500	<b>CIL60127</b>
7,000	127	60	3	100	300	550	285	400	M20x500	<b>CIL70127</b>

\* Check other measurements or configurations

RECOMMENDED LUMINAIRES (NOT INCLUDED)



CIL WITH NATH S




CIL WITH NATH M

CIL WITH NATH L

CIL WITH ALTAIR IXF

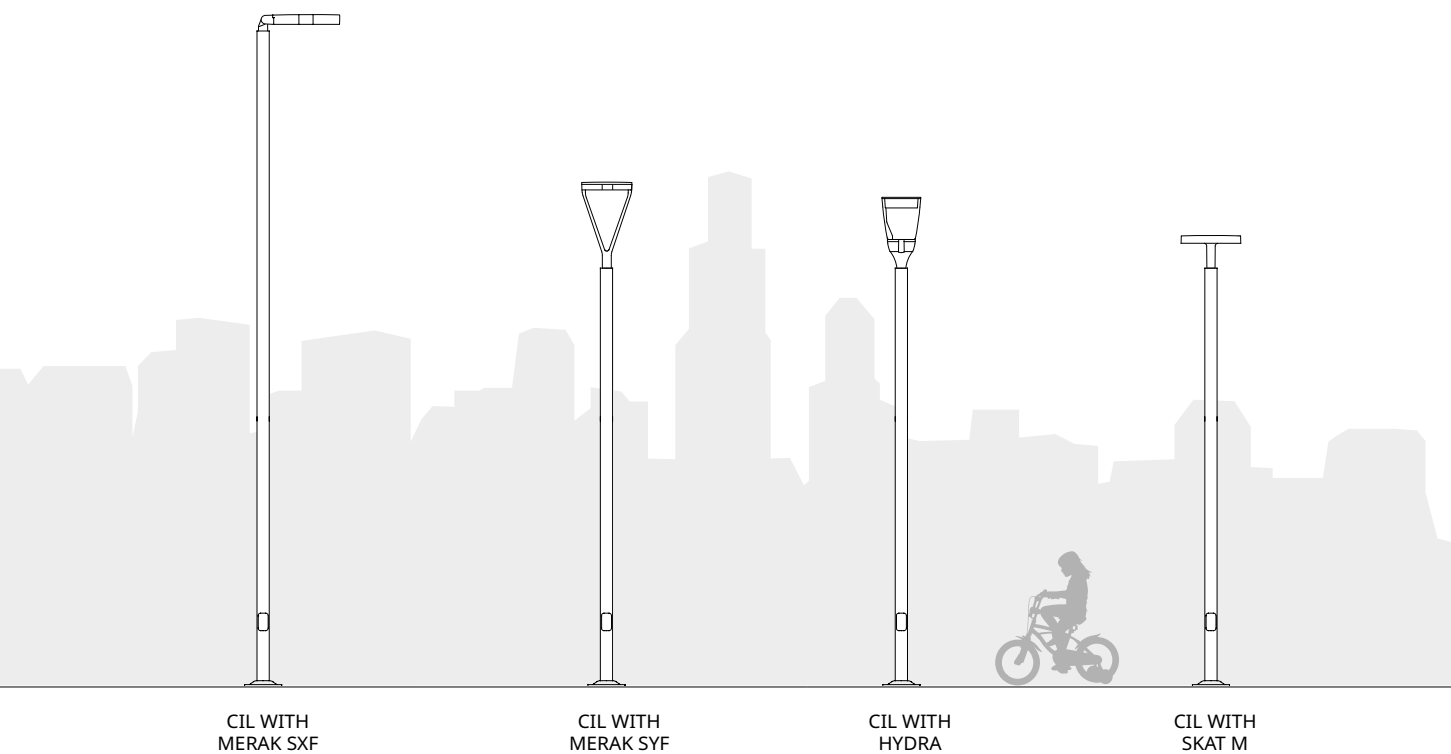
CIL WITH ALTAIR IYF

SUPPORT PROTECTIVE SYSTEMS AND FINISHES

Type of durability / atmospheric corrosion category*	Acid-less protection 	Stick-less protection 	Draw-less protection 
Standard finish: hot dip galvanised**	✓		
Standard Paint Finish: hot dip galvanised** and painted	✓	✓	✓
Seafront Paint Finish: hot dip galvanised** and painted	✓	✓	✓

\* According to EN ISO 12944 \*\* According to EN ISO 1461

See expanded information on protection systems and finishes on pages 28 and 514 respectively

CIL WITH  
MERAK SXFCIL WITH  
MERAK SYFCIL WITH  
HYDRACIL WITH  
SKAT M

## ACCESSORIES / REPLACEMENTS

Description	Order code
10 mm triangular closure post key	<b>50-73265</b>
Flush door replacement, 100 mm pole diameter, galvanised finish	<b>50-70985</b>
Flush door replacement, 127 mm pole diameter, galvanised finish	<b>see</b>





# ARCO

Simon ARCO functional curved pole, up to 11 m high, three different bending radii, conical tapering, and post-top luminaire fastening using lateral coupling.



Simon **ARCO** functional curved pole, up to 11 m high, three different bending radii, conical tapering, and post-top luminaire fastening using lateral coupling.

Flat flange plate with reinforcing ring and gussets and shaft made of S235JR-quality sheet carbon steel.

Flush trapdoor with interior reinforcement.

Post-top luminaire lateral fastening using cylindrical coupling, Ø60 mm x 200 mm and 5° angle.

IP3X protection rating. To achieve IP44, it is necessary to use an internal junction box, not supplied.

Hot dip galvanised finish. Allows Simon and RAL chart finishes, as well as other protective finishes.

Supplied with anchoring bolts, template and double nut to level the base. Luminaires not included.

Pole with CE-certified constancy of performance.

Recommended luminaires: NATH LXF, NATH MXF, NATH SXF, TAU, ALTAIR IXF and MERAK SXF.

## FASTENING SYSTEMS

Luminaire fastening Lateral fastening through Ø60 mm x 200 mm coupling at 5° angle.

Notes Anchoring bolts and template provided  
Luminaires not included

## FINISHES

Shaft Galvanised

Simon Colours (Standard Paint / Seafront Paint)  
RAL chart colours (Standard Paint / Seafront Paint)

## PHYSICAL FEATURES AND MATERIALS

IP IP3X. To achieve IP44, it is necessary to use an internal junction box with IP44 (not supplied on the pole).

Shaft Conical tapering

Trapdoor Flush with interior reinforcement

Construction Support manufactured in a single section

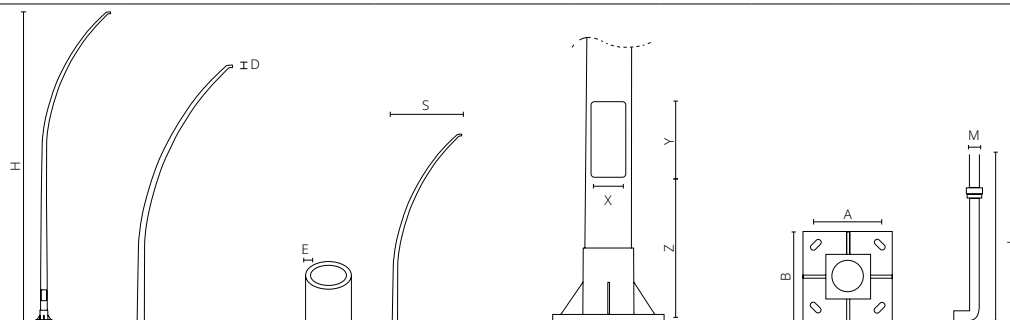
Shaft Carbon steel sheet, S235JR quality

Flange plate Flat steel sheet, S235JR quality, with reinforcing ring and gussets

## REGULATIONS AND CERTIFICATES

Support according to REGULATION EN 40-5

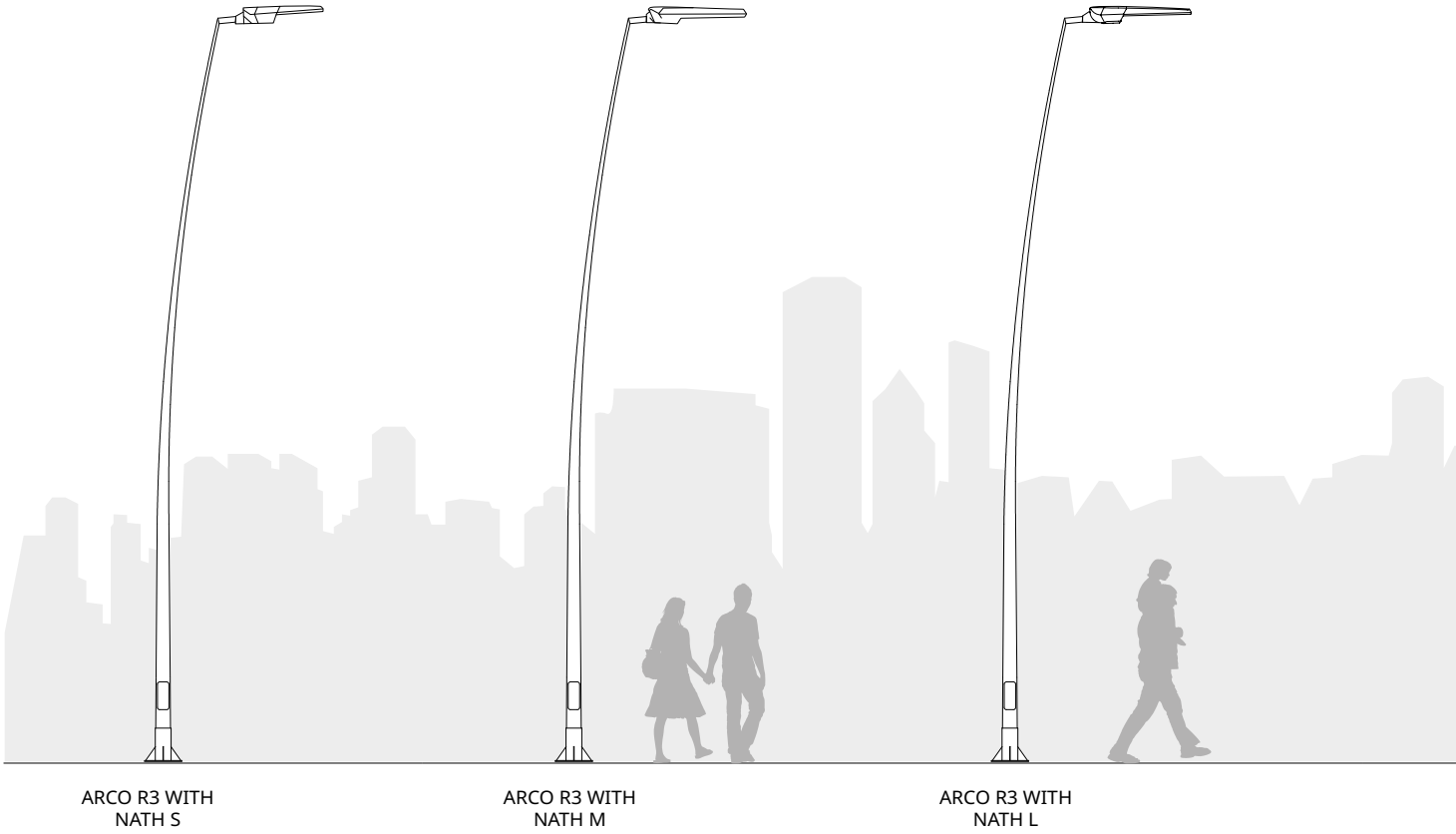
## TECHNICAL INFORMATION\* (Units in mm)



Model	Height	Diameter	Thickness	Overhang	Door			Flange plate		Bolts	Code
	H				Ø D	E	S	X	Y		
<b>Arco R1</b>	9,000	60	4	3,000	130	300	550	285	400	M22X600	<b>S-581809</b>
	10,000	60	4	3,500	135	300	550	285	400	M22X600	<b>S-581810</b>
	11,000	60	4	4,000	140	300	550	285	400	M22X600	<b>S-581811</b>
<b>Arco R2</b>	8,000	60	3	1,500	120	300	550	285	400	M22X600	<b>S-581708</b>
	9,000	60	3	1,500	125	300	550	285	400	M22X600	<b>S-581709</b>
	10,000	60	4	2,000	130	300	550	285	400	M22X600	<b>S-581710</b>
	11,000	60	4	2,000	135	300	550	285	400	M22X600	<b>S-581711</b>
<b>Arco R3</b>	8,000	60	3	550	120	300	550	285	400	M22X600	<b>S-581608</b>
	9,000	60	3	850	125	300	550	285	400	M22X600	<b>S-581609</b>
	10,000	60	4	1,000	130	300	550	285	400	M22X600	<b>S-581610</b>
	11,000	60	4	1,050	135	300	550	285	400	M22X600	<b>S-581611</b>

\* Check other measurements or configurations

RECOMMENDED LUMINAIRES (NOT INCLUDED)






ARCO R3 WITH NATH S

ARCO R3 WITH NATH M

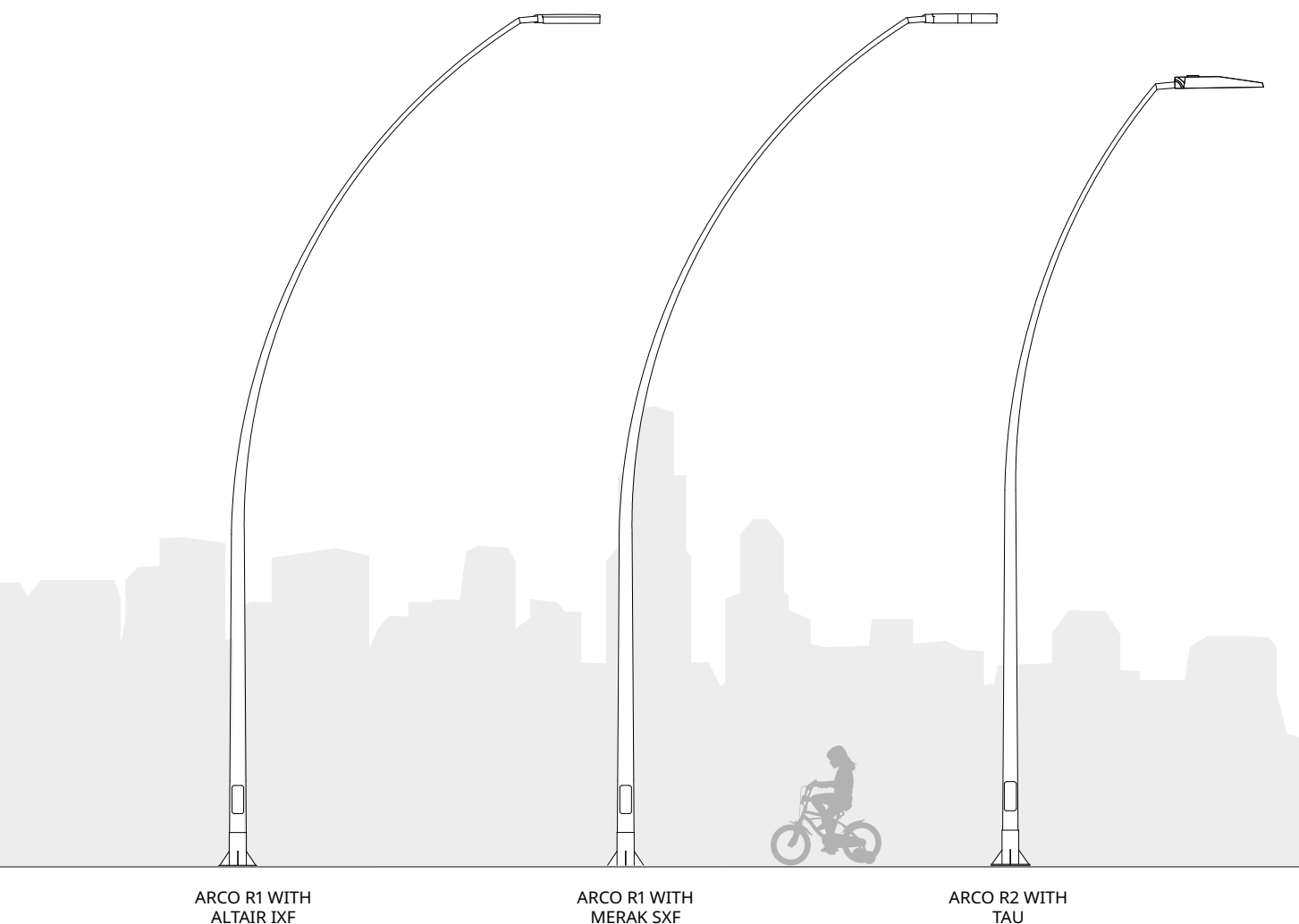
ARCO R3 WITH NATH L

SUPPORT PROTECTIVE SYSTEMS AND FINISHES

Type of durability / atmospheric corrosion category*	Acid-less protection 	Stick-less protection 	Draw-less protection 
Standard finish: hot dip galvanised**	✓		
Standard Paint Finish: hot dip galvanised** and painted	✓	✓	✓
Seafront Paint Finish: hot dip galvanised** and painted	✓	✓	✓

\* According to EN ISO 12944 \*\* According to EN ISO 1461

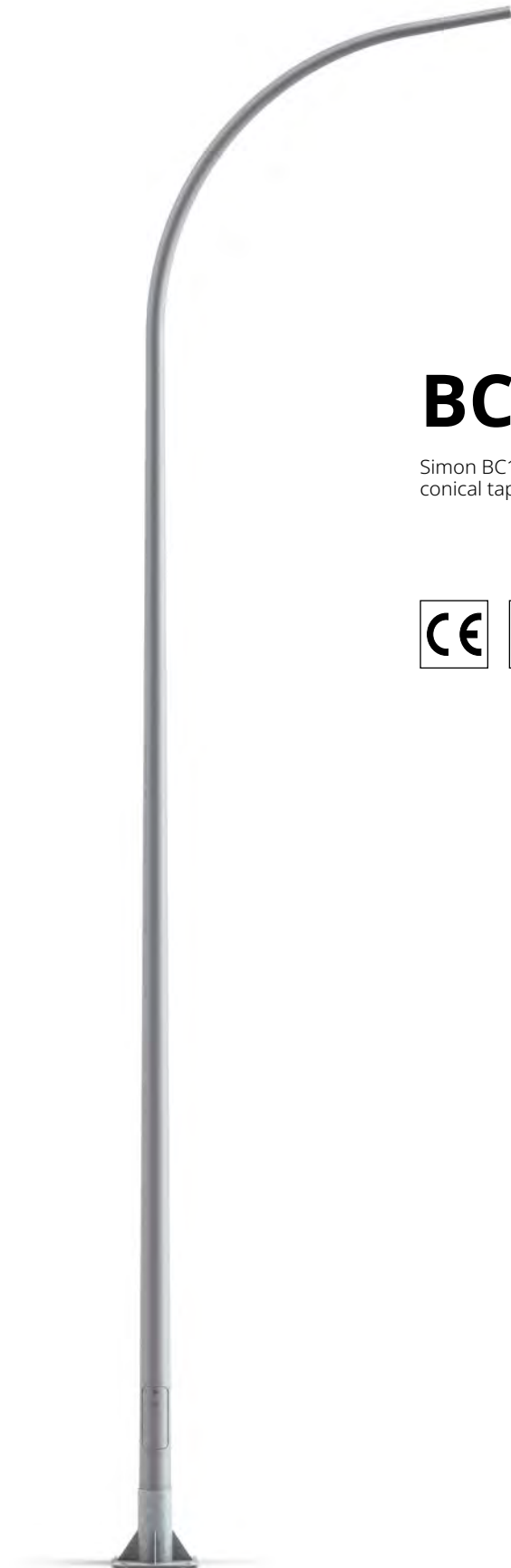
See expanded information on protection systems and finishes on pages 28 and 514 respectively

ARCO R1 WITH  
ALTAIR IXFARCO R1 WITH  
MERAK SXFARCO R2 WITH  
TAU

## ACCESSORIES / REPLACEMENTS

Description	Order code
Triangular 10 mm key to close trapdoor	<b>50-73265</b>
Flush door replacement, 8 m curved pole height, R1 model, 60 mm post-top diameter, galvanised finish	<b>S-551006</b>
Flush door replacement, 10 m curved pole height, R1 model, and 11 m curved pole height, R2 and R3 model, 60 mm post-top diameter, galvanised finish	<b>S-551156</b>
Flush door replacement, 11 m curved pole height, R1 model, 60 mm post-top diameter, galvanised finish	<b>S-551266</b>
Flush door replacement, 8 m curved pole height, R2 model, 60 mm post-top diameter, galvanised finish	<b>S-550846</b>
Flush door replacement, 9 m curved pole height, R2 model, 60 mm post-top diameter, galvanised finish	<b>S-550946</b>
Flush door replacement, 10 m curved pole height, R2 and R3 model, 60 mm post-top diameter, galvanised finish	<b>S-551056</b>
Flush door replacement, 8 m curved pole height, R3 model, 60 mm post-top diameter, galvanised finish	<b>S-550806</b>
Flush door replacement, 9 m curved pole height, R3 model, 60 mm post-top diameter, galvanised finish	<b>S-550906</b>





# BC1

Simon BC1 functional curved pole, up to 9 m high, conical tapering and post-top luminaire fastening.



Simon **BC1** functional curved pole, up to 9 m high, conical tapering and post-top luminaire fastening. Flat flange plate with reinforcing ring and gussets and shaft made of S235JR-quality sheet carbon steel. Flush trapdoor with interior reinforcement and interior sleeve. Post-top luminaire lateral fastening using cylindrical coupling, Ø60 mm x 230 mm and 10° angle. IP3X protection rating. To achieve IP44, it is necessary to use an internal junction box, not supplied. Hot dip galvanised finish. Allows Simon and RAL chart finishes, as well as other protective finishes. Supplied with anchoring bolts, template and double nut to level the base. Luminaires not included. Pole with CE-certified constancy of performance. Pole meets City of Barcelona product specifications. Recommended luminaires: NATH LXF, NATH MXF, NATH SXF, TAU, ALTAIR IXF and MERAK SXF.

## FASTENING SYSTEMS

Luminaire fastening Lateral fastening through Ø60 mm x 230 mm coupling at 10° angle

Notes Anchoring bolts and template provided.  
Luminaires not included.

## FINISHES

Shaft Galvanised  
Simon Colours (Standard Paint / Seafront Paint)  
RAL chart colours (Standard Paint / Seafront Paint)

## PHYSICAL FEATURES AND MATERIALS

IP IP3X. To achieve IP44, it is necessary to use an internal junction box with IP44 (not supplied on the pole).  
Shaft Conical tapering  
Trapdoor Flush with reinforcement and interior sleeve  
Construction Support manufactured in a single section  
Shaft Carbon steel sheet, S235JR quality  
Flange plate Flat steel sheet, S235JR quality, with reinforcing ring and gussets

## REGULATIONS AND CERTIFICATES

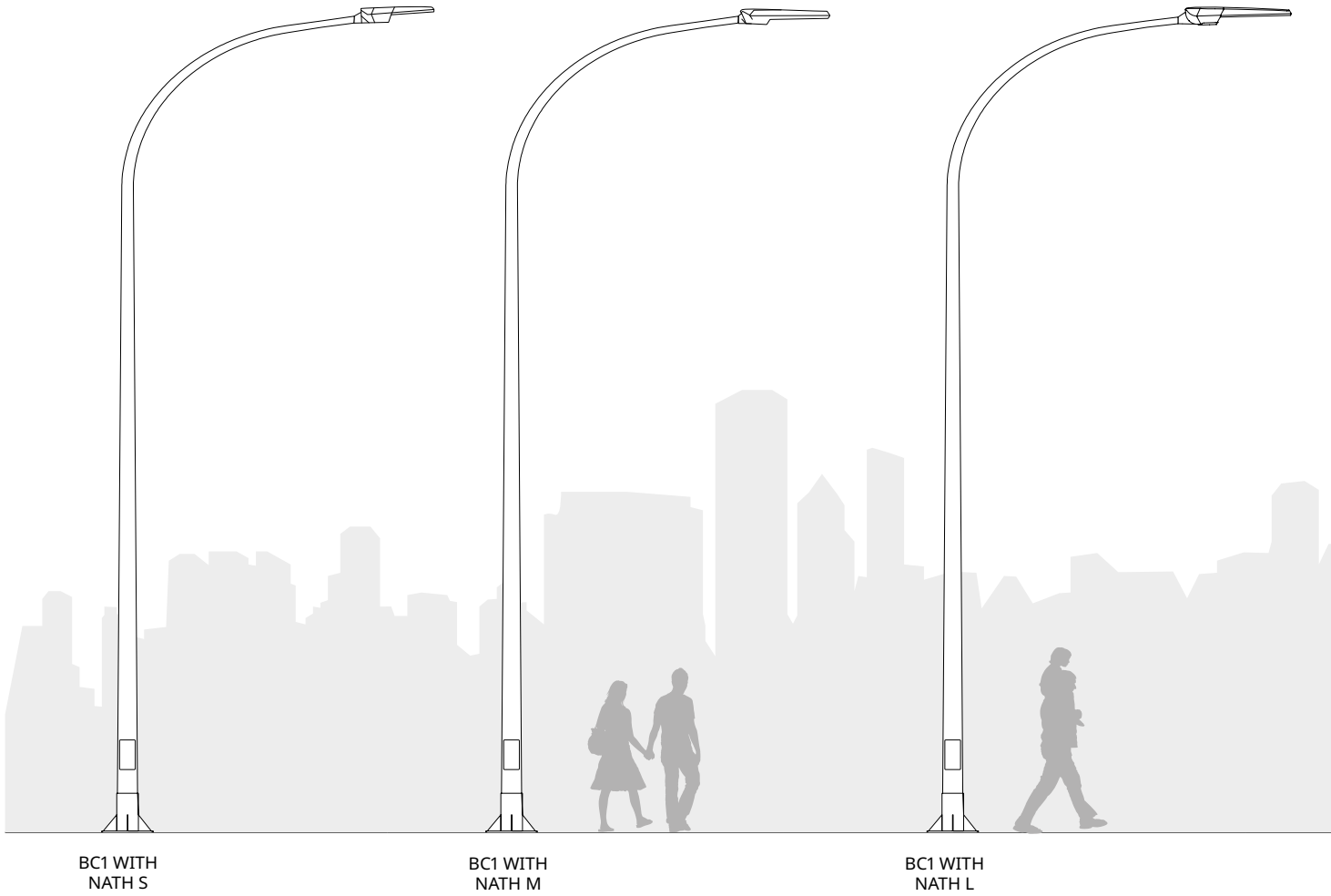
Support according to REGULATION EN 40-5  
Barcelona City Hall Conditions

## TECHNICAL INFORMATION\* (Units in mm)

Height	Diameter	Overhang	Thickness	Door			Flange plate		Bolts	Code
H	Ø D	S	E	X	Y	Z	A	B	M x L	
7,500	60	1,500	3	120	300	550	300	400	M22x600	<b>S-581575</b>
9,000	60	1,500	3	130	300	550	300	400	M22x600	<b>S-581509</b>

\* Check other measurements or configurations

RECOMMENDED LUMINAIRES (NOT INCLUDED)






BC1 WITH NATH S

BC1 WITH NATH M

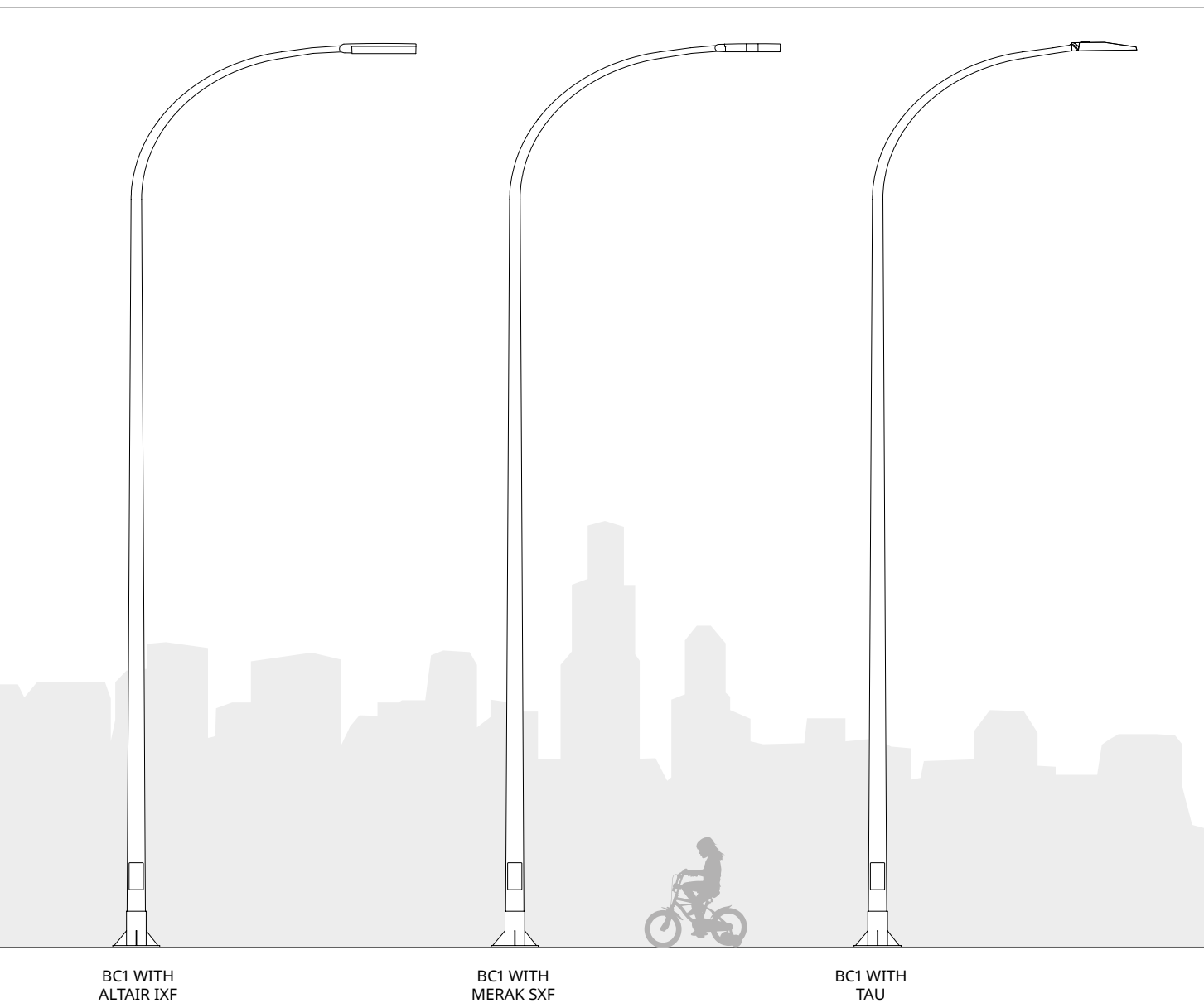
BC1 WITH NATH L

SUPPORT PROTECTIVE SYSTEMS AND FINISHES

Type of durability / atmospheric corrosion category*	 Acid-less protection	 Stick-less protection	 Draw-less protection
Standard finish: hot dip galvanised**	✓		
Standard Paint Finish: hot dip galvanised** and painted	✓	✓	✓
Seafront Paint Finish: hot dip galvanised** and painted	✓	✓	✓

\* According to EN ISO 12944 \*\* According to EN ISO 1461

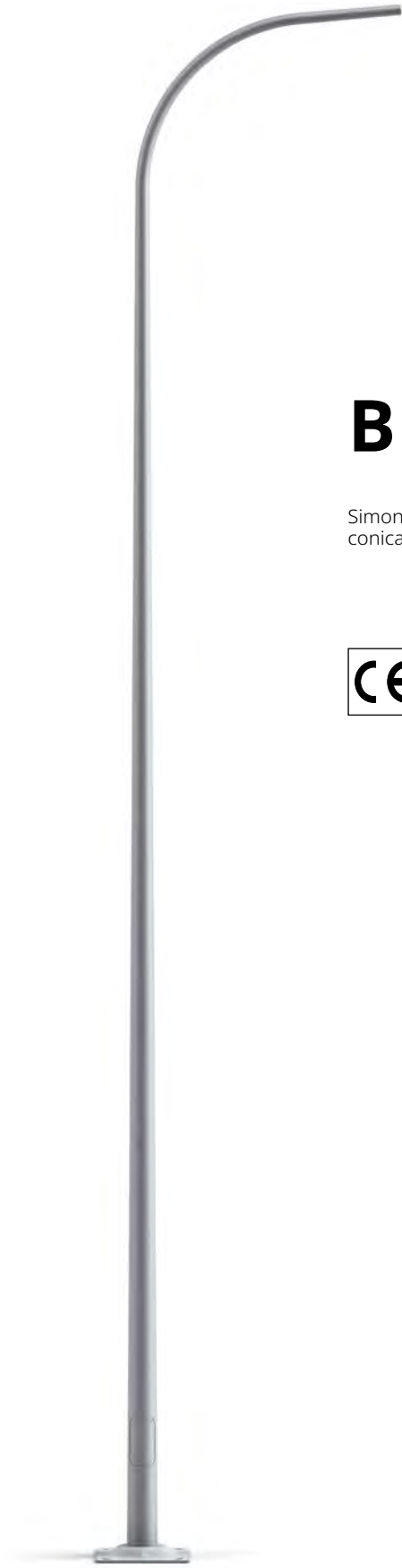
See expanded information on protection systems and finishes on pages 28 and 514 respectively



## ACCESSORIES / REPLACEMENTS

Description	Order code
Triangular 10 mm key to close trapdoor	<b>50-73265</b>
Flush door replacement, 7.5 m curved pole height, 60 mm post-top diameter, galvanised finish	<b>See</b>
Flush door replacement, 9 m curved pole height, 60 mm post-top diameter, galvanised finish	<b>See</b>





# BEU

Simon BEU functional curved pole, up to 12 m high, conical tapering and post-top luminaire fastening.



Simon **BEU** functional curved pole, up to 12 m high, conical tapering and post-top luminaire fastening. Recessed flange plate and shaft made of S235JR-quality sheet carbon steel.

Flush trapdoor with interior reinforcement.

Post-top luminaire lateral fastening using cylindrical terminal, Ø60 mm x 100 mm and 5° angle.

IP3X protection rating. To achieve IP44, it is necessary to use an internal junction box, not supplied.

Hot dip galvanised finish. Allows Simon and RAL chart finishes, as well as other protective finishes.

Supplied with anchoring bolts, template and double nut to level the base. Luminaires not included.

Pole with CE-certified constancy of performance.

Recommended luminaires: NATH LXF, NATH MXF, NATH SXF, TAU, ALTAIR IXF and MERAK SXF.

## FASTENING SYSTEMS

**Luminaire fastening** Lateral fastening through Ø60 mm x 100 mm cylindrical terminal and 5° angle.

**Notes** Anchoring bolts and template provided.  
Luminaires not included.

## FINISHES

**Shaft** Galvanised

Simon Colours (Standard Paint / Seafront Paint)  
RAL chart colours (Standard Paint / Seafront Paint)

## PHYSICAL FEATURES AND MATERIALS

**IP** IP3X. To achieve IP44, it is necessary to use an internal junction box with IP44 (not supplied on the pole).

**Shaft** Conical tapering

**Trapdoor** Flush with interior reinforcement

**Construction** Support manufactured in a single section

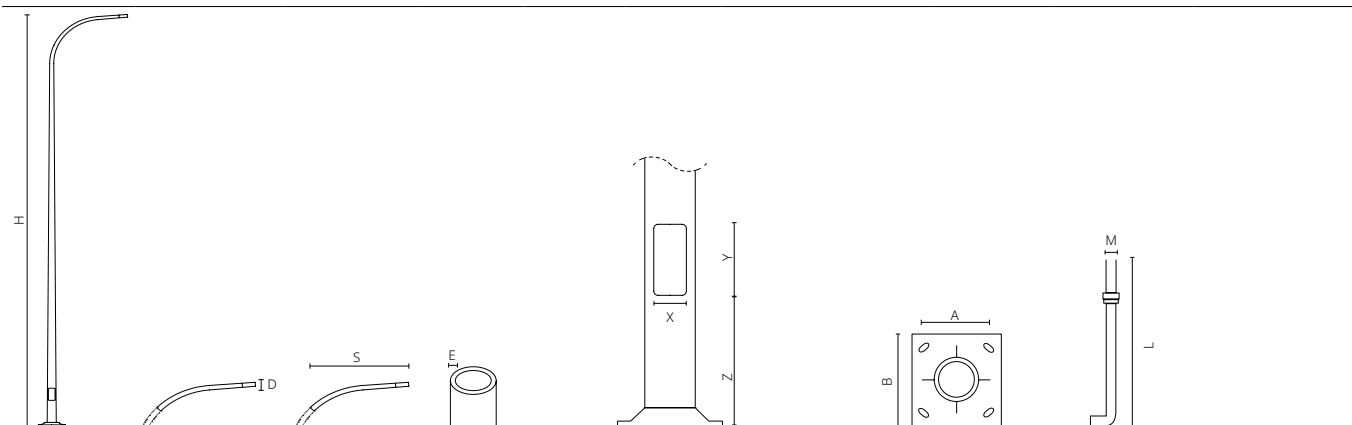
**Shaft** Carbon steel sheet, S235JR quality

**Flange plate** Flat steel sheet, S235JR quality, recessed

## REGULATIONS AND CERTIFICATES

**Support according to** REGULATION EN 40-5

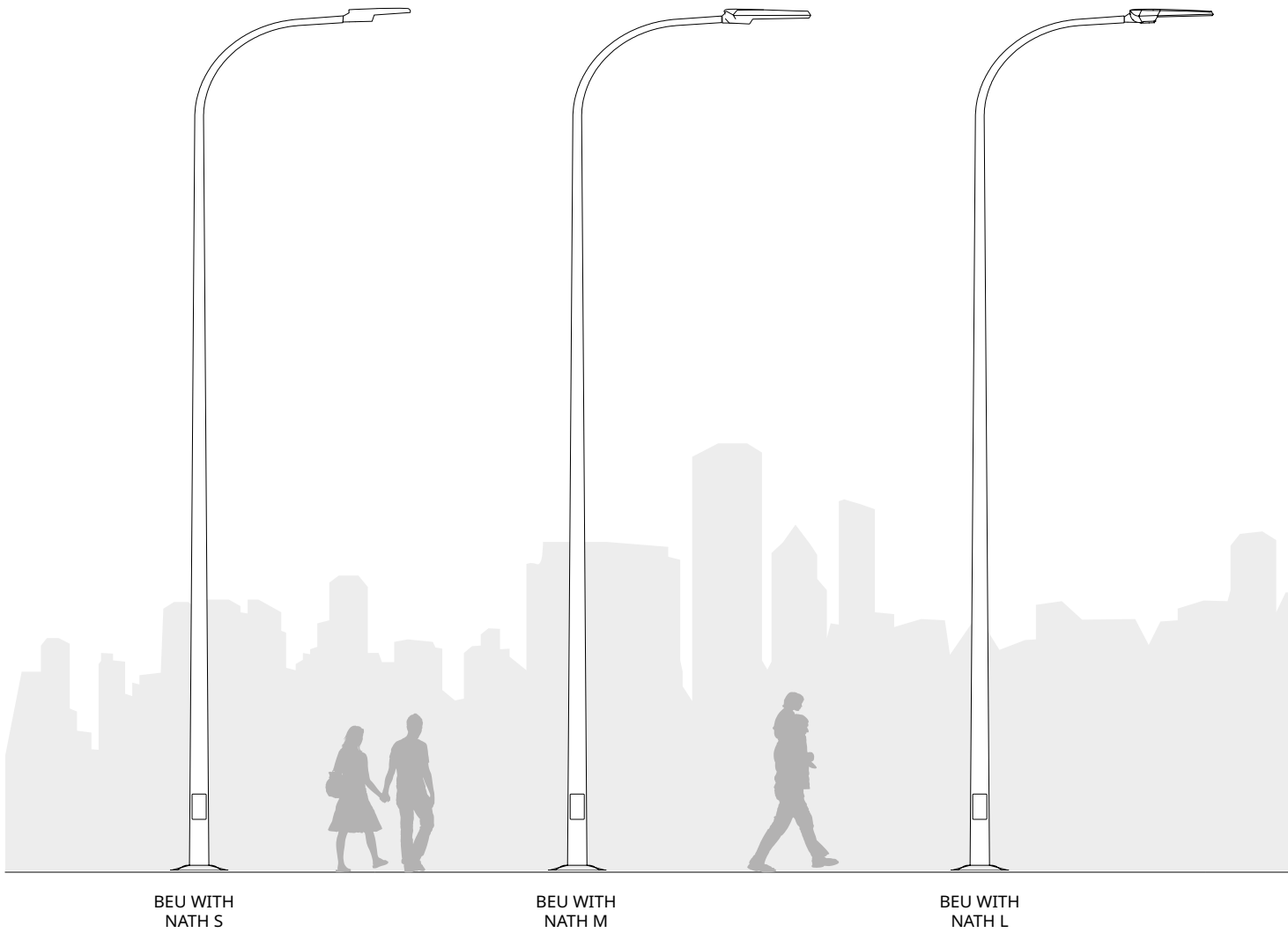
## TECHNICAL INFORMATION\* (Units in mm)






Height	Diameter	Overhang	Thickness	Door			Flange plate		Bolts	Code
H	Ø D	S	E	X	Y	Z	A	B	M x L	
6,000	60	1,500	3	115	300	550	285	400	M20x500	<b>BEU06153</b>
7,000	60	1,500	3	120	300	550	285	400	M20x500	<b>BEU07153</b>
8,000	60	1,500	3	125	300	550	285	400	M20x500	<b>BEU08153</b>
9,000	60	1,500	3	125	300	550	285	400	M22x600	<b>BEU09153</b>
10,000	60	1,500	3	130	300	550	285	400	M22x600	<b>BEU10153</b>
10,000	60	2,000	3	130	300	550	285	400	M22x600	<b>BEU10203</b>
12,000	60	1,500	4	130	300	550	285	400	M22x600	<b>BEU12154</b>
12,000	60	2,000	4	130	300	550	285	400	M22x600	<b>BEU12204</b>

\* Check other measurements or configurations

RECOMMENDED LUMINAIRES (NOT INCLUDED)

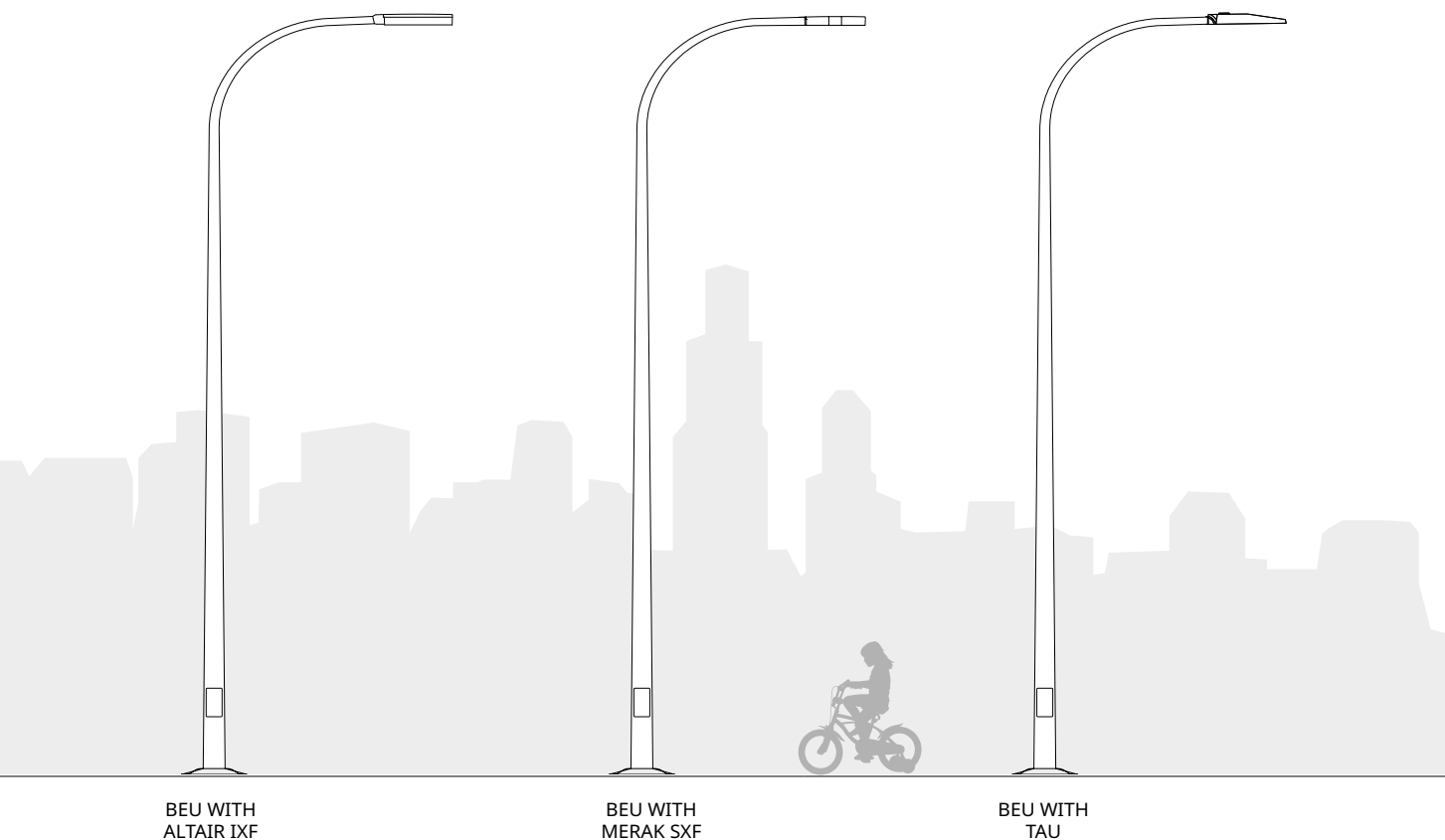


SUPPORT PROTECTIVE SYSTEMS AND FINISHES

	Type of durability / atmospheric corrosion category*	 Acid-less protection	 Stick-less protection	 Draw-less protection
Standard finish: hot dip galvanised**	-	✓		
Standard Paint Finish: hot dip galvanised** and painted	Average durability in corrosive environment C4.	✓	✓	✓
Seafront Paint Finish: hot dip galvanised** and painted	High durability in corrosive environment C5M.	✓	✓	✓

\* According to EN ISO 12944 \*\* According to EN ISO 1461

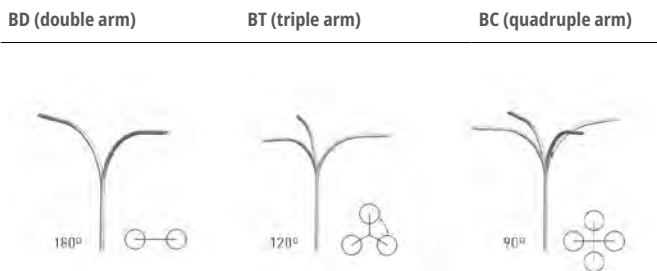
See expanded information on protection systems and finishes on pages 28 and 514 respectively



ACCESSORIES / REPLACEMENTS

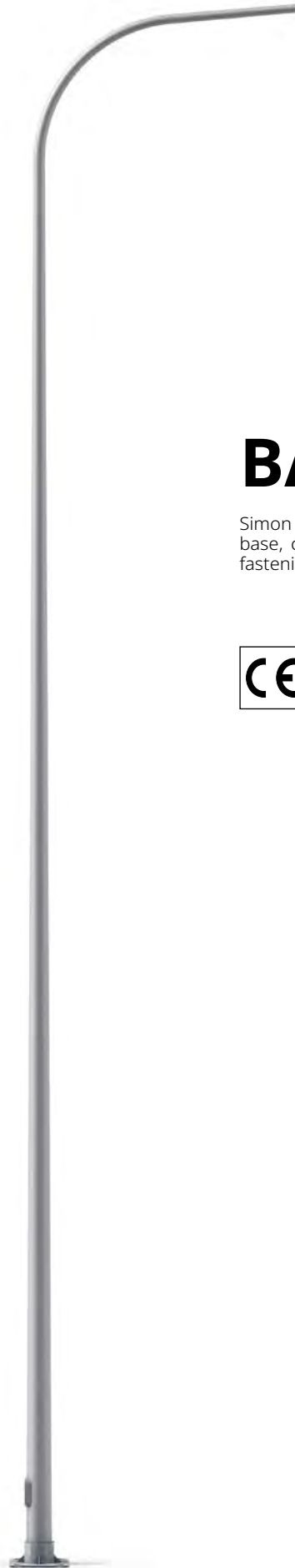
Description	Order code
Flush door replacement, 6 m curved pole height, 1.5 m overhang, 60 mm post-top diameter, galvanised finish	<b>S-550706</b>
Flush door replacement, 7 m curved pole height, 1.5 m overhang, 60 mm post-top diameter, galvanised finish	<b>S-550806</b>
Flush door replacement, 8 m curved pole height, 1.5 m overhang, 60 mm post-top diameter, galvanised finish	<b>S-550906</b>
Flush door replacement, 9 m curved pole height, 1.5 m overhang, 60 mm post-top diameter, galvanised finish	<b>S-551006</b>
Flush door replacement, 10 m curved pole height, 1.5 m overhang, 60 mm post-top diameter, galvanised finish	<b>S-551106</b>
Flush door replacement, 10 m curved pole height, 2 m overhang, 60 mm post-top diameter, galvanised finish	<b>S-551156</b>
Flush door replacement, 12 m curved pole height, 1.5 m overhang, 60 mm post-top diameter, galvanised finish	<b>see</b>
Flush door replacement, 12 m curved pole height, 2 m overhang, 60 mm post-top diameter, galvanised finish	<b>see</b>

CURVED POLES WITH ARMS



The codes of curved poles with multiple arms are made by adding the suffix to the curved pole base code. Example:  
 BEU curved pole of 9 m, 1.5 m overhang and 4 arms  
 BEU09153BC





# BAM

Simon BAM functional pole, up to 12 m high, square base, conical tapered shaft and post-top luminaire fastening.



Simon **BAM** functional pole, up to 12 m high, square base, conical tapered shaft and post-top luminaire fastening.

Flange plate with reinforcing ring and gussets, base and shaft made of S235JR-quality carbon steel sheet.

Trapdoor with exterior reinforcement frame.

Post-top luminaire fastening through Ø60 mm cylindrical terminal and 5° angle. Models whose reference number ends in P50 are supplied with the luminaire coupling tip reduced to 50 mm.

IP3X protection rating. To achieve IP44, it is necessary to use an internal junction box, not supplied.

Hot dip galvanised and painted in forged and sand blasted dark grey. Hot dip galvanised shaft and painted in Simon RAL 9006 grey colour. Allows Simon and RAL chart finishes, as well as other protective finishes.

Supplied with anchoring bolts, template and double nut to level the base. Luminaires not included.

Pole with CE-certified constancy of performance.

Recommended luminaires NATH LXF, NATH MXF, NATH SXF, TAU, ALTAIR IXF and MERAK SXF.

## FASTENING SYSTEMS

**Luminaire fastening** Post-top luminaire fastening through Ø60 mm cylindrical terminal and 5° angle

**Notes** Anchoring bolts and template provided.  
Luminaires not included.

## FINISHES

**Shaft** Galvanised  
Simon Colours (Standard Paint / Seafront Paint)  
RAL chart colours (Standard Paint / Seafront Paint)

## PHYSICAL FEATURES AND MATERIALS

**IP** IP3X. To achieve IP44, it is necessary to use an internal junction box with IP44 (not supplied on the pole).

**Shaft** Carbon steel sheet

**Trapdoor** With reinforcing ring frame, gussets and interior reinforcement

**Construction** Support manufactured in a single section

**Shaft** Carbon steel sheet, S235JR quality

**Flange plate** Recessed steel sheet, S235JR quality

## REGULATIONS AND CERTIFICATES

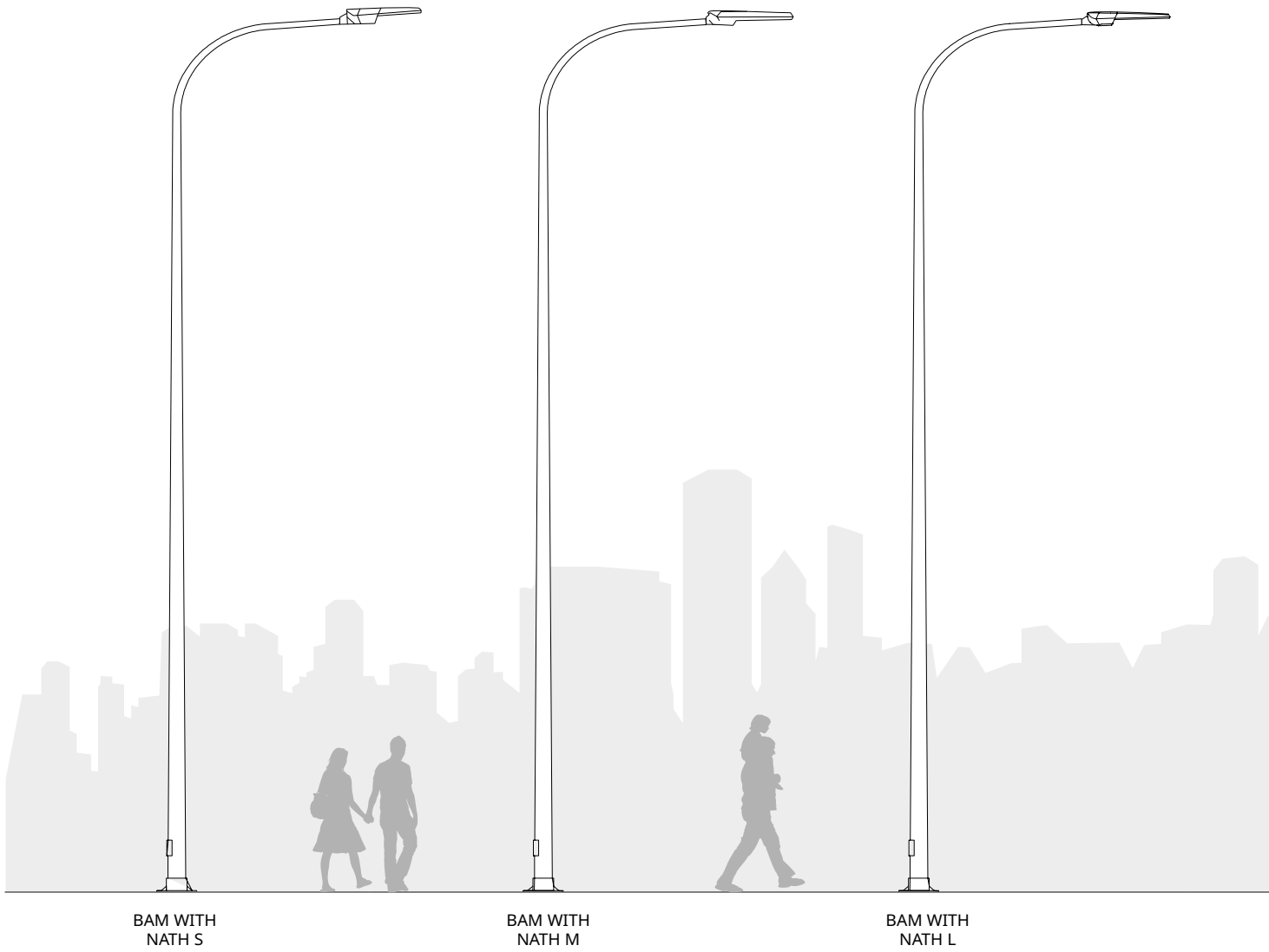
**Support according to** REGULATION EN 40-5

## TECHNICAL INFORMATION\* (Units in mm)

Height	Diameter	Overhang	Thickness	Door			Flange plate		Bolts	Code
H	Ø D	S	E	X	Y	Z	A	B	M x L	
6,000	60	1,000	3	102	162	410	285	400	M20x500	<b>BAM06103</b>
6,000	60	1,500	3	102	162	410	285	400	M20x500	<b>BAM06153</b>
7,000	60	1,000	3	140	192	410	285	400	M20x500	<b>BAM07103</b>
7,000	50	1,500	3	140	192	410	285	400	M20x500	<b>BAM07153P50</b>
7,000	60	1,500	3	140	192	410	285	400	M20x500	<b>BAM07153</b>
8,000	60	1,000	3	140	192	410	285	400	M20x500	<b>BAM08103</b>
8,000	60	1,500	3	140	192	410	285	400	M20x500	<b>BAM08153</b>
9,000	50	1,500	3	140	192	440	285	400	M22x600	<b>BAM09153P50</b>
9,000	60	1,500	3	140	192	440	285	400	M22x600	<b>BAM09153</b>
10,000	60	1,500	3	140	192	440	285	400	M22x600	<b>BAM10153</b>
10,000	60	2,000	3	140	192	440	285	400	M22x600	<b>BAM10203</b>
12,000	60	1,500	3	140	192	440	285	400	M22x600	<b>BAM12154</b>
12,000	60	2,000	3	140	192	440	285	400	M22x600	<b>BAM12204</b>

\* Check other measurements or configurations

RECOMMENDED LUMINAIRES (NOT INCLUDED)






BAM WITH NATH S

BAM WITH NATH M

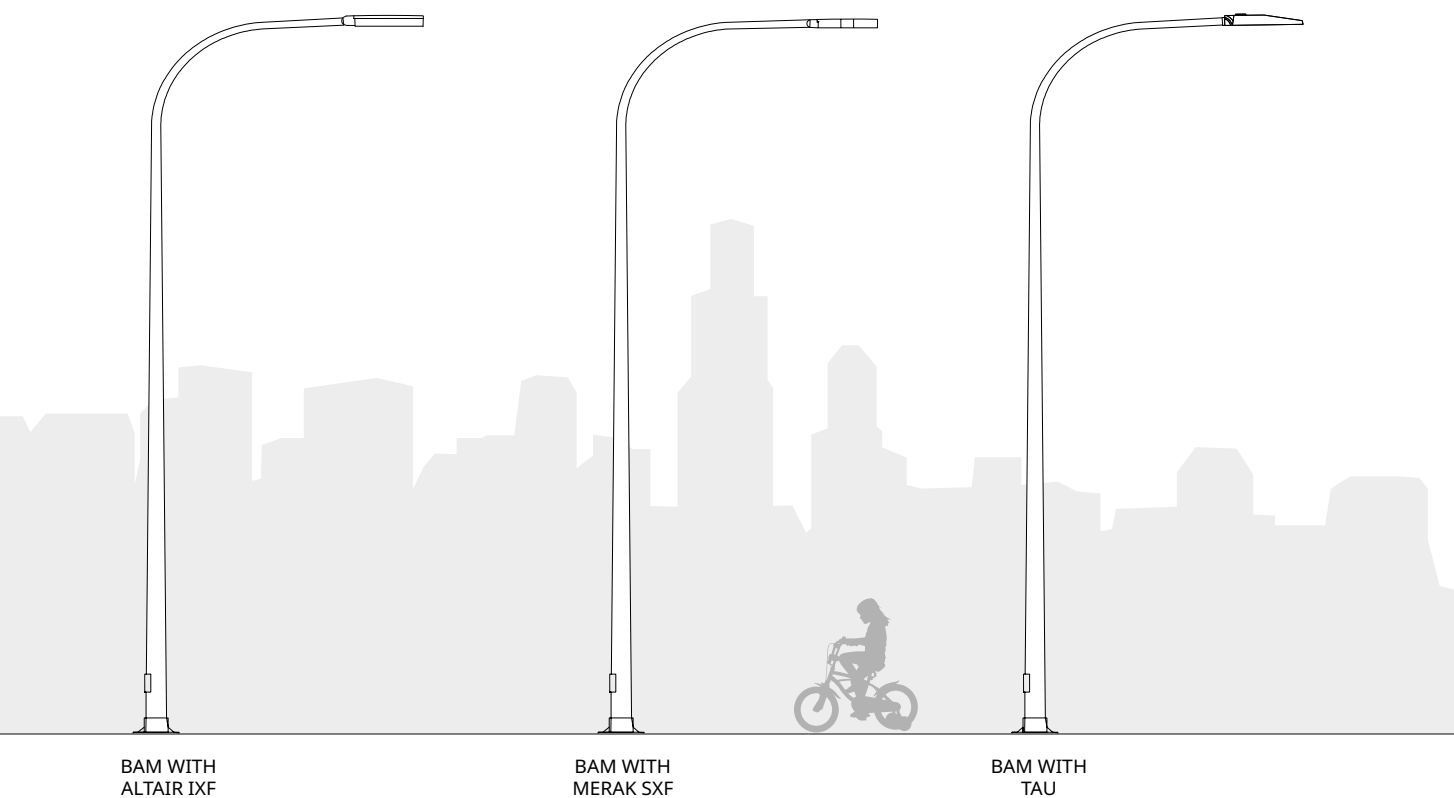
BAM WITH NATH L

SUPPORT PROTECTIVE SYSTEMS AND FINISHES

	Type of durability / atmospheric corrosion category*	 Acid-less protection	 Stick-less protection	 Draw-less protection
Standard finish: hot dip galvanised**	-	✓		
Standard Paint Finish: hot dip galvanised** and painted	Average durability in corrosive environment C4.	✓	✓	✓
Seafrost Paint Finish: hot dip galvanised** and painted	High durability in corrosive environment C5M.	✓	✓	✓

\* According to EN ISO 12944 \*\* According to EN ISO 1461

See expanded information on protection systems and finishes on pages 28 and 514 respectively



BAM WITH  
ALTAIR IXF

BAM WITH  
MERAK SXF

BAM WITH  
TAU

**ACCESSORIES / REPLACEMENTS**

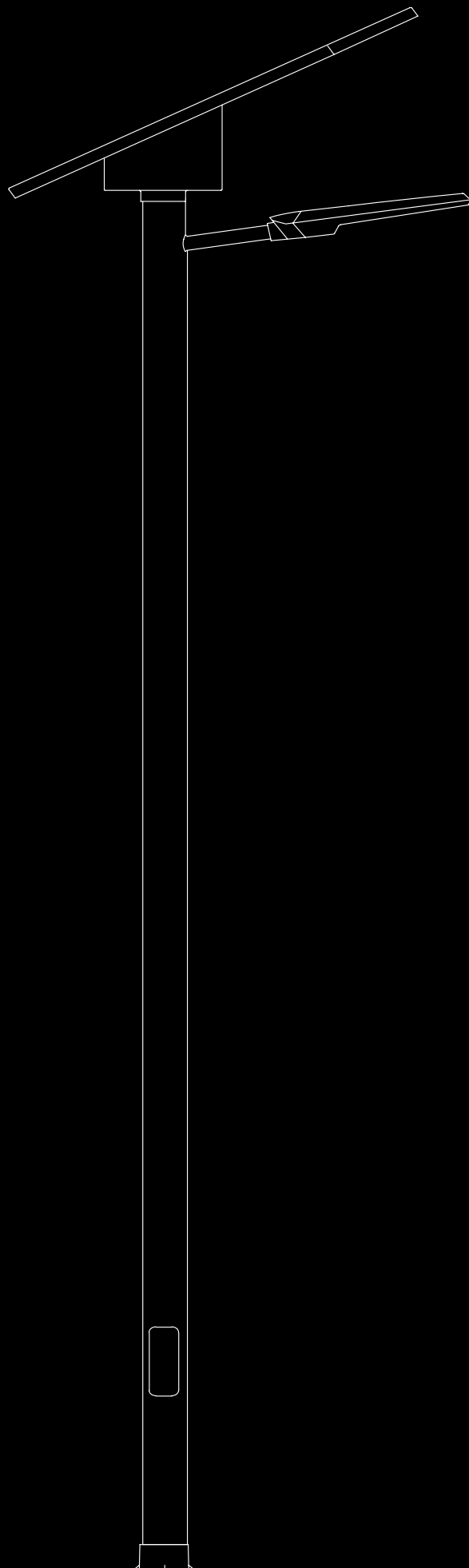
Description	Order code
Triangular 10 mm key to close trapdoor	<b>50-73265</b>
Flush door replacement, 4 to 7 m pole height, galvanised finish	<b>50-70988</b>
Flush door replacement, 8 to 12 m pole height, galvanised finish	<b>50-71269</b>

**CURVED POLES WITH ARMS**

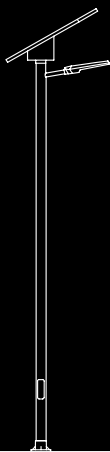
BD (double arm)	BT (triple arm)	BC (quadruple arm)
<p>180°</p>	<p>120°</p>	<p>90°</p>

The codes of curved poles with multiple arms are made by adding the suffix to the curved pole base code. Example:  
 BAM curved pole of 9 m, 1.5 m overhang and 4 arms  
 BAM09153BC

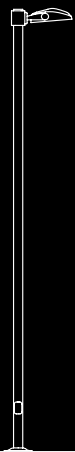




# CUSTOM SOLUTIONS



**MAGNOLIA  
SOLAR**  
P.402



**TRAFIC  
MIŁOS**  
P.410



**NEON**  
P.420



**SM20**  
P.428



**SM34**  
P.436

Our specific solutions are designed to fulfil a particular function, allowing vehicles and people to move around in a safe, sustainable and functional way. We offer solar solutions equipped with solar panels, solutions for pedestrian crossings with advanced technical features and electric vehicle charging solutions.



# SOLAR: MAGNOLIA

Simon's solar solutions are equipped with solar panels and controllers that fulfil specific sustainability, safety and functionality purposes.



Main roads



Parking areas



Green trails



Avenues



Pedestrian streets



Parks / Gardens



Squares



Urban cycle paths



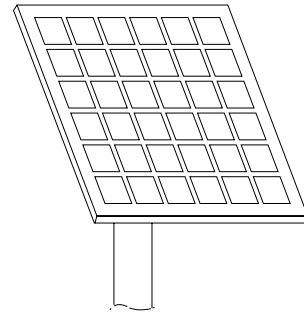
Roundabouts / Intersections





# SOLAR

## FEATURES



### SOLAR PANEL

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**MAGNOLIA:** Monocrystalline solar panel.  
 30° or 60° angle to horizontal axis.  
 Allows the panel to be directed 360° on vertical axis.  
 25-year service life with 20% decrease in power.  
 Equipped with sealed junction box and IP66 connectors.  
 High quality and high transmission tempered glass top cover to provide high impact resistance and high hardness.

### SOLAR CONTROLLER

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Battery status indicator with low charge alarm.  
 Internal temperature sensor.  
 Charges batteries in three phases: initial, absorption and float. This type of charging optimises battery life.  
 Protected against surges, short circuit and reverse polarity of solar panels and/or battery.

### BATTERY

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Gel battery  
 1,800 cycle service life with 30% discharges.

### MAINTENANCE

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The CEDRUS and MAGNOLIA range are practically maintenance free due to the high quality of the components used. Performing the following actions is recommended at the end of the operational life of the components:

- Battery replacement: 5 years
- Solar panel replacement: 25 years

## PROJECT IMPLEMENTATION

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A lighting project with stand-alone solar lighting points requires two analyses:

- **Lighting Calculation** to ensure the minimum lighting levels required for the road type are met.
- **Runtime Calculation** to analyse the installation's energy viability and adequately gauge the stand-alone solar point's critical components according to lighting requirements, in order to achieve the proposed runtime.

For the SIMON Projects Department to make the calculations, it is essential to have a blueprint with information on the area that needs to be lit, the type of lighting required, etc., as with any other lighting project. Furthermore, knowing the project's exact location is necessary to obtain historical data on average solar radiation and other weather information required to make the Runtime Calculation.

## CLIENT DOCUMENTATION

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SIMON's Projects Department gives the client the following documentation:

- **Lighting calculation** with expected levels.
- **Solar report** with an analysis of the installation's expected runtime.

The Solar Report includes the following information:

- Average solar radiation during the twelve months of the year for the installation's geographical location, which provides a forecast of the energy the solar panel will be able to absorb.
- Technical parameters of the stand-alone solar point configured specifically for the project.
- Functioning analysis of the solar point and energy balances for the months with the most and least average solar radiation.
- Energy saving scheme expected for the luminaire.
- Specific technical features of the solar point components.

## CEDRUS AREAS OF APPLICATION

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Due to the intrinsic features of stand-alone solar lighting points, the following areas of application are recommended:

- Environmentally friendly installations with lighting points that use solar energy to generate light at night:
  - Avenues, streets, squares and intersections
  - Parks and large green areas
- Installations that are far away from electricity grid networks, where a connected solution is not financially viable and stand-alone lighting solutions are preferable:
  - Transport links
  - Suburban bike lanes
  - Remote bus stops or train stations
  - Remote service areas

Due to the intrinsic features of this technology, its use is not recommended in areas where, due to their location and/or adjacent physical elements, shadows are cast on the solar panel, such as urban areas with buildings that are taller than the panel, areas near to trees that may cover the panel or the north face of mountains (south face in the southern hemisphere).

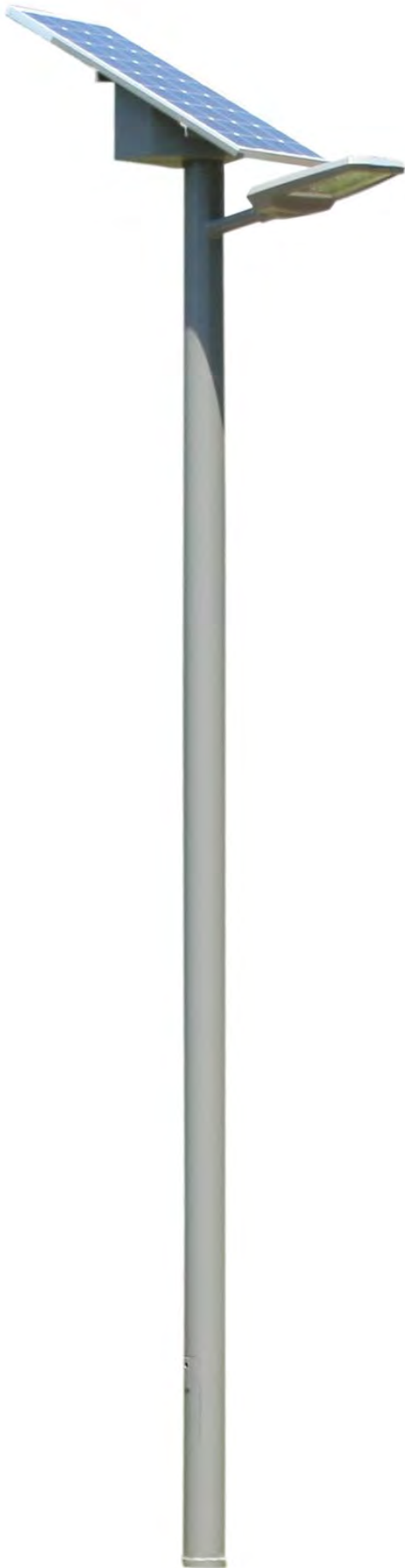
## MAGNOLIA AREAS OF APPLICATION

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Due to the intrinsic features of stand-alone solar lighting points, the following areas of application are recommended:

- Environmentally friendly installations with lighting points that use solar energy to generate light at night:
  - Green trails
  - Avenues, streets, squares and intersections
  - Parks and large green areas
- Installations that are far away from electricity grid networks, where a connected solution is not financially viable and stand-alone lighting solutions are preferable:
  - Transport links
  - Suburban bike lanes
  - Remote bus stops or train stations
  - Remote service areas

Due to the intrinsic features of this technology, its use is not recommended in areas where, due to their location and/or adjacent physical elements, shadows are cast on the solar panel, such as urban areas with buildings that are taller than the panel, areas near to trees that may cover the panel or the north face of mountains (south face in the southern hemisphere).



# MAGNOLIA SOLAR

Simon MAGNOIA stand-alone solar point, up to 8 m high, with cylindrical shaft, lateral luminaire fastening through coupling, battery holder and solar panel support.



Simon **MAGNOIA** stand-alone solar point, up to 8 m high, with cylindrical shaft, lateral luminaire fastening through coupling, battery holder and solar panel support.

Flat flange plate with reinforcing ring and gussets, shaft, coupling, battery holder and solar panel support made of S235JR-quality carbon steel sheet. Battery/batteries located in holder and solar controller located inside shaft with trapdoor access. Flush trapdoor with interior reinforcement.

Lateral luminaire fastening through Ø60 mm x 400 mm coupling at 5° angle. Upper solar panel fastening through support with four anchoring points and discrete angles between 30° and 60°. Allows the panel to be directed 360° on vertical axis.

IP3X protection rating. To achieve IP44, it is necessary to use an internal junction box, not supplied.

Hot dip galvanised finish and painted in Simon GY9007 colour. Allows Simon and RAL chart finishes, as well as other protective finishes.

Supplied with anchoring bolts, template and double nut to level the base. Luminaires not included.

Pole with CE-certified constancy of performance.

Monocrystalline solar panel with power and operating voltage according to model, equipped with high-performance bypass diodes to minimise power drops caused by shadows, waterproof junction box and fast-connect IP66 connectors.

Gel battery/batteries with storage capacity according to model, with operating voltage of 12VDC, and optimal service life length in float mode and in cycles. Connections with flat copper terminals with M8 bolts to optimise contact and avoid accidental battery discharges.

Solar controller for energy flow management, with internal temperature sensor, battery charging process divided into three phases, with protection against surges, short circuits and reverse polarity of solar panel and/or battery and charging output disconnection due to low voltage. Specific low loss wiring, with 6 mm<sup>2</sup> section, to connect the panel and battery/batteries to solar controller. Recommended luminaire: NATH SXF and TAU.

### DIMENSIONS AND FASTENING SYSTEMS

Luminaire fastening	Lateral fastening through Ø60 mm x 400 mm coupling at 10° angle
Notes	Anchoring bolts and template provided Luminaires not included

### PHYSICAL FEATURES AND MATERIALS

IP	IP3X. To achieve IP44, it is necessary to use the internal junction box with IP44 (not supplied with the pole).
Shaft	Cylindrical
Trapdoor	Flush
Construction	Support manufactured in a single section with upper fastening for battery holder and solar panel support
Coupling	Carbon steel sheet, S235JR quality
Storage hopper and solar panel support	Carbon steel sheet, S235JR quality
Shaft	Carbon steel sheet, S235JR quality
Flange plate	Flat steel sheet, S235JR quality, with reinforcing ring and gussets

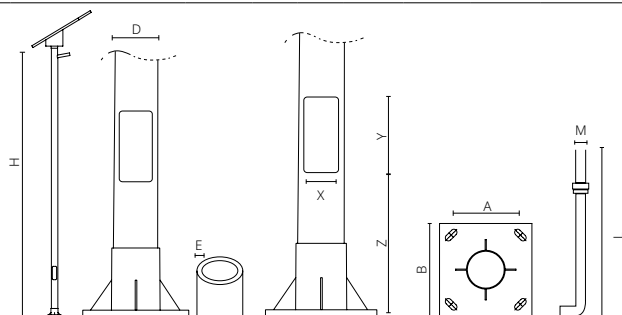
### FINISHES

Coupling	Galvanised and painted in GY9007 colour (Standard Paint)
Storage hopper and solar panel support	Galvanised and painted in GY9007 colour (Standard Paint)
Shaft	Galvanised and painted in GY9007 colour (Standard Paint)  Simon Colours (Standard Paint / Seafont Paint) RAL chart colours (Standard Paint / Seafont Paint)

### REGULATIONS AND CERTIFICATES

Support*	not applicable
Solar panel according to	EN 61730 / EN IEC 63000
Solar controller according to	EN 61000-6-3 / EN 61000-6-2 / EN 61000-6-1 / EN 55014-1 / EN 55014-2 / EN 55014-2 / EN 62109-1 / EN IEC 63000
Battery according to	EN 55014-1 / EN 55014-2 / EN 61000-3-3 / EN 60335-1

### TECHNICAL INFORMATION\*\* (Units in mm)



Model	Height	Diameter	Thick-ness	Door			Flange plate		Bolts	Solar Panel			Batteries		Code
	H	Ø D	E	X	Y	Z	A	B		(Wp****)	Operating voltage (V <sub>DC</sub> )	Angle	No. of batt.	Capacity (Ah)	
<b>Extended Battery Life</b>	4,000	152	3	100	300	3,400	300	400	M24 x 800	200	24	60°	2	2x90	<b>5-660144-016</b>
	5,000	152	3	100	300	4,400	300	400	M24 x 800	200	24	60°	2	2x90	<b>5-660145-016</b>
	6,000	152	3	100	300	5,400	300	400	M24 x 800	200	24	60°	2	2x90	<b>5-660146-016</b>
	7,000	152	3	100	300	6,400	300	400	M24 x 800	200	24	60°	2	2x90	<b>5-660147-016</b>
	8,000	152	4	100	300	7,400	300	400	M24 x 800	200	24	60°	2	2x90	<b>5-660148-016</b>
<b>Average Battery Life</b>	4,000	152	3	100	300	3,400	300	400	M24 x 800	175	12	60°	1	90	<b>5-660154-016</b>
	5,000	152	3	100	300	4,400	300	400	M24 x 800	175	12	60°	1	90	<b>5-660155-016</b>
	6,000	152	3	100	300	5,400	300	400	M24 x 800	175	12	60°	1	90	<b>5-660156-016</b>




\* The support structural calculations are made according to regulation EN 40-5 criteria \*\* Check other measurements or configurations  
\*\*\*\* Values can vary due to the constant progress that the technology undergoes.





MAGNOLIA SOLAR  
WITH NATH S

SUPPORT PROTECTIVE SYSTEMS AND FINISHES

	Type of durability / atmospheric corrosion category*	 Acid-less protection	 Stick-less protection	 Draw-less protection
Standard Paint Finish: hot dip galvanised** and painted	Average durability in corrosive environment C4.	✓	✓	✓
Seafrost Paint Finish: hot dip galvanised** and painted	High durability in corrosive environment C5M.	✓	✓	✓

\* According to EN ISO 12944    \*\* According to EN ISO 1461

See expanded information on protection systems and finishes on pages 28 and 514 respectively

## ACCESSORIES / REPLACEMENTS

Description	Order code
Triangular 10 mm key to close trapdoor	<b>50-73265</b>
Gel battery, 90 Ah, 12VDC	<b>50-73447</b>
Solar controller with assembly plate	<b>50-73362</b>
Monocrystalline solar panel for Extended Battery Life solar points	<b>50-73449</b>
Monocrystalline solar panel for Average Battery Life solar points	<b>50-73601</b>



# TRAFIC:

# MILOS

ISTANIUM<sup>LED</sup>®

Simon's TRAFIC custom lighting solutions illuminate pedestrian crossings without compromising the appearance of luminaires. Equipped with advanced technical features to promote the safety of vehicles and pedestrians.



Avenues



Commercial areas



Zebra crossings





# TRAFFIC FEATURES

## DESCRIPTION

Adequately illuminate pedestrians with new TRF and TRI symmetrical optics that prevent them from remaining in semi-darkness.

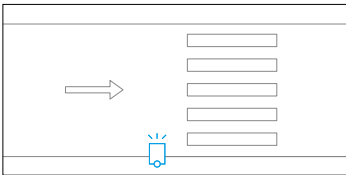
No glare for the driver since the light is focused on the pedestrian.

Illuminates both the road and the pavement access points. Clearly identifies pedestrian crossings by creating greater contrast, thanks to its different warm and neutral colour temperatures.

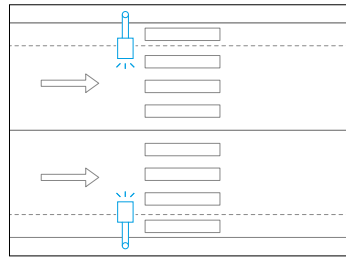
Ensures proper lighting for the pedestrian and access points in areas where pedestrians, bicycles and traffic converge.

## ROAD TYPES

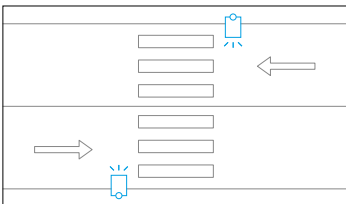
One-lane street, 3.5 m wide, one-way traffic:



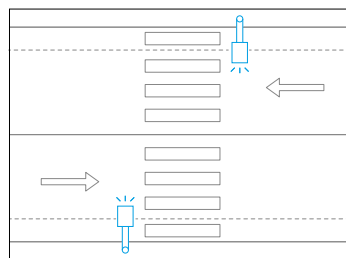
Two-lane street, 3.5 m wide, plus two parking lanes, one-way traffic, total width 11 m:



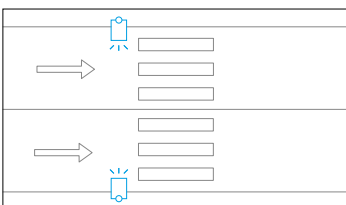
Two-lane street, 3.5 m wide, two-way traffic, total width 7 m:



Two-lane street, 3.5 m wide, plus two parking lanes, two-way traffic, total width 11 m:



Two-lane street, 3.5 m wide, one-way traffic, total width 7 m:



## TRAFIC MILOS

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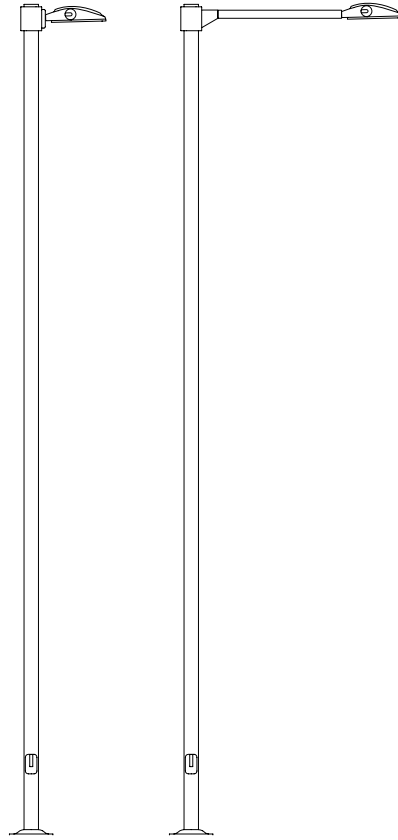
Configure your **TRAFIC** lighting point with the Simon **Milos SFX** Istanium LED spotlight luminaire.



TRFPED finish  
Trafic Peatonal



TRFSCL finish  
Trafic Escolar



Tangential

1150 mm arm



# TRAFIC MILOS

## ISTANIUM<sup>®</sup> LED

Simon TRAFIC MILOS LED lighting point, specifically for lighting pedestrian crossings, 5 m high, with cylindrical shaft, and lateral fastening for MILOS LED spotlight, size S, through tangential cable tie or cable tie with 1.150 m long arm.



Mount:



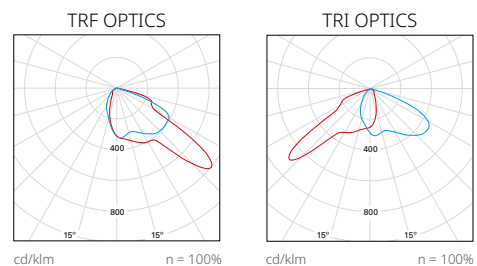
COLOUR TEMP.: ND L 4000 K | WDL 3000 K | SDL 2700 K | XDL 2200 K | PCA\*

COLOUR RENDERING INDEX: >70

UPWARD LIGHT OUTPUT RATIO (ULOR): <0.1%\*\*

LED DURATION (L90 B10 AT T<sub>a</sub>=25 °C AND T<sub>j</sub>=95 °C): 100.000h

\* Upon request \*\* Value may change depending on the optics



cd/klm n = 100%

— C0 - C180 — C90 - C270

Simon **TRAFIC MILOS** LED lighting point, specifically for lighting pedestrian crossings, 5 m high, with cylindrical shaft, and lateral fastening for **MILOS** LED spotlight, size S, through tangential cable tie or cable tie with 1.150 m long arm. Supported by a recessed flange plate, shaft and arms made of S235JR-quality carbon steel sheet. Cable ties made of die-cast aluminium. Flush trapdoor with interior reinforcement. Lateral spotlight fastening using a cable tie, with bracket anchoring using a screw, or lateral spotlight fastening using a cable tie with arm, with bracket anchoring plate using screw(s). IP3X protection rating. To achieve IP44, it is necessary to use an internal junction box, not supplied. Hot dip galvanised and painted finish. TRAFIC PEATONAL finish: support painted in Simon RD3000 colour and cable tie/arm painted in Simon WH9003 colour. TRAFIC ESCOLAR finish: support painted in Simon BL5015 colour and cable tie/arm painted in Simon WH9003 colour. Allows other protective finishes. Supplied with anchoring bolts, template and double nut to level the base. Pole with CE-certified constancy of performance. Specific Simon MILOS LED spotlight, size S, made of die-cast aluminium. Flat cover. Internal refrigeration system through fins. Possibility of fitting an upper **Zhaga/NEMA** connector. Access to gear and maintenance from the bottom with front lever opening, without tools. Easy-clean transparent flat tempered glass diffuser to prevent UV radiation in the optics. **IP66** protection rating for full spotlight, and **IK08** impact resistance rating. Possibility of mounting two double asymmetrical multi-array optics, specifically for pedestrian crossing lighting, to direct light flux by keeping the longitudinal axis of the spotlight perpendicular to the road. Possibility of four colour temperatures in white light, as well as PCA (Phosphor Converted Amber) for specially protected areas. Service life of **LED L90 B10 100,000 hours**. Istantium LED lighting groups can be replaced and updated even when the luminaire is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (**ULOR**) equal to **0%** with an angle from 0° to ± 5° (verify according to optics used). With **Class I** and **Class II** electronic control gear with 230 V<sub>ac</sub> / 50 Hz supply voltage. Possibility of including additional protection against surges of **10 kV/10 kA**. Optional dimming with control line 2N+, without control line (Self-dimming) 2N-, by means of a flow dimmer from CAD cabinet amplitude dimming, for telemanagement with 1.10V or DALI input, according to luminaire model. Optional custom programming and maintenance of constant light output (**CLO**). TRAFIC PEATONAL finish: body and bracket painted in Simon RD3000 colour and bracket trim painted in Simon WH9003 colour. TRAFIC ESCOLAR finish: body and bracket painted in Simon BL5015 colour and bracket trim painted in Simon WH9003 colour. Possibility of Seafrost Paint for corrosive environments with high durability in a **C5M** environment. Dimensions 260x395x105 mm. **Zhaga-D4i** compatible luminaire.

## LUMINAIRE

### PHYSICAL FEATURES AND MATERIALS

IP	IP66
IK	IK08
Body	Die-cast aluminium
Closure system	Painted die-cast aluminium lever
Fastening system	Painted galvanised sheet steel
Diffuser	Flat transparent shatter-proof tempered glass

### ELECTRICAL PARAMETERS \* AND CONNECTIVITY

Temp.	-20 °C... +35 °C	
Dimming**	<b>2N-</b> Without control line <b>Dxxx</b> Without custom programmed control line <b>2N+</b> With control line <b>CAD</b> Cabinet amplitude dimming <b>1N (100%)</b> Without dimming <b>1.10V</b> Dimming through 1.10V input protocol <b>DALI</b> Dimming through DALI input protocol	
	Possibility of activating the <b>CLO</b> function, which allows the depreciation of the light emitted by the LEDs to be compensated by gradually increasing the supply current to them. Possibility of fitting a <b>Zhaga / NEMA</b> connector on the top of the luminaire according to Zhaga Consortium Book 18.	
	<b>Luminaires supplied by electrical grid</b>	
Supply voltage	220-240 V <sub>ac</sub>	
Frequency	50/60 Hz	
Protection against power surge	6 kV (Possibility of increasing to 10 kV / 10 kA upon request)	
Power factor (cos)	≥ 0.95	
Luminaire electrical protection	Class I or Class II	
Power according to models***	12 LEDs	24 LEDs
Supply current	1 mod	2 mod
HIGH EFFICIENCY	12 W	24 W
HIGH BALANCE	18 W	36 W
HIGH FLUX	24 W	49 W

## REGULATIONS AND CERTIFICATES



Luminaire according to: EN 60598-2-5 / EN 62493 / EN 55015 / EN 61547 / EN 61000-3-2 / EN 50581  
 Support according to: EN 40-5

Warranty	5 years for luminaires and light groups
Supply and packaging	Luminaire packed in recyclable cardboard to protect the product during transport and storage. Pole packed with foam reel protector and base plate with foam protector on edges.
Luminaire maintenance	Keep the diffuser surface clean to achieve maximum light flux. Use a damp rag without any type of harsh product or detergent. Lubricate the sealing gaskets and replace them when they are cracked over time. Lubricate the closures and/or hinges of the moving parts. Keep the thermal radiation surface clean to ensure proper dissipation and not lose light flux without shortening the life of the LEDs.

\* Values corresponding to the current state of technology. \*\* Check other regulations. \*\*\* The luminaire power can vary around ± 7%.

## SUPPORT

### DIMENSIONS AND FASTENING SYSTEMS

Luminaire fastening	Bracket, Ø13 mm, Ø15 mm, Ø13 mm
Notes	Anchoring bolts and template provided

### PHYSICAL FEATURES AND MATERIALS

IP	To achieve IP44, it is necessary to use the internal junction box with IP44 (not supplied with the pole).
Shaft	Cylindrical
Trapdoor	Flush
Construction	Made up of shaft, cable tie and arm (optional)
Arm	Carbon steel sheet, S235JR quality
Cable tie	Die-cast aluminium
Shaft	Carbon steel sheet, S235JR quality
Flange plate	Recessed steel sheet, S235JR quality

### FINISHES

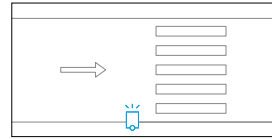
	TRAFIC PEATONAL	TRAFIC ESCOLAR
Spotlight Body	RD3000 (Standard Paint)	BL5015 (Standard Paint)
Spotlight Bracket	RD3000 (Standard Paint)	BL5015 (Standard Paint)
Bracket Trim	WH9003 (Standard Paint)	WH9003 (Standard Paint)
Arm/Cable tie	WH9003 (Standard Paint)	WH9003 (Standard Paint)
Pole	RD3000 (Standard Paint) (Seafrost Paint)	BL5015 (Standard Paint) (Seafrost Paint)



TYPE EXAMPLES

**A. One-lane street, 3.5 m wide, one-way traffic**

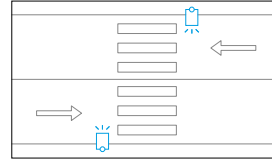
5 m high TRAFIC lighting point placed on right pavement, before reaching the pedestrian crossing following direction of traffic.



Finish	No. of lighting points	Optics	Dimming	Arm length	Description	Order code
● TRAFIC PEATONAL	1	TRF	1N - without dimming	Tangential	TRFMIS05SMTRFNDL_36W530IA23_1N_C1TRFPED	<b>502-000834603</b>
● TRAFIC ESCOLAR	1	TRF	1N - without dimming	Tangential	TRFMIS05SMTRFNDL_36W530IA23_1N_C1TRFSC	<b>502-000834604</b>

**B. Two-lane street, 3.5 m wide, two-way, total width 7 m**

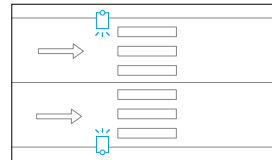
Two 5 m high TRAFIC lighting points placed on both pavements, before reaching the pedestrian crossing following direction of traffic of each lane.



Finish	No. of lighting points	Optics	Dimming	Arm length	Description	Order code
● TRAFIC PEATONAL	2	TRF	1N - without dimming	Tangential	TRFMIS05SMTRFNDL_36W530IA23_1N_C1TRFPED	<b>502-000834603</b>
● TRAFIC ESCOLAR	2	TRF	1N - without dimming	Tangential	TRFMIS05SMTRFNDL_36W530IA23_1N_C1TRFSC	<b>502-000834604</b>

**C. Two-lane street, 3.5 m wide, one-way traffic, total width 7 m**

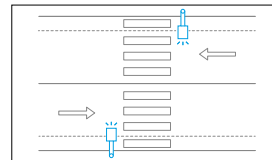
Two 5-m high TRAFIC lighting points placed on both pavements, before reaching the pedestrian crossing, TRF optics on right side and TRI optics on left side following direction of traffic.



Finish	No. of lighting points	Optics	Dimming	Arm length	Description	Order code
● TRAFIC PEATONAL	1	TRF	1N - without dimming	Tangential	TRFMIS05SMTRFNDL_36W530IA23_1N_C1TRFPED	<b>502-000834603</b>
	1	TRI	1N - without dimming	Tangential	TRFMIS05SMTRINDL_36W530IA23_1N_C1TRFPED	<b>502-006098603</b>
● TRAFIC ESCOLAR	1	TRF	1N - without dimming	Tangential	TRFMIS05SMTRFNDL_36W530IA23_1N_C1TRFSC	<b>502-000834604</b>
	1	TRI	1N - without dimming	Tangential	TRFMIS05SMTRINDL_36W530IA23_1N_C1TRFSC	<b>502-006098604</b>

**D. Two-lane street, 3.5 m wide, plus two parking lanes, two-way traffic, total width 11 m**

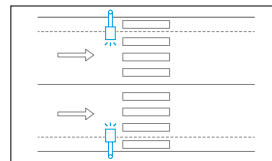
Two 5 m high TRAFIC lighting points, with 1.15 m arms, placed on both pavements, before reaching the pedestrian crossing following direction of traffic of each lane.



Finish	No. of lighting points	Optics	Dimming	Arm length	Description	Order code
● TRAFIC PEATONAL	2	TRF	1N - without dimming	1,150 mm	TRAMIS05SMTRFNDL_49W700IA23_1N_C1TRFPED	<b>504-000833603</b>
● TRAFIC ESCOLAR	2	TRF	1N - without dimming	1,150 mm	TRAMIS05SMTRFNDL_49W700IA23_1N_C1TRFSC	<b>504-000833604</b>

**E. Two-lane street, 3.5 m wide, plus two parking lanes, one-way traffic, total width 11 m**

Two 5 m high TRAFIC lighting points, with 1.15 m arms, placed on both pavements, before reaching the pedestrian crossing following direction of traffic of each lane.



Finish	No. of lighting points	Optics	Dimming	Arm length	Description	Order code
● TRAFIC PEATONAL	1	TRF	1N - without dimming	1,150 mm	TRAMIS05SMTRFNDL_49W700IA23_1N_C1TRFPED	<b>504-000833603</b>
	1	TRI	1N - without dimming	1,150 mm	TRAMIS05SMTRINDL_49W700IA23_1N_C1TRFPED	<b>504-001985603</b>
● TRAFIC ESCOLAR	1	TRF	1N - without dimming	1,150 mm	TRAMIS05SMTRFNDL_49W700IA23_1N_C1TRFSC	<b>504-000833604</b>
	1	TRI	1N - without dimming	1,150 mm	TRAMIS05SMTRINDL_49W700IA23_1N_C1TRFSC	<b>504-001985604</b>



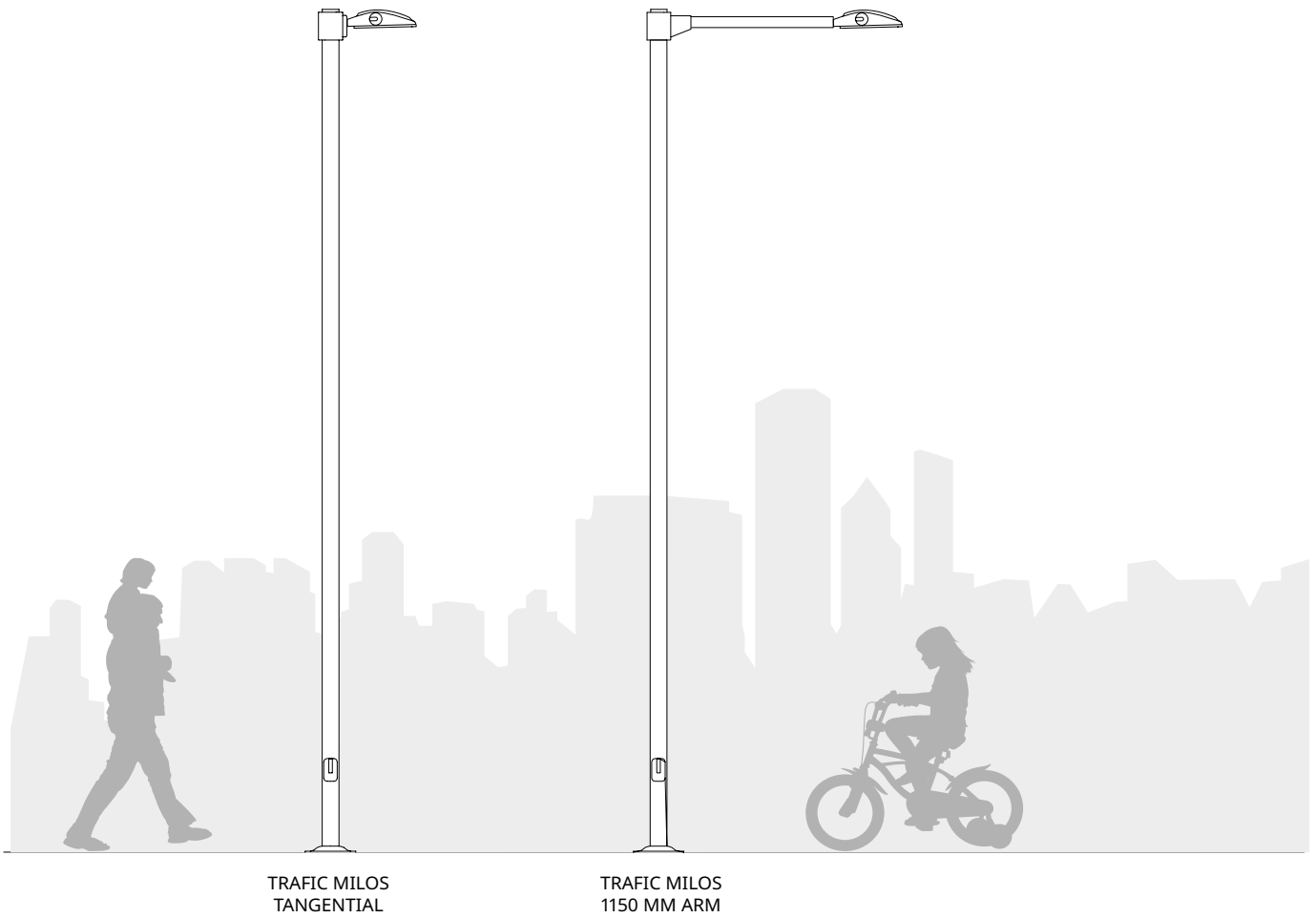
## CONFIGURE YOUR TRAFIC MILOS

Model	Optics	Colour Temp.	Flux	Team	Dimming	Protection	Finish	Description
<b>TRFMIS05SM</b>								Simon TRAFFIC MILOS Istanium® S lighting point, 5,000 mm high, trapdoor and recessed base plate according to measurements
<b>TRAMIS05SM</b>								Simon TRAFFIC MILOS Istanium® S lighting point, 5,000 mm high, 1.15 m arm, trapdoor and recessed base plate according to measurements
	<b>TRF</b>							Trafic Optics
	<b>TRI</b>							Reverse Trafic Optics
		<input type="radio"/> <b>NDL</b> <input type="radio"/> <b>WDL</b> <input type="radio"/> <b>SDL</b> <input type="radio"/> <b>XDL</b>						Neutral daylight - 4,000 K Warm daylight - 3,000 K Soft daylight - 2,700 K Extra warm daylight - 2,200 K
			<b>_36W530</b>					36 W 530 mA 4,960 lm @ 4,000 K 24 LEDs
			<b>_49W700</b>					49 W 700 mA 6,330 lm @ 4,000 K 24 LEDs
				<b>IA23_</b>				Electronic control gear at 230 VAC 50/60 Hz, standard protection against 6 kV power surges
				<b>IA23S</b>				Electronic control gear at 230 VAC 50/60 Hz, additional protection against 10 kV power surges
				<b>2N_</b>				Dimming without control line (self-dimming)
				<b>2N+</b>				Dimming with control line
				<b>1N_</b>				Without dimming (on/off)
				<b>CAD_</b>				Cabinet amplitude dimming (electrical box dimmer)
				<b>1-10</b>				Dimming through 1.10 V input protocol
				<b>DALI</b>				Dimming through DALI input protocol
				<b>DXXX</b>				Dimming without control line (custom program)
							<b>C1</b>	Class 1 Luminaire electrical protection
							<b>C2</b>	Class 2 Luminaire electrical protection
							<b>TRFPED</b>	TRFPED finish, Trafic Peatonal
							<b>TRFSCL</b>	TRFSCL finish, Trafic Escolar

### TECHNICAL INFORMATION (Units in mm)

Height	Diameter	Thickness	Door			Flange plate		Bolts	Arm	
H	Ø D	E	X	Y	Z	A	B	M x L	L1	Example
5,000	100	3	80	135	385	200	300	M18x500	0	A-B-C
5,000	100	3	80	135	385	200	300	M18x500	1,150	D-E

The luminaire flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes. The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.






TRAFIC MILOS  
TANGENTIAL

TRAFIC MILOS  
1150 MM ARM

ACCESSORIES / REPLACEMENTS

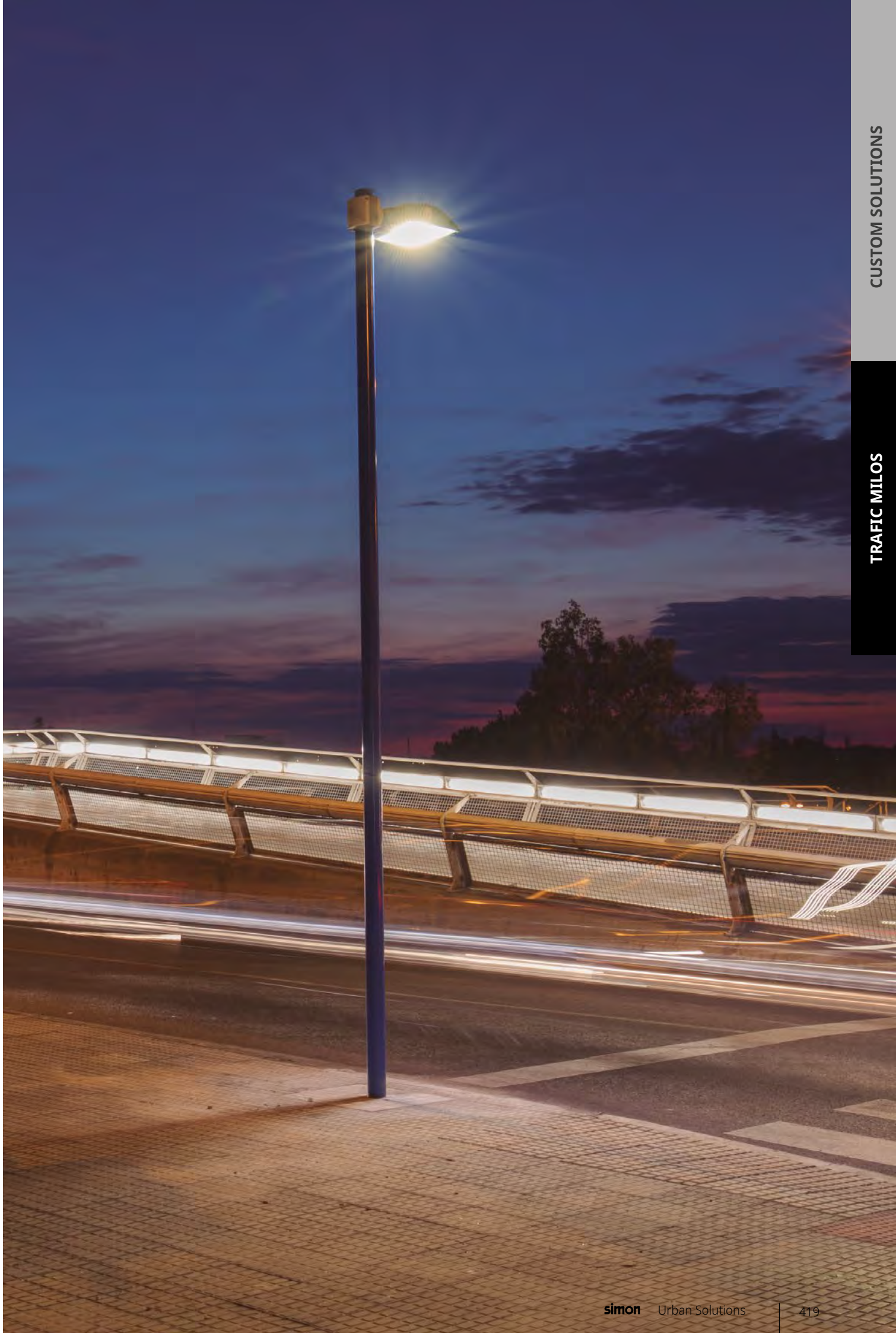
Description	Order code
Triangular 10 mm key to close trapdoor	50-73265

SUPPORT PROTECTIVE SYSTEMS AND FINISHES

	Type of durability / atmospheric corrosion category*	Acid-less protection 	Stick-less protection 	Draw-less protection 
Standard Paint Finish: hot dip galvanised** and painted	Average durability in corrosive environment C4.	✓	✓	✓
Seafront Paint Finish: hot dip galvanised** and painted	High durability in corrosive environment C5M.	✓	✓	✓

\* According to EN ISO 12944 \*\* According to EN ISO 1461

See expanded information on protection systems and finishes on pages 28 and 514 respectively







# NEON

Simon Neon Street is the ideal solution for charging electric vehicles in urban environments.

The Simon Neon's ease of installation and its balance between functionality, price, aesthetics and long durability, make it the ideal electric vehicle charger for different environments, such as public or private car parks.



City



Hotels



Corporate parking



### Connectivity

Simon Neon can be integrated into different platforms and management applications, allowing interoperability with other systems thanks to its standard OCPP protocol. Ethernet communications or optionally via 4G modem.



### Security

The Simon Neon has an automatic disconnection system in case the door is opened, for the safety of the user or the maintenance technician. The doors are only accessible via a special bumping key, to prevent access by unauthorised personnel.



IK10

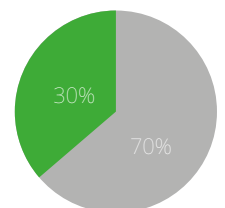
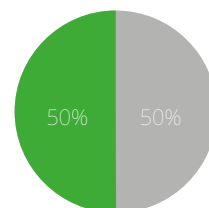
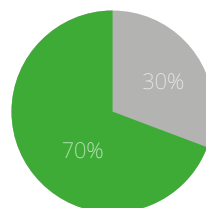


IP54



### Power management

The Simon Neon makes setting up large installations easy. The power load can be adapted to the specifics of a given environment, not only between charging points, but also between sockets at the same point.



● Punto de recarga Simon|Neon

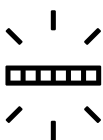
● Otros Consumos

## DESIGN AND FUNCTIONALITY:



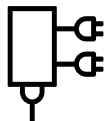
### Durability

The IP54 and IK10 enclosures, made from AISI 304 stainless steel, are perfect for outdoor use, thanks to their resistance to corrosion, heat and low temperatures, as well as the improved mechanical properties from the chrome passivation film on its surface.



### 360° LED indicator

The only solution available that, depending on the status, allows you to quickly and remotely identify from any location in the car park whether the equipment is available, currently being used.

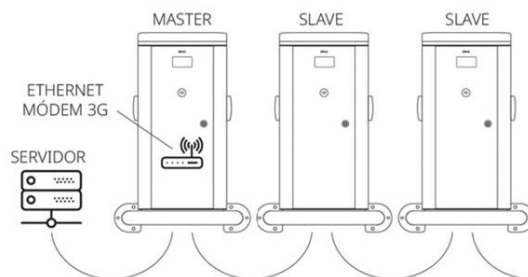


### Connection between power units

Simon Neon offers a master-slave connection system for simpler installation and management of charging points. With this system we can connect up to 12 recharging points without the need for other external elements, allowing us to manage power and users intelligently and efficiently.



Load balancing is managed by the "1 Master Device /11 Slave Devices" method. From now on, our load balancing system SIMON ELECTRON MANAGER efficiently manages loads up to 64 points, without the need for a cloud connection and with minimal instances of network failures or lack of coverage.







With 5 metre smooth cable



With 4 metre spiral cable



With cordless socket



With 5 metre smooth cable

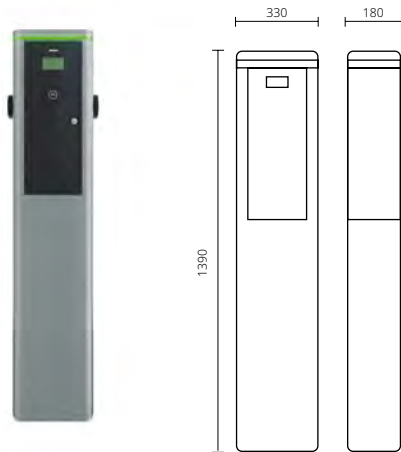


With 4 metre spiral cable



With cordless socket

**DIMENSIONS**



**COMMON CHARACTERISTICS**

Power measurement	MID counter on each connector
Screen	LCD Display
RFID reader	ISO 14443A - MIFARE - 13.56 MHz
Status indicator	360° LEDs
Communications	RS-485, Ethernet, Modem (optional), OCPP 1.5 / 1.6 JSON / Modbus TCP/IP (optional).
Multipoint	A group of devices can be connected to each other (up to 12 devices) and power can be balanced among them.

**PHYSICAL FEATURES AND MATERIALS**

IP	IP54
IK	IK10
Environmental conditions	-30 °C / +50 °C
Body	AISI 304 Stainless Steel
Front	Polycarbonate

**ELECTRICAL PARAMETERS**

Supply voltage	230 - 400 Vac
Frequency	50 Hz
Maximum Intensity/outlet	32 A
Max power/input	14.8 kW / 44 kW -64 A (lower values configurable).
Differential protection	Class A differential 30 mA per connector, optional resettable.
Magneto-thermal protection	C-Curve Magneto-thermal circuit breaker per connector.



## CONFIGURE YOUR SIMON NEON

0	6	Assembly	Connectivity	Number of outlets	Total power	Connector	Protections	Special cases	Description
		2							Post recharging point
		3							Wall recharging point
			0						Basic
			1						Modem
				2					2 outlets
					1				44 kW
					3				14.8 kW
						1			T2 outlet
						2			5 m cable T2 straight
						3			4 m spiral cable
							-1		Basic protections
							-3		Resettable Protec. + Diff.
								00	Standard finish

## STANDARD REFERENCES

Art. No.	Assembly	Connectivity	Power	Connector	Protections
0620231-100	Neon Pole	Basic	14.8 kW	T2 outlet	Basic protections
0620232-100	Neon Pole	Basic	14.8 kW	5 m cable T2 straight	Basic protections
0620211-100	Neon Pole	Basic	44 kW	T2 outlet	Basic protections
0620212-100	Neon Pole	Basic	44 kW	5 m cable T2 straight	Basic protections
0621231-100	Neon Pole	Modem	14.8 kW	T2 outlet	Basic protections
0621232-100	Neon Pole	Modem	14.8 kW	5 m cable T2 straight	Basic protections
0621233-100	Neon Pole	Modem	14.8 kW	4 m spiral cable	Basic protections
0621211-100	Neon Pole	Modem	44 kW	T2 outlet	Basic protections
0621212-100	Neon Pole	Modem	44 kW	5 m cable T2 straight	Basic protections
0621213-100	Neon Pole	Modem	44 kW	4 m spiral cable	Basic protections
0621211-300	Neon Pole	Modem	44 kW	T2 outlet	Resettable Protec. + Diff.
0621231-300	Neon Pole	Modem	14.8 kW	T2 outlet	Resettable Protec. + Diff.
0630231-100	Neon Wall	Basic	14.8 kW	T2 outlet	Basic protections
0630232-100	Neon Wall	Basic	14.8 kW	5 m cable T2 straight	Basic protections
0630211-100	Neon Wall	Basic	44 kW	T2 outlet	Basic protections
0630212-100	Neon Wall	Basic	44 kW	5 m cable T2 straight	Basic protections
0631231-100	Neon Wall	Modem	14.8 kW	T2 outlet	Basic protections
0631232-100	Neon Wall	Modem	14.8 kW	5 m cable T2 straight	Basic protections
0631233-100	Neon Wall	Modem	14.8 kW	4 m spiral cable	Basic protections
0631211-100	Neon Wall	Modem	44 kW	T2 outlet	Basic protections
0631212-100	Neon Wall	Modem	44 kW	5 m cable T2 straight	Basic protections
0631213-100	Neon Wall	Modem	44 kW	4 m spiral cable	Basic protections
0631211-300	Neon Wall	Modem	44 kW	T2 outlet	Resettable Protec. + Diff.
0631231-300	Neon Wall	Modem	14.8 kW	T2 outlet	Resettable Protec. + Diff.











# SM20

The Simon SM20 is a state-of-the-art recharging point for electric vehicles designed for multi-point and multi-user installations. Designed and conceived to create a network of chargers, the Simon SM20 will help you transform car parking spots into investments in a sustainable future, as we evolve towards a cleaner and more conscientious electric mobility.



Car parks



Hotels



Hospitals



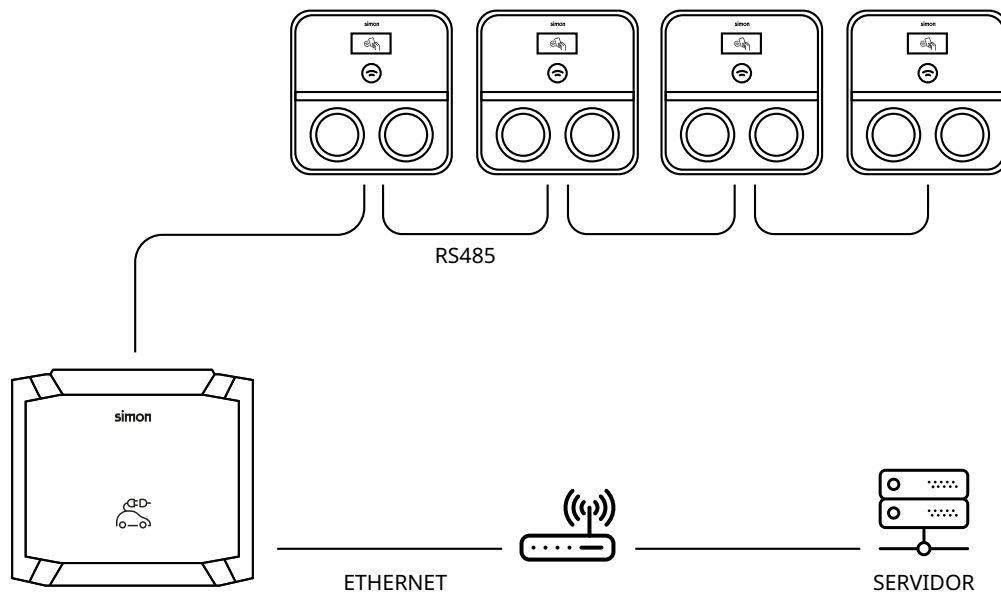
Shopping centres



Private companies



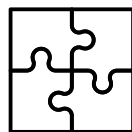
Fleet management



### Intelligent load balancing solution

Simon Electron Manager is a device that allows users to intelligently balance the available load based on the recharging points in use and vehicle demand. This optimises charging according to the kW available in the installation and supplies each vehicle with the maximum power that the charger can provide.

This intelligent balancing system is recommended for all types of multipoint installations. Simon Electron Manager can manage up to 128 sockets and allows configuration and control via PC or web server, making it easier to identify users with access to the load via RFID cards.



### Compatible solution

The Electron Manager solution is compatible with the full range of SIMON recharging points: NEON, SM20 and SM34.

## DESIGN AND FUNCTIONALITY:



### **Adaptive and scalable**

The Simon SM20 can be installed as single or multipoint device. It adapts to power management needs based on to the number of chargers.

In installations with up to 12 chargers, you can assign a master device that shares the load equally among the devices in use. However, we recommend that you install the Simon SM20 with the Simon Electron Manager, as this will help you to intelligently balance the load according to the number of devices in use and each connected vehicle's demand. What's more, doing this will also allow you to safely and easily increase the number of devices over time, with a total of 128 connected sockets.



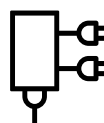
### **Security**

The Simon SM20 has a cable retention system that protects against theft by third parties.



### **Architectural versatility**

The Simon SM20 is designed to be wall mounted, although there is also the option of adding a vertical support for column installation with capacity for one or two devices.

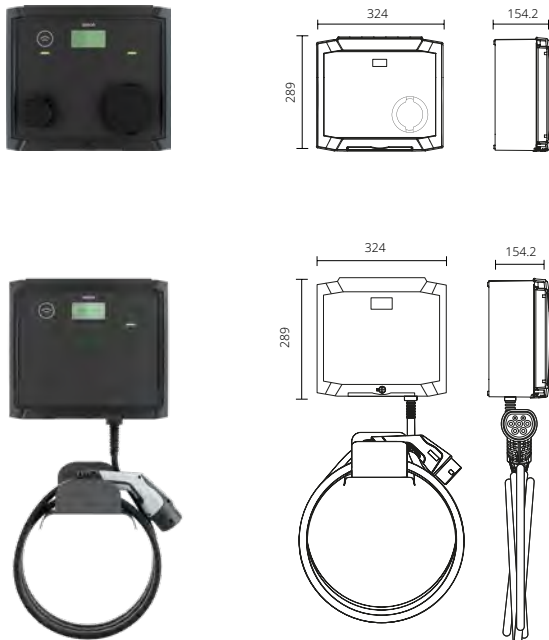


### **Combination of German socket outlets - IEC 62196 Type 2**

The Simon SM20 can also include a German socket outlet connector for charging lower-power electric vehicles such as motorcycles and scooters, in addition to the IEC 62196 Type 2 connector.



## DIMENSIONS



## COMMON CHARACTERISTICS

Power measurement	MID counter on each connector
Screen	LCD Display
RFID reader	ISO 14443A - MIFARE - 13.56 MHz
Status indicator	360° LEDs
Communications	RS-485, Ethernet, Modem (optional), OCPP 1.5 / 1.6 JSON / Modbus TCP/IP (optional).
Multipoint	A group of devices can be connected to each other (up to 12 devices) and power can be balanced among them.

## GENERAL FEATURES

Maximum intensity per connector	32 A (Type 2) 10 A (German socket outlet)
Charging mode	Mode 3 (Type 2) Mode 1 and 2 (German socket outlet)
Secondary counter	Included, per outlet, with MID certificate
LCD Display	Included
Power balancing between outlets	Yes
Master-slave	Yes, a maximum of 12 devices (1 master, 11 slaves)
Status indicator	Status LED on the front
RFID reader	Yes (ISO14443A/MIFARE - 13.56 MHz), 2 cards included
Communications	Ethernet, RS485 (multipoint)
Protocol	TCP, IP
Safety:	Connector lock

## PHYSICAL FEATURES AND MATERIALS

IP	IP54
IK	IK10
Environmental conditions	-30 °C / +50 °C
Housing	ABS
Dimensions and weight	324 mm x 289 mm x 154 mm, 6 kg
Finish	Simon Standard
Maintenance	Front Opening
Cable section admitted	Up to 25 mm <sup>2</sup>
Compatibility	Electron Manager, SPL Analyser Accessory

## ELECTRICAL PARAMETERS

Supply voltage	230 - 400 VAC
Frequency	50 Hz
Maximum Intensity/outlet	32 A (Type 2) 10 A (German socket outlet)
Max power/input	7.4kW - 32A / 22kW - 32 A (lower values configurable).
Differential protection	Class A Differential 30mA per connector
Magneto-thermal protection	C-Curve Magneto-thermal circuit breaker per connector.

## STANDARD REFERENCES

Art. No.	Assembly	Connectivity	Power	Connector	Protections
0640141-000	Wall	Ethernet	7.4 kW	T2 Socket	-
0640141-100	Wall	Ethernet	7.4 kW	T2 Socket	Automatic C-Curve + Class A Differential 30 mA
0641141-000	Wall	Ethernet + Modem	7.4 kW	T2 Socket	-
0641141-100	Wall	Ethernet + Modem	7.4 kW	T2 Socket	Automatic C-Curve + Class A Differential 30 mA
0640341-000	Wall	Ethernet	7.4 kW	T2 socket + German socket outlet	-
0640341-100	Wall	Ethernet	7.4 kW	T2 socket + German socket outlet	Automatic C-Curve + Class A Differential 30 mA
0641341-000	Wall	Ethernet + Modem	7.4 kW	T2 socket + German socket outlet	-
0641341-100	Wall	Ethernet + Modem	7.4 kW	T2 socket + German socket outlet	Automatic C-Curve + Class A Differential 30 mA
0640142-000	Wall	Ethernet	7.4 kW	5 m cable T2 straight	-
0640142-100	Wall	Ethernet	7.4 kW	5 m cable T2 straight	Automatic C-Curve + Class A Differential 30 mA
0641142-000	Wall	Ethernet + Modem	7.4 kW	5 m cable T2 straight	-
0641142-100	Wall	Ethernet + Modem	7.4 kW	5 m cable T2 straight	Automatic C-Curve + Class A Differential 30 mA
0640121-000	Wall	Ethernet	22 kW	T2 Socket	-
0640121-100	Wall	Ethernet	22 kW	T2 Socket	Automatic C-Curve + Class A Differential 30 mA
0641121-000	Wall	Ethernet + Modem	22 kW	T2 Socket	-
0641121-100	Wall	Ethernet + Modem	22 kW	T2 Socket	Automatic C-Curve + Class A Differential 30 mA
0640122-000	Wall	Ethernet	22 kW	5 m cable T2 straight	-
0640122-100	Wall	Ethernet	22 kW	5 m cable T2 straight	Automatic C-Curve + Class A Differential 30 mA
0641122-000	Wall	Ethernet + Modem	22 kW	5 m cable T2 straight	-
0641122-100	Wall	Ethernet + Modem	22 kW	5 m cable T2 straight	Automatic C-Curve + Class A Differential 30 mA
0640321-000	Wall	Ethernet	22 kW	T2 socket + German socket outlet	-
0641321-000	Wall	Ethernet + Modem	22 kW	T2 socket + German socket outlet	-

## ACCESSORIES

## INTELLIGENT LOAD BALANCING

Art. No.	Description
0694002-000	Simon Electron Manager

## NETWORK ANALYSERS

Art. No.	Description
0691100-000	Single-phase SPL Analyser Accessory + 1 toroid <100 A
0691200-000	Single-phase SPL Analyser Accessory + 1 toroid <200 A
0691300-000	Single-phase SPL Analyser Accessory + 1 toroid <300 A
0692100-000	Three-phase SPL Analyser Accessory + 3 toroids <100 A
0692200-000	Three-phase SPL Analyser Accessory + 3 toroids <200 A
0692300-000	Three-phase SPL Analyser Accessory + 3 toroids <300 A
0692600-000	Three-phase SPL Analyser Accessory + 3 toroids <600 A
0692M00-000	Three-phase SPL Analyser Accessory + 3 toroids <1000 A

## RFID IDENTIFICATION

Art. No.	Description
0603000-039	Pack of 10 MIFARE RFID cards
0603001-039	Pack of 25 MIFARE RFID cards

## PEDESTALS

Art. No.	Description
0693010-000	Single SM20 Tower
0693020-000	Double SM20 Tower













# SM34

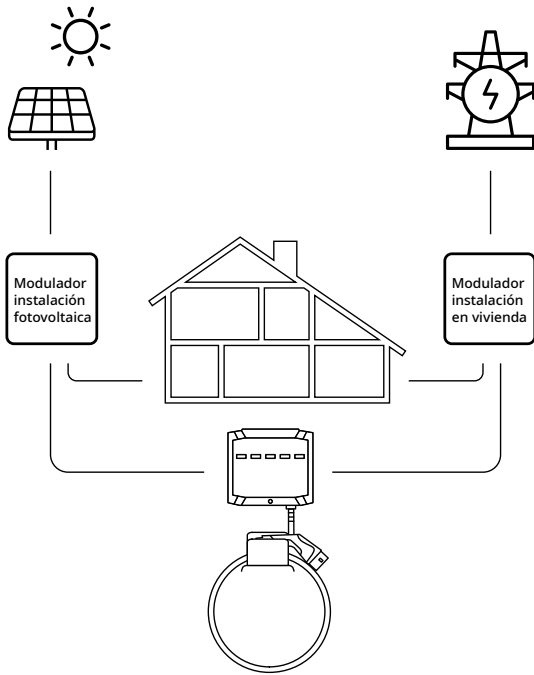
The Simon SM34 is a compact recharging device that is also practical and easy to install, manage and maintain. The Simon SM34 allows users to control the power available in their homes and optimise their charging schedule, in addition to a whole series of energy management functionalities.



Single-family  
homes



Property owner  
communities



**Photovoltaic system modulator**

The Simon Plug & Drive app allows users to set different charging profiles for electric vehicles, using either solar energy or hybrid energy, or a mixture of solar and grid energy, to make charging faster and more sustainable. For installations in homes with photovoltaic panels, a photovoltaic installation modulator is required. This allows the available load to be dynamically balanced and optimises energy use.

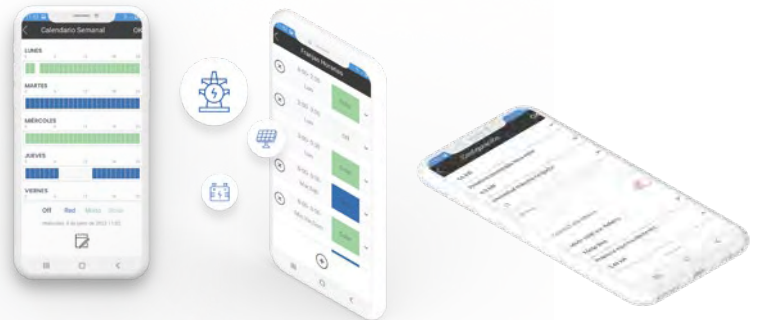
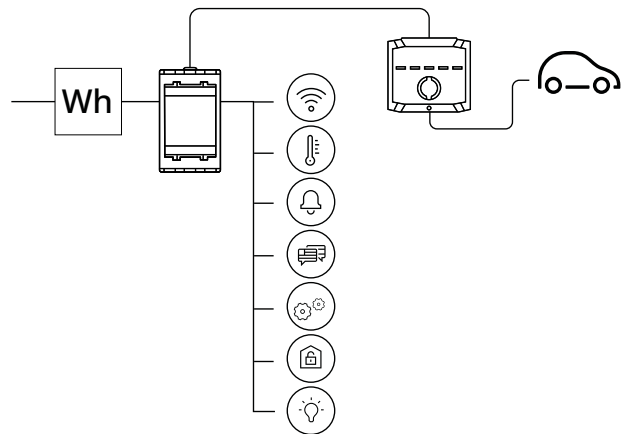


**RFID reader for user identification**

Accessory for adding an RFID card reader to the recharging point. It includes 2 RFID cards for using the point, as well as a sticker for indicating the identification area on the front.

**Home power modulator**

An accessory that enables dynamic load balancing based on overall household consumption, helping to avoid excess contracted power usage and to make the most of the installation.



**Electric protections**

The Simon SM34 is designed to meet all required protection regulations, depending on users' needs. It even includes an automatic meter reset device for communities with private meter bypass, making installation even easier.

**Configure the charging times**

Save money by scheduling the hours with the most economical electricity rates in your calendar

**Choose renewable energy sources**

Charge your vehicle using solar energy generated by your photovoltaic panels

**Configure the available power**

Sets the amount of contracted power

Download the App and start enjoying the Simon Plug&Drive experience



## DESIGN AND FUNCTIONALITY:

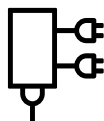


### Practical and compact

The Simon SM34 is a **practical** and **compact range** that adapts to the needs of each installation. It is primarily designed for installation in single-family homes, but has the added advantage of being able to systematize a network of chargers for communities using the Electron Manager.

When installed on its own, it uses **Bluetooth** communications, which allows it to be configured and managed through the **Simon Plug&Drive App**.

When installed as a multipoint solution, the **Electron Manager** configures and manages the system via PC or web server. Furthermore, this device offers the benefit of intelligent load balancing for devices in use depending on vehicle demand.



### IEC 62196 Type 2 socket

The Simon SM34 range is available with an IEC 62196 Type 2 socket with a choice of socket base or 5m hose.



### Architectural versatility

The Simon SM34 is designed to be wall mounted, although there is also the option of adding a vertical support for column installation with capacity for one or two devices.



### MID-certified secondary meter

For community installations, SM34 can include a MID-certified meter, which is suitable for re-billing for users' consumption.

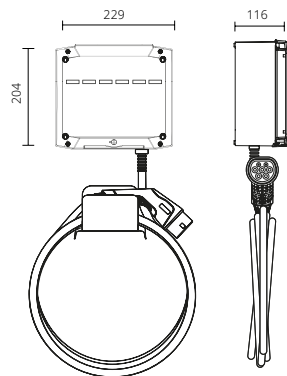
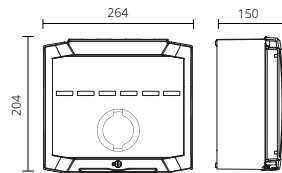


### Home power protection and management

All SM34 models are compatible with an easy-to-install power modulator that can balance the recharging point's power with the house's overall energy consumption.



## DIMENSIONS



## GENERAL FEATURES

Maximum Intensity	32 A
Power configuration	Through built-selector or through the APP for Bluetooth-enabled equipment
Charging mode	Mode 3
Status indicator	Status LED on the front
Cable support	Painted galvanized steel (Cable models only)
Communications	RS485 (multipoint), optional Bluetooth
Security	Connector lock
Activation	Plug & Play Plug & Drive APP (Bluetooth-enabled equipment) RFID (Equipment with an RFID reader accessory)

## PHYSICAL FEATURES AND MATERIALS

IP	IP54
IK	IK10
Environmental conditions	-30 °C / +50 °C
Housing	ABS
Weight	2.5 kg
Dimensions for equipment with cable	324 mm x 700 mm x 146 mm
Dimensions for equipment with T2 socket	264 mm x 235 mm x 150 mm
Finish	Simon Standard
Maintenance	Front opening
Cable section admitted	Up to 16 mm <sup>2</sup>
Compatibility	Electron Manager Power modulator for dynamic home load balancing Photovoltaic modulator RFID activation accessory Bluetooth connectivity accessory

## ELECTRICAL PARAMETERS

Supply voltage	230 - 400 Vac
Frequency	50 Hz
Maximum Intensity/outlet	32 A
Max power/input	7.4 kW / 22kW A (lower values configurable).

## STANDARD REFERENCES

Art. No.	Controlled via app	Power	MID meter	Connector	Protections
<b>0650041-000</b>		7.4 kW	-	T2 Socket	-
<b>0650041-100</b>		7.4 kW	-	T2 Socket	Automatic C-Curve + Class A Differential 30 mA
<b>0650141-000</b>		7.4 kW	MID meter	T2 Socket	-
<b>0650141-100</b>		7.4 kW	MID meter	T2 Socket	Automatic C-Curve + Class A Differential 30 mA
<b>0651041-000</b>	Bluetooth + Plug & Drive APP	7.4 kW	-	T2 Socket	-
<b>0651041-100</b>	Bluetooth + Plug & Drive APP	7.4 kW	-	T2 Socket	Automatic C-Curve + Class A Differential 30 mA
<b>0650042-000</b>	-	7.4 kW	-	5 m cable T2 straight	-
<b>0650042-100</b>	-	7.4 kW	-	5 m cable T2 straight	Automatic C-Curve + Class A Differential 30 mA
<b>0650042-300</b>	-	7.4 kW	-	5 m cable T2 straight	Auto. C-Curve + Class A Differential 30 mA + Permanent and Transient Overvoltages
<b>0650042-400</b>	-	7.4 kW	-	5 m cable T2 straight	Automatic C-Curve + Class A Differential 30 mA + Permanent and transient overvoltages + Meter resetting device
<b>0650142-000</b>	-	7.4 kW	MID meter	5 m cable T2 straight	-
<b>0650142-100</b>	-	7.4 kW	MID meter	5 m cable T2 straight	Automatic C-Curve + Class A Differential 30 mA
<b>0650142-300</b>	-	7.4 kW	MID meter	5 m cable T2 straight	Auto. C-Curve + Class A Differential 30 mA + Permanent and Transient Overvoltages
<b>0651042-000</b>	Bluetooth + Plug & Drive APP	7.4 kW	-	5 m cable T2 straight	-
<b>0651042-100</b>	Bluetooth + Plug & Drive APP	7.4 kW	-	5 m cable T2 straight	Automatic C-Curve + Class A Differential 30 mA
<b>0651042-300</b>	Bluetooth + Plug & Drive APP	7.4 kW	-	5 m cable T2 straight	Auto. C-Curve + Class A Differential 30 mA + Permanent and Transient Overvoltages
<b>0651042-400</b>	Bluetooth + Plug & Drive APP	7.4 kW	-	5 m cable T2 straight	Auto. C-Curve + Class A Differential 30 mA + Permanent and transient overvoltages + Meter reset device
<b>0650021-000</b>	-	22 kW	-	T2 Socket	-
<b>0650021-100</b>	-	22 kW	-	T2 Socket	Automatic C-Curve + Class A Differential 30 mA
<b>0650221-000</b>	-	22 kW	MID meter	T2 Socket	-
<b>0651021-000</b>	Bluetooth + Plug & Drive APP	22 kW	-	T2 Socket	-
<b>0651021-100</b>	Bluetooth + Plug & Drive APP	22 kW	-	T2 Socket	Automatic C-Curve + Class A Differential 30 mA
<b>0650022-000</b>	-	22 kW	-	5 m cable T2 straight	-
<b>0650022-200</b>	-	22 kW	-	5 m cable T2 straight	Automatic C-Curve + Class A Differential 30 mA
<b>0650222-000</b>	-	22 kW	MID meter	5 m cable T2 straight	-
<b>0651022-000</b>	Bluetooth + Plug & Drive APP	22 kW	-	5 m cable T2 straight	-
<b>0651022-200</b>	Bluetooth + Plug & Drive APP	22 kW	-	5 m cable T2 straight	Automatic C-Curve + Class A Differential 30 mA

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## ACCESSORIES

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### INTELLIGENT LOAD BALANCING

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Art. No.	Description
<b>0694002-000</b>	Simon Electron Manager

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### POWER MODULATORS

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Art. No.	Description
<b>0695000-030</b>	SM34 Residential Accessory: Single-phase home dynamic load manager
<b>0695000-040</b>	SM34 Residential Accessory: Three-phase home dynamic load manager
<b>0695000-050</b>	SM34 Residential Accessory: Single-phase photovoltaic modulator
<b>0695000-060</b>	SM34 Residential Accessory: Three-phase photovoltaic modulator

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### NETWORK ANALYSERS

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Art. No.	Description
<b>0691100-000</b>	Single-phase SPL Analyser Accessory + 1 toroid <100 A
<b>0691200-000</b>	Single-phase SPL Analyser Accessory + 1 toroid <200 A
<b>0691300-000</b>	Single-phase SPL Analyser Accessory + 1 toroid <300 A
<b>0692100-000</b>	Three-phase SPL Analyser Accessory + 3 toroids <100 A
<b>0692200-000</b>	Three-phase SPL Analyser Accessory + 3 toroids <200 A
<b>0692300-000</b>	Three-phase SPL Analyser Accessory + 3 toroids <300 A

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### RFID IDENTIFICATION

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Art. No.	Description
<b>0695000-010</b>	SM34 Residential Accessory: RFID reader + 2 RFID cards
<b>0603000-039</b>	Pack of 10 MIFARE RFID cards
<b>0603001-039</b>	Pack of 25 MIFARE RFID cards

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### PEDESTALS

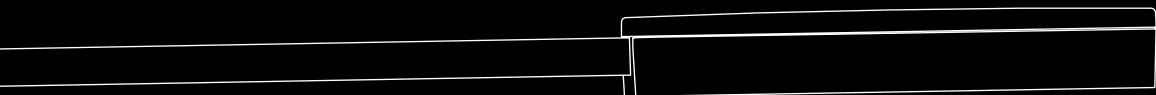
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Art. No.	Description
<b>0693040-000</b>	Simple Tower SM34 for equipment with 5m Cable
<b>0693050-000</b>	Double Tower SM34 for equipment with 5m Cable
<b>0693060-000</b>	Simple Tower SM34 for equipment with T2 Socket
<b>0693070-000</b>	Double Tower SM34 for equipment with T2 Socket



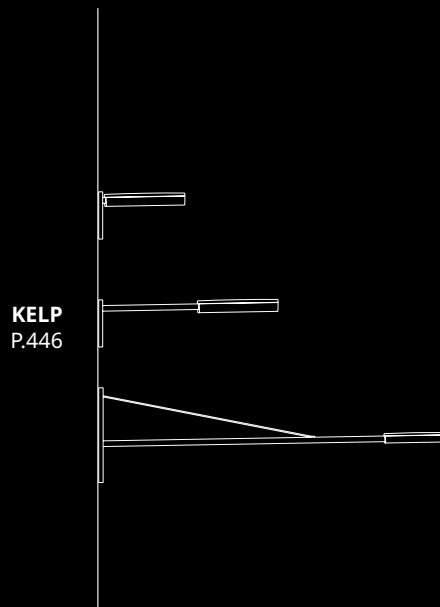






# AMBIENT ARMS

ISTANIUM<sup>LED</sup>®





# KELP

WALL ARM

## ISTANIUM<sup>LED</sup>



Parking areas



Avenues



Streets



Pedestrian streets



Commercial areas



Parks / Gardens



Squares



Roundabouts /  
Intersections



Large areas



# KELP MERAK / ALTAIR

## ISTANIUM®



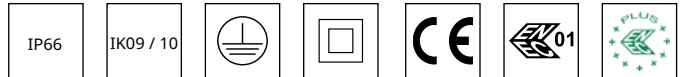
Simon KELP decorative wall arm, up to 1.5 m long, rectangular section, and lateral luminaire fastening.

Support with wall fastening plate, arm and rod (according to model) made of S235JR quality carbon steel sheet.

Lateral luminaire fastening via direct anchoring on the body, without coupling, Ø60 mm.

Hot dip galvanised finish and painted in Simon GYDECO colour. Allows Simon and RAL chart finishes, as well as other protective finishes.

Luminaires:



Mount:



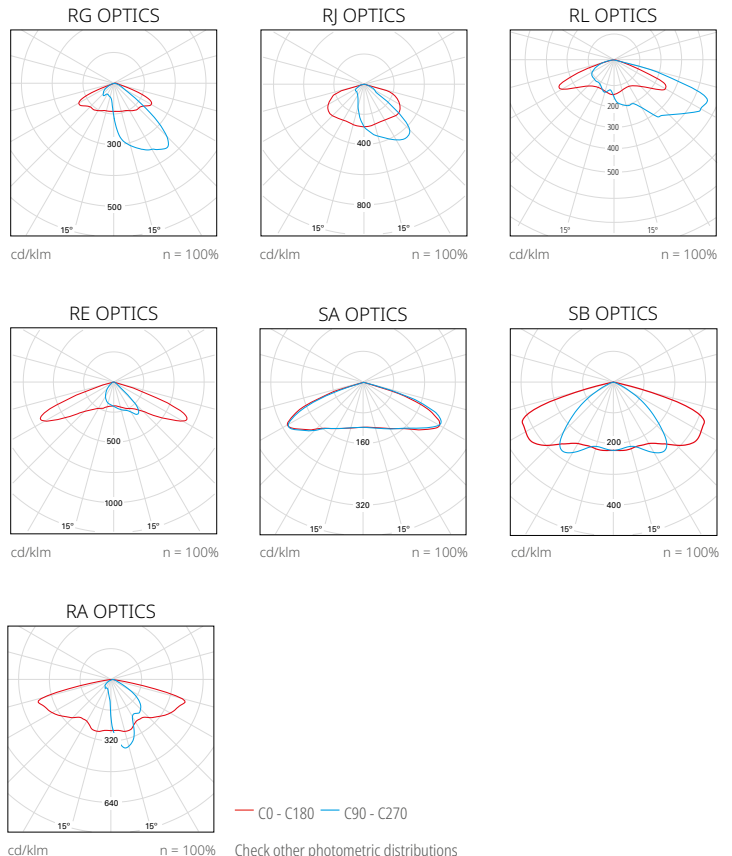
COLOUR TEMP.: NDL 4000 K | WDL 3000 K | SDL 2700 K | XDL 2200 K | PCA\*

COLOUR RENDERING INDEX: >70

UPWARD LIGHT OUTPUT RATIO (ULOR): <1 %\*\*

LED DURATION (L90 B10 AT  $T_a=25\text{ °C}$  AND  $T_j=95\text{ °C}$ ): 100,000 h

\* Upon request \*\* Value may change depending on the optics



## WALL ARM

Simon **KELP** decorative wall arm, up to 1.5 m long, rectangular section, and lateral luminaire fastening. Support with wall fastening plate, arm and rod (according to model) made of S235JR quality carbon steel sheet. Lateral luminaire fastening via direct anchoring on the body, without coupling, Ø60 mm. Hot dip galvanised finish and painted in Simon GYDECO colour. Allows Simon and RAL chart finishes, as well as other protective finishes. Specific decorative luminaires: Simon MERAK LED, size S, and Simon ALTAIR LED, size I, made of die-cast aluminium. Flat cover with internal honeycomb LED cooling system, no visible fins. Access to the electrical-optical group and maintenance via the top part with opening by means of two levers, without tools, or fastened with four captive screws that are invisible when installed, according to luminaire model. The electro-optical group is removable and upgradeable in a single piece, with a disconnecter for automatic disconnection and a three-guide alignment system to avoid incorrect assemblies, according to luminaire model. Possibility of fitting an upper Zhaga/NEMA connector for MERAK and ALTAIR luminaires, and a lower Zhaga connector for MERAK luminaires. 6 mm thick flat transparent tempered glass diffuser to facilitate cleaning and avoid UV radiation on the optics. **IP66** protection rating for the complete luminaire, with **pressure relief valve** to keep the pressure constant and prevent moisture from entering, and up to **IK10** impact resistance rating. Possibility of mounting up to nine multi-array optics. Anti-glare, truncated pyramid-shaped reflector, matt with light flux recovery. Possibility of four colour temperatures in white light, as well as PCA (Phosphor Converted Amber) for specially protected areas. Service life of LED **L90 B10 100,000 hours**. Istantium LED lighting groups can be replaced and updated even when the luminaire is installed, thereby extending its service life. Numerous different lighting packages are offered, thanks to its modular LED system. Upward Light Output Ratio (ULOR) equal to 0% (verify according to optics used). With **Class I** and **Class II** electronic equipment with 230 V AC/50 Hz supply voltage. Possibility of including additional protection against surges of **10 kV/10 kA**. With automatic disconnection when opening the gear compartment. Optional dimming with control line 2N+, without control line (Self-dimming) 2N-, by means of a flow dimmer from CAD cabinet amplitude dimming, for telemanagement with 1.10V or DALI input, according to luminaire model. Optional custom programming and maintenance of constant light output (**CLO**). Standard finish in Simon GYDECO colour. Possibility of Simon and RAL finishes, as well as Seafront paint for corrosive environments with high durability in a **CSM** environment. Dimensions 425x63x425 mm for MERAK luminaire and 425x63x220 mm for ALTAIR luminaire. **ENEC+** and **Zhaga-D4i** certified MERAK luminaire. ALTAIR **ENEC** certified luminaire, compatible with **Zhaga-D4i**.

## LUMINAIRE

### PHYSICAL FEATURES AND MATERIALS

IP	IP66
IK	From IK09 to IK10
Body	Die-cast aluminium
Cover	Die-cast aluminium
Closure system	Levers made of die-cast aluminium, tool-free opening / Stainless steel screws
Diffuser	Flat transparent shatter-proof tempered glass

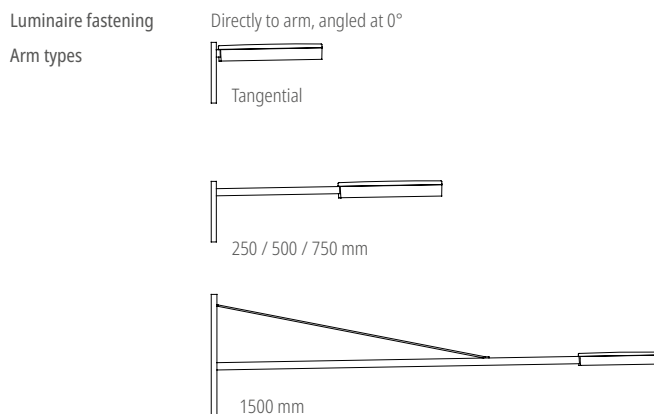
### ELECTRICAL PARAMETERS \* AND CONNECTIVITY

Temp.	-20 °C... +35 °C				
Dimming**	MERAK luminaire	ALTAIR luminaire			
	<b>2N-</b> Without control line	<b>2N-</b> Without control line			
	<b>Dxxx</b> Without custom programmed control line	<b>Dxxx</b> Without custom programmed control line			
	<b>2N+</b> With control line	<b>CAD</b> Cabinet amplitude dimming			
	<b>CAD</b> Cabinet amplitude dimming	<b>1N (100%)</b> Without dimming			
	<b>1N (100%)</b> Without dimming	<b>1.10V</b> Dimming through 1.10V input protocol			
	<b>1.10V</b> Dimming through 1.10V input protocol	<b>1.10V</b> Dimming through DALI input protocol			
	<b>DALI</b> Dimming through DALI input protocol	<b>DALI</b> Dimming through DALI input protocol			
	Possibility of activating the CLO function, which allows the depreciation of the light emitted by the LEDs to be compensated by gradually increasing the supply current to them.				
	Possibility of fitting a Zhaga/NEMA connector on the top of the MERAK or ALTAIR luminaire and a Zhaga connector on the bottom of the MERAK luminaire according to Zhaga Consortium Book 18.				
<b>Luminaires supplied by electrical grid</b>					
Supply voltage	220-240 V <sub>AC</sub>				
Frequency	50/60 Hz				
Protection against power surge	6 kV (Possibility of increasing to 10 kV / 10 kA upon request)				
Power factor (cos φ at max. charge)	≥ 0.95				
Luminaire electrical protection	Class I or Class II				
Power according to models for MERAK luminaire***	16 LEDs	24 LEDs	40 LEDs	48 LEDs	
Supply current					
HIGH EFFICIENCY	16 W	24 W	39 W	47 W	
HIGH BALANCE	24 W	36 W	60 W	73 W	
HIGH FLUX	32 W	49 W	81 W	97 W	
VERY HIGH FLUX	50 W	75 W	-	-	

Power according to models for ALTAIR luminaire***	12 LEDs	16 LEDs	24 LEDs
Supply current			
HIGH EFFICIENCY	12 W	16 W	24 W
HIGH BALANCE	18 W	24 W	36 W
HIGH FLUX	24 W	32 W	49 W
VERY HIGH FLUX	37 W	50 W	75 W

## SUPPORT

### DIMENSIONS AND FASTENING SYSTEMS



### PHYSICAL FEATURES AND MATERIALS

Arm	Structural steel sheet, S235JR quality
Arm trim	Die-cast aluminium
Rod	Structural steel, S235JR quality
Fastening plate	Structural steel sheet, S235JR quality

### FINISHES

Wall arm	Galvanised and painted in GYDECO colour (Standard Paint) Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)
Luminaires	Painted in GYDECO colour (Standard Paint) Simon Colours (Standard Paint / Seafront Paint) RAL chart colours (Standard Paint / Seafront Paint)

\* Values corresponding to the current state of technology. \*\* Check other regulations. \*\*\* Power values have a tolerance of ±7%.



CONFIGURE YOUR KELP WALL ARM

Model	Arm	Arm length	Optics	Colour Temp.	Flux	Team	Dimming	Protection	Finishes	Description	
KEG KEB										Simon MERAK / ALTAIR luminaire for KELP, with IK10 protection	
										Simon MERAK / ALTAIR luminaire for KELP, with IK09 protection	
	MWA AWA									Simon MERAK Istanium® LED luminaire, size S, flat cover Simon ALTAIR Istanium® LED luminaire, size L, flat cover	
		TA_ 25_ 50_ 75_ A5_								Tangential arm Arm 250 mm long Arm 500 mm long Arm 750 mm long Arm 1500 mm long with rod	
			RG_ RJ_ RA_ RE_ SA_ SB_							G Type Front Road Light Optics J Type Front Road Light Optics A Type Extended Road Light Optics, E Type Extended Road Light Optics A Type Symmetric Optics, B Type Symmetric Optics	
				<input type="radio"/> NDL <input type="radio"/> WDL <input type="radio"/> SDL <input type="radio"/> XDL						Neutral daylight - 4,000 K Warm daylight – 3,000 K Soft daylight - 2,700 K Extra warm daylight – 2,200 K	
					<b>_12W350</b> <b>_16W350</b> <b>_18W530</b> <b>_24W530</b> <b>_24W700</b> <b>_32W700</b>  <b>_36W530</b> <b>_37W_1K</b> <b>_49W700</b> <b>_50W_1K</b> <b>_75W_1K</b> <b>_81W700</b> <b>_97W700</b>					12 W 350 mA    1,970 lm @ 4,000 K    12 LEDs    ALTAIR Istanium® LED luminaire 16 W 350 mA    2,550 lm @ 4,000 K    16 LEDs    MERAK Istanium® LED luminaire 18 W 530 mA    2,790 lm @ 4,000 K    16 LEDs    ALTAIR Istanium® LED luminaire 24 W 530 mA    3,630 lm @ 4,000 K    16 LEDs    MERAK Istanium® LED luminaire 24 W 700 mA    3,530 lm @ 4,000 K    12 LEDs    ALTAIR Istanium® LED luminaire 32 W 700 mA    4,520 lm @ 4,000 K    16 LEDs    MERAK Istanium® LED luminaire 32 W 700 mA    4,560 lm @ 4,000 K    16 LEDs    ALTAIR Istanium® LED luminaire 36 W 530 mA    5,300 lm @ 4,000 K    24 LEDs    MERAK Istanium® LED luminaire 37 W 1050 mA    4,870 lm @ 4,000 K    12 LEDs    ALTAIR Istanium® LED luminaire 49 W 700 mA    6,560 lm @ 4,000 K    24 LEDs    MERAK Istanium® LED luminaire 50 W 1,050 mA    6,110 lm @ 4,000 K    16 LEDs    ALTAIR Istanium® LED luminaire 75 W 1,050 mA    8,730 lm @ 4,000 K    24 LEDs    MERAK Istanium® LED luminaire 81 W 700 mA    10,650 lm @ 4,000 K    40 LEDs    MERAK Istanium® LED luminaire 97 W 700 mA    12,690 lm @ 4,000 K    48 LEDs    MERAK Istanium® LED luminaire	
										<b>IA23_</b> <b>IA23S</b>	Electronic control gear at 230 VAC 50/60 Hz, standard protection against 6 kV power surges Electronic control gear at 230 VAC 50/60 Hz, additional protection against 10 kV power surges
							<b>2N-_ 2N+_ 1N_ CAD_ 1-10 DALI</b>			Dimming without control line (self-dimming) Dimming with control line* Without dimming (on/off) Cabinet amplitude dimming (electrical box dimmer)* Dimming through 1.10 V input protocol* Dimming through DALI input protocol*	
								<b>C1 C2</b>		Class 1 Luminaire electrical protection Class 2 Luminaire electrical protection	
									<b>GYDECO</b> <b>*****</b> <b>*****</b>	Standard finish in Simon Decorative Grey Finish in Simon colours (see page 514) Finish in RAL classic chart colours	

The luminaire flow output can vary around ± 6% regarding those published according to environmental condition and/or the constant progress that LED technology undergoes. The luminaire power can vary around ± 7% regarding those published according to environmental condition and/or the constant progress that technology undergoes.  
\* Model only available with MERAK Istanium® LED luminaire.





AMBIENT ARMS

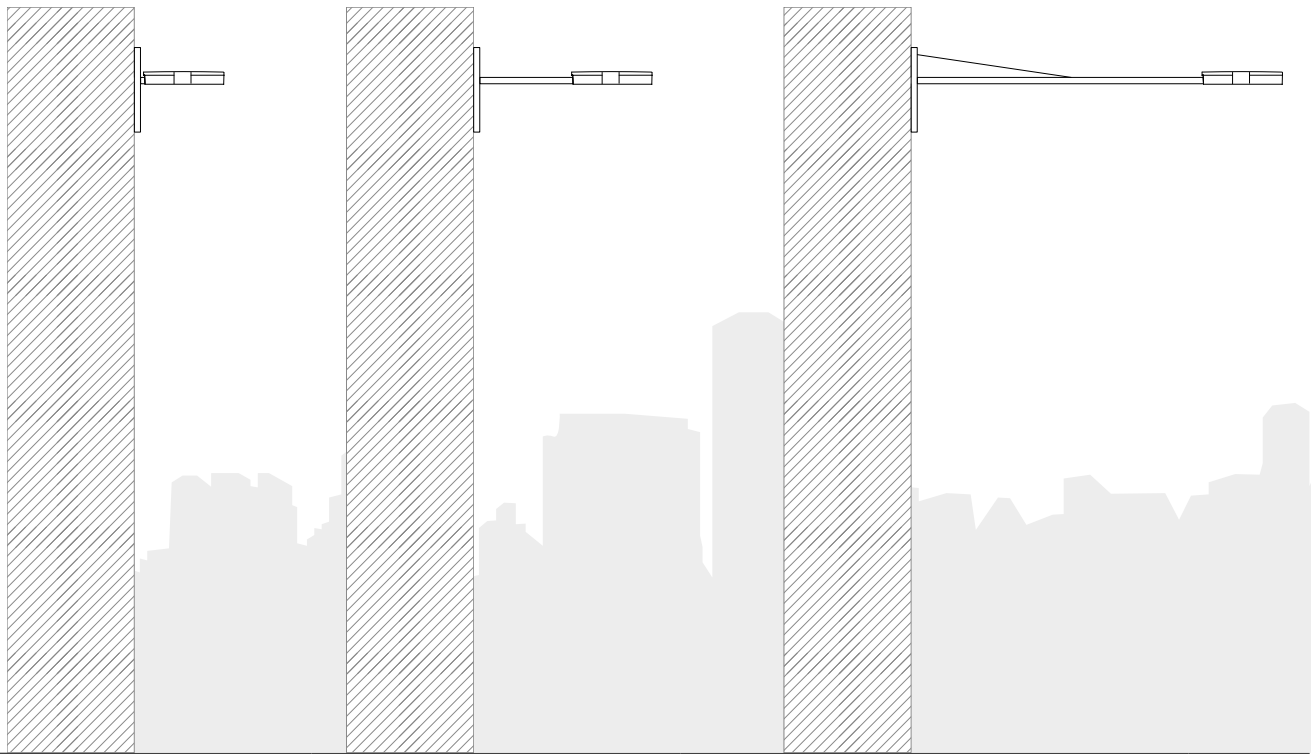
KELP



EXAMPLES OF KELP AMBIENT ARM

AMBIENT ARMS

KELP

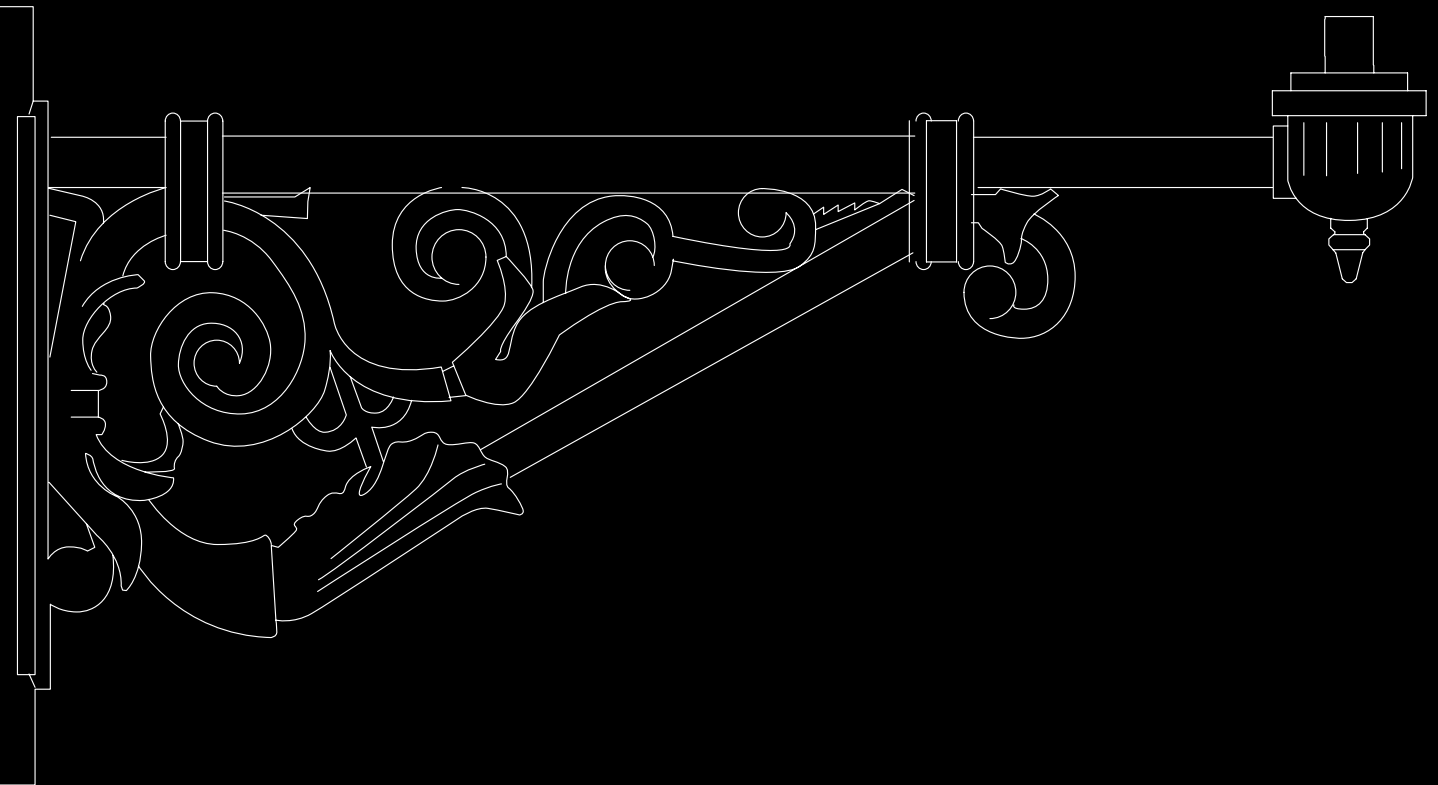


KELP MERAK WALL ARM,  
TANGENTIAL

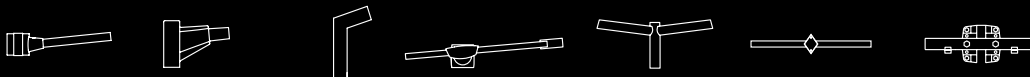
KELP MERAK WALL ARM 500 MM

KELP MERAK WALL ARM 1500 MM





# ARMS AND OTHER ACCESSORIES



**ALF1**  
P.456

**ALF2**  
P.460

**ALF3**  
P.462

**ALF4**  
P.464

**CROSSPIECES**  
P.468

**CR1**  
P.469

**CR2**  
P.470



**CR3**  
P.471

**BM1**  
P.472

**BM13**  
P.473

**BM10**  
P.474

**BM2**  
P.475

**BM5**  
P.476

**BM9**  
P.477





ALF1 for luminaires



ALF1 for spotlights

# ALF1

Arm with decorative urban pole cable tie. To fasten additional luminaires and spotlights to poles and curved poles with no need for couplings.

## FASTENING SYSTEMS

Luminaire fastening	Lateral fastening for luminaires: Ø60 mm coupling. Lateral fastening for spotlights: M10 hole for fastening screw.
Installation	Arm to cylindrical or conical tapering pole for lateral luminaires or spotlights with bracket using cable ties in two sizes. To choose proper cable tie size, see attached table.
Notes	0° or 6° angle according to assembly allow the direction of luminaire light flux.
Recommendation	Not suitable for KOS or LORE spotlights.

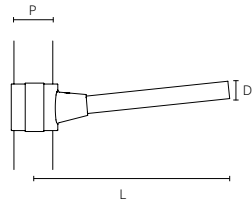
## MATERIALS

Arm	Steel tube.
Cable tie	Die-cast aluminium

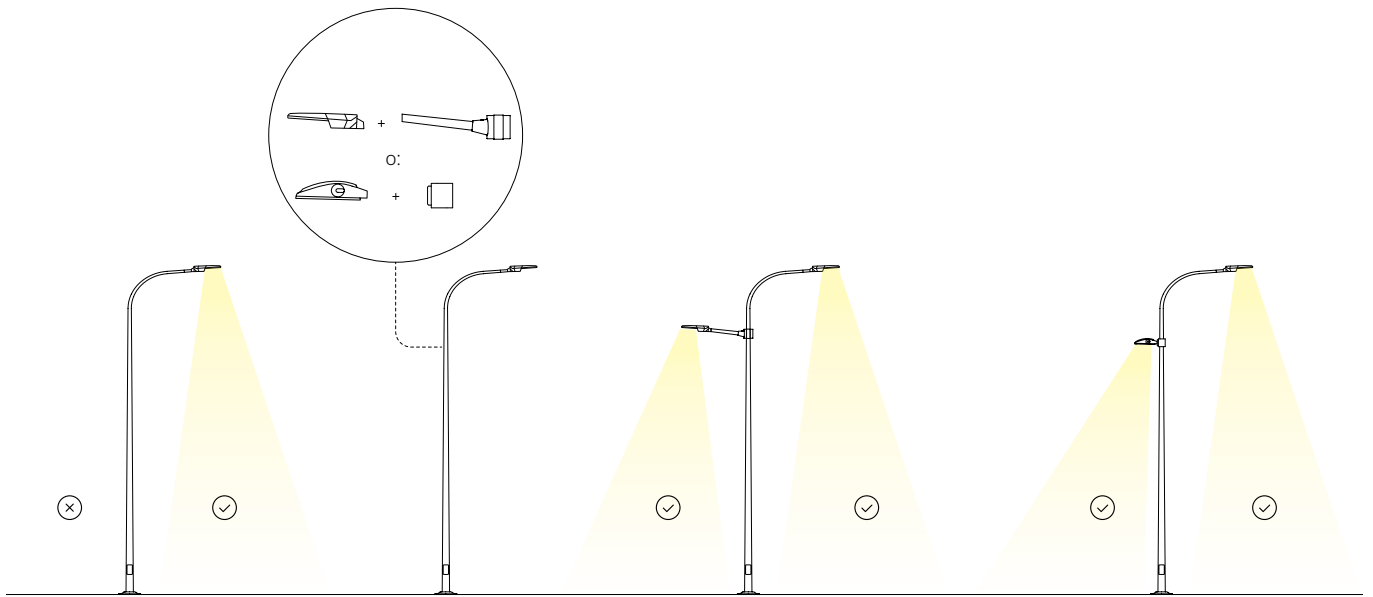
## FINISHES

Arm	Hot dip galvanised
Cable tie	Painted in GYTECH Simon Colours RAL chart colours

BASE REFERENCES (Units in mm)

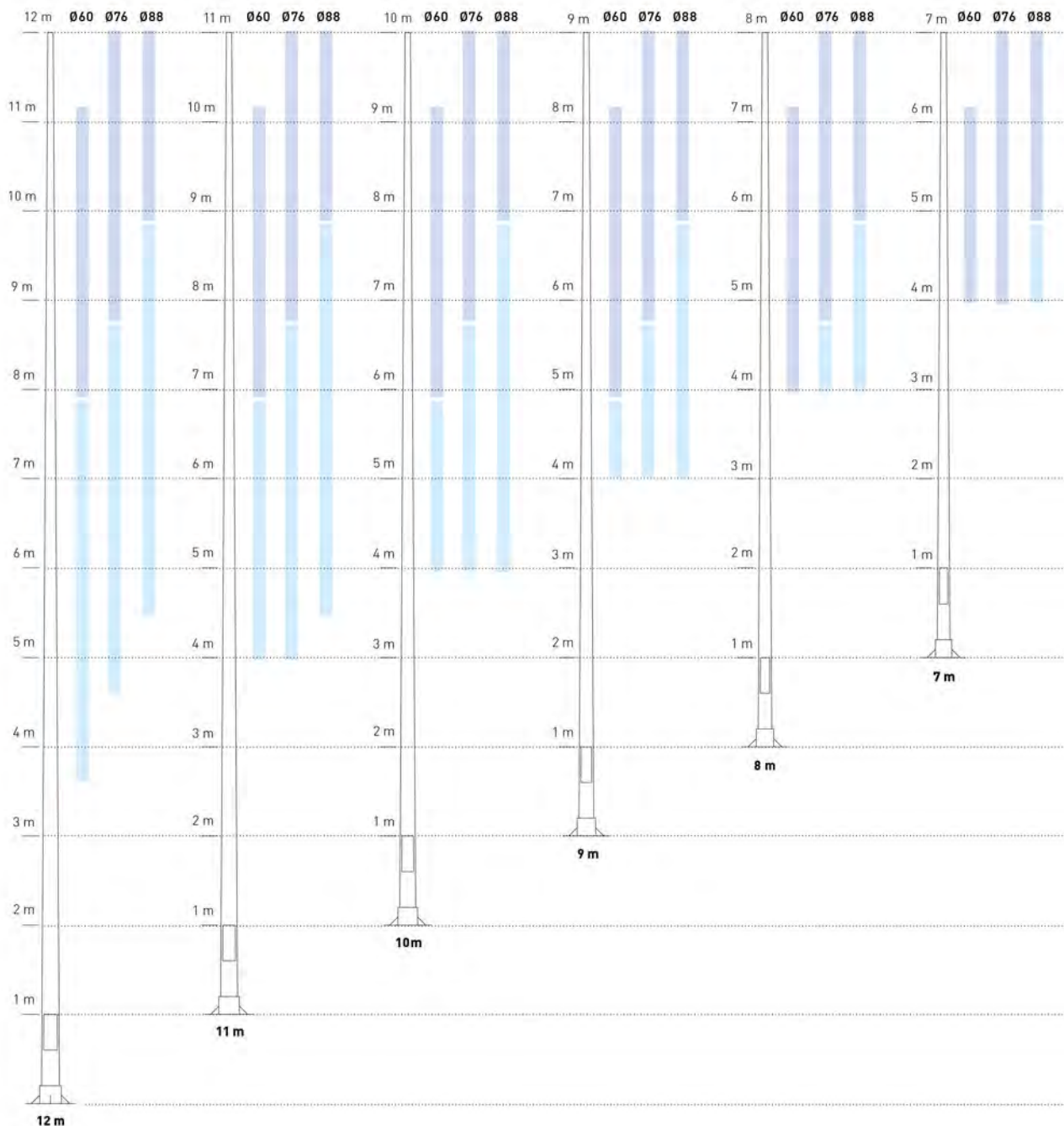


Model	Fastening	Arm length (L)	D	P	Finish	Offer codes	Order code	
<b>ALF 1 for luminaires</b>		Lateral at 5°	350	Ø60	76-115	GYTECH/GV	ALF1C_350_L05_1D60_UT115_PCF____GYT_GV	<b>50-33252</b>
		Lateral at 5°	350	Ø60	115-154	GYTECH/GV	ALF1C_350_L05_1D60_UT154_PCF____GYT_GV	<b>50-33262</b>
		Lateral at 5°	700	Ø60	76-115	GYTECH/GV	ALF1C_700_L05_1D60_UT115_PCF____GYT_GV	<b>50-33254</b>
		Lateral at 5°	700	Ø60	115-154	GYTECH/GV	ALF1C_700_L05_1D60_UT154_PCF____GYT_GV	<b>50-33264</b>
		Lateral at 5°	1,150	Ø60	76-115	GYTECH/GV	ALF1C1150_L05_1D60_UT115_PCF____GYT_GV	<b>50-33250</b>
		Lateral at 5°	1,150	Ø60	115-154	GYTECH/GV	ALF1C1150_L05_1D60_UT154_PCF____GYT_GV	<b>50-33260</b>
		Lateral at 5°	350	Ø60	76-115	GYTECH/GV	ALF1C_350_L05_2D60_UT115_PCF____GYT_GV	<b>50-33253</b>
		Lateral at 5°	350	Ø60	115-154	GYTECH/GV	ALF1C_350_L05_2D60_UT154_PCF____GYT_GV	<b>50-33263</b>
		Lateral at 5°	700	Ø60	76-115	GYTECH/GV	ALF1C_700_L05_2D60_UT115_PCF____GYT_GV	<b>50-33255</b>
		Lateral at 5°	700	Ø60	115-154	GYTECH/GV	ALF1C_700_L05_2D60_UT154_PCF____GYT_GV	<b>50-33265</b>
		Lateral at 5°	1,150	Ø60	76-115	GYTECH/GV	ALF1C1150_L05_2D60_UT115_PCF____GYT_GV	<b>50-33251</b>
		Lateral at 5°	1,150	Ø60	115-154	GYTECH/GV	ALF1C1150_L05_2D60_UT154_PCF____GYT_GV	<b>50-33261</b>
<b>ALF1 for spotlights</b>		Lateral at 0°	10	1PR	76-115	GYTECH/GV	ALF1C__10_L00_1PR_UT115_PCF____GYT_GV	<b>5-531852-012</b>
		Lateral at 0°	10	1PR	115-154	GYTECH/GV	ALF1C__10_L00_1PR_UT154_PCF____GYT_GV	<b>5-531846-012</b>
		Lateral at 0°	10	2PR	76-115	GYTECH/GV	ALF1C__10_L00_2PR_UT115_PCF____GYT_GV	<b>5-531853-012</b>
		Lateral at 0°	10	2PR	115-154	GYTECH/GV	ALF1C__10_L00_2PR_UT154_PCF____GYT_GV	<b>5-531851-012</b>



Example of application of ALF1 arms with cable tie.

The ALF1 arms allow luminaires or floodlights to be mounted on supports that are already installed, reinforcing the existing lighting without the need for complicated and costly interventions.



### CABLE TIE SIZE CHOICE

#### Appropriate cable tie size choice for 12/1000 conical tapering poles:

1. Choose the post-top diameter of the pole in the configurator.
2. Choose the cable tie assembly height in the configurator.
3. The configurator determines the appropriate cable tie size.

#### Choosing the appropriate cable tie for cylindrical poles:

Choose cable tie size according to pole diameter:

- from Ø76 mm to Ø115 mm, small cable tie
- from Ø115 mm to Ø154 mm, large cable tie

#### SMALL CABLE TIE

	1 ARM	2 ARMS
1150 mm	50-33250	50-33251
700 mm	50-33254	50-33255
350 mm	50-33252	50-33253
Spotlight	5-531852-012	5-531853-012

#### LARGE CABLE TIE

	1 ARM	2 ARMS
1150 mm	50-33260	50-33261
700 mm	50-33264	50-33265
350 mm	50-33262	50-33263
Spotlight	5-531846-012	5-531851-012





Double arm at end of pole



Wall adaptation arm



Arm at end of pole

# ALF2

Accessory for luminaire fastening at end of pole / wall adaptation, decorative urban

## FASTENING SYSTEMS

Luminaire fastening	Lateral fastening: Ø60 mm coupling.
Installation	For ends on conical tapering or cylindrical poles Ø60 mm or Ø76 mm.
Notes	5° angle for arms to pole.

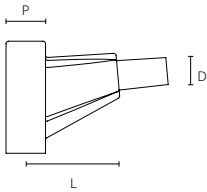
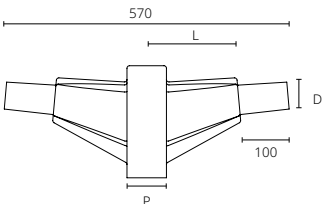
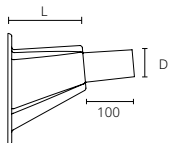
## MATERIALS

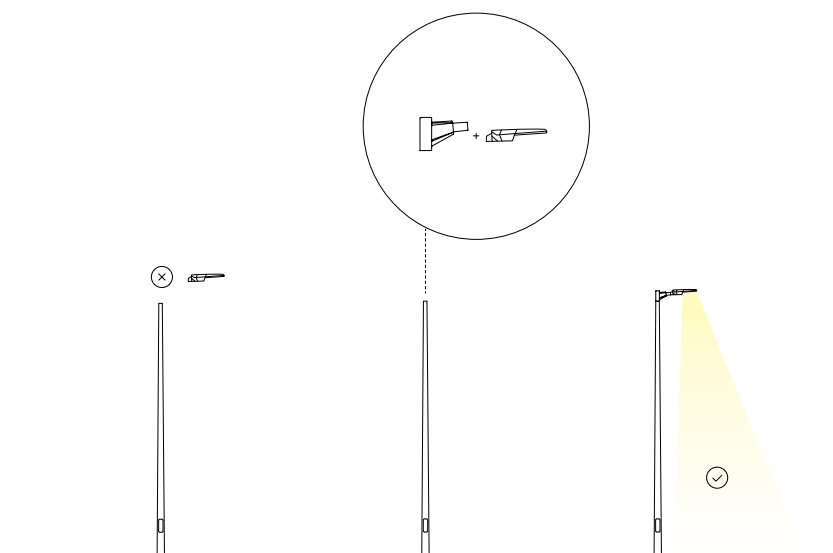
Arm	Die-cast aluminium.
-----	---------------------

## FINISHES

Arm	GY9007
	GY9006
	DGCLAS
	GYDECO
	GYTECH
	WH9010
	Simon Colours
	RAL chart colours

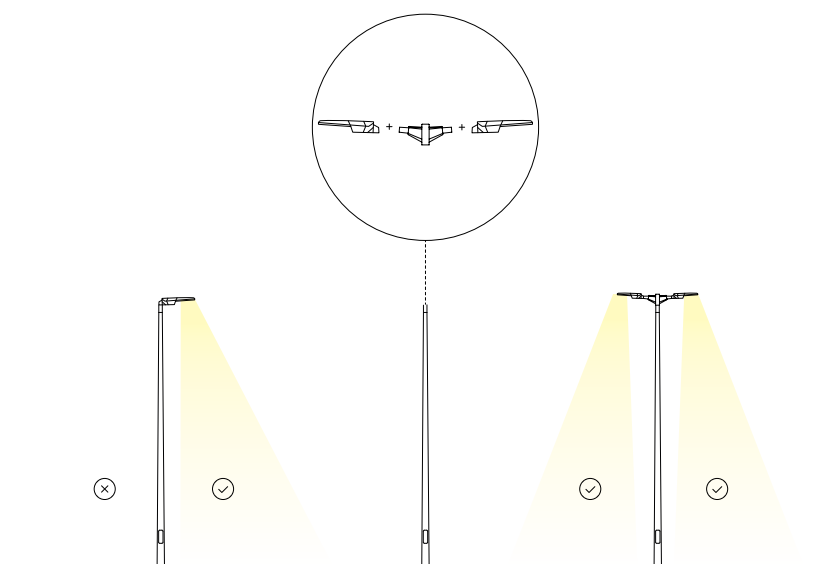
## BASE REFERENCES (Units in mm)

	Fastening	Arm length (L)	D	P	Finish	Offer codes	Order code
<b>Arm at end of pole</b> 	Lateral at 5°	190	Ø60	Ø60	GY9007	ALF2C_190_L05_1D60_P60_PCF____GY9007	<b>50-33950</b>
	Lateral at 5°	190	Ø60	Ø76	GY9007	ALF2C_190_L05_1D60_P76_PCF____GY9007	<b>50-33956</b>
	Lateral at 5°	190	Ø60	Ø60	GY9006	ALF2C_190_L05_1D60_P60_PCF____GY9006	<b>50-33960</b>
	Lateral at 5°	190	Ø60	Ø76	GY9006	ALF2C_190_L05_1D60_P76_PCF____GY9006	<b>50-33966</b>
	Lateral at 5°	190	Ø60	Ø60	DGCLAS	ALF2C_190_L05_1D60_P60_PCF____DGCLAS	<b>50-33970</b>
	Lateral at 5°	190	Ø60	Ø76	DGCLAS	ALF2C_190_L05_1D60_P76_PCF____DGCLAS	<b>50-33976</b>
	Lateral at 5°	190	Ø60	Ø60	GYDECO	ALF2C_190_L05_1D60_P60_PCF____GYDECO	<b>50-33550</b>
	Lateral at 5°	190	Ø60	Ø76	GYDECO	ALF2C_190_L05_1D60_P76_PCF____GYDECO	<b>50-33556</b>
	Lateral at 5°	190	Ø60	Ø60	GYTECH	ALF2C_190_L05_1D60_P60_PCF____GYTECH	<b>50-33560</b>
	Lateral at 5°	190	Ø60	Ø76	GYTECH	ALF2C_190_L05_1D60_P76_PCF____GYTECH	<b>50-33566</b>
<b>Double arm at end of pole</b> 	Lateral at 5°	190	Ø60	Ø60	GY9007	ALF2C_190_L05_2D60_P60_PCF____GY9007	<b>50-33954</b>
	Lateral at 5°	190	Ø60	Ø76	GY9007	ALF2C_190_L05_2D60_P76_PCF____GY9007	<b>50-33957</b>
	Lateral at 5°	190	Ø60	Ø60	GY9006	ALF2C_190_L05_2D60_P60_PCF____GY9006	<b>50-33964</b>
	Lateral at 5°	190	Ø60	Ø76	GY9006	ALF2C_190_L05_2D60_P76_PCF____GY9006	<b>50-33967</b>
	Lateral at 5°	190	Ø60	Ø60	DGCLAS	ALF2C_190_L05_2D60_P60_PCF____DGCLAS	<b>50-33974</b>
	Lateral at 5°	190	Ø60	Ø76	DGCLAS	ALF2C_190_L05_2D60_P76_PCF____DGCLAS	<b>50-33977</b>
	Lateral at 5°	190	Ø60	Ø60	GYDECO	ALF2C_190_L05_2D60_P60_PCF____GYDECO	<b>50-33554</b>
	Lateral at 5°	190	Ø60	Ø76	GYDECO	ALF2C_190_L05_2D60_P76_PCF____GYDECO	<b>50-33857</b>
	Lateral at 5°	190	Ø60	Ø60	GYTECH	ALF2C_190_L05_2D60_P60_PCF____GYTECH	<b>50-33564</b>
	Lateral at 5°	190	Ø60	Ø76	GYTECH	ALF2C_190_L05_2D60_P76_PCF____GYTECH	<b>50-33867</b>
<b>Wall adaptation arm</b> 	Lateral at 5°	166	Ø60	Wall	GY9007	ALF2C_166_L05_1D60_WALL_PCF____GY9007	<b>50-33951</b>
	Lateral at 5°	166	Ø60	Wall	GY9006	ALF2C_166_L05_1D60_WALL_PCF____GY9006	<b>50-33961</b>
	Lateral at 5°	166	Ø60	Wall	DGCLAS	ALF2C_166_L05_1D60_WALL_PCF____DGCLAS	<b>50-33971</b>
	Lateral at 5°	166	Ø60	Wall	GYDECO	ALF2C_166_L05_1D60_WALL_PCF____GYDECO	<b>50-33851</b>
	Lateral at 5°	166	Ø60	Wall	GYTECH	ALF2C_166_L05_1D60_WALL_PCF____GYTECH	<b>50-33861</b>



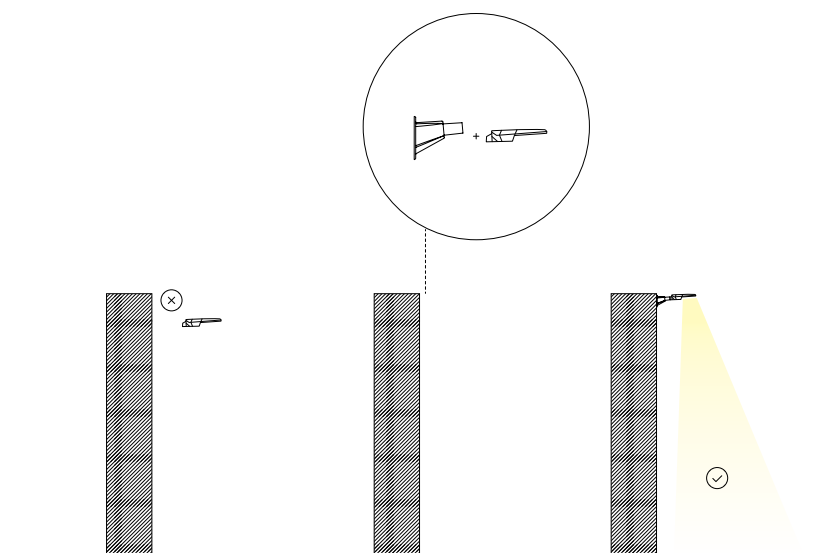
Example of application of the ALF2 arm at end of pole.

The ALF2 arm at the end of the pole makes it possible to mount a lateral-mount luminaire without the possibility of post-top mounting on poles that are already installed without the need for complicated and costly interventions.



Example of application of the ALF2 double arm at end of pole.

The ALF2 double arm at the end of the pole makes it possible to mount a new luminaire on poles that are already installed, reinforcing the existing lighting without the need for complicated and costly interventions.



Example of application of the ALF2 wall adapter arm.

The ALF2 wall adapter arm makes it possible to mount a side-mount luminaire on walls without the need for a curved or straight pole.



Accessory at end of pole



Double accessory at end of pole



Simple arm at end of pole



Double arm at end of pole

# ALF3

Accessory for luminaire fastening at end of pole.

## FASTENING SYSTEMS

Installation	For ends on conical tapering or cylindrical poles Ø60 mm / Ø48 mm
Notes	5°, 10° or 15° angle for arms to luminaire pole.

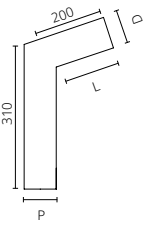
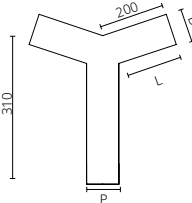



## MATERIALS

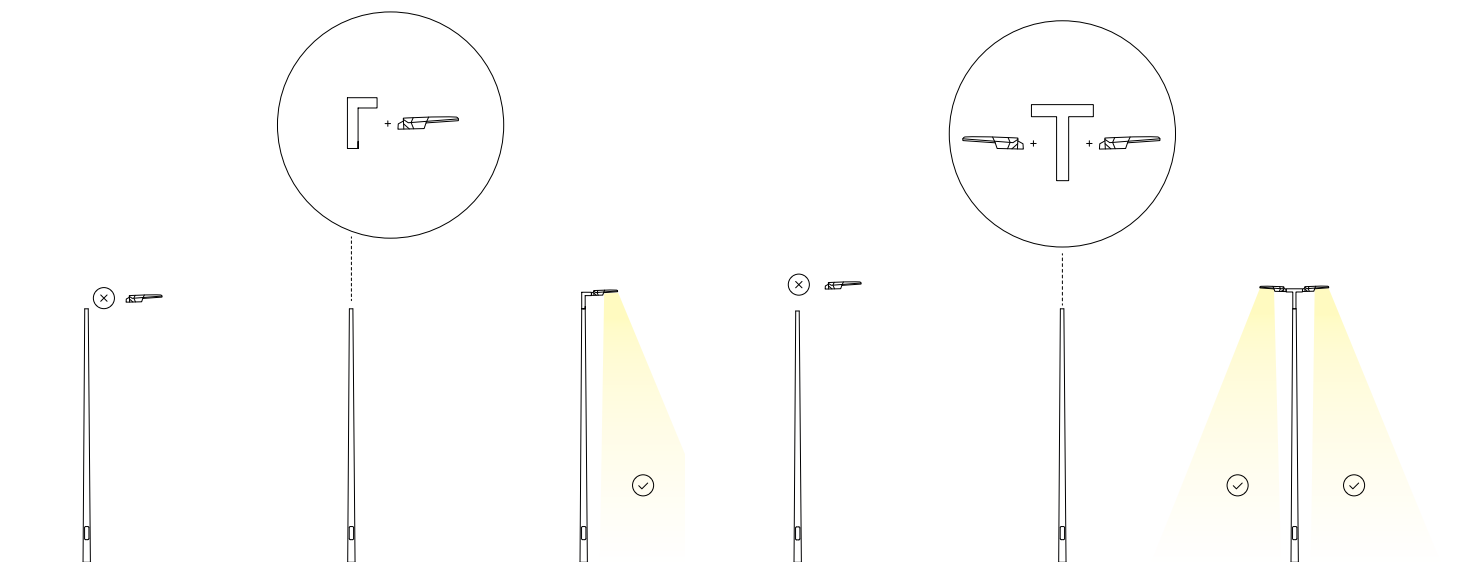
Arm	Steel structural tube.
Fastening plate	Galvanised steel sheet.

## FINISHES

Arm	Hot dip galvanised and painted according to model. Simon Colours RAL chart colours
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## BASE REFERENCES (Units in mm)

Model	Fastening	Arm length (L)	D	P	Finish	Offer codes	Order code
<b>Accessory at end of conical tapering or cylindrical pole for two luminaires</b> 	Lateral at 15°	200	Ø48	Ø48	GV	ALF3C_200_L15_1D48_P48_PCF____GV____	<b>50-33334</b>
	Lateral at 15°	200	Ø48	Ø60	GV	ALF3C_200_L15_1D48_P60_PCF____GV____	<b>50-33335</b>
	Lateral at 10°	129	Ø60	Ø60	GY9007	ALF3C_129_L10_1D60_P60_PCF____GY9007	<b>5-533361</b>
	Lateral at 10°	129	Ø60	Ø60	GY9006	ALF3C_129_L10_1D60_P60_PCF____GY9006	<b>5-533360</b>
	Lateral at 10°	129	Ø60	Ø60	DGCLAS	ALF3C_129_L10_1D60_P60_PCF____DGCLAS	<b>5-533364</b>
	Lateral at 10°	129	Ø60	Ø60	GYDECO	ALF3C_129_L10_1D60_P60_PCF____GYDECO	<b>5-533366</b>
	Lateral at 10°	129	Ø60	Ø60	GYTECH	ALF3C_129_L10_1D60_P60_PCF____GYTECH	<b>5-533365</b>
	Lateral at 5°	129	Ø60	Ø60	GY9007	ALF3C_129_L05_1D60_P60_PCF____GY9007	<b>5-533362</b>
	Lateral at 5°	129	Ø60	Ø60	GY9006	ALF3C_129_L05_1D60_P60_PCF____GY9006	<b>5-533367</b>
	Lateral at 5°	129	Ø60	Ø60	DGCLAS	ALF3C_129_L05_1D60_P60_PCF____DGCLAS	<b>5-533368</b>
	Lateral at 5°	129	Ø60	Ø60	GYDECO	ALF3C_129_L05_1D60_P60_PCF____GYDECO	<b>5-533370</b>
	Lateral at 5°	129	Ø60	Ø60	GYTECH	ALF3C_129_L05_1D60_P60_PCF____GYTECH	<b>5-533369</b>
<b>Double accessory at end of conical tapering or cylindrical pole for two luminaires</b> 	Lateral at 10°	129	Ø60	Ø60	GY9007	ALF3C_129_L10_2D60_P60_PCF____GY9007	<b>5-533363</b>
	Lateral at 10°	129	Ø60	Ø60	GY9006	ALF3C_129_L10_2D60_P60_PCF____GY9006	<b>5-533371</b>
	Lateral at 10°	129	Ø60	Ø60	DGCLAS	ALF3C_129_L10_2D60_P60_PCF____DGCLAS	<b>5-533372</b>
	Lateral at 10°	129	Ø60	Ø60	GYDECO	ALF3C_129_L10_2D60_P60_PCF____GYDECO	<b>5-533374</b>
	Lateral at 10°	129	Ø60	Ø60	GYTECH	ALF3C_129_L10_2D60_P60_PCF____GYTECH	<b>5-533373</b>
<b>Simple arm at end of conical tapering or cylindrical pole for one spotlight</b> 	Lateral at 0°	41	PR	Ø60	GV	ALF3C_41_L00_1PR_P60_PCF____GV____	<b>5-531830</b>
	Lateral at 0°	41	PR	Ø60	GYTECH	ALF3C_41_L00_1PR_P60_PCF____GYTECH	<b>5-531830-012</b>
<b>Simple arm at end of conical tapering or cylindrical pole for one spotlight</b> 	Lateral at 0°	129	PR	Ø60	GV	ALF3C_129_L00_1PR_P60_PCF____GV____	<b>5-531838</b>
	Lateral at 0°	129	PR	Ø60	GYTECH	ALF3C_129_L00_1PR_P60_PCF____GYTECH	<b>5-531838-012</b>
<b>Double arm at end of conical tapering or cylindrical pole for two spotlights</b> 	Lateral at 0°	129	PR	Ø60	GV	ALF3C_129_L00_2PR_P60_PCF____GV____	<b>5-531839</b>
	Lateral at 0°	129	PR	Ø60	GYTECH	ALF3C_129_L00_2PR_P60_PCF____GYTECH	<b>5-531839-012</b>

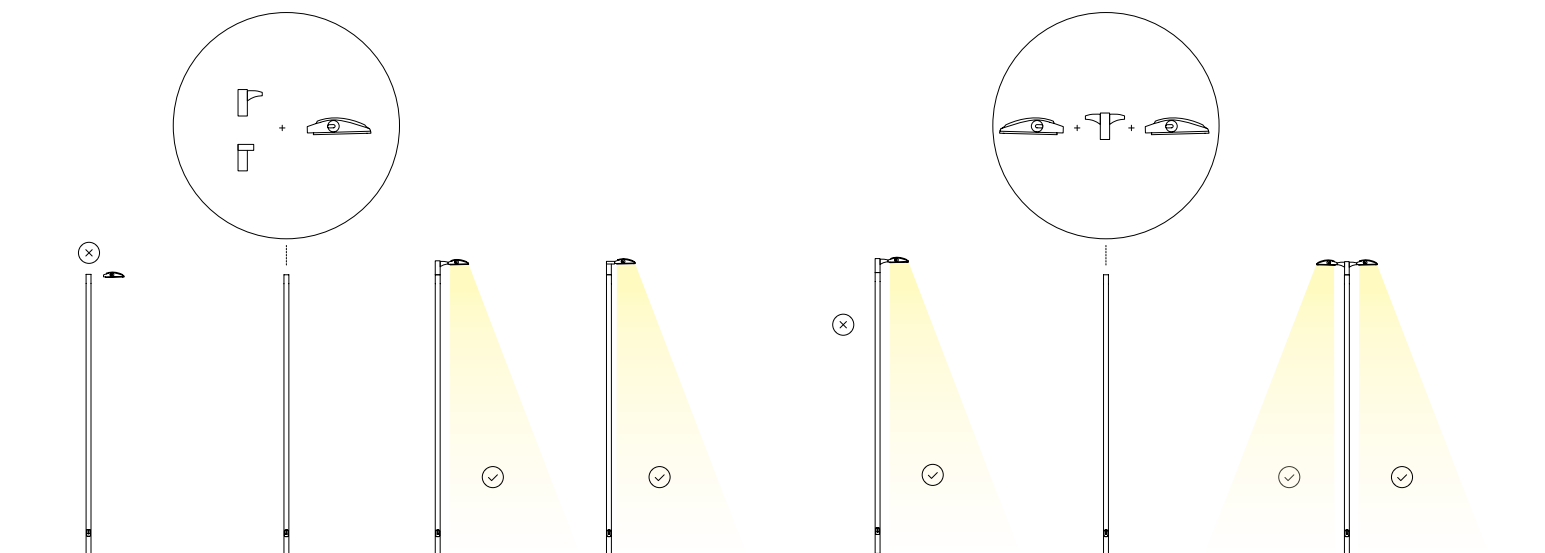


Example of application of the ALF3 accessory at end of pole.

The ALF3 accessory at the end of the pole makes it possible to mount a lateral-mount luminaire without the possibility of post-top mounting on poles already installed, without the need for complicated and costly interventions.

Example of application of the ALF3 double accessory at end of pole.

The ALF3 accessory at the end of the pole makes it possible to mount a luminaire on poles that are already installed, reinforcing the existing lighting without the need for complicated and costly interventions.



Example of application of the ALF3 single arm at end of pole for spotlight.

The ALF3 single arm at the end of the pole makes it possible to mount a spotlight on poles that are already installed without the need for complicated and costly interventions.

Example of application of the ALF3 double arm at end of pole for spotlights.

The ALF3 double arm at the end of the pole for spotlights makes it possible to mount two spotlights on poles that are already installed without the need for complicated and costly interventions.





ALF4 model 100  
for one luminaire



ALF4 model 101  
for one luminaire



ALF4 model 200 for two luminaires

# ALF4

Arm with decorative urban pole cable tie. To fasten additional luminaires to poles and curved poles with no need for couplings.

## FASTENING SYSTEMS

Luminaire fastening	Lateral fastening for luminaires: Ø60 mm x 120 mm coupling.
Installation	Arm to cylindrical or conical tapering pole for lateral luminaires using cable ties in two sizes. To choose proper cable tie size, see attached table.
Notes	0° / 5° / 10° angle to allow the direction of light flux from the luminaire.

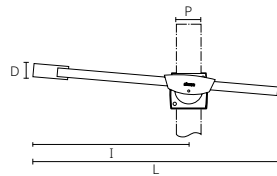
## MATERIALS







Arm	Steel tube.
Cable tie	Die-cast aluminium
Lateral trim covers and rear arm cap	Technical polymer
Fastening plate	Galvanised steel sheet.

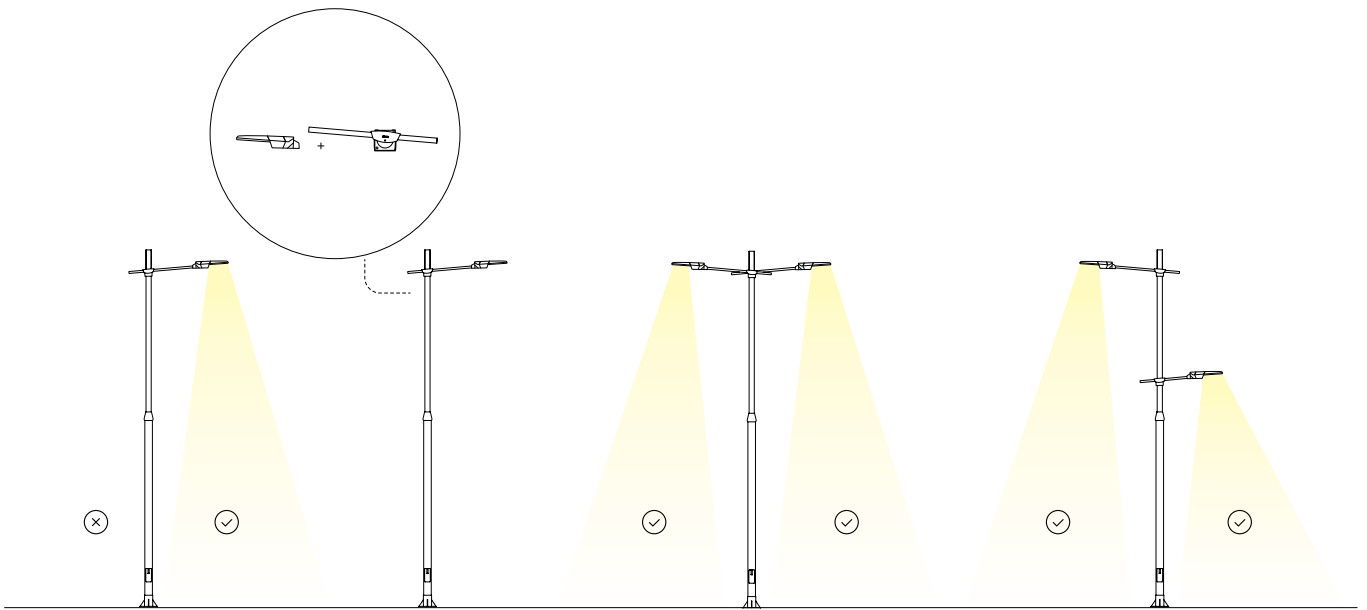
## FINISHES

Arm	Hot dip galvanised and painted in colour GY9007 (Standard Paint) Simon Colours (Standard Paint) RAL chart colours (Standard Paint)
Cable tie	Painted in GY9007 colour (Standard Paint) Simon Colours (Standard Paint) RAL chart colours (Standard Paint)
Lateral trim covers	Painted in GY9006 colour
Rear cap	Painted in black

BASE REFERENCES (Units in mm)

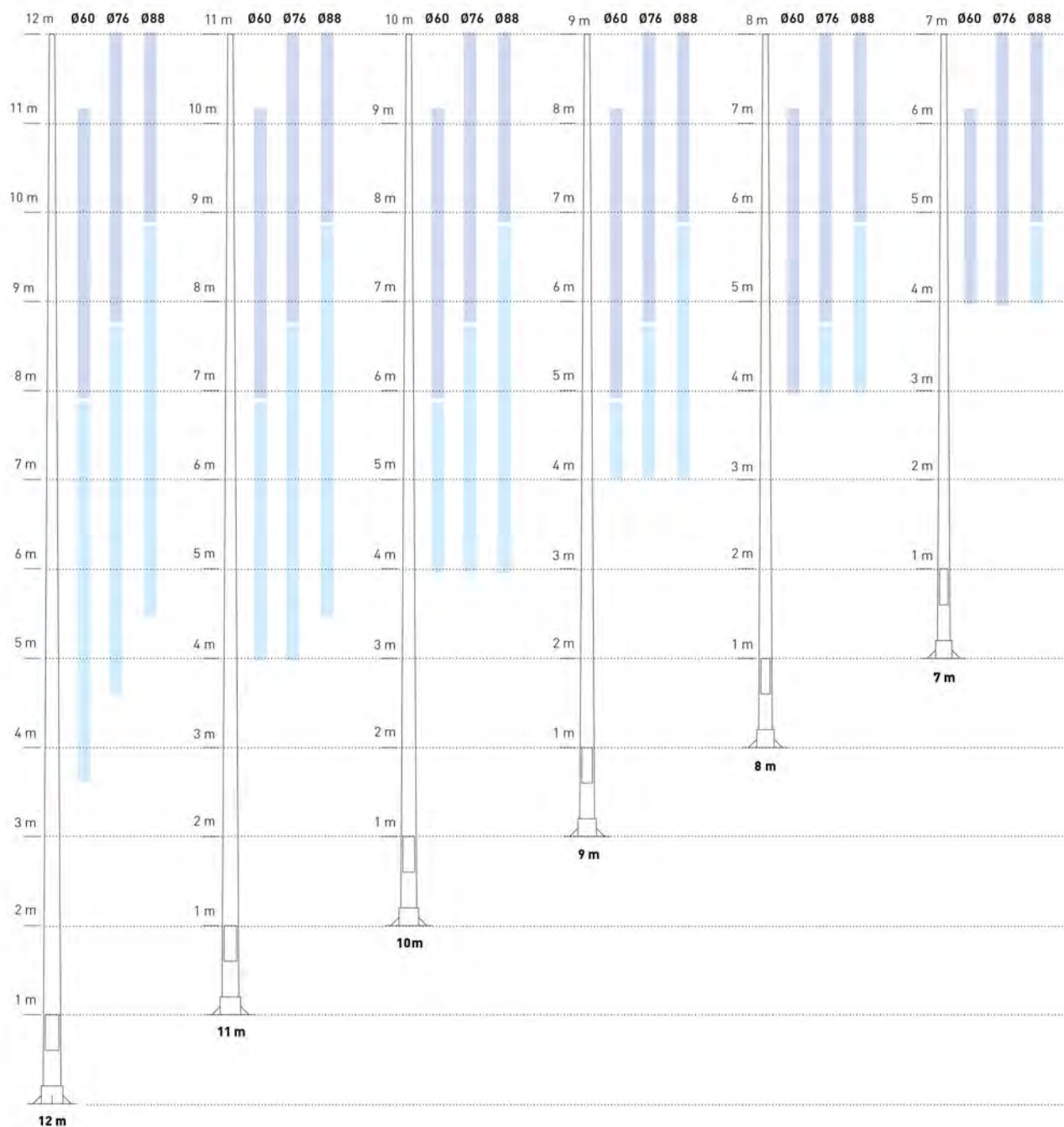


Model	Fastening	Arm length (L)	Overhang length (I)	D	P	Finish (arm/ cable tie)	Offer codes	Order code
<b>100</b> 	Lateral at 0° / 5° / 10°	1,000	600	Ø60	76-115	GY9007/GY9007	ALF4C1000_LRO_1D60_UT115_PCF100__GYTBKT	<b>5-532001-016</b>
	Lateral at 0° / 5° / 10°	1,000	600	Ø60	115-154	GY9007/GY9007	ALF4C1000_LRO_1D60_UT154_PCF100__GYTBKT	<b>5-532003-016</b>
<b>100</b> 	Lateral at 0° / 5° / 10°	1,400	1,000	Ø60	76-115	GY9007/GY9007	ALF4C1400_LRO_1D60_UT115_PCF100__GYTBKT	<b>5-532002-016</b>
	Lateral at 0° / 5° / 10°	1,400	1,000	Ø60	115-154	GY9007/GY9007	ALF4C1400_LRO_1D60_UT154_PCF100__GYTBKT	<b>5-532004-016</b>
<b>101</b> 	Lateral at 0° / 5° / 10°	1,000	600	Ø60	76-115	GY9007/GY9007	ALF4C1000_LRO_1D60_UT115_PCF101__GYTBKT	<b>5-532011-016</b>
	Lateral at 0° / 5° / 10°	1,000	600	Ø60	115-154	GY9007/GY9007	ALF4C1000_LRO_1D60_UT154_PCF101__GYTBKT	<b>5-532013-016</b>
<b>101</b> 	Lateral at 0° / 5° / 10°	1,400	1,000	Ø60	76-115	GY9007/GY9007	ALF4C1400_LRO_1D60_UT115_PCF101__GYTBKT	<b>5-532012-016</b>
	Lateral at 0° / 5° / 10°	1,400	1,000	Ø60	115-154	GY9007/GY9007	ALF4C1400_LRO_1D60_UT154_PCF101__GYTBKT	<b>5-532014-016</b>
<b>200</b> 	Lateral at 0° / 5° / 10°	1,000	600	Ø60	76-115	GY9007/GY9007	ALF4C1000_LRO_1D60_UT115_PCF200__GYTBKT	<b>5-532021-016</b>
	Lateral at 0° / 5° / 10°	1,000	600	Ø60	115-154	GY9007/GY9007	ALF4C1000_LRO_1D60_UT154_PCF200__GYTBKT	<b>5-532023-016</b>
<b>200</b> 	Lateral at 0° / 5° / 10°	1,400	1,000	Ø60	76-115	GY9007/GY9007	ALF4C1400_LRO_1D60_UT115_PCF200__GYTBKT	<b>5-532022-016</b>
	Lateral at 0° / 5° / 10°	1,400	1,000	Ø60	115-154	GY9007/GY9007	ALF4C1400_LRO_1D60_UT154_PCF200__GYTBKT	<b>5-532024-016</b>



Example of application of the ALF4 double accessory at end of pole.

The ALF4 arms allow luminaires to be mounted on supports that are already installed, reinforcing the existing lighting without the need for complicated and costly interventions.



### CABLE TIE SIZE CHOICE

#### Appropriate cable tie size choice for 12/1000 conical tapering poles:

1. Choose the post-top diameter of the pole in the configurator.
2. Choose the cable tie assembly height in the configurator.
3. The configurator determines the appropriate cable tie size.

#### Choosing the appropriate cable tie for cylindrical poles:

Choose cable tie size according to pole diameter:

- from Ø76 mm to Ø115 mm, small cable tie
- from Ø115 mm to Ø154 mm, large cable tie

#### SMALL CABLE TIE

	1 ARM	2 ARMS
Model 100 / 200 - 1,000 mm	5-532001-016	5-532021-016
Model 100 / 200 - 1,400 mm	5-532002-016	5-532022-016
Model 101 - 1,000 mm	5-532011-016	-
Model 101 - 1,400 mm	5-532012-016	-

#### LARGE CABLE TIE

	1 ARM	2 ARMS
Model 100 / 200 - 1,000 mm	5-532003-016	5-532023-016
Model 100 / 200 - 1,400 mm	5-532004-016	5-532024-016
Model 101 - 1,000 mm	5-532013-016	-
Model 101 - 1,400 mm	5-532014-016	-





# CROSSPIECES

Functional support.

## FASTENING SYSTEMS

Luminaire fastening	Lateral fastening: through $\varnothing 60$ mm coupling in horizontal position.
Installation	Pole support for lateral luminaires.
Notes	Different measurements according to post top and luminaire coupling diameter.

## MATERIALS

Arm	Steel structural tube.
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## FINISHES

Arm	Standard: Hot dip galvanised. Simon Colours RAL chart colours
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## BASE REFERENCES (Units in mm)

Model	Fastening	Arm length (L)	D	P	Finish	Offer codes	Order code
<b>1-arm crosspiece at end of conical tapering or cylindrical pole</b>  	Lateral at 5°	500	$\varnothing 60$	$\varnothing 60$	GV	CRT_C_500_L05_1D60_P60_PCF___GV___	<b>CR16060500</b>
	Lateral at 5°	500	$\varnothing 60$	$\varnothing 76$	GV	CRT_C_500_L05_1D60_P76_PCF___GV___	<b>CR17660500</b>
	Lateral at 5°	700	$\varnothing 60$	$\varnothing 60$	GV	CRT_C_700_L05_1D60_P60_PCF___GV___	<b>CR16060700</b>
	Lateral at 5°	700	$\varnothing 60$	$\varnothing 76$	GV	CRT_C_700_L05_1D60_P76_PCF___GV___	<b>CR17660700</b>
	Lateral at 5°	1,000	$\varnothing 60$	$\varnothing 60$	GV	CRT_C1000_L05_1D60_P60_PCF___GV___	<b>CR160601000</b>
	Lateral at 5°	1,000	$\varnothing 60$	$\varnothing 76$	GV	CRT_C1000_L05_1D60_P76_PCF___GV___	<b>CR176601000</b>
	Lateral at 5°	1,500	$\varnothing 60$	$\varnothing 60$	GV	CRT_C1500_L05_1D60_P60_PCF___GV___	<b>CR160601500</b>
	Lateral at 5°	1,500	$\varnothing 60$	$\varnothing 76$	GV	CRT_C1500_L05_1D60_P76_PCF___GV___	<b>CR176601500</b>
<b>2-arm crosspiece at 180°, end of conical tapering or cylindrical pole</b>  	Lateral at 5°	500	$\varnothing 60$	$\varnothing 60$	GV	CRT_C_500_L05_2D60_P60_PCF___GV___	<b>CR26060500</b>
	Lateral at 5°	500	$\varnothing 60$	$\varnothing 76$	GV	CRT_C_500_L05_2D60_P76_PCF___GV___	<b>CR27660500</b>
	Lateral at 5°	700	$\varnothing 60$	$\varnothing 60$	GV	CRT_C_700_L05_2D60_P60_PCF___GV___	<b>CR26060700</b>
	Lateral at 5°	700	$\varnothing 60$	$\varnothing 76$	GV	CRT_C_700_L05_2D60_P76_PCF___GV___	<b>CR27660700</b>
	Lateral at 5°	1,000	$\varnothing 60$	$\varnothing 60$	GV	CRT_C1000_L05_2D60_P60_PCF___GV___	<b>CR260601000</b>
	Lateral at 5°	1,000	$\varnothing 60$	$\varnothing 76$	GV	CRT_C1000_L05_2D60_P76_PCF___GV___	<b>CR276601000</b>
	Lateral at 5°	1,500	$\varnothing 60$	$\varnothing 60$	GV	CRT_C1500_L05_2D60_P60_PCF___GV___	<b>CR260601500</b>
	Lateral at 5°	1,500	$\varnothing 60$	$\varnothing 76$	GV	CRT_C1500_L05_2D60_P76_PCF___GV___	<b>CR276601500</b>
<b>3-arm crosspiece at 120°, end of conical tapering or cylindrical pole</b>  	Lateral at 5°	500	$\varnothing 60$	$\varnothing 60$	GV	CRT_C_500_L05_3D60_P60_PCF___GV___	<b>CR36060500</b>
	Lateral at 5°	500	$\varnothing 60$	$\varnothing 76$	GV	CRT_C_500_L05_3D60_P76_PCF___GV___	<b>CR37660500</b>
	Lateral at 5°	700	$\varnothing 60$	$\varnothing 60$	GV	CRT_C_700_L05_3D60_P60_PCF___GV___	<b>CR36060700</b>
	Lateral at 5°	700	$\varnothing 60$	$\varnothing 76$	GV	CRT_C_700_L05_3D60_P76_PCF___GV___	<b>CR37660700</b>
	Lateral at 5°	1,000	$\varnothing 60$	$\varnothing 60$	GV	CRT_C1000_L05_3D60_P60_PCF___GV___	<b>CR360601000</b>
	Lateral at 5°	1,000	$\varnothing 60$	$\varnothing 76$	GV	CRT_C1000_L05_3D60_P76_PCF___GV___	<b>CR376601000</b>
	Lateral at 5°	1,500	$\varnothing 60$	$\varnothing 60$	GV	CRT_C1500_L05_3D60_P60_PCF___GV___	<b>CR360601500</b>
	Lateral at 5°	1,500	$\varnothing 60$	$\varnothing 76$	GV	CRT_C1500_L05_3D60_P76_PCF___GV___	<b>CR376601500</b>
<b>4-arm crosspiece at 90°, end of conical tapering or cylindrical pole</b>  	Lateral at 5°	500	$\varnothing 60$	$\varnothing 60$	GV	CRT_C_500_L05_4D60_P60_PCF___GV___	<b>CR46060500</b>
	Lateral at 5°	500	$\varnothing 60$	$\varnothing 76$	GV	CRT_C_500_L05_4D60_P76_PCF___GV___	<b>CR47660500</b>
	Lateral at 5°	700	$\varnothing 60$	$\varnothing 60$	GV	CRT_C_700_L05_4D60_P60_PCF___GV___	<b>CR46060700</b>
	Lateral at 5°	700	$\varnothing 60$	$\varnothing 76$	GV	CRT_C_700_L05_4D60_P76_PCF___GV___	<b>CR47660700</b>
	Lateral at 5°	1,000	$\varnothing 60$	$\varnothing 60$	GV	CRT_C1000_L05_4D60_P60_PCF___GV___	<b>CR460601000</b>
	Lateral at 5°	1,000	$\varnothing 60$	$\varnothing 76$	GV	CRT_C1000_L05_4D60_P76_PCF___GV___	<b>CR476601000</b>
	Lateral at 5°	1,500	$\varnothing 60$	$\varnothing 60$	GV	CRT_C1500_L05_4D60_P60_PCF___GV___	<b>CR460601500</b>
	Lateral at 5°	1,500	$\varnothing 60$	$\varnothing 76$	GV	CRT_C1500_L05_4D60_P76_PCF___GV___	<b>CR476601500</b>

# CR1

Crosspiece for spotlights, with Ø60, 76 or 88 mm post-top pole coupling



## FASTENING SYSTEMS

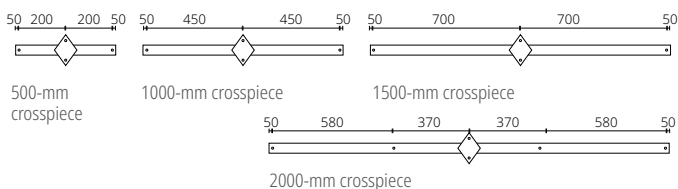
Notes	For Ø60, 76 or 88 mm pole end. Requires end coupling for assembly to pole (according to Ø). Table specifies the maximum number of spotlights.
Recommendation	Verify layout according to spotlight measurements.

## MATERIALS

Arm	Steel sheet.
Screws	Zinc-coated steel.

## FINISHES

Arm	Hot dip galvanised.
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**IMPORTANT:** Verify layout according to spotlight measurements.

## CROSSPIECE BASE REFERENCES (Units in mm)

Model	Arm length (L)	P	Maximum luminaires using crosspieces				Offer codes	Order code
			Milos S	Milos M / Demon / Iraya M	Lore / Fogo	Kos / Iraya L		
Cross-piece arm	500	60	3	2	2	1	CR1_C_500_PU0_PR_UT88_PCF___GV___	<b>S-577278</b>
	500	76	4	2	2	2	CR1_C_500_PU0_PR_UT88_PCF___GV___	<b>S-577278</b>
	500	88	4	2	2	2	CR1_C_500_PU0_PR_UT88_PCF___GV___	<b>S-577278</b>
	1,000	60	3	2	2	1	CR1_C1000_PU0_PR_UT88_PCF___GV___	<b>S-577279</b>
	1,000	76	5	3	3	2	CR1_C1000_PU0_PR_UT88_PCF___GV___	<b>S-577279</b>
	1,000	88	6	4	4	3	CR1_C1000_PU0_PR_UT88_PCF___GV___	<b>S-577279</b>
	1,500	60	3	2	2	1	CR1_C1500_PU0_PR_UT88_PCF___GV___	<b>S-577280</b>
	1,500	76	5	3	3	2	CR1_C1500_PU0_PR_UT88_PCF___GV___	<b>S-577280</b>
	1,500	88	6	4	4	3	CR1_C1500_PU0_PR_UT88_PCF___GV___	<b>S-577280</b>
	2,000	60	3	2	2	1	CR1_C2000_PU0_PR_UT88_PCF___GV___	<b>S-577281</b>
2,000	76	5	3	3	2	CR1_C2000_PU0_PR_UT88_PCF___GV___	<b>S-577281</b>	
2,000	88	7	4	4	3	CR1_C2000_PU0_PR_UT88_PCF___GV___	<b>S-577281</b>	

## COUPLING BASE REFERENCES

Model	Length (L)	P2	Description	Order code
Coupling	400	76	for CR1 crosspiece on Ø60 support	<b>5-577169</b>
	400	88	for CR1 crosspiece on Ø76 support	<b>5-577170</b>
	400	100	for CR1 crosspiece on Ø88 support	<b>5-577171</b>

# CR2

Crosspiece for spotlights, with pole coupling using a cable tie. From Ø48 to 90 mm



Base for crosspiece



Cable tie base for spotlight

## FASTENING SYSTEMS

Notes	For tube from Ø48 to 90 mm For a maximum weight of 15 kg
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## MATERIALS

Arm	Steel sheet.
Joint element	Die-cast aluminium.

## FINISHES

Arm	Hot dip galvanised.
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## BASE REFERENCES (Units in mm)

Model	Arm length (L)	Maximum luminaires using crosspieces	Offer codes	Order code
<b>Crosspiece for pole-mounted spotlights Ø48 to 90 mm</b>	800	2	CR2_C_800_L00_2PR_UT90_PCF____GV__	<b>5-577080</b>
	1,000	2	CR2_C1000_L00_2PR_UT90_PCF____GV__	<b>5-577083</b>
	1,830	2	CR2_C1830_L00_2PR_UT90_PCF____GV__	<b>5-577081</b>
	1,830	3	CR2_C1830_L00_3PR_UT90_PCF____GV__	<b>5-577082</b>

## BASE REFERENCES

Model	Offer description	Offer codes	Order code
<b>Cable tie</b>	Tube fastening cable tie	ZA_COL____CLMP_TUBE	<b>50-70133</b>

# CR3

Crosspiece without drill holes for spotlights, with pole coupling.



L profile



U profile

## FASTENING SYSTEMS

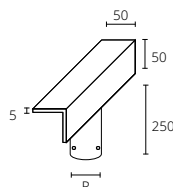
Notes No drill holes.  
For Ø60, 76 or 88 mm pole end.

## MATERIALS

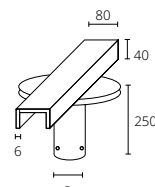
Arm Steel profile.  
Cylindrical tube Steel.  
Screws Steel.

## FINISHES

Crosspiece Hot dip galvanised.  
Simon Colours  
RAL chart colours



L profile



U profile

## BASE REFERENCES (Units in mm)

Model	Fastening	Arm length (L)	P	Finish	Offer codes	Order code
<b>L profile, end of conical tapering or cylindrical pole</b>	Lateral at 0°	500	Ø60	GV	CR3_C_500_PL0_PR_P60_PCF_GV__	<b>S-577257</b>
	Lateral at 0°	500	Ø76	GV	CR3_C_500_PL0_PR_P76_PCF_GV__	<b>S-577258</b>
	Lateral at 0°	500	Ø88	GV	CR3_C_500_PL0_PR_P88_PCF_GV__	<b>S-577259</b>
	Lateral at 0°	1,000	Ø60	GV	CR3_C1000_PL0_PR_P60_PCF_GV__	<b>S-577260</b>
	Lateral at 0°	1,000	Ø76	GV	CR3_C1000_PL0_PR_P76_PCF_GV__	<b>S-577261</b>
	Lateral at 0°	1,000	Ø88	GV	CR3_C1000_PL0_PR_P88_PCF_GV__	<b>S-577262</b>
	Lateral at 0°	1,500	Ø60	GV	CR3_C1500_PL0_PR_P60_PCF_GV__	<b>S-577263</b>
	Lateral at 0°	1,500	Ø76	GV	CR3_C1500_PL0_PR_P76_PCF_GV__	<b>S-577264</b>
	Lateral at 0°	1,500	Ø88	GV	CR3_C1500_PL0_PR_P88_PCF_GV__	<b>S-577265</b>
<b>U profile, end of conical tapering or cylindrical pole</b>	Lateral at 0°	500	Ø60	GV	CR3_C_500_PU0_PR_P60_PCF_GV__	<b>S-577266</b>
	Lateral at 0°	500	Ø76	GV	CR3_C_500_PU0_PR_P76_PCF_GV__	<b>S-577267</b>
	Lateral at 0°	500	Ø88	GV	CR3_C_500_PU0_PR_P88_PCF_GV__	<b>S-577268</b>
	Lateral at 0°	1,000	Ø60	GV	CR3_C1000_PU0_PR_P60_PCF_GV__	<b>S-577269</b>
	Lateral at 0°	1,000	Ø76	GV	CR3_C1000_PU0_PR_P76_PCF_GV__	<b>S-577270</b>
	Lateral at 0°	1,000	Ø88	GV	CR3_C1000_PU0_PR_P88_PCF_GV__	<b>S-577271</b>
	Lateral at 0°	1,500	Ø60	GV	CR3_C1500_PU0_PR_P60_PCF_GV__	<b>S-577272</b>
	Lateral at 0°	1,500	Ø76	GV	CR3_C1500_PU0_PR_P76_PCF_GV__	<b>S-577273</b>
	Lateral at 0°	1,500	Ø88	GV	CR3_C1500_PU0_PR_P88_PCF_GV__	<b>S-577274</b>
	Lateral at 0°	2,000	Ø60	GV	CR3_C2000_PU0_PR_P60_PCF_GV__	<b>S-577275</b>
	Lateral at 0°	2,000	Ø76	GV	CR3_C2000_PU0_PR_P76_PCF_GV__	<b>S-577276</b>
	Lateral at 0°	2,000	Ø88	GV	CR3_C2000_PU0_PR_P88_PCF_GV__	<b>S-577277</b>





BM1 without gear holder, lateral fastening



BM1 without gear holder, suspended fastening

# BM1

Wall arm, decorative urban

## FASTENING SYSTEMS

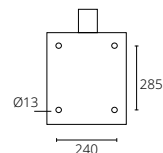
Lateral fastening	With Ø60 mm x 110 mm coupling, and 5° angle at end of arm.
Suspended fastening	3/4 "G screw at end of arm, in vertical position.
Installation	Wall arm for suspended or lateral luminaires.

## MATERIALS

Arm	Steel sheet.
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## FINISHES

Arm	GY9007 / GY9006 / DGCLAS / GYDECO / GYTECH / WH9010 Simon Colours RAL chart colours
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## BASE REFERENCES (Units in mm)

Model	Fastening	Arm length (L)	D	Finish	Offer codes	Order code
<b>BM1 without gear holder, lateral fastening, Ø60</b>	Lateral at 5°	1,300	Ø60	GY9006	BM1_W1300_L05_D60____PCF____GY9006	<b>5-533125</b>
	Lateral at 5°	1,300	Ø60	GY9007	BM1_W1300_L05_D60____PCF____GY9007	<b>5-533080</b>
	Lateral at 5°	1,300	Ø60	GN6005	BM1_W1300_L05_D60____PCF____GN6005	<b>50-33364</b>
	Lateral at 5°	1,300	Ø60	DGCLAS	BM1_W1300_L05_D60____PCF____DGCLAS	<b>50-33365</b>
	Lateral at 5°	1,300	Ø60	RD3004	BM1_W1300_L05_D60____PCF____RD3004	<b>5-533065</b>
	Lateral at 5°	1,300	Ø60	GY7016	BM1_W1300_L05_D60____PCF____GY7016	<b>5-533073</b>
<b>BM1 without gear holder, suspended fastening, 3/4 "G</b>	Suspended	1,150	3/4 "G	DGCLAS	BM1_W1150_H__3/4G____PCF____DGCLAS	<b>5-531655</b>
	Suspended	1,150	3/4 "G	GY9007	BM1_W1150_H__3/4G____PCF____GY9007	<b>5-531789</b>
	Suspended	1,150	3/4 "G	GY9006	BM1_W1150_H__3/4G____PCF____GY9006	<b>5-531617</b>
	Suspended	1,150	3/4 "G	BL5026	BM1_W1150_H__3/4G____PCF____BL5026	<b>5-531685</b>

# BM13

Ornamental wall arm



## FASTENING SYSTEMS

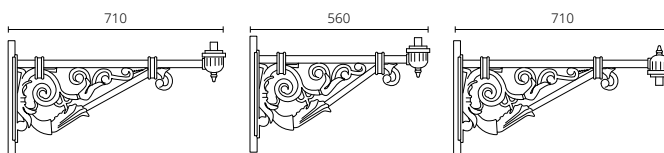
Installation	Wall arm for sustained or suspended luminaires according to reference.
Notes	Appropriate for BERLIN, PRAGA M PRO and PRAGA M BASIC models.

## MATERIALS

Arm	Die-cast aluminium and galvanised steel tube.
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## FINISHES

Arm	Standard paint: BK9005, BKCLAS, BKTECH Simon Colours RAL chart colours
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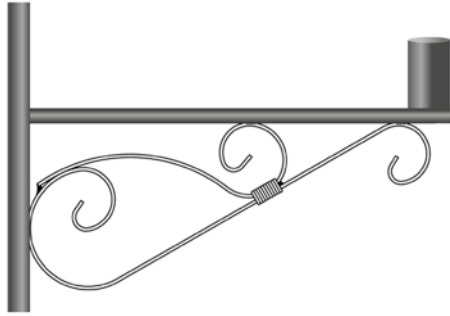


## BASE REFERENCES (Units in mm)

Model	Fastening	Arm length (L)		Finish	Offer codes	Order code
<b>BM13</b> post-top 3/4 "G	Post-top	560	3/4 "G	BK9005	BM13W_560_P_3/4G_PCF_BK9005	<b>50-33480</b>
	Post-top	710	3/4 "G	BK9005	BM13W_710_P_3/4G_PCF_BK9005	<b>50-33484</b>
	Post-top	560	3/4 "G	BKCLAS	BM13W_560_P_3/4G_PCF_BKCLAS	<b>50-33490</b>
	Post-top	710	3/4 "G	BKCLAS	BM13W_710_P_3/4G_PCF_BKCLAS	<b>50-33494</b>
	Post-top	560	3/4 "G	BKTECH	BM13W_560_P_3/4G_PCF_BKTECH	<b>50-33481</b>
	Post-top	710	3/4 "G	BKTECH	BM13W_710_P_3/4G_PCF_BKTECH	<b>5-533197</b>
<b>BM13</b> suspended 3/4 "G	Suspended	710	3/4 "G	BKCLAS	BM13W_710_H_3/4G_PCF_BKCLAS	<b>50-33496</b>
	Suspended	710	3/4 "G	BK9005	BM13W_710_H_3/4G_PCF_BK9005	<b>50-33486</b>



BM10 Type 1



BM10 Type 2

# BM10

Wall arm, decorative urban

## FASTENING SYSTEMS

Installation	Wall arm for suspended luminaires.
Notes	Appropriate for PRAGA and PRAGA S FC6 models.

## MATERIALS

Arm	Steel sheet.
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## FINISHES

Arm	Hot dip galvanised and painted.
	Standard BK9005
	Simon Colours
	RAL chart colours

## BASE REFERENCES (Units in mm)

Model	Fastening	Arm length (L)	D	Finish	Offer codes	Order code
<b>BM10 type 1</b>	Post-top	300	Ø48	BK9005	BM10W_300_P___D48_T1___PCF___BK9005	<b>50-33916</b>
	Post-top	500	Ø48	BK9005	BM10W_500_P___D48_T1___PCF___BK9005	<b>50-33102</b>
<b>BM10 type 2</b>	Post-top	700	3/4 "G	BK9005	BM10W_700_P___3/4G_T2___PCF___BK9005	<b>5-531573</b>
	Post-top	500	Ø60	BK9005	BM10W_500_P___D60_T2___PCF___BK9005	<b>5-531468</b>



# BM2

Ornamental wall arm

## FASTENING SYSTEMS

Installation	Wall arm for lateral fastening luminaires Ø 60 mm
Notes	5° angle.

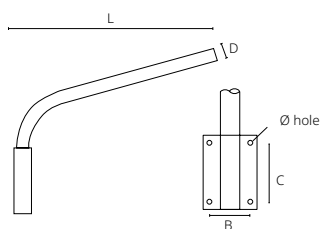
## MATERIALS

Arm	Steel structural tube
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## FINISHES

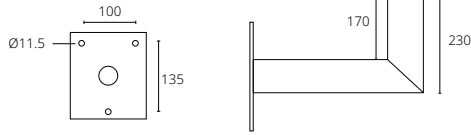
Arm	Hot dip galvanised. Simon Colours RAL chart colours
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## BASE REFERENCES (Units in mm)



Model	Fastening	Arm length (L)	D (Ø)	Hole (Ø)	B	C	Finish	Offer codes	Order code
<b>BM2</b>	Lateral at 5°	750	60	18	136	220	GV	BM2_W_750_L05_D60____PCF____GV____	<b>5-531907</b>
	Lateral at 5°	1000	60	18	136	220	GV	BM2_W_1000_L05_D60____PCF____GV____	<b>5-531869</b>
	Lateral at 5°	1500	60	18	136	220	GV	BM2_W_1500_L05_D60____PCF____GV____	<b>5-531915</b>
	Lateral at 5°	2000	60	18	136	220	GV	BM2_W_2000_L05_D60____PCF____GV____	<b>5-531920</b>





# BM5

Functional wall arm

## FASTENING SYSTEMS

Installation Wall arm for suspended luminaires.

## MATERIALS

Arm Steel structural tube.

## FINISHES

Arm Hot dip galvanised.  
Simon Colours  
RAL chart colours

## BASE REFERENCES (Units in mm)

Model	Fastening	Arm length (L)	D	Finish	Offer codes	Order code
BM5	Post-top	270	Ø60	GV	BM5_W_270_P__D60__PCF__GV__	50-33321
	Post-top	500	Ø60	GV	BM5_W_500_P__D60__PCF__GV__	50-33341
	Post-top	270	3/4 "G	GV	BM5_W_270_P__3/4G__PCF__GV__	50-33323
	Post-top	500	3/4 "G	GV	BM5_W_500_P__3/4G__PCF__GV__	50-33343

# BM9

Ornamental wall arm.

## FASTENING SYSTEMS

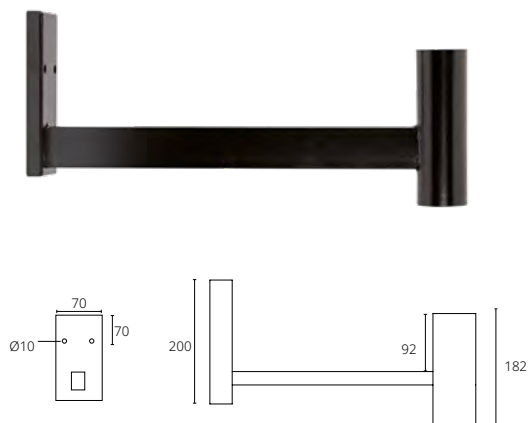
Installation	Wall arm for suspended luminaires.
Notes	Appropriate for spherical luminaires up to Ø 550 mm

## MATERIALS

Arm	Steel structural tube.
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## FINISHES

Arm	Hot dip galvanised and painted in BK9005. Simon Colours RAL chart colours
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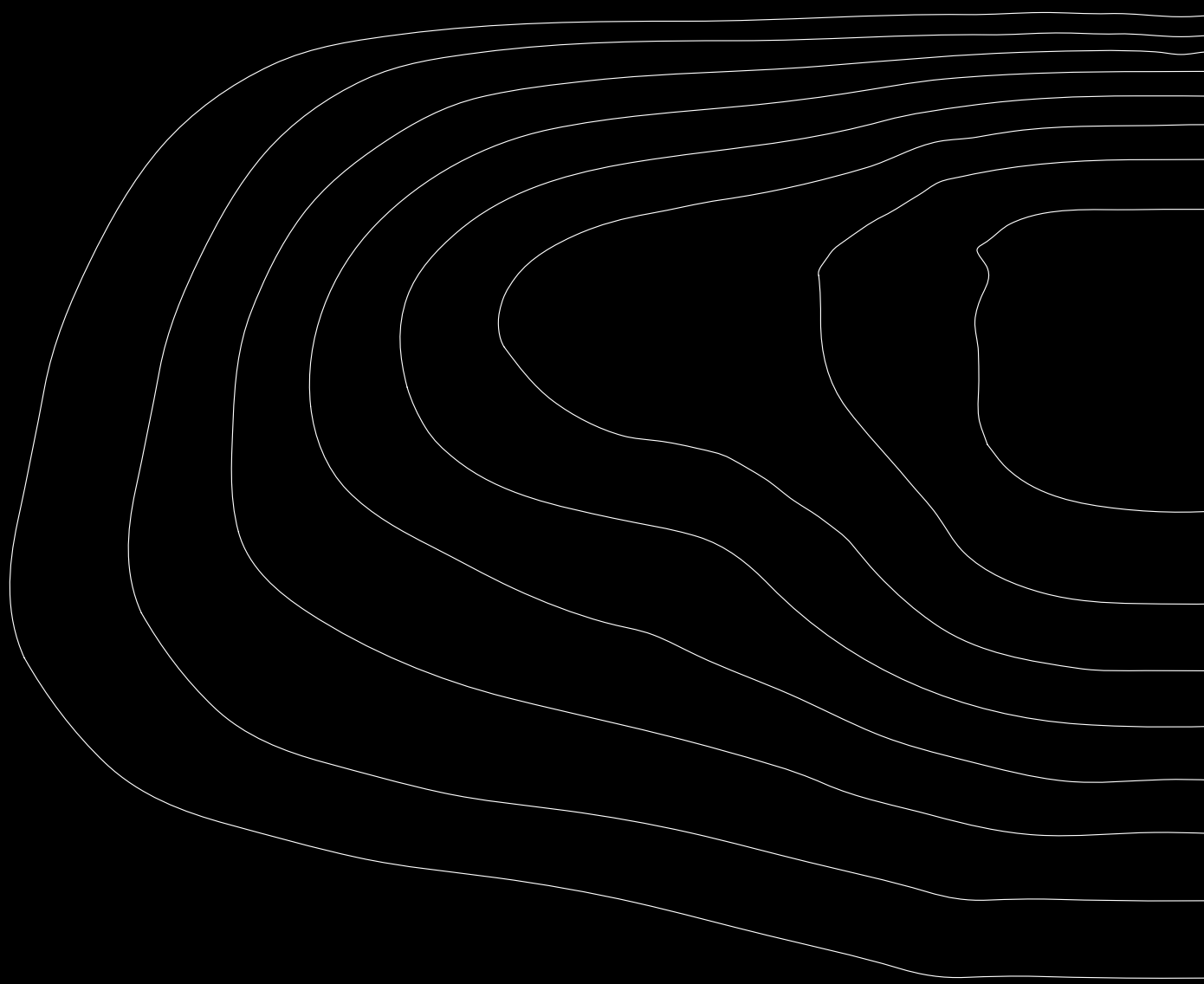


## BASE REFERENCES (Units in mm)

Model	Fastening	Arm length (L)	D	Finish	Offer codes	Order code
BM9	Post-top	500	Ø60	BK9005	BM9_W_500_P___D60___PCF___BK9005	50-33501



# TECHNICAL INFORMATION

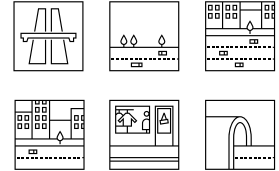
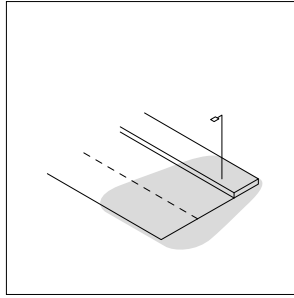
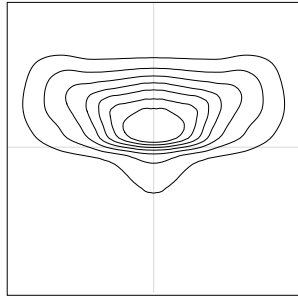
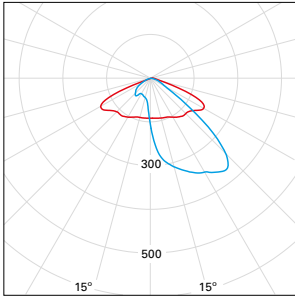




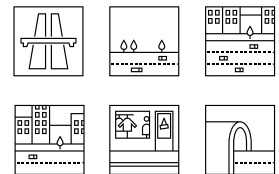
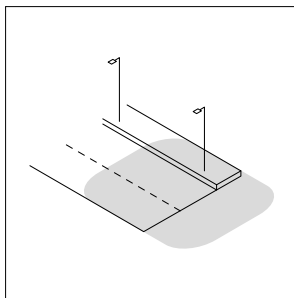
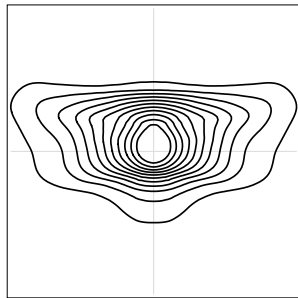
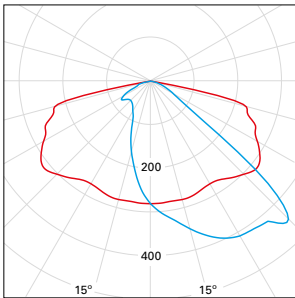
# PHOTOMETRICS

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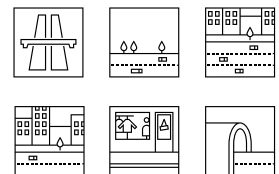
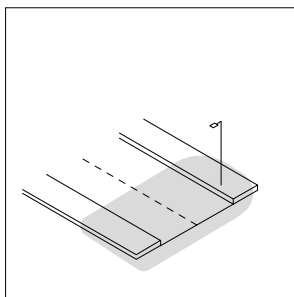
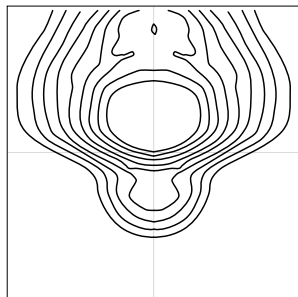
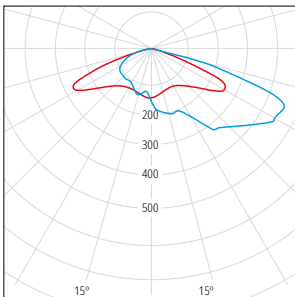
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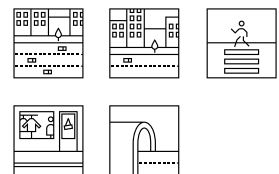
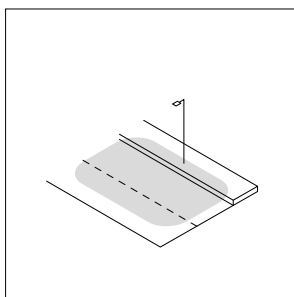
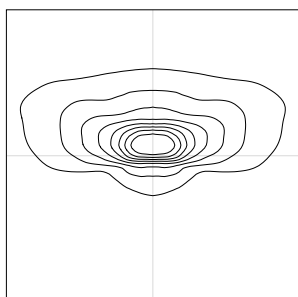
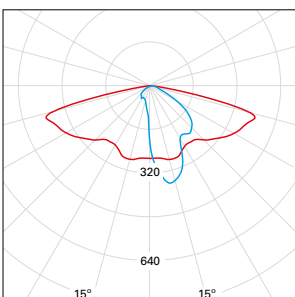
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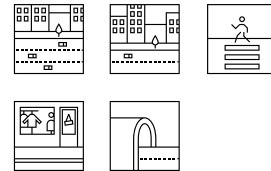
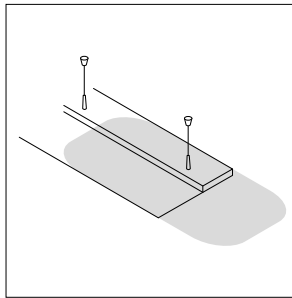
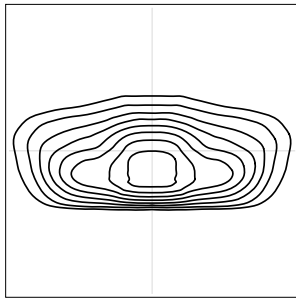
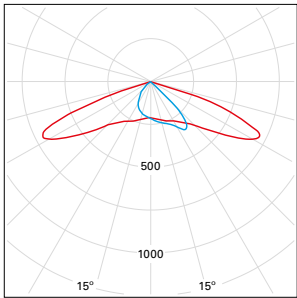
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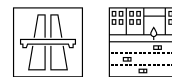
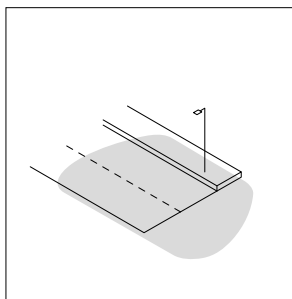
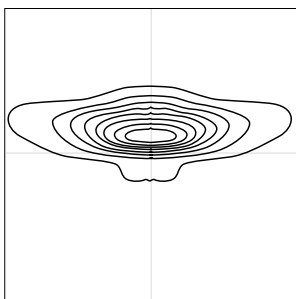
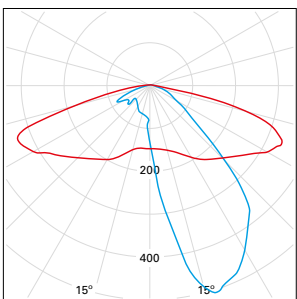
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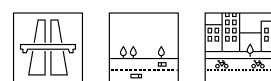
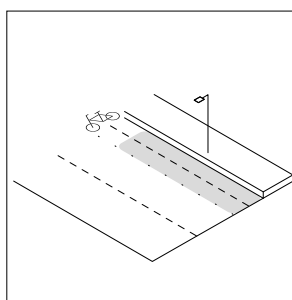
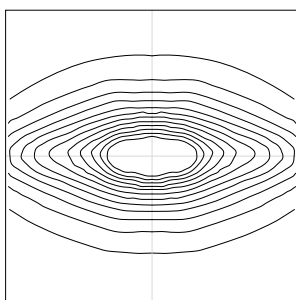
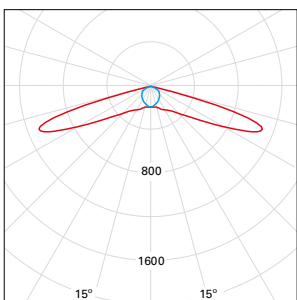
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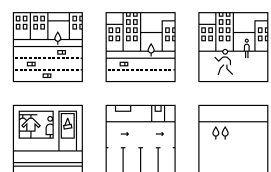
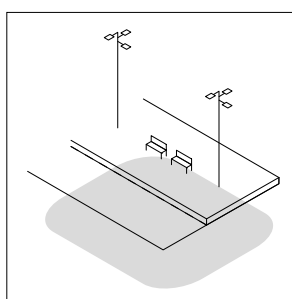
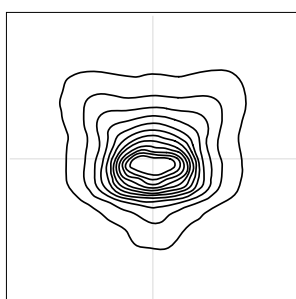
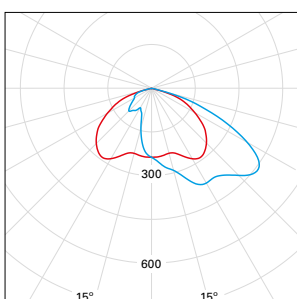
RL OPTICS - CLASS M ROAD LIGHT



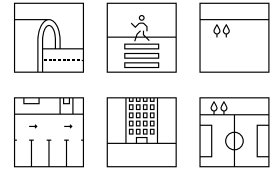
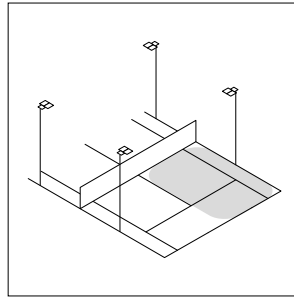
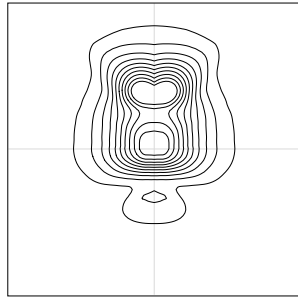
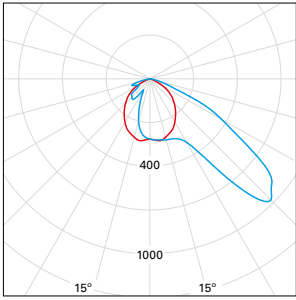
E1 OPTICS - 1 TYPE ELLIPTICAL ROAD LIGHT



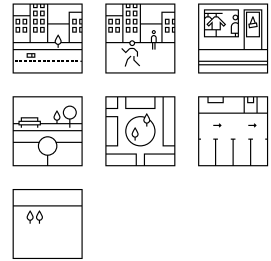
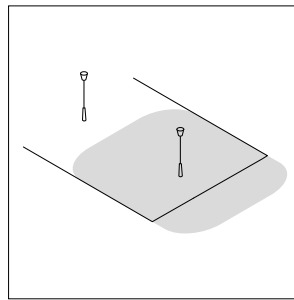
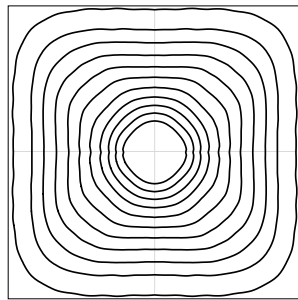
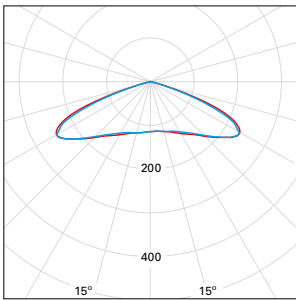
AE OPTICS - E TYPE ASYMMETRIC



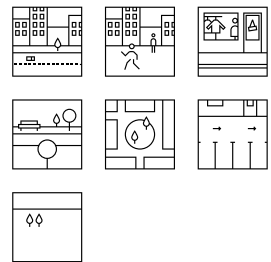
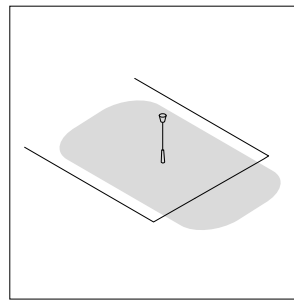
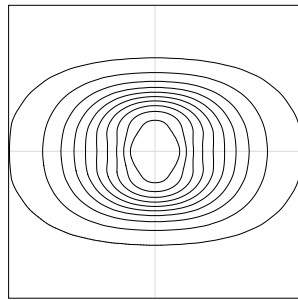
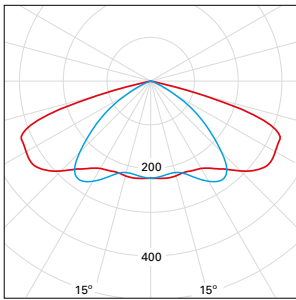
AG OPTICS - G TYPE ASYMMETRIC



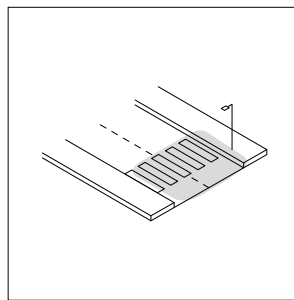
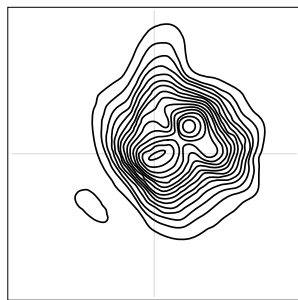
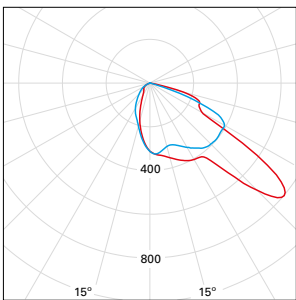
SA OPTICS - A TYPE SYMMETRIC



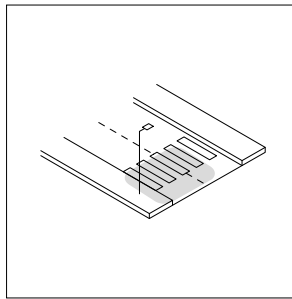
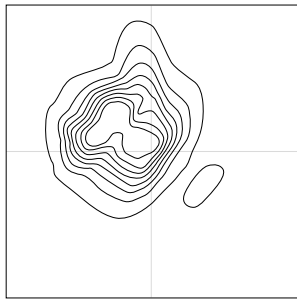
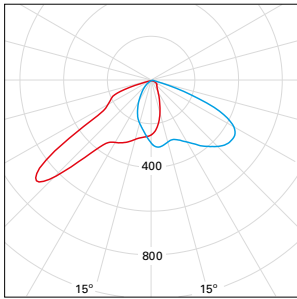
SB OPTICS - B TYPE SYMMETRIC



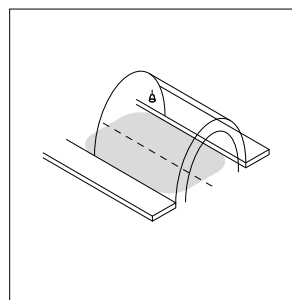
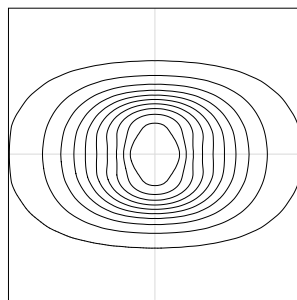
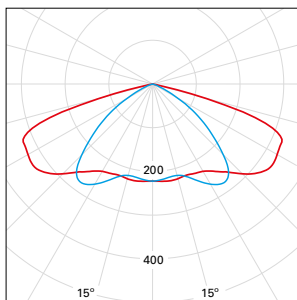
TRF OPTICS - TRAFIC



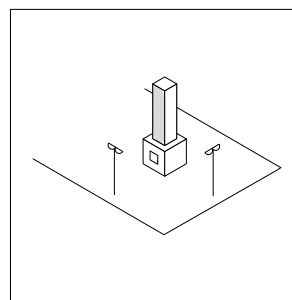
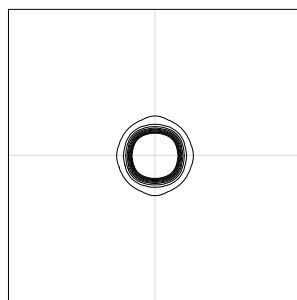
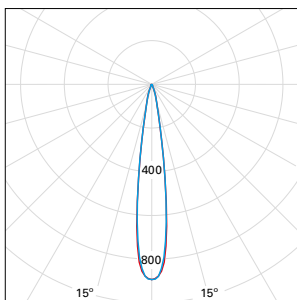
TRI OPTICS - REVERSE TRAFIC



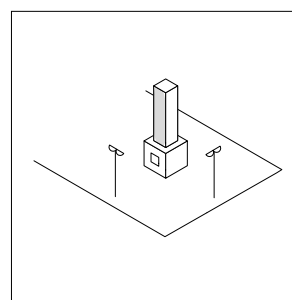
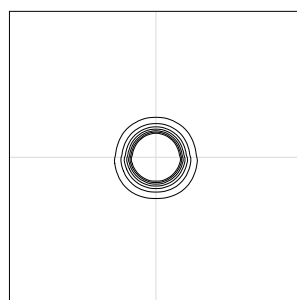
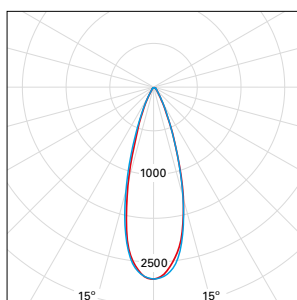
TA OPTICS - OVERHEAD TUNNEL



CIN OPTICS - INTENSIVE TAPERED

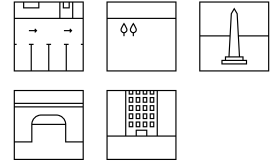
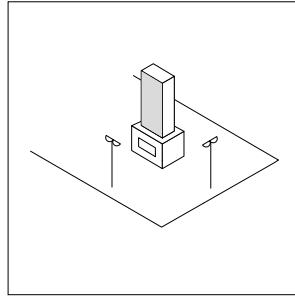
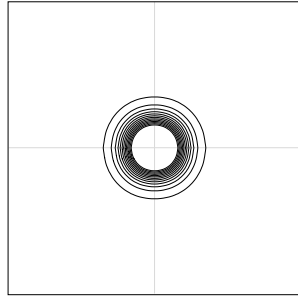
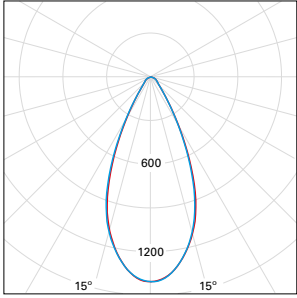


CME OPTICS - E TYPE MEDIUM TAPERED

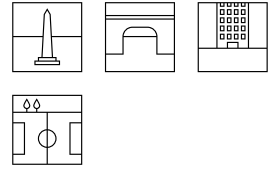
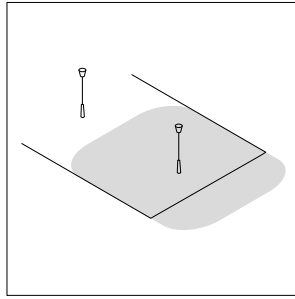
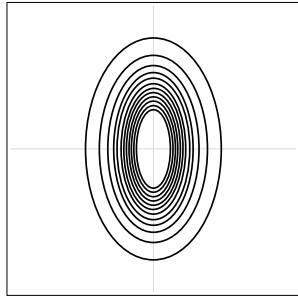
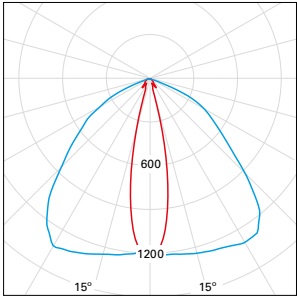




CMM OPTICS - M TYPE MEDIUM TAPERED



EW OPTICS - WIDE ELLIPTICAL



# SMART LIGHTING SYSTEM

The digital refinement of outdoor lighting is having a major impact on the planet and people alike. By incorporating wireless control and smart sensors, LED lighting becomes context sensitive and able to optimise energy use, while providing a fantastic user experience.



Example of Zhaga top connector with IP66 cap



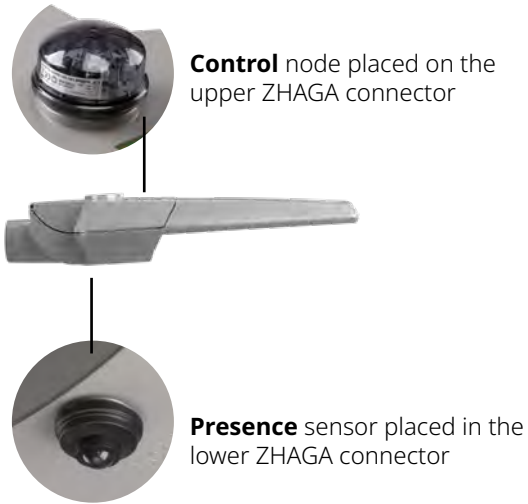
Example of an upper communication node



According to Zhaga book 18  
DALI-2 certification  
Built-in light sensor 20 - 1500 lx  
24 VDC SELV  
Bluetooth 4.0  
Colour Environment: -25°C to +50°C  
IP66 - IK09 (top) / IK07 (side)  
Range between nodes: 70m BLE4  
Maximum 250 control nodes

**DIMMING WITH CONFIGURABLE PRESENCE DETECTOR**

---



Two levels of light flux: A low level when the luminaire is turned on and a high level when the sensor detects presence.

Switching the system on and off by means of cabinet line switchboard or by photocell (integrated in the control node in the upper ZHAGA of the luminaire)

A single presence sensor can switch on several luminaires.

All luminaires linked, grouped as desired, communicated via Bluetooth and managed using the CASAMBI App.

**DIMMING 2N-**

---



A level of light flux.

Switching the system on and off by means of a line switchboard at the head-end.

The sequence of light levels begins when the system is powered and ends when it is switched off.

All luminaires linked, grouped as desired, communicated via Bluetooth and managed using the CASAMBI App.

**DIMMING WITH AUTONOMOUS PRESENCE DETECTOR**

---



Two levels of light flux: 20% when the luminaire is turned on and 100% when the sensor detects presence.

Time at 100%: 2 min.

Switching the system on and off by means of cabinet line switchboard or by photocell ON → <35 lux and OFF → >18 lux

COMPATIBLE SIMON LUMINAIRES

---

	Zhaga/NEMA UPPER	Zhaga/NEMA LOWER
NATH S	●	●
NATH M		
NATH L	●	●
NATH L		
MERAK SXF	●	●
MERAK SYF	●	-
ALTAIR IXF	●	-
ALTAIR IYF	●	-
SKAT M	●	-
TAU S	●	●
IRAYA S	●	●
IRAYA M	●	●
PRAGA M BASIC	●	-
MILOS S	●	-
MILOS M	●	-

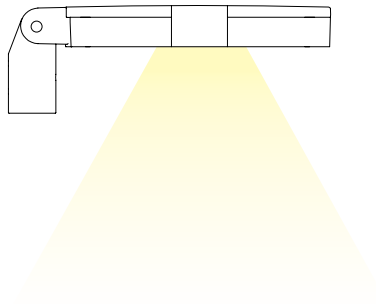


# FLUX CONTROL VISOR

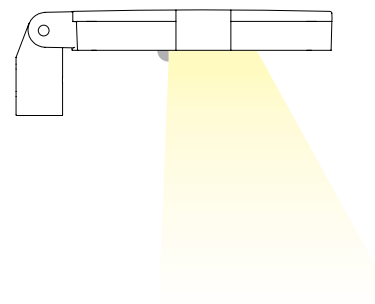
## REAR HEMISPHERE FLUX CONTROL VISORS

The rear flux control visor reduces the amount of light flux from the luminaire that is emitted towards the rear hemisphere, thus limiting intrusive light towards buildings, facades, etc.

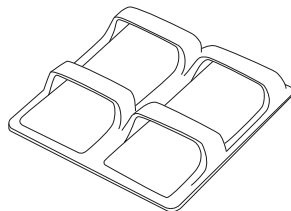
Luminaire without flux control visor on the rear hemisphere



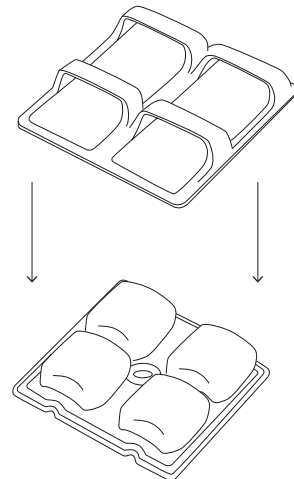
Luminaire with flux control visor on the rear hemisphere



Flux control visor



Optics with flux control visor



Using these visors reduces the useful light flux and modifies the photometry of the optics on which they are mounted. They are always black.

These visors can be **factory mounted** on the luminaire or supplied as an **accessory** for subsequent mounting on existing luminaires. They must be mounted on all the optics of the luminaire to produce the desired effect.

## COMPATIBILITY

The flux control visors of the luminaire are only compatible with the following optics:

RJ	RL	RE	E1	AE	AG	SA	SB	TEMP.	
(RJB)*	(RLB)*	(REB)*	(E1B)*	(AEB)*	(AGB)*	(SAB)*	(SBB)*	(TAB)*	
●	●	●	●	●	●	●	●		<b>NATH S</b> (16 and 32 LEDs)
									<b>NATH S</b> (24 and 40 LEDs)
●	●	●	●	●	●	●	●		<b>NATH M</b>
									<b>NATH L</b>
●	●	●	●	●	●	●	●		<b>TAU S</b>
●	●	●	●	●	●	●	●		<b>ALTAIR IXF</b>
●	●	●	●	●	●	●	●		<b>MERAK SXF</b>
●	●	●	●	●	●	●	●		<b>ALTAIR IYF</b>
●	●	●	●	●	●	●	●		<b>MERAK SYF</b>
									<b>SKAT S</b>
●	●	●	●	●	●	●	●		<b>SKAT M</b>
●	●	●	●	●	●	●	●		<b>ALYA</b>
●	●	●	●	●	●	●	●		<b>MIZAR</b>
●	●	●	●	●	●	●	●		<b>HYDRA</b>
●	●	●	●	●	●	●	●		<b>KUMA</b>
●	●	●	●	●	●	●	●		<b>PRAGA M PRO</b>
●	●	●	●	●	●	●	●		<b>PRAGA M BASIC</b> (12 and 24 LEDs)
									<b>PRAGA M BASIC</b> (36 LEDs)
									<b>PRAGA S FC6</b>
●	●	●	●	●	●	●	●		<b>BERLIN</b>
									<b>BORA</b>
●	●	●	●	●	●	●		●	<b>IRAYA M</b>
●	●	●	●	●	●	●		●	<b>IRAYA L</b>
●	●	●	●	●	●	●		●	<b>KOS</b>
●	●	●	●	●	●	●		●	<b>FOGO</b>
●	●	●	●	●	●	●		●	<b>DEMON</b>
●	●	●	●	●	●	●		●	<b>MILOS S</b>
●	●	●	●	●	●	●		●	<b>MILOS M</b>
●	●	●	●	●	●	●		●	<b>LORE</b>
						●	●		<b>LOREGON</b>

\* Refers to the nomenclature of optics with flux control visors

### VISOR INCLUDED IN LUMINAIRE

No. of LEDs	No. of visors
12 LEDs	3
16 LEDs	4
24 LEDs	6
32 LEDs	8
36 LEDs	9
40 LEDs	10
48 LEDs	12
60 LEDs	15
72 LEDs	18
80 LEDs	20
100 LEDs	25

### ACCESSORY VISOR

No. of LEDs	No. of visors	Order code	Offer code
12 LEDs	3	See	ZA_L_____SHAD_3_SHADES_2X2_CLU_BLACK
16 LEDs	4	See	ZA_L_____SHAD_4_SHADES_2X2_CLU_BLACK
24 LEDs	6	See	ZA_L_____SHAD_6_SHADES_2X2_CLU_BLACK
32 LEDs	8	See	ZA_L_____SHAD_8_SHADES_2X2_CLU_BLACK
36 LEDs	9	See	ZA_L_____SHAD_9_SHADES_2X2_CLU_BLACK
40 LEDs	10	See	ZA_L_____SHAD_10_SHADES_2X2_CLU_BLACK
48 LEDs	12	See	ZA_L_____SHAD_12_SHADES_2X2_CLU_BLACK
60 LEDs	15	See	ZA_L_____SHAD_15_SHADES_2X2_CLU_BLACK
72 LEDs	18	See	ZA_L_____SHAD_18_SHADES_2X2_CLU_BLACK
80 LEDs	20	See	ZA_L_____SHAD_20_SHADES_2X2_CLU_BLACK
100 LEDs	25	See	ZA_L_____SHAD_25_SHADES_2X2_CLU_BLACK

## GUARANTEED PERFORMANCE AND TRACEABILITY: ENEC / ENEC+

Simon has various production centres around the world, equipped with advanced measurement systems that allow us to perform demanding tests and checks, during both the development and production phases, which guarantees the quality of all our products.

The main ranges within our portfolio have achieved the ENEC / ENEC+ certification. This seal requires the manufacturer to verify the proper operation of 100% of the production process, perform a full visual inspection, and measure and record certain electrical parameters.



### WHY ENEC / ENEC+?

- The ENEC / ENEC+ certification is a symbol of product quality and safety, backed by an independent third party.
- The certification is recognised by public and private organisations.
- The manufacturer voluntarily submits its product to full testing by independent organisations and specialists in order to objectively ensure that the product meets established quality requirements. This includes complying with corresponding standards and being subject to periodic production centre inspections.
- All luminaires produced under ENEC / ENEC+ certification have a unique serial number for traceability.
- For further information, see [www.aenor.es](http://www.aenor.es) and [www.enec.com](http://www.enec.com)

### WHAT CHECKS ARE PERFORMED FOR ENEC?

- Visual inspection of entire production process.
- Operating test.
- Ground continuity test.
- Dielectric strength or insulation test.

### WHAT DOES ENEC+ INVOLVE?

- Power cannot exceed 10% of that declared by the manufacturer.
- Initial light flux cannot be less than 90% of that declared by the manufacturer.
- CTT colour temperature and CRI Colour Rendering Index are not different to those reported by the manufacturer.



# CODE



Simon luminaires are **ZHAGA D4i** certified, the new technology that standardises smart luminaires with IoT connectivity between LED luminaires and sensors/communication nodes, covering all critical features such as mechanical adjustment, digital communication, data reporting and power requirements, ensuring plug-and-play interoperability of luminaires and nodes.

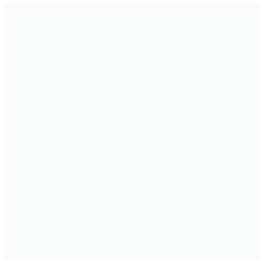




# SIMON FINISHES

## SIMON FINISHES\*

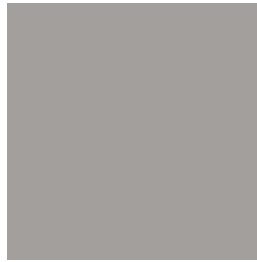
### Standard Colours:



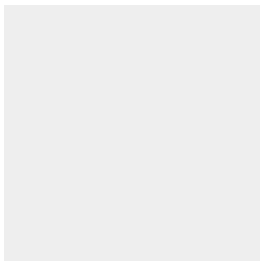
WHTECH



BKTECH



GY9007



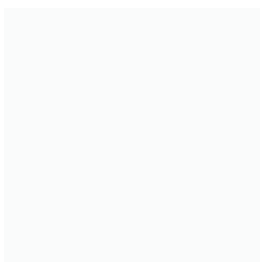
WHDUST



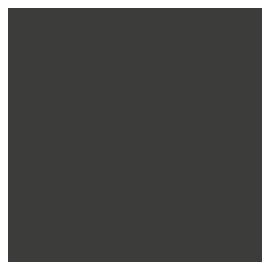
BKGLOS



GYDECO



WHGLOS



BKONIX

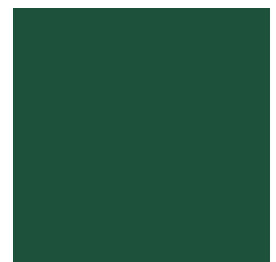
### Organic Colours:



MARINE



TERRAN



GARDEN

## OTHERS

RAL chart upon request.  
 SIMON Colours: BKCLAS, DGCLAS, CGCLAS, WH9003, WH9010, GY7035, GY9006, GYTECH, GY7016, BK9005, RD3005, RD3011, RD3000, BW8017, OXICOR, BE1015, BL5003, BL5015, BL5024, GN6009, GN6005, GN6025

\* For this type of graphics, bright colour tone is not guaranteed, it can vary due to the calibration of your monitor or printer. This table is useful for getting a general idea.

# SYMBOLS

## TECHNICAL SYMBOLS



Class I



Class II



Class III



Weight



European Conformity



European Product



ENEC+



High Impact Resistance



ISO 14001



ISO 9001

**IK** Impact resistance index

**IP** Protection rating :

### FIRST NUMBER

- 0 Not protected against penetration by solid elements
- 1 Protected against solid elements over 50 mm
- 2 Protected against solid elements over 12 mm
- 3 Protected against solid elements over 2.5 mm
- 4 Protected against solid elements over 1 mm
- 5 Protected against dust
- 6 Dust tight

### SECOND NUMBER

- 0 Not protected against water penetration
- 1 Protected against drops of vertically falling water
- 2 Protected against water falling at maximum 15°
- 3 Protected against rain water
- 4 Protected against water splashing
- 5 Protected against water streams
- 6 Protected against water streams of 1 kg/cm<sup>2</sup>
- 7 Protected against immersion
- 8 Protected against prolonged immersion

## AREAS OF APPLICATION



Motorways and dual carriageways



Zebra crossings



Roads



Tunnels



Industrial Spaces



Underpasses



Parking areas



Monuments



Avenues



Bridges



Streets



Façades



Pedestrian streets



Sports facilities



Commercial areas



Large areas



Parks / Gardens



Submersible



Squares



Signalling



Urban



Roundabouts / Intersections



Green trails

## UPWARD LIGHT OUTPUT RATIO (INST. ULOR)

E0	<0.1%
E1	<0.1%
E2	<2.5%
E3	<5%
E4	<15%

To control light flux emissions in undesired directions, and keep our luminaires within environmentally-friendly standards, SIMON develops lighting components according to maximum efficiency and minimum light pollution criteria. SIMON also states the inst. ULOR (Upward Light Output Ratio) of its luminaires.

# DIMMING

## ISTANIUM® LED

### ISTANIUM® LED LUMINAIRES

SUPPLIED BY PUBLIC LIGHTING NETWORKS

In these luminaires, the light source is the Istanium® LED modules, which are supplied by gear. They work with a nominal line voltage of 230 VAC 50/60 Hz, and a defect surge protection of 6 kV. They are extremely efficient given that they have low insertion losses (from 1% to 3% fully charged).

#### ISTANIUM® LED 1N LUMINAIRES

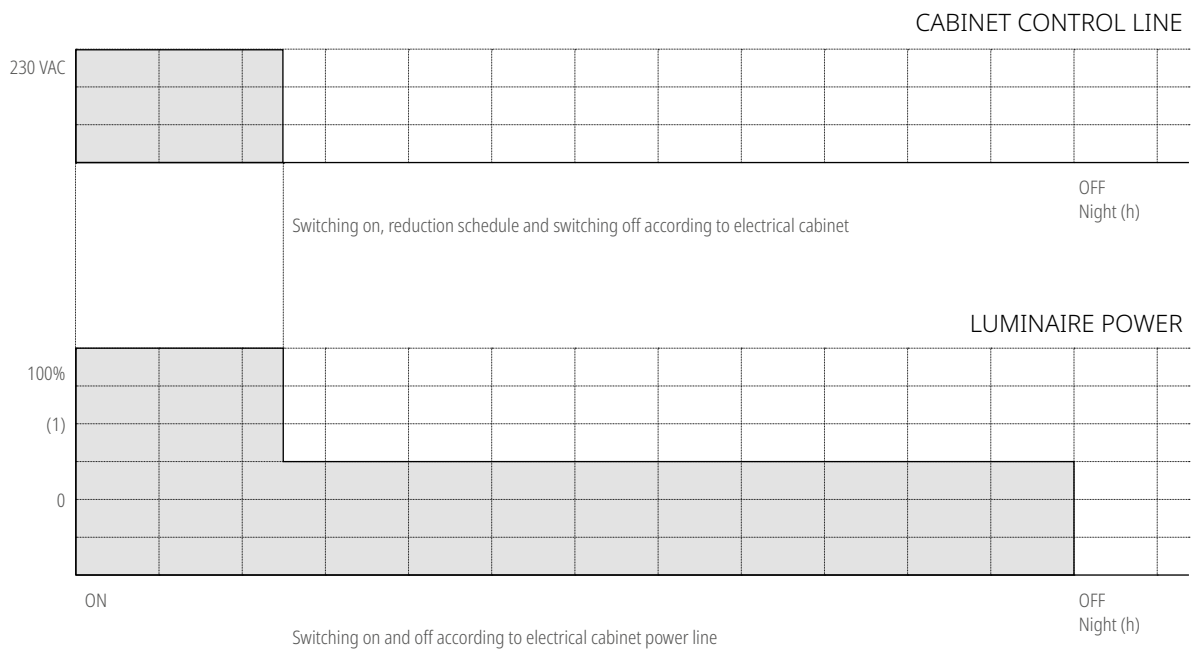
(without dimming)

The electronic control gear delivers 100% of the power without a dimming option. If there is any fluctuation in the device's line voltage, the supply current of the Istanium® LED modules compensates to maintain the light flux (input voltage from 208 to 277 VAC). Likewise, if the electrical cabinet has a cabinet amplitude dimming device, the device will not dim the lamp (requires an Istanium® LED luminaire with CAD dimming).

#### ISTANIUM® LED 2N+ LUMINAIRES

(dimming with control line)

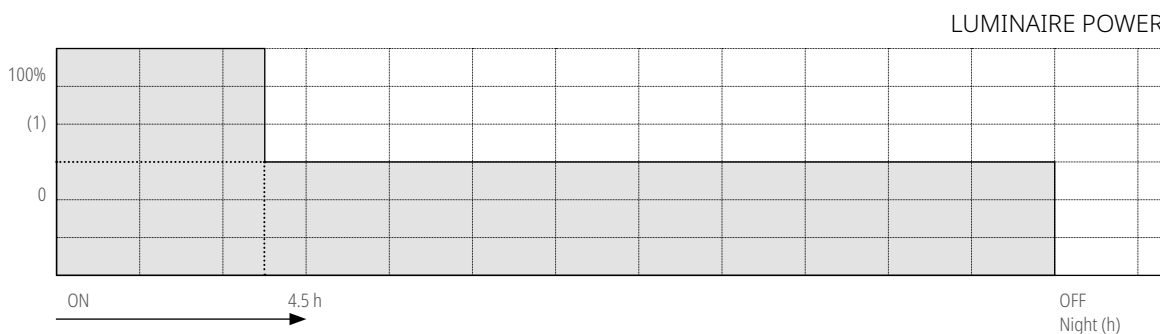
The electronic control gear has an input that connects it to the electrical cabinet. When the cabinet activates the voltage on the control line, the device delivers 100% of the nominal power to the Istanium® LED module. When the cabinet disconnects the control line (0 volts), the device reduces the power by half.



**ISTANIUM® LED 2N- LUMINAIRES**

(dimming without control line; dimming)

The luminaire's electronic control gear has a programmed timer that reduces the power by half 4.5 hours after it is switched on.



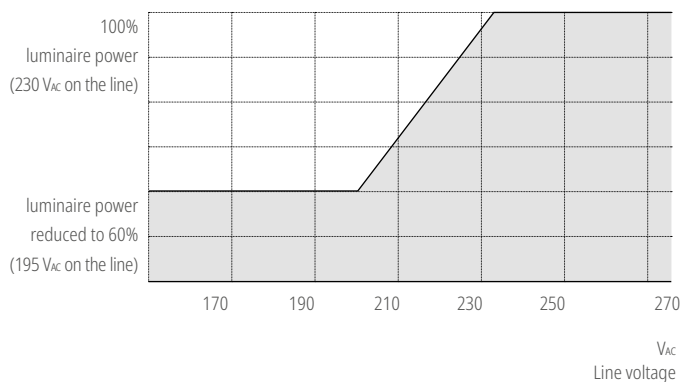
Switching on and off according to electrical cabinet power line

(1) 50% reduction level of nominal power

**ISTANIUM® LED CAD LUMINAIRES**

(cabinet amplitude dimming)

The luminaire's electronic control gear adapts to the supply current of the Istanium® LED modules, in proportion to the line input voltage. The amplitude dimming electrical cabinet must have a device that regulates the line voltage to reduce the light level of the luminaire. This dimming type is ideal to take advantage of installations with existing cabinet equipment installations.



**ISTANIUM® LED DALI LUMINAIRES**

(dimming governed by DALI protocol)

The electronic control gear delivers the output power to the Istanium® LED modules according to the level indicated by the DALI signal (normally delivered by a telemanagement device)

**ISTANIUM® LED 1-10 LUMINAIRES**

(dimming governed by 1-10 protocol)

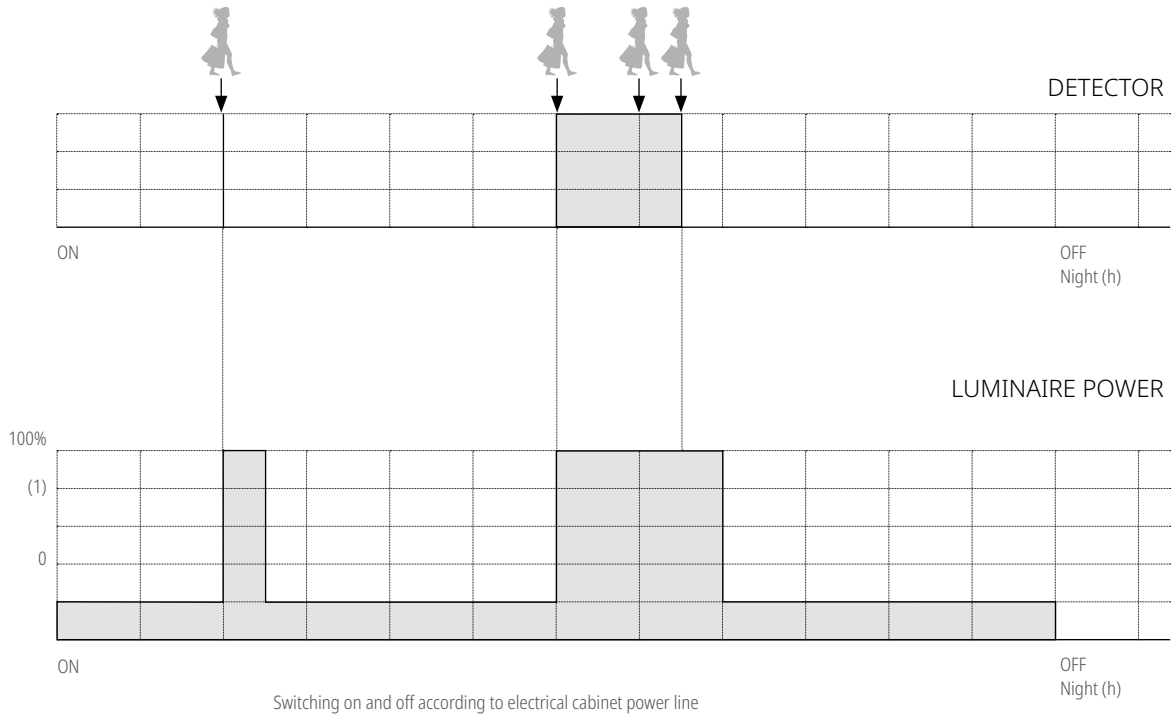
The electronic control gear delivers the output power to the Istanium® LED modules according to the level indicated by the 1-10 signal (normally delivered by a telemanagement device)



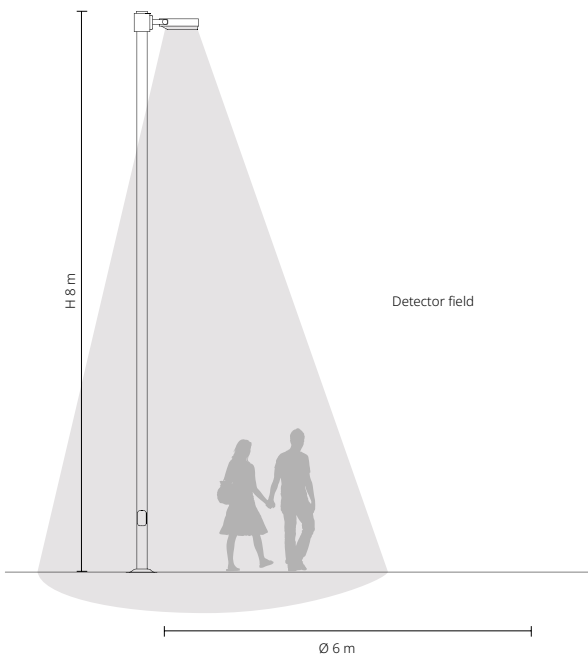
**ISTANIUM® LED LUMINAIRES WITH EXTERNAL MOTION DETECTOR THROUGH ZHAGA CONNECTOR**

(motion detection dimming)

Luminaires that can be fitted with a Zhaga connector on the bottom can incorporate a motion sensor to manage the operation of the light flux. The luminaire increases the flux when it detects a person. After the set time has elapsed, it is reduced to the initial level.



(1) 20% reduction level of nominal power



The recommended luminaire height is 4 to 8 metres.

The operating parameters can be configured using the corresponding application.

Check other operating systems.

## ISTANIUM® LED LUMINAIRES

### FOR SOLAR LIGHTING POINTS

In these luminaires, the light source is the Istanium® LED modules, the electronic control gear supplied by the solar lighting point battery with direct current.

Luminaire switching on and off is defined by the solar lighting point controller (generally between sunrise and sunset, but the maximum time can be limited by the controller).

### ISTANIUM® LED SOLAR 1N LUMINAIRES

(without dimming)

The electronic control gear delivers 100% of the power without a dimming option.

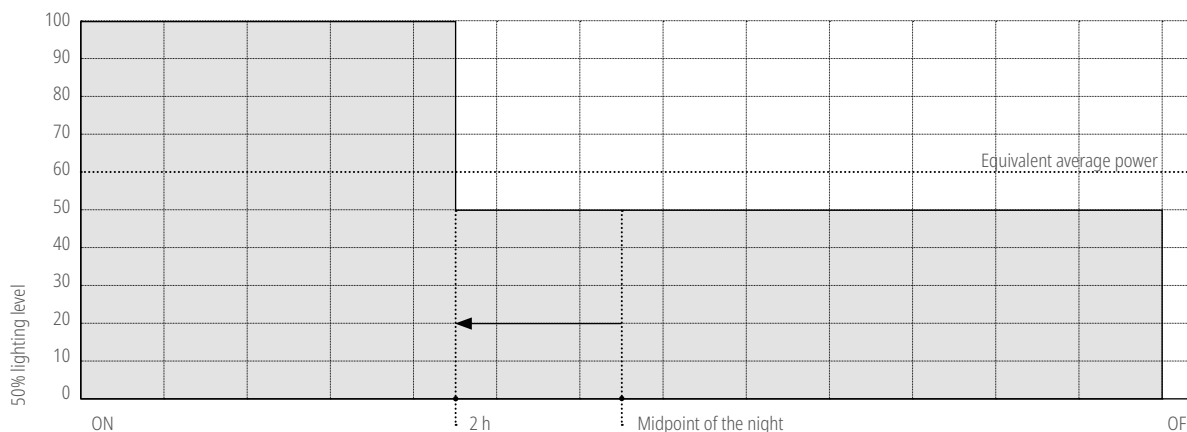
LEDs (mod.)	High flux (700mA)		High balance (530mA)		High Efficiency (350mA)	
	Power	Solar Runtime	Power	Solar Runtime	Power	Solar Runtime
48 LEDs (4 mod)	-	-	-	-	49W	Extended Battery Life
32 LEDs (3 mod)	-	-	58W	Extended Battery Life	37W	Extended Battery Life
24 LEDs (2 mod)	54W	Extended Battery Life	39W	Extended Battery Life	25W	Average Battery Life
12 LEDs (1 mod)	27W	Average Battery Life	20W	Basic Battery Life	13W	Average Battery Life

The recommended solar unit depends on the latitude where the solar lighting point is installed and the maximum on time desired (maximum all night).

### ISTANIUM® LED SOLAR 2N- LUMINAIRES

(stand-alone dimming)

The low loss electronic driver supplies 100% of nominal power when the luminaire is switched on. 2 hours before the midpoint of the night, it reduces the lighting level by 50% until the luminaire switches off.



LEDs	HIGH FLUX (700mA)		HIGH BALANCE (530mA)		HIGH EFFICIENCY (350mA)	
	Power	Solar Runtime	Power	Solar Runtime	Power	Solar Runtime
24 LEDs	-	-	36 W	24 W	24 W	16W
12 LEDs	24 W	16 W	18 W	12 W	12 W	8 W

We can estimate a 33% increase in the solar lighting points' runtime.

# GENERAL CONDITIONS OF SALE AND SUPPLY

## GENERAL

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The acceptance of an order by SIMON LIGHTING, S.A. implies, in all cases, that the buyer accepts the following general conditions of sale and supply.

## DELIVERY TERMS

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The delivery times given by SIMON LIGHTING, S.A. are purely informative. They will be confirmed at the time the order is placed by means of the ORDER CONFIRMATION document and will always be for guidance purposes only, so any delays that may occur shall not entail the cancellation of the order or charges of penalties or compensation.

## ORDER CONFIRMATION

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If, 48 hours after receipt of our "Order Receipt Confirmation" document, no disagreement is reported, the order will be considered accepted under all terms. Any claim will be made based on our "Order Receipt Confirmation".

## CANCELLING ORDERS

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SIMON LIGHTING, S.A. products are part of the Customised Program (CP) and are manufactured "ex professo." In the event of order cancellations of Custom Programmed products more than 48 hours after the order confirmation has been sent, a charge of 50% of the net value of the cancelled items in the order will be applied.

## RETURNS

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No returns will be accepted for Custom Program (CP) products, which are manufactured "ex professo". In the event that the return is due to an error on the part of SIMON LIGHTING, S.A., the quality incident criteria will be applied.

## COMPLAINTS

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After 8 days from the delivery of the goods, SIMON LIGHTING, S.A. will not accept claims of any type.

## TRANSPORT AND SUPPLY

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All shipments shall be at the buyer's risk and expense, except when "cash on delivery" is agreed. Deliveries will be made to the address indicated in the order. The costs of requesting delivery to a new address or partial unloading shall be charged to the client. For orders of luminaires, their accessories and arms, cash on delivery will be applied if the minimum net quantity per order and delivery site exceeds 900 euros.

For the shipment of straight and curved poles, cash on delivery will always be applied, except for the transport, material unloading and freight policy expressed in the commercial tender document issued by SIMON LIGHTING, S.A.

The buyer must check the goods upon delivery and confirm the carrier's delivery note with their company's stamp and the date of receipt; if there is no company stamp, the person receiving the goods must write their name and VAT number, as well as the date. In the event of damage, breakage, breakdown, theft or loss of the product, the recipient of the goods must report it to the Shipping Agency, or directly to the Sales Management Department (in writing), within a maximum period of 24 hours after receipt of the goods. After this time SIMON LIGHTING, S.A. is exempt from any responsibility.

In case of shipment by an agency chosen by the client, SIMON LIGHTING, S.A. may not be held liable. Unless otherwise agreed, SIMON LIGHTING, S.A. reserves the right to make partial deliveries and, consequently, partial billings on the total.

## PACKAGING

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All shipments include in the price of the default packaging of each product. Any special or additional packaging will be at the client's expense. Packaging returns are not accepted.

## SAMPLES

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Samples are at the client's expense.

## PAGOS

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In general, payments must be made by direct debit at 30 days from the invoice date. All expenses incurred as a result of the return of effects shall be at the purchaser's expense, as well as the costs of renewal or postponement. SIMON LIGHTING, S.A. reserves the right to set the maximum credit limit or amount granted to any client, as well as to suspend supplies should the client enter arrears.

## FUEROS

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For all discrepancies arising from this transaction, buyer and seller expressly submit to the jurisdiction of the courts and tribunals of Barcelona.

# WARRANTY AND QUALITY POLICY

SIMON LIGHTING, S.A., an ISO 9001 certified company, guarantees the quality of its products through the control and monitoring of its standards in its production and quality control procedures. All products in this price list comply with applicable National Regulations and European Directives.



## GUARANTEE PERIOD

SIMON LIGHTING, S.A. guarantees that its products are free of any defect in materials or manufacture that may prevent their normal operation under correct conditions of use, installation and maintenance for a period of 3 years, counting from the invoice date. In the case of luminaires, the warranty period covers use in accordance with the on/off cycles established by the IEC standard.

In the case of batteries, the warranty period is 6 months from the invoice date.

## WARRANTY EXTENSION

The Istanium® LED ranges indicated as such, in the product sheet of this general catalogue, have an extended warranty period of 5 years. SIMON LIGHTING, S.A. may issue, upon request, the following extended warranty certificates (extending the warranty this may incur an additional cost):

- Extended warranty for luminaires with Istanium® LED technology: 10 years
- Corrosion of Galvanised Products: 10 years
- Corrosion on aluminium parts: 10 years
- Adhesion of Paint on Aluminium Parts: 3 years
- Luminaires with LED technology intended for public lighting, their total flux will not depreciate by more than 30% during the first 5 years. To obtain this extended warranty, SIMON LIGHTING, S.A. must be informed of:
  - Light intensity and direction of the system
  - Details of the company requesting the warranty extension (name, address, telephone/fax, company name and VAT number) and the contact person (full name, position in the company, ID number, telephone number and e-mail address).
- Copy of the order of all material for which you wish to obtain the warranty extension.

## SCOPE OF THE WARRANTY

The warranty includes only the materials derived from the replacement or exchange of the product and/or components, as well as the transportation costs derived from products that are damaged or malfunction during normal use, according to the instructions detailed in the technical installation and maintenance manuals, provided there are no modifications to the lighting project associated with the work, the limits of use in the technical sheets have not been exceeded and the purpose for which the equipment was designed has not changed.

Installation or removal of the products, normal wear and tear, maintenance of the equipment, replacement of batteries and consumables and in general any other service not included and detailed in the previous paragraph are expressly excluded from the scope of this warranty. In the case of poles and brackets, SIMON LIGHTING, S.A. reserves the right to repair the product on Simon Lighting's premises, on the client's premises or at its final location, depending on SIMON LIGHTING, S.A.'s own technical/economic criteria. Parts and components by other manufacturers integrated in SIMON LIGHTING, S.A. products, such as ballasts, power supplies, compensation capacitors, controllers and other electronic equipment, are subject to the scope of the original manufacturer's warranty.

## PROTOCOL FOR ACTION

It is the client's responsibility to inspect the condition of the goods and to check that the equipment is in good working order prior to installation. The client should contact their Sales Representative or our Customer Service Centre (Tel. 651 761 346), indicating the details of the incident and information on the purchase invoice of the products being claimed.

## CANCELLATION OF THE WARRANTY

The warranty shall not be valid in the event of: misuse, improper use of the product, improper handling of the product by unauthorised persons, deterioration of the product due to external agents such as limescale or other harmful, chemical, obstructive or corrosive products, improper maintenance, lack of cleaning or the use of spare parts that are original from the brand. Similarly, failures or malfunctions caused by incorrect voltages, frequencies and electrical installations, vandalism or damage or incidents caused by force majeure (such as wars, earthquakes, fires, floods, etc.) are not covered by the warranty.

## LIMITS OF RESPONSIBILITY

The replacement of defective parts by SIMON LIGHTING, S.A. shall not entitle the Client to claim any compensation for damages. In no case shall SIMON LIGHTING, S.A. be liable for any damages incurred as a result of the installation of damaged goods.







[www.simonelectric.com](http://www.simonelectric.com)



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