

# Simon<sub>1</sub>860

LINEAR LIGHTING SYSTEM



# Simon<sub>l</sub>860



Create light paths that define your workspaces







# Simon<sub>1</sub>860

Simon 860 is a linear lighting system that represents a new way of understanding office environments. It's a modular solution capable of creating efficient working environments with good visual comfort and adapting to people's needs.



Health centres



Educational centres



Libraries



# **REDISCOVER YOUR**

## WORKSPACE

Simon 860 is a lighting system that allows the luminaire to adapt to the functionality of the space in order to provide the best lighting results while promoting the well-being and productivity of the people it illuminates.

It offers comfortable, flicker-free light with a UGR <16, which decreases glare and reduces visual fatigue. It's opal diffuser provides a general lighting with a high efficiency. Simon 860 provides visual lighting uniformity, creating a healthy office environment.



#### ENERGY-EFFICIENT AND

# SUSTAINABLE SPACES



Simon 860 can be controlled through the DALI 2 protocol, which allows you to control and dim the luminaire's intensity depending on the amount of natural light, with presence and brightness sensors. This feature, combined with a good lighting efficiency up to 150 lm/W and power factor >0.9, helps to create energy-efficient and sustainable spaces.

These factors can help your project achieve good scores on healthy and sustainable building certifications such as **LEED** (Leadership in Energy and Environmental Design), the **Well V2** Building Standard or **BREEAM** (Building Research Establishment Environmental Assessment Method).









#### APPLICATIONS AND

#### FUNCTIONALITY



#### DESIGNED FOR WORKSPACES

It has been designed to be the best coworker. LOW-UGR versions reduce direct glare, thereby reducing eyestrain and maximising energy efficiency.



# ADAPTABLE TO ANY ARCHITECTURE

A wide range of products to suit any needs. Different fasteners, diffusers and lengths.

# LIGHT PATHS

Compositions can be created by joining lighting modules using connectors or corners. There are three lengths available : 1200mm, 1600mm,

2400mm. There are two corners available: 360x360mm, 100x100mm



# CONSTRUCTION OF

# LIGHT PATHS

la seconda di

le ser

**b** ....

The Simon 860 system allows users to compose lighting sets and easily install light structures, using lighting modules, 90° joints and installation accessories to adapt the light layout to the space and people's needs.

14 m

**.** .

el.



Finishes () White 30 • Black 38



# INSTALLATION

#### TYPES

Various installation types to adapt to all kinds of spaces and projects. The compositions can be suspended and attached or integrated into the false ceiling.



#### RECESSED

Recessed-mount installation of the Simon 860, for perfect integration into the space. Its minimal and discreet frame outlines the lighting path. It has a simple staple system for easy insertion and disassembly.

#### SURFACE-MOUNTED

Surface-mount installation of the Simon 860 with a power inlet at the top of the profile, with a rubber edge to adapt the profile to any surface irregularities, ensuring a perfect placement.









CABLE SUSPENSION

Suspended installation of the Simon 860 using metal rods. This is a very practical and flexible type of installation, as it adapts to high ceilings and allows adjustments to be made from the bottom of the rod after installation.



# ROD SUSPENSION

Suspended installation of the Simon 860 using rods up to 4 metres, to offer a more robust appearance.





# SYSTEM

# **ELEMENTS**

# LIGHT MODULES

By combining the modules with accessories from the Simon 860 series, you can create easyto-assemble structures that foster creativity, making it possible to compose unique paths that integrate into the interior design.





# MODULE WITH OPAL DIFFUSER

Diffused light to achieve a consistent light projection. A 10-meter diffuser is available to enhance the appearance and display an uninterrupted light path.





# MODULE WITH MICROPRISMATIC DIFFUSER

A diffuser with microprisms that reduces light dispersion and avoids annoying glare, capable of achieving UGR <19, depending on the project, and thereby improving visual comfort.





# MODULE WITH LOW-UGR OPTICS

Optical group module with lenses and raster that reduce direct glare, achieving a maximum UGR <14 and a minimum UGR <16, with a high lighting efficiency of up to 147 lm/W.



n = 100%



Simon 860 with Low-UGR optics presented at Light & Building, a biennial international trade fair for architectural design and technology, focused mainly on the fields of lighting, electrical engineering, building automation and civil engineering software.

# SYSTEM

ELEMENTS

# CORNERS

The auxiliary corners allow changes in the light path, letting the line follow its course naturally in the space. The light corner, which is compatible with Opal and Microprismatic diffusers, provides a continuous line of light.



# STRUCTURAL CONNECTOR

This structural element that joins profiles is required to connect the modules to each other and the corners. A solid and simple joint that makes installation easier. Please note that the illuminated and blind corners come standard with two structural connectors.



# POWER AND CONTROL WIRING

The through wiring with quick connectors, which is included in the lighting module, gives continuity to the linear system, allowing quick and practical section linking to avoid human errors while connecting the power supply. This also allows control of the system and reduces connection time. We make the installation simpler by using a single power input, which makes it possible to electrically supply up to 25 lighting modules.

#### POSSIBLE CONFIGURATIONS\*:

CONFIGURATIONS	NUMBER OF MODULES	TOTAL LENGTH
1.2 m	25 modules	30 m
1.6 m	25 modules	40 m
2.4 m	25 modules	60 m
Mix 1.2/2.4 m	25 modules	Depending on configuration





\*using the maximum number of modules



# CUSTOMISED

LIGHTING SECTIONS

Add nuance to your light, adapting it to every imaginable environment and atmosphere.



Users can choose between warmer or cooler lighting, depending on the specific context and environment.

The luminaires incorporate the DALI 2 protocol, which allows users to control and adjust the lights individually, as well as turn them on or off and dim them point by point.





The different optics available allow us to adapt to the needs of the space and the desired environment.

Opal





Lc tic U(

# LIGHT MODULES

# CUSTOMISED SECTIONS

Simon 860 is a linear lighting system designed to **adapt to most spaces** and the needs of technically and visually demanding environments.

The **modular concept** allows a wide variety of combinations, letting the user adapt the lighting to each room of the project. The advantage of this feature is that it solves various problems with the same range of products, while obtaining a coherent appearance and photometry.

The components in the modular composition are also optimised for easy **replacement and repair**, extending the service life of the lighting system.



\* The Low-UGR light module includes lenses and a raster.



ð



Ergonomic T-shaped accessory to unclip and snap the light module back into the body channel.





Suction cup accessory to remove the diffuser from the profile.

# Simon<sub>l</sub>860



Guarantee quality lighting in your meeting rooms.



SMART

CONTROL

# SIMON IO

Simplify connectivity Controlling and digitalising light has never been easier. The Simon iO collections allow lighting to be adapted to each moment and to each person easily and simply.





The Simon iO App allows you to configure your Simon

connective mechanisms, all while preserving the same

switch-off times, as well as create scenes adapted to your needs, enhancing the functions available in the Simon iO

iO devices, control the intensity and switch-on and

YOUR SPACE IN THE PALM OF

manual and intuitive operation.

## SET UP SCENES AND

#### SCHEDULE PROGRAMS

Digitize and transform spaces simply and easily. Control and dim the light directly via the Simon iO interfaces, without the need for additional elements.

Compatible with all inter-device communication technology.





YOUR HAND

# SIMON SCENA

Simon Scena is the professional solution for light control and dimming. It integrates all customisation and management functionality, as well as scene creation, dynamic lighting and time schedules, to name just a few.





#### SET UP SCENES AND

#### SCHEDULE PROGRAMS

Since it's compatible with the DALI and DMX protocols, it allows you to create an unlimited array of effects, adjusting and configuring all the nuances of your lighting: colour temperature, intensity, colour saturation. You can also create or predefine static or dynamic lighting scenes.

# SIMON SENSE

Simon Sense is the solution for integrating home automation and controlling spaces — adapting them to your uses, emotions and needs.

# QUALITY LIGHT

# FOR BETTER LIVING

The spaces we live in are defined by light: bright natural light first thing in the morning, neutral and uniform light in the workplace, soft light in the late afternoon and the warm, soothing light of our living room in the evening. Light can define routines, moods, activity and productivity. This means we need to be aware of how this light affects us and the quality of the light we receive. This is especially true nowadays, when we spend a lot of time indoors, particularly in workspaces.

A good lighting project is crucial to the space, since every lighting design and light projection decision can affect people's quality of life and well-being.

# **RECEPTION HALL**

Simon 860 suspended to illuminate the work table. The use of cables regulates the installation height.

#### CORRIDOR

Simon Downlight 800.21, a small luminaire that produces a path of warm light points through the space. It saves energy using DALI 2 control and a presence and brightness sensor.

# **OPEN-PLAN OFFICE**

Simon 860 suspended with LOW-UGR modules over desks for maximum visual comfort with UGR values of <16.

# MEETING ROOM

Simon 860 with microprismatic diffusers provides the perfect combination of light flux and visual comfort.

#### GYMNASIUM

Simon 860 recessed with opal diffusers, available in 10-meter rolls to ensure consistent general lighting.

# DINING ROOM / RESTAURANT

Simon 800.23 large downlight with 105lm/W lighting efficiency.





Simon 860 is a linear lighting system that represents a new way of understanding office environments. It's a modular solution capable of creating efficient working environments with good visual comfort and adapting to people's needs.





PHOTOMETRICS

— CO - C180 — C90 - C270







cd/klm

n = 100%

cd/klm

n = 100%

TECHNICAL

CHARACTERISTICS

# DISCREET DESIGN

Simon 860 is a linear lighting system with a textured finish and **subtle design** that enables the **light path** to be integrated into any space, in an easy and straightforward way.

# SYSTEM FOR EXCELLENCE

It is designed to comply with the legal regulations, for a more energetically sustainable future and to care for the well-being of the people it illuminates.

- It achieves higher LEED, WELL V2 and BREEAM
- certification scores due to its high performance It complies with the **UNE 12464-6** standard.



# COMPATIBLE CONTROL

Simon 860 has DALI 2.0 dimming, **ensuring compatibility** with all systems that use this protocol.



# MODULAR CONCEPT

Construction of customised light sections that, when combined with corners and structural connectors, allow users to create light path compositions in their space.

# GOOD LUMINOUS EFFICIENCY

Lighting efficiency of the basic module with Opal diffuser @4000K of 120 lm/W. However, we attain **150** Im/W in the LOW-UGR modules.



#### VISUAL COMFORT

Luminaire designed for the **well-being** of the people it illuminates:

- Flicker free.
- Diffusers that **minimise annoying glare**: Low-UGR <16, Microprismatic UGR<19, Opal UGR <21.



# INFRASTRUCTURE ADAPTATION

It can be installed four different ways to adapt to the space and the aesthetics of any decoration style.

- Recessed
- Surface-mounted
  Suspended with c
- Suspended with cableSuspended with rod
- Suspended with rou



# EASY TO INSTALL

Simon 860 is a luminaire that is specially designed for multiple combinations, but it is also user-friendly and easy to install. It is designed to be installed simply, ensuring clean lines.

# QUICK CONNECTION

The modular concept enables **fast and intuitive** linking of modules and light path connections.

TRIM

Simon 860 has magnetised cover caps to guarantee a exceptional and sophisticated effect.





# CONTINUOUS DIFFUSER

The Simon 860 has a 10m opal diffuser for long general lighting runs. The diffuser comes rolled up for quick installation and a **clean**, **continuous appearance**.



# PERFECT FINISHES

The main advantage of the illuminated corners is that they come with the diffuser already mitred, giving them an elegant and neat **appearance**.



#### ASSEMBLY AIDS

To facilitate installation, Simon 860 has flexible safety cables for fastening the light modules to the profiles.



# **PROFILE STRUCTURE**

ART. NO.	DESCRIPTION	CONTROL	DIMENSIONS (mm)	INSTALLATION	OPTICS (°)	COLOUR TEMPERATURE (K)	POWER (W)	LUMENS (lm)	EFFICIENCY (lm/W)
860210**-109	Linear luminaire 860.21 profile	-	1200	Recessed	-	-	-	-	-
860220**-109	Linear luminaire 860.22 profile	-	1600	Recessed	-	-	-	-	-
860230**-109	Linear luminaire 860.23 profile	-	2400	Recessed	-	-	-	-	-
860410**-109	Linear luminaire 860.41 profile	-	1200	Suspended/Surface	-	-	-	-	-
860420**-109	Linear luminaire 860.42 profile	-	1600	Suspended/Surface	-	-	-	-	-
860430**-109	Linear luminaire 860.43 profile	-	2400	Suspended/Surface	-	-	-	-	-
860443**-309	Corner profile accessory	-	360 x 360	Suspended/Surface	-	-	-	-	-
860243**-309	Corner profile accessory	-	360 x 360	Recessed	-	-	-	-	-
860044**-209	Blind corner acc. for low UGR	-	100 x 100	Suspended/Surface	Blind section	-	-	-	-
860244**-209	Blind corner acc. for low UGR	-	100 x 100	Recessed	Blind section	-	-	-	-

# LIGHT MODULES

ART. NO.	DESCRIPTION	CONTROL	DIMENSIONS (mm)	INSTALLATION	OPTICS (°)	COLOUR TEMPERATURE (K)	POWER (W)	LUMENS (lm)	EFFICIENCY (lm/W)
86001300-383	Linear light module 860 1200 3000 K	DALI 2	1200	-	Opal	3000	18	2090*	116
86001300-384	Linear light module 860 1200 4000 K	DALI 2	1200	-	Opal	4000	18	2175*	121
86001300-583	Linear light module 860 Low-UGR 1200 3000 K	DALI 2	1200	-	Low-UGR	3000	13.5	1830	136
86001300-584	Linear light module 860 Low-UGR 1200 4000 K	DALI 2	1200	-	Low-UGR	4000	13.5	1980	147
86002300-383	Linear light module 860 1600 3000 K	DALI 2	1600	-	Opal	3000	24	2785*	116
86002300-384	Linear light module 860 1600 4000 K	DALI 2	1600	-	Opal	4000	24	3115*	130
86002300-583	Linear light module 860 Low-UGR 1600 3000 K	DALI 2	1600	-	Low-UGR	3000	19.5	2535	130
86002300-584	Linear light module 860 Low-UGR 1600 4000 K	DALI 2	1600	-	Low-UGR	4000	19.5	2705	139
86003300-383	Linear light module 860 2400 3000 K	DALI 2	2400	-	Opal	3000	36	4305*	120
86003300-384	Linear light module 860 2400 4000 K	DALI 2	2400	-	Opal	4000	36	4590*	128
86003300-583	Linear light module 860 Low-UGR 2400 3000 K	DALI 2	2400	-	Low-UGR	3000	27	3665	136
86003300-584	Linear light module 860 Low-UGR 2400 4000 K	DALI 2	2400	-	Low-UGR	4000	27	4040	150
86004300-183	Corner light module accessory 3000 K	DALI 2	360 x 360	-	Opal	3000	10.5	1145*	109
86004300-184	Corner light module accessory 4000 K	DALI 2	360 x 360	-	Opal	4000	10.5	1230*	117

\*Photometry values performed with the opal diffuser. The microprismatic diffuser reaches values which are 11% lower. Opal diffuser not included.

# DIFFUSERS

ART. NO.	DESCRIPTION	CONTROL	DIMENSIONS (mm)	INSTALLATION	OPTICS (°)	COLOUR TEMPERATURE (K)	POWER (W)	LUMENS (lm)	EFFICIENCY (Im/W)
86099900-510	Corner microprismatic diffuser		360 x 360	-	Microprismatic	-	-	-	-
86099900-612	Microprismatic diffuser 1200 mr (5 units)	n	1200	-	Microprismatic	-	-	-	-
86099900-616	Microprismatic diffuser 1600 mr (5 units)	n	1600	-	Microprismatic	-	-	-	-
86099900-624	Microprismatic diffuser 2400 mr (5 units)	n	2400	-	Microprismatic	-	-	-	-
86099900-520	Corner opal diffuser		360 x 360	-	Opal	-	-	-	-
86099900-712	Opal diffuser 1200 mm (5 units)		1200	-	Opal	-	-	-	-
86099900-716	Opal diffuser 1600 mm (5 units)		1600	-	Opal	-	-	-	-
86099900-724	Opal diffuser 2400 mm (5 units)		2400	-	Opal	-	-	-	-
86099900-700	Roll-up Opal diffuser 10 m		10 m	-	Opal	-	-	-	-

# ACCESSORIES INSTALLATION

ART. NO.	DESCRIPTION	CONTROL	DIMENSIONS (mm)	INSTALLATION	OPTICS (°)	COLOUR TEMPERATURE (K)	POWER (W)	LUMENS (Im)	EFFICIENCY (lm/W)
86097905-039	Power cable 5P 4 m		4000	-	-	-	-	-	-
860969**-039	Canopy accessory		-	-	-	-	-	-	-
86097900-039	Linear structural luminaire connector		-	-	-	-	-	-	-
860259**-039	Recessed end cover		-	Recessed	-	-	-	-	-
860459**-039	Suspended end cover		-	Suspended	-	-	-	-	-
86098700-039	Recess accessory 2 pcs		-	Recessed	-	-	-	-	-
86098900-039	Recess accessory 3 pcs		-	Recessed	-	-	-	-	-
860487**-039	Suspension kit 4 m 2 pcs		4000	Suspended - Cable	-	-	-	-	-
860489**-039	Suspension kit 4 m 3 pcs		4000	Suspended - Cable	-	-	-	-	-
860987**-039	Rod accessory 1 m 2 pcs		1000	Suspended - rod	-	-	-	-	-
860999**-039	Rod accessory 1 m 3 pcs		1000	Suspended - rod	-	-	-	-	-
860988**-039	Rod extension 0.5 m		500	Suspended - rod	-	-	-	-	-

## REFERENCE LIGHTING PROJECT

This is an open studio that uses Simon 860 Low-UGR suspended luminaires over the work tables, combined with recessed Simon 860 microprismatic luminaires to provide uniform general lighting throughout the room.

The objective was to achieve roughly 1000 lx on the work table. This allowed demanding work to be carried out. This allowed the intensity of the luminaires to be dimmed to a lower light flux when necessary, obtaining roughly 500 lx on the work surface and allowing common tasks to be performed.

#### LIST OF LUMINAIRES

UNIT	DESCRIPTION	POWER (W)	LUMENS (lm)	LIGHTING EFFICIENCY (lm/W)
72	Simon 860 Microprismatic 1200 3000K	18	1862	103
47	Simon 860 Low-UGR 1200 3000K	13.5	1830	136

## CONSUMPTION

<b>Consumption values</b>	Consumption	5450 kWh/a	max. 14050 kWh/a
Location	specific connection power	4.95 W/m <sup>2</sup>	-
		0.93 W/m <sup>2</sup> / 100lx	

#### CALCULATION SURFACES

PROPERTIES	E (NOMINAL)	E <sub>min</sub>	E <sub>max</sub>	G <sub>1</sub>	G <sub>2</sub>	Index
Useful surface (Working area) Perpendicular illuminance (Adaptive) Height: 0.800 m, Marginal zone: 0.400 m	533 lx ( ≥500 lx)	58.6 lx	1522 lx	0.11	0.099	WP7
Work area - Table Perpendicular illuminance Height: 0.800 m	1130 lx	691 lx	1404 lx	0.61	0.49	CG12
Work area Perpendicular illuminance Height: 0.800 m	600 lx	248 lx	1373 lx	0.41	0.18	CG13

LOCATION					
SURFACE-MOUNTED	CEILING HEIGHT	HEIGHT 860 RECESSED	HEIGHT 860 SUSPENDED	DEGREE OF REFLECTION	MAINTENANCE FACTOR
400.36 m <sup>2</sup>	3.950 m	4.050 m	2.100 m	Ceiling 70% Walls 50% Floor 20%	0.80

MEASURING OBJECTS

# LAYOUT

		WIP/
	513	
	MAT AND	
	TO TO TO	
10 10 10 10		



# FALSE COLOUR PREVIEW



# LIGHT MEASURES PREVIEW





**SIMON S.A.U.** Diputación, 390-392 08013 Barcelona Tel. (+34) 651 761 336

# Customer Service Technical Assistance

Tel. (+34) 651 761 346 E-mail: sat@simon.es





Projects Department Tel. (+34) 651 761 346 E-mail: proyectos@simon.es

**Customer Service** Tel. (+34) 651 761 314 **Visit us at: The House of Light** Santa Cruz de Marcenado, 1 28015 Madrid

Appointments: lacasadelaluz@simonelectric.com