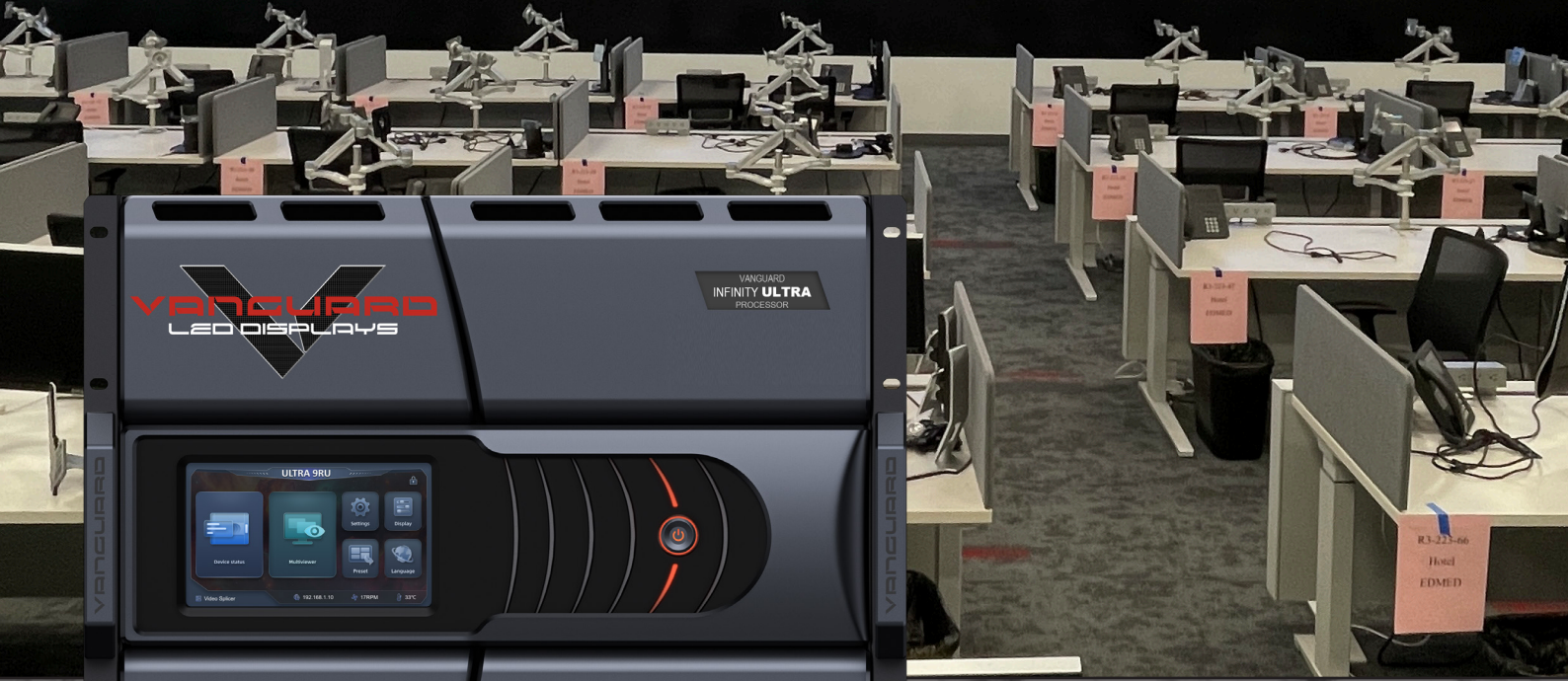


VANGUARD LED DISPLAYS

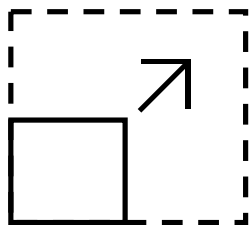


Infinity ULTRA

Controllers

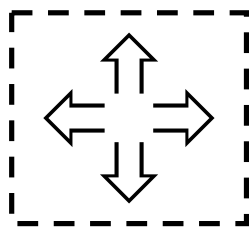


CONTROLLERS



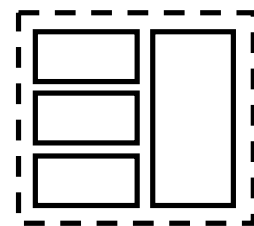
SCALING

Is the content the exact same resolution of the display?



DISPLAY SIZE

Can the display be supported by a single controller?



SOURCES

Are there several sources?
Is windowing needed?



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learn more!



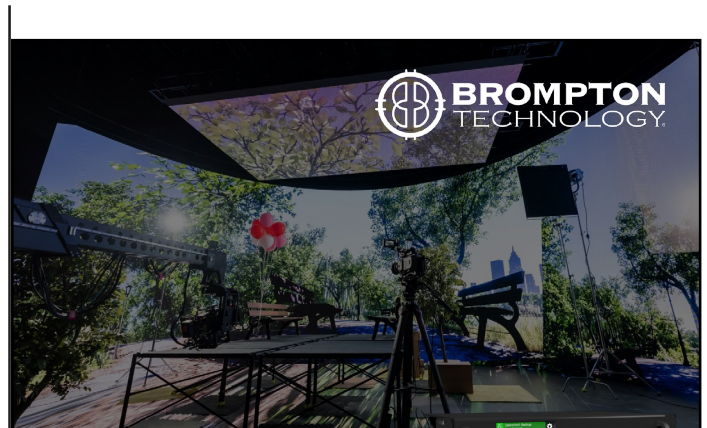
Vanguard controllers

- Configure a single controller for **very large displays**
- **Powerful control** over sources and multiple displays
- Pair with the Vanguard 4K Encoder to **manage up to 160 workstations**
- Experience the **Infinity series**, which is **TAA compliant**



Novastar controllers

- Supporting Novastar's diverse product line.
- Series include:
 - **H-Series** (*configurable*)
 - **MCTRL series** (*pixel-to-pixel*)
 - **VX series** (*scaling*)
 - **Taurus series** (*media player*)



Brompton controllers

- The powerful **TESSERA series** is a popular choice for rental and high-end xR configurations.
- Pair the **v** with the **XD** Distribution Unit to coordinate content and control for multiple displays.



Visit our site to learn more!



INFINITY

ULTRA



Expansive capabilities with secure **command and control** in mind

ideal for

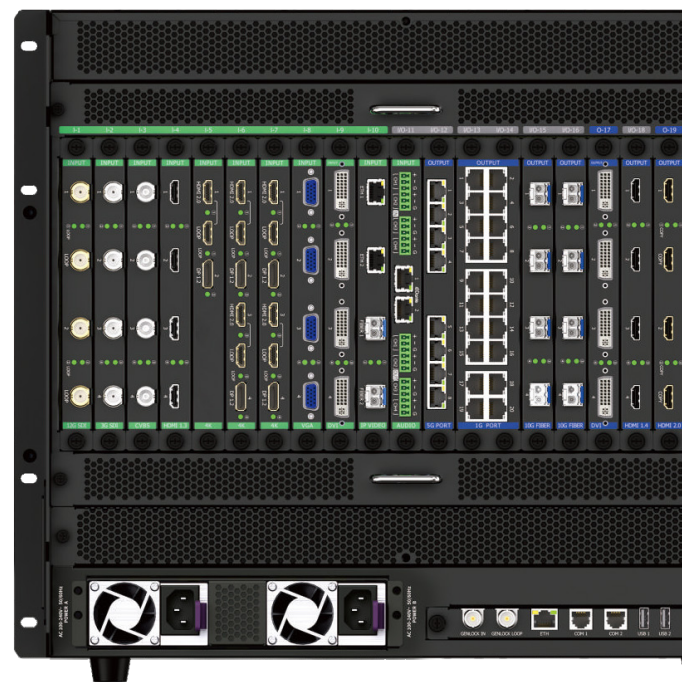
Command and control

summary

Vanguard LED is proud to announce our latest next generation in video processing LED controllers, the Infinity Ultra series. Available in three chassis sizes, 9, 15, and 20 RU, Infinity Ultra has expansive options input/output cards to support any application.

Infinity Ultra is managed entirely via a human-friendly and intuitive web-based interface enabling a diverse range of compatibility for the operating system of the control computer. The web interface enables easy configuration of a high volume of inputs as well as non-video source elements like background images, subtitles, and logos.

Infinity Ultra supports dual 4K UltraHD preview and monitoring. In combination with dynamic system health monitoring with email alert functionality, Infinity Ultra is the processing and control solution which exceeds the requirements of the most demanding applications like secure command and control centers. Pair Infinity Ultra with the VE4K to centralize up to 160 workstations.



inputs



optional

- Light sensor for automatic brightness
- Multi-function card
- Back-up power supply
- VE4K encoder



compatible control OS



Infinity ULTRA 9RU

INPUT	up to 18 cards (20 total I/O slots)	
OUTPUT	up to 10 cards (20 total I/O slots)	
OUTPUT WINDOWS	160 x 2K or 40 x 4K (per controller)	
	16 x 2K or 4 x 4K (per card)	
DIMENSIONS	WIDTH	482.6mm (19")
	HEIGHT	399.3mm (15.7")
	DEPTH	535.2mm (21.1")
WEIGHT	27kg (59.5lbs)	

Infinity ULTRA 15RU

INPUT	up to 30 cards (40 total I/O slots)	
OUTPUT	up to 20 cards (40 total I/O slots)	
OUTPUT WINDOWS	640 x 2K or 160 x 4K (per controller)	
	16 x 2K or 4 x 4K (per card)	
DIMENSIONS	WIDTH	482.6mm (19")
	HEIGHT	666mm (26.2")
	DEPTH	488.2mm (19.2")
WEIGHT	48.6kg (107.14lbs)	

Infinity ULTRA 20RU

INPUT	up to 40 cards (60 total I/O slots)	
OUTPUT	up to 30 cards (60 total I/O slots)	
OUTPUT WINDOWS	960 x 2K or 240 x 4K (per controller)	
	16 x 2K or 4 x 4K (per card)	
DIMENSIONS	WIDTH	482.6mm (19")
	HEIGHT	889mm (35")
	DEPTH	488.2mm (19.2")
WEIGHT	66.8kg (147.3lbs)	

MAIN BOARD	2 Genlock I/O
	2 RJ11 RS-232
	2 USB2.0
	1 Ethernet/LAN
	1 3D port

PREVIEW AND MONITORING	2 HDMI2.0 (4K)
------------------------	----------------

Optional input/output cards



INPUT CARDS	2 HDMI2.0, 2 DP1.2
	1 HDMI2.0, 1 DP1.2
	2 12G-SDI
	1 12G-SDI
	4 3G-SDI
	4 HDMI1.3
	6 HDMI1.3
	4 VGA
	2 VGA, 2 CVBS
	4 AUDIO
	4 DVI
	4 CVBS

OUTPUT CARDS	20 1G RJ45
	8 5G RJ45
	4 10G Fiber
	2 HDMI2.0
	1 HDMI2.0
	4 HDMI1.4
	4 DVI

MAIN BOARD	2 Genlock I/O
	2 RJ11 RS-232
	2 USB2.0
	1 Ethernet/LAN
	1 3D port

PREVIEW AND MONITORING	2 HDMI2.0 (4K)
------------------------	----------------



Visit our site to learn more!

INFINITY



Limitless Capabilities to Create an all-encompassing Data Wall

ideal for

Large displays, complex inputs

summary

Infinity controllers utilize a card/chassis. This allows for the optimal customization to any LED display system. By combining Infinity with Vanguard displays there is no need for expensive switcher/multi-window processors which will result in significant savings. Ample input and output options guarantee that Infinity controllers can support an ideal data wall, exceeding the requirements of the most complex direct view LED system.

Infinity controllers can also be paired with the Vanguard LED VE4K encoder to enable dynamic screen sharing from a high volume of connected machines.

Three chassis sizes allow for the perfect configuration of inputs, outputs, and optimal functionality.

inputs



optional

- Light sensor for automatic brightness
- Multi-function card for various sensors
- Back-up power supply
- VE4K encoder



Infinity 4RU

INPUT	up to 4 cards, 16 channels	
OUTPUT	up to 4 cards, 26 million pixels	
OUTPUT WINDOWS	16 x 2K or 4 x 4K (per controller)	
	16 x 2K or 4 x 4K (per card)	
DIMENSIONS	WIDTH	482.6mm (19in)
	HEIGHT	406.1mm (16in)
	DEPTH	177.8mm (7in)
WEIGHT	38kg (83.8lbs)	



Infinity 7RU

INPUT	up to 8 cards, 32 channels	
OUTPUT	up to 8 cards, 52 million pixels	
OUTPUT WINDOWS	32 x 2K or 8 x 4K (per controller)	
	16 x 2K or 4 x 4K (per card)	
DIMENSIONS	WIDTH	482.6mm (19in)
	HEIGHT	406.1mm (16in)
	DEPTH	276.8mm (10.9in)
WEIGHT	19.3kg (42.5lbs)	

Infinity 11RU

INPUT	up to 16 cards, 64 channels	
OUTPUT	up to 18 cards, 117 million pixels	
OUTPUT WINDOWS	72 x 2K or 18 x 4K (per controller)	
	16 x 2K or 4 x 4K (per card)	
DIMENSIONS	WIDTH	482.6mm (19in)
	HEIGHT	475.2mm (18.7in)
	DEPTH	488mm (19.2in)
WEIGHT	12.5kg (27.6lbs)	

MAIN BOARD	2 Genlock I/O
	1 RS-232
	1 USB3.0
	1 Ethernet/LAN
	1 3D port

PREVIEW AND MONITORING	1 HDMI2.0 (4K)
------------------------	----------------

Optional input/output cards



I/O CARDS	1 HDMI2.0
	1 DP1.2
	1 12G-SDI
	1 HDMI2.0, 1 DP1.2
	4 DL-DVI
	4 VGA
	2 VGA, 2 CVBS
	4 3G-SDI
	2 1G RJ45

OUTPUT CARDS	8 1G RJ45
	10 1G RJ45
	4 5G RJ45
	2 10G Fiber
	1 HDMI2.0
	4 DL-DVI
	4 HDMI1.4

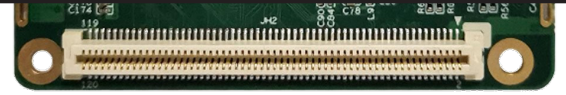
Receiving cards

The Vanguard LED controller series is paired with our robust line of receiving cards. Covering a broad range of capacity and features, Vanguard receiving cards offer all standard requirements as well as several next generation features to ensure performance and operation of the display are optimized.

ND
DDR SODIMM



NN
standard interface

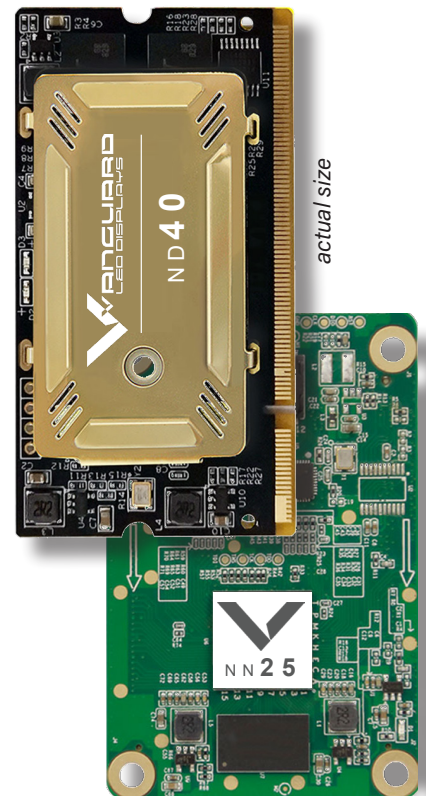


— **ND** **25** — **ND** **40** — **ND** **45** — **ND** **50**
— **NN** — **NN** — **NN** — **NN**

	ND NN 25	ND NN 40	ND NN 45	ND NN 50
TRANSMISSION RATE	1G	1G	1G	1G
LOADING CAPACITY (px)	512 x 384	640 x 360	640 x 360	768 x 432
COMM PORT	Ethernet	Ethernet	Ethernet	Ethernet
DATA GROUP	32	32	32	32
PROCESSING DEPTH (bit)	8	8, 10	8, 10	8, 10, 12
REFRESH RATE (Hz)	30 - 120	23.98 - 240	23.98 - 240	23.98 - 240
GRAYSCALE REFINEMENT	•	•	•	•
MULTI-LAYER CALIBRATION	-	-	•	•
HDR	-	•	•	•
COLOR GAMUT ADJUSTMENT	-	•	•	•
CALIBRATION COEFFICIENT BACKUP	-	•	-	•
CONFIGURE PARAMETER BACKUP	-	•	-	•

AR **90** **AU** **90**

	AR 90	AU 90
TRANSMISSION RATE	5G	5G
LOADING CAPACITY (px)	256 x 1,024	256 x 1,024
COMM PORT	Ethernet	USB-C
DATA GROUP	32	32
PROCESSING DEPTH (bit)	8, 10, 12	8, 10, 12
REFRESH RATE (Hz)	30 - 120	23.98 - 240
GRAYSCALE REFINEMENT	•	•
MULTI-LAYER CALIBRATION	-	-
HDR	-	•
COLOR GAMUT ADJUSTMENT	-	•
CALIBRATION COEFFICIENT BACKUP	-	•
CONFIGURE PARAMETER BACKUP	-	•



Sensors and automation

A smart display is a sensor away! Enable smart brightness, various environmental monitoring, and automation control with a powerful multi-function card.

There is no need to run sensor cables from the display to the controller, as the multi-function card can be conveniently installed with the display, carrying signal to the controller using the display's existing data paths.

SENSORS

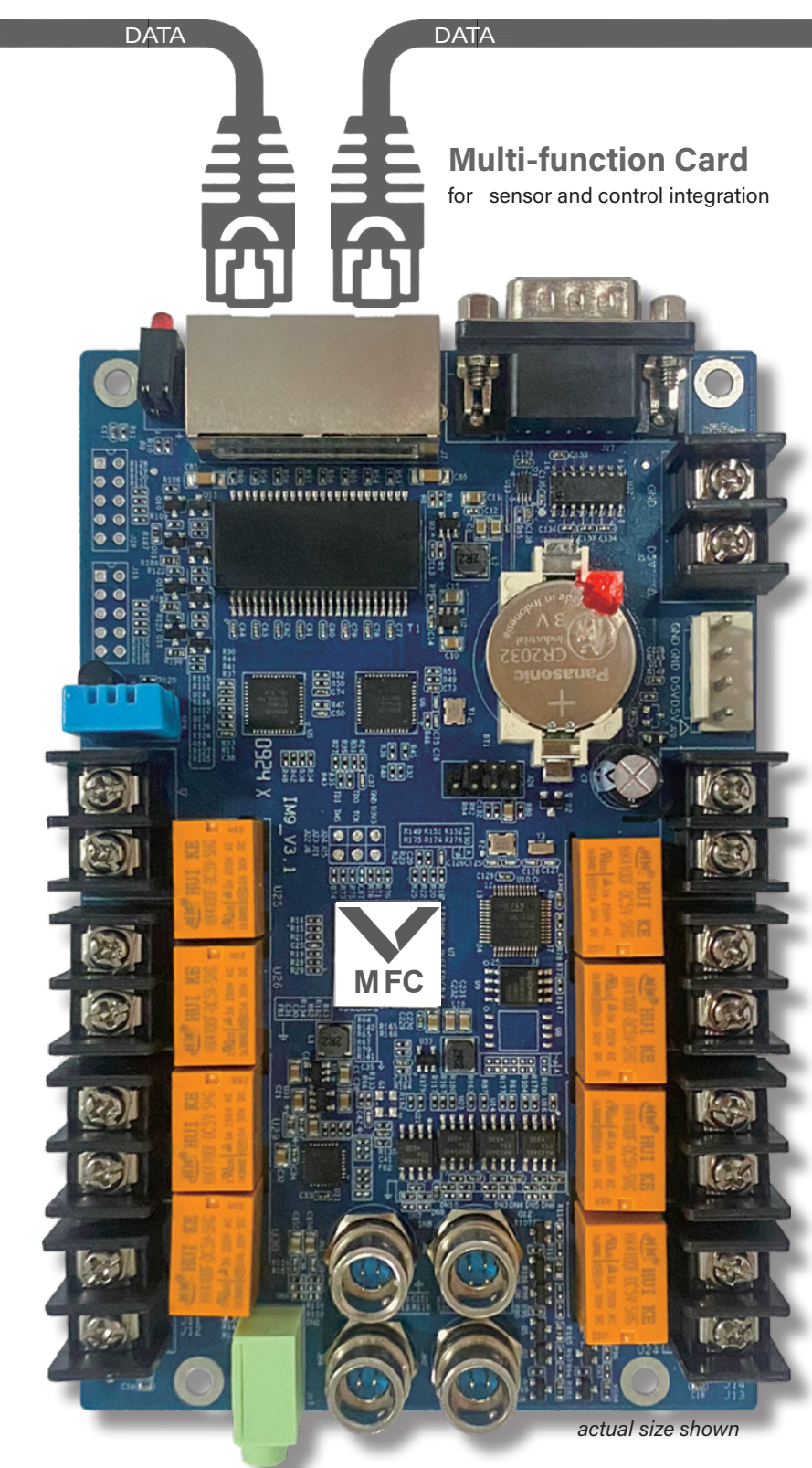
- Light
- Noise
- Humidity
- Temperature
- Pollution

CONTROL

- (8) Relays

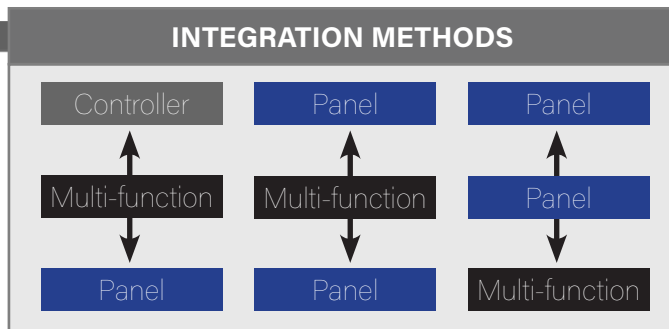
OUTPUT

- Audio (3.5mm)



Multi-function Card
for sensor and control integration

actual size shown



Light sensor
for automatic
brightness



Temp & humidity sensor
for temperature and
moisture monitoring

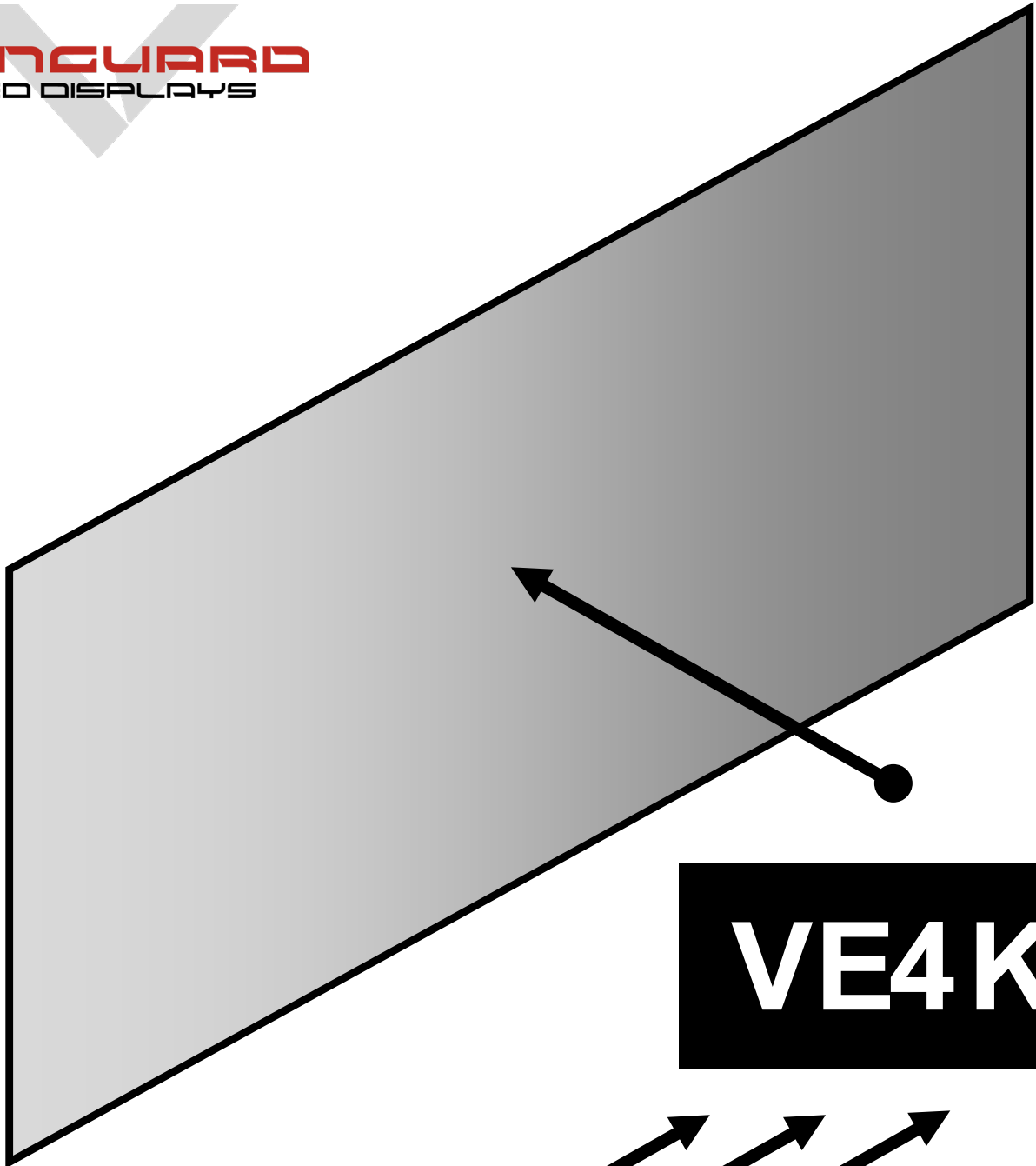


Noise sensor
for ambient
noise monitoring

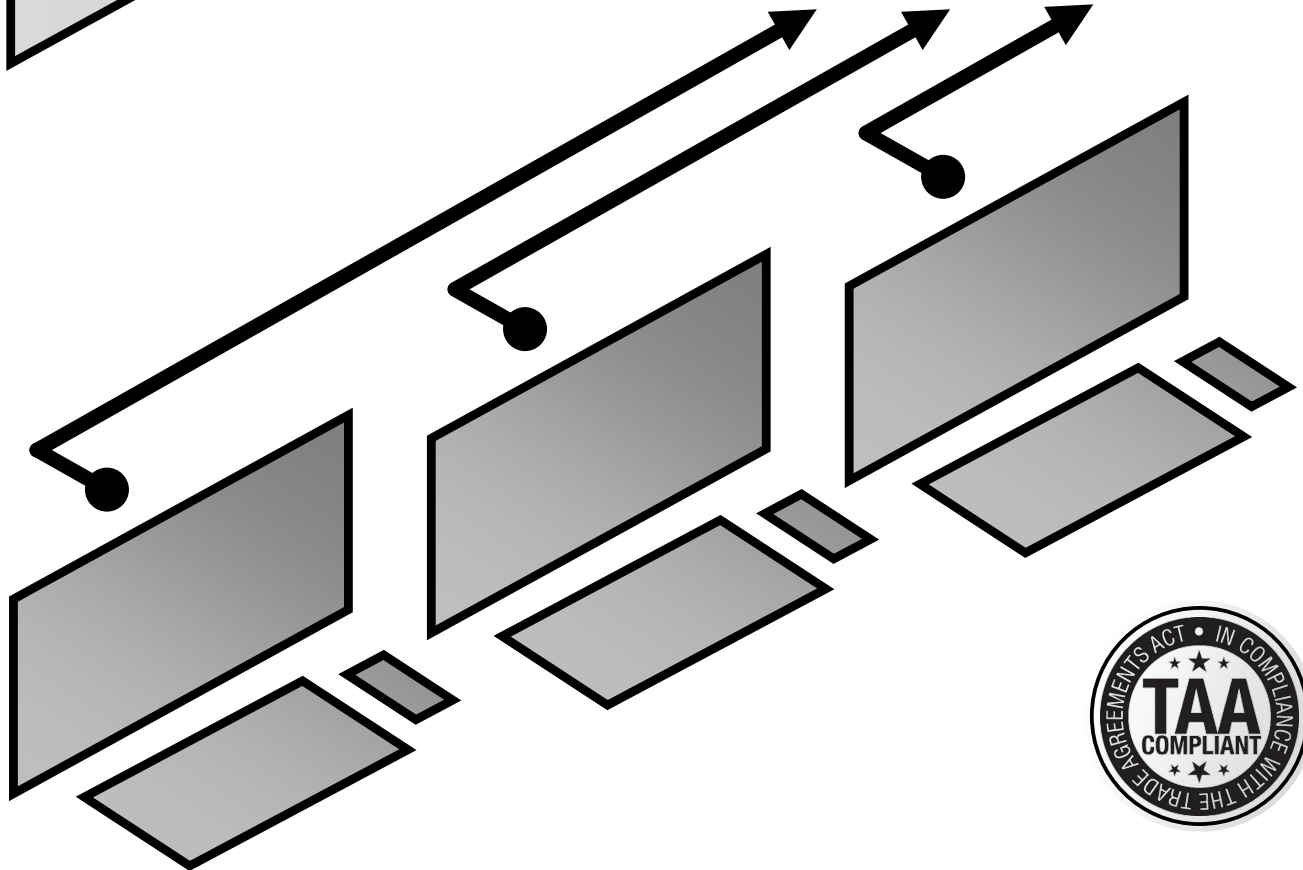


Air quality sensor
for pollution
monitoring





VE4K



secure and expansive control



actual size shown

VE4K 4K Video Encoder

ideal for

Command and control

summary

The VE4K (Vanguard Encoder 4K) is an optional peripheral for the Infinity and Infinity Ultra controller series.

An IP-based HDMI extender for management of workstations (up to 160) in a SCIF, watch floor, or command center. Coordinate and manage different categories of content. Mirror select stations to the data wall in real time or in combination with defined preset layouts.

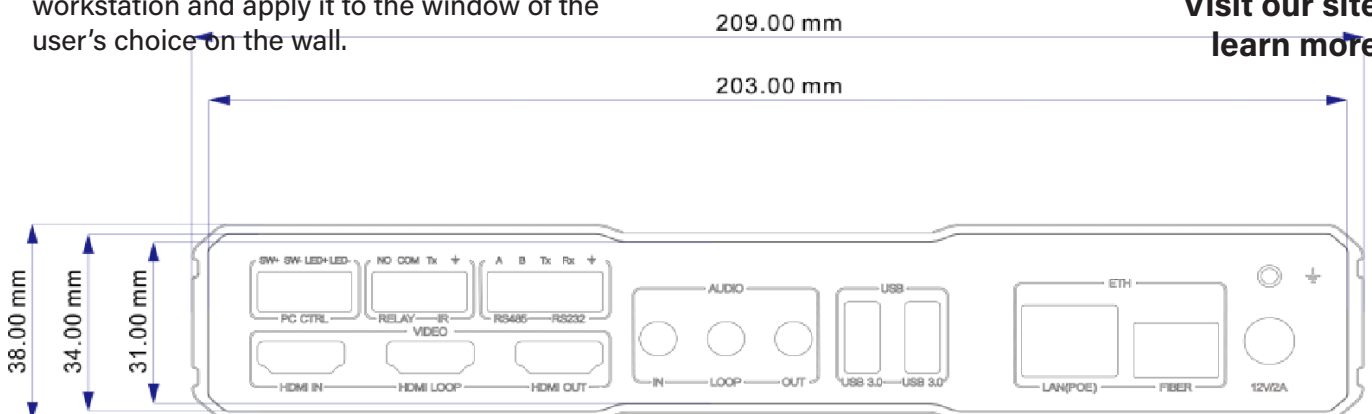
The Infinity controller will receive a network cable from the switch and receive the signal from the workstation and apply it to the window of the user's choice on the wall.

CONNECTIONS

- 1 HDMI1.4 I/O and loop
- 1 35mm Audio I/O and loop
- 3 USB3.0
- 1 USB2.0
- 1 10G Fiber
- 1 Ethernet
- 1 Control for PC, IR, RS-232, RS-485



Visit our site to learn more!



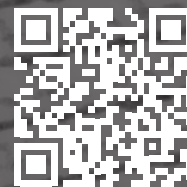
Vanguard LED Displays

summation

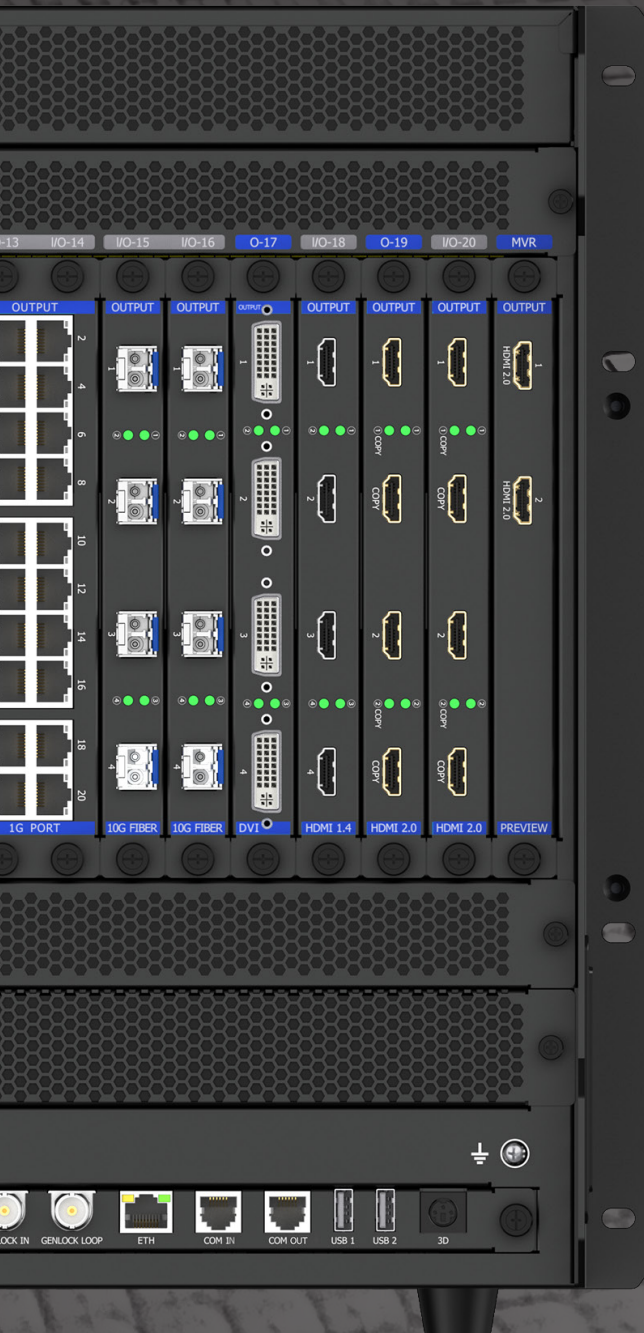
A leader in innovative digital LED display solutions, Vanguard offers an unrivaled range of products, technologies, and support.

Vanguard is an American-owned company, headquartered in Lakeland, Florida. Our mission statement - Complete customer satisfaction, defined by our core values of expertise, integrity, responsiveness, service, and value.

Our core values take many practical forms including Industry leading new technology, expert design advice at the outset of a project, timely quotes, the quickest lead times in the industry, helpful CADs and electrical drawings, professional commissioning, proficient on-site training, and stellar after-sales services.



Scan to
contact us!



VANGUARD
LED DISPLAYS