



\* All images in this datasheet are for illustrative purposes only.

# LG MAGNIT


**Micro LED** True Innovation behind New Depths

 Deep Black

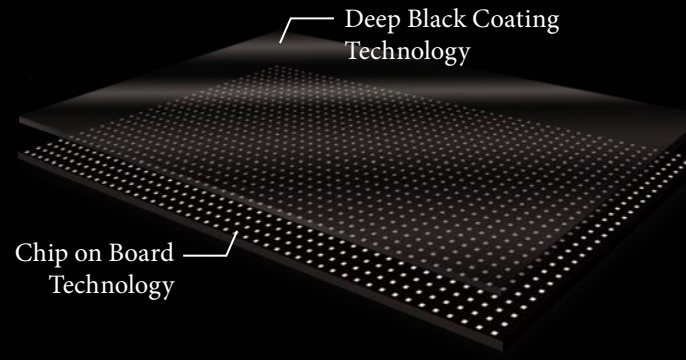
 Vibrant Colors

 Wide Viewing Angle

 Intelligent Processor

 Cable-Less Concept

 High Reliability



### Black Immersion, Enlivened Details

By removing a package surrounding R, G, B LED chips and applying LG's own Full Black Coating technology, the LG MAGNIT surprisingly delivers much deeper black than the conventional package LED signage\*. This not only enhances color vividness, but also makes the details which were hidden in the shadows appear, providing audiences a sense of immersion.

\* Based on LG's conventional LED Signage

LG Conventional LED Signage

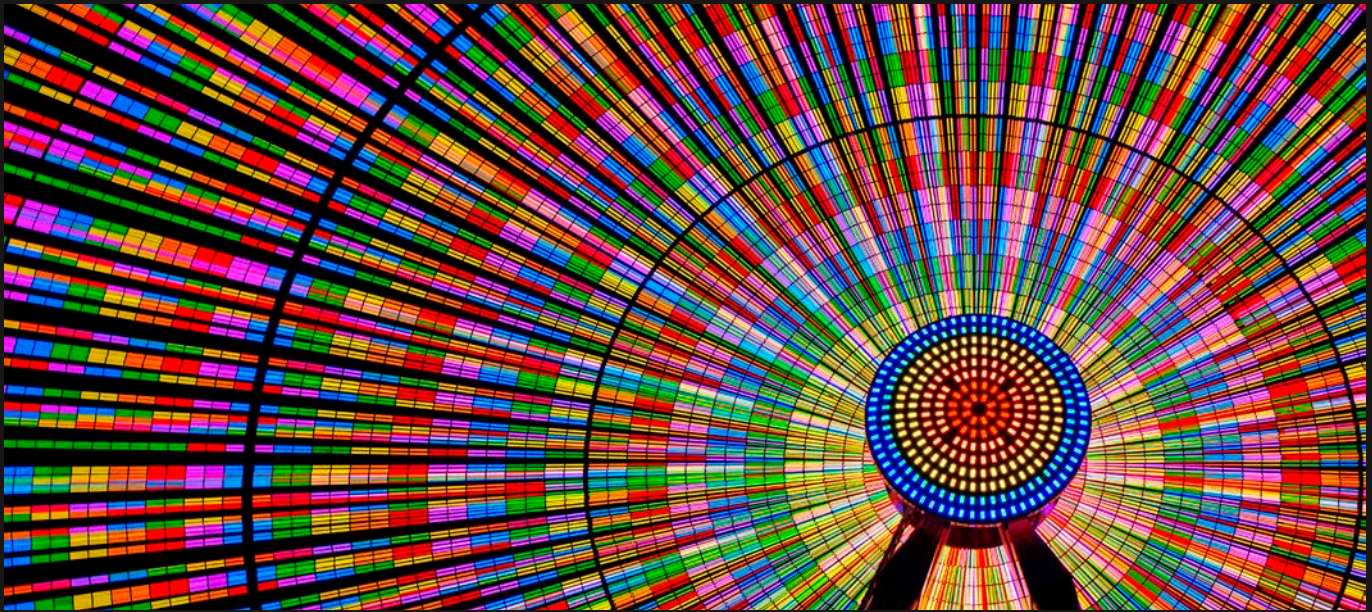


LG MAGNIT



### Stronger Light and Shadow

The solid black LG MAGNIT makes also results in superbly high contrast ratio which is a vital part of the picture quality. The difference between the dark parts and the light parts is clearly great, making every part of the content distinctive.



## Accurate Colors as Intended

MAGNIT's carefully-selected micro LED chip has a narrowed wavelength that allows it to show uniform colors across the screen. Furthermore, the enhanced Gamut Transfer technology supports it to describe colors close to the original color, which is essential for places where exact color representation is demanding.



Alpha 7 Intelligent Processor

## Intelligent Image Processor

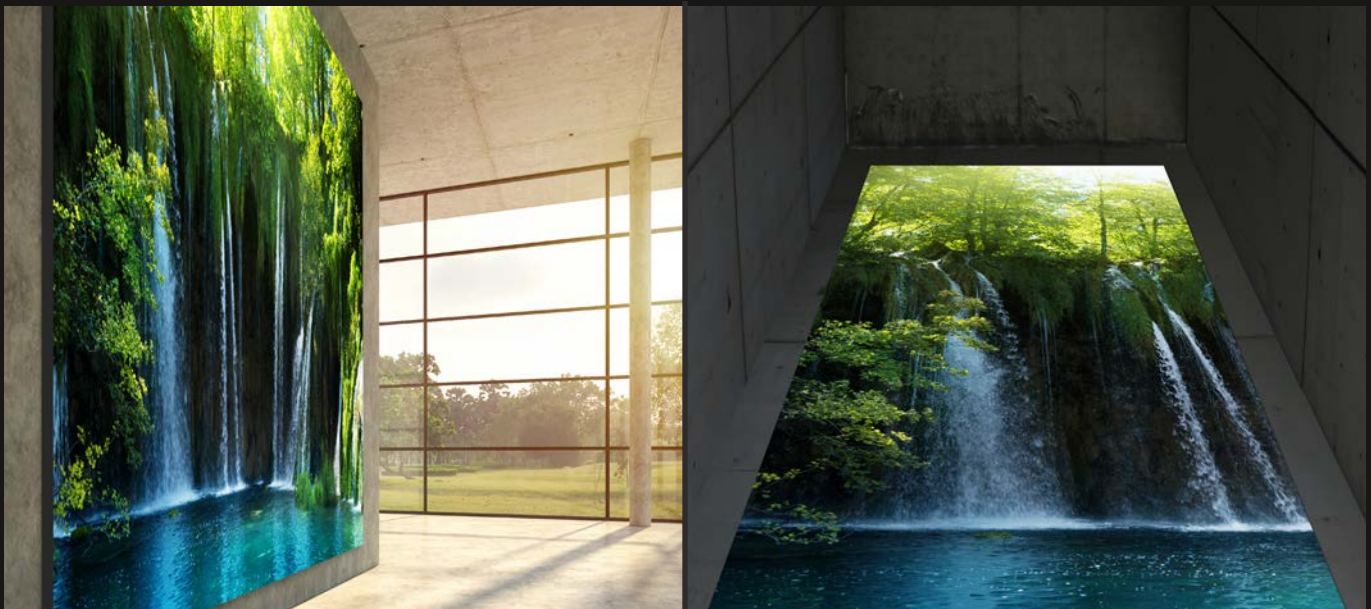
The Alpha 7 Intelligent Processor adopts deep learning AI capability from LG's TV technology to analyze and recognize incoming content and optimize image clarity and sharpness.



## Vivid Color Expression Powered by HDR

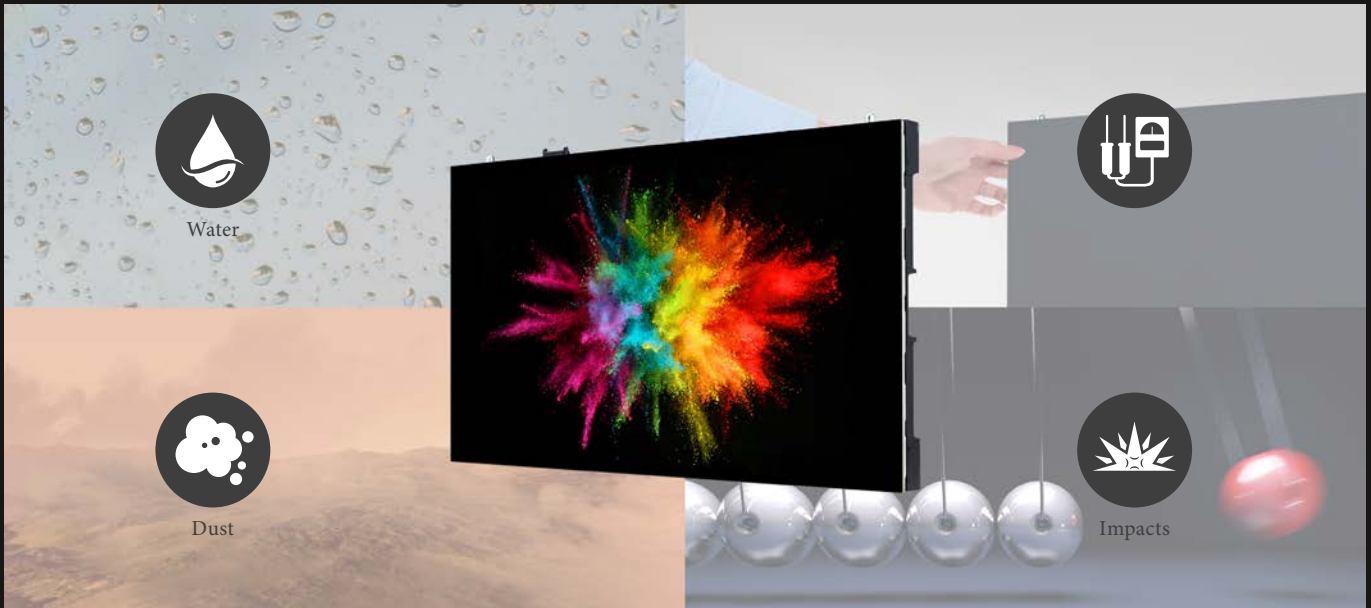
With HDR (HDR10, HDR10 Pro\*) support, content becomes vivid with great visual impact. The wider color spectrum and greater contrast ratio allow viewers to fully enjoy lively content.

\* HDR10 Pro is LG's own HDR solution to process HDR signal by using enhanced dynamic tone mapping.



## Wide Color Viewing Angle

Thanks to the structure of LG MAGNIT, it minimizes color distortion according to the viewing angle. The original color can be appreciated even from the side angles, captivating various pedestrians even if it is installed in a large public places.



## Confidence with LG's Sturdy Design

\* Based on in-house testing in accordance with the certification criteria, or under actual operating conditions.



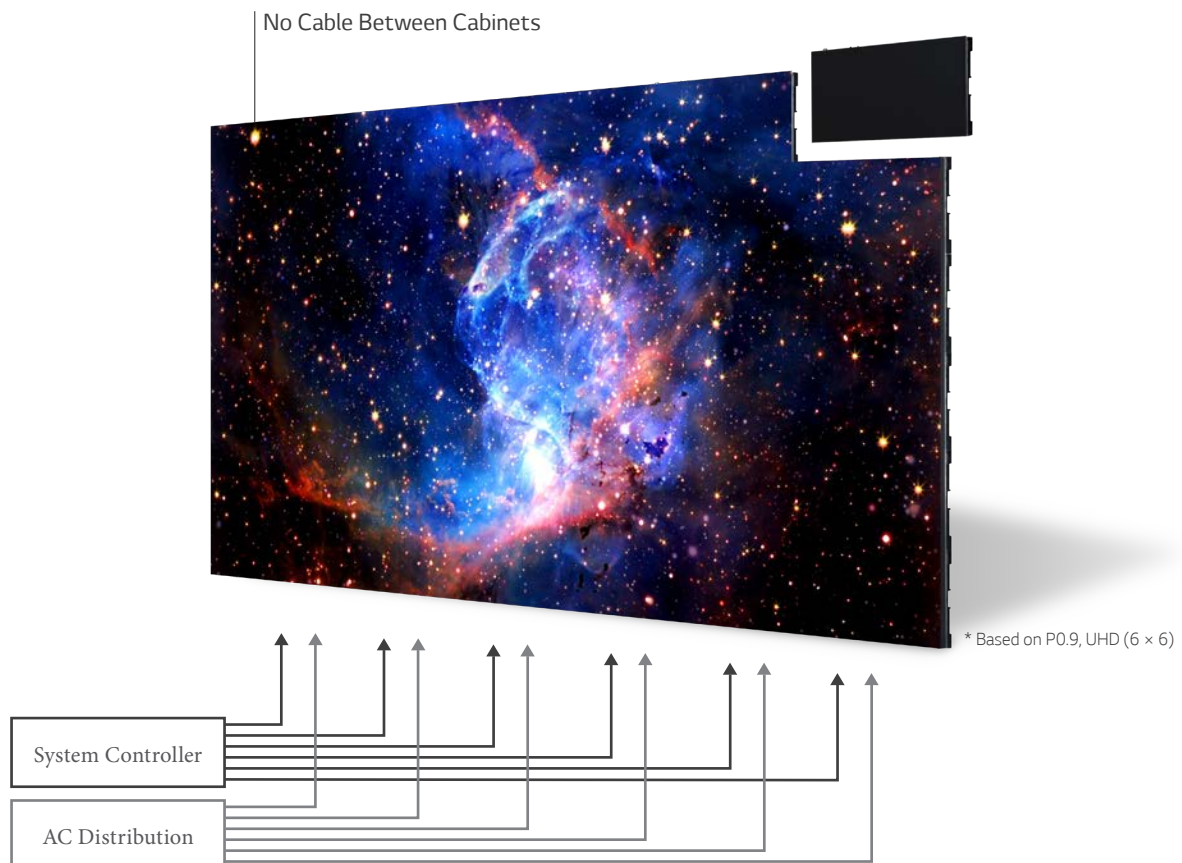
## Sleek Look with Smooth Surface

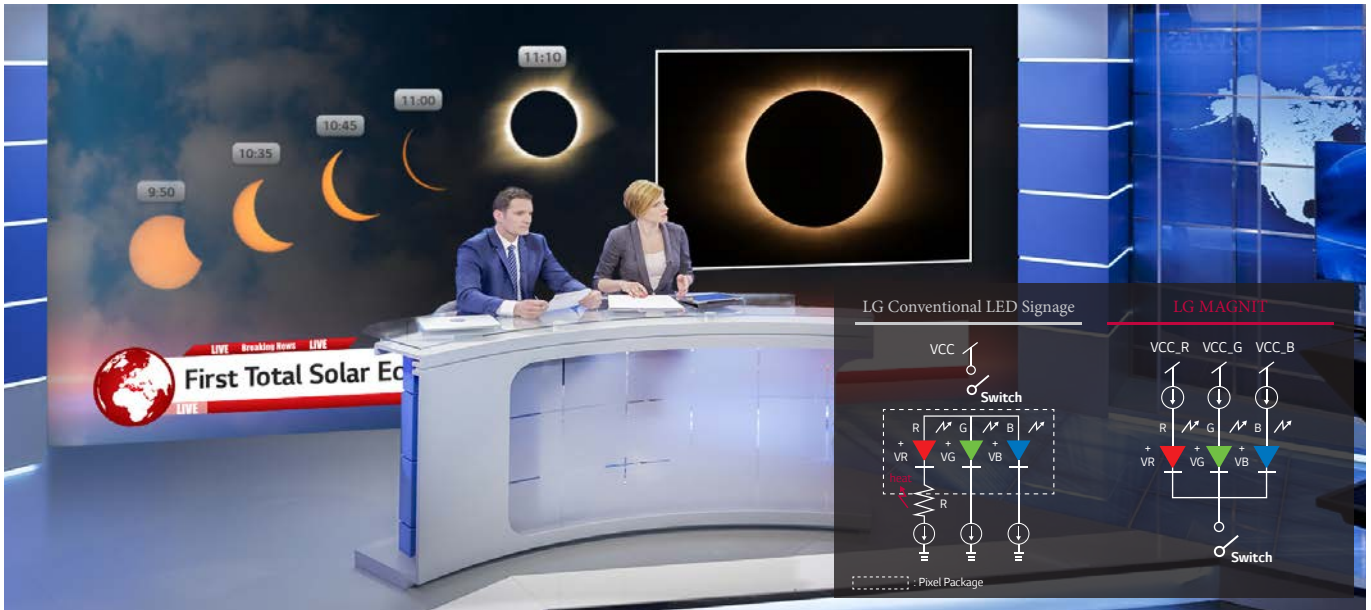
The screen surface of LG MAGNIT is very smooth making it attractive even when the screen is off. If fingerprints are on the surface, they can be simply removed by wiping with a soft cloth without the need for any chemicals.



## Cable-less Design for Simple Installation

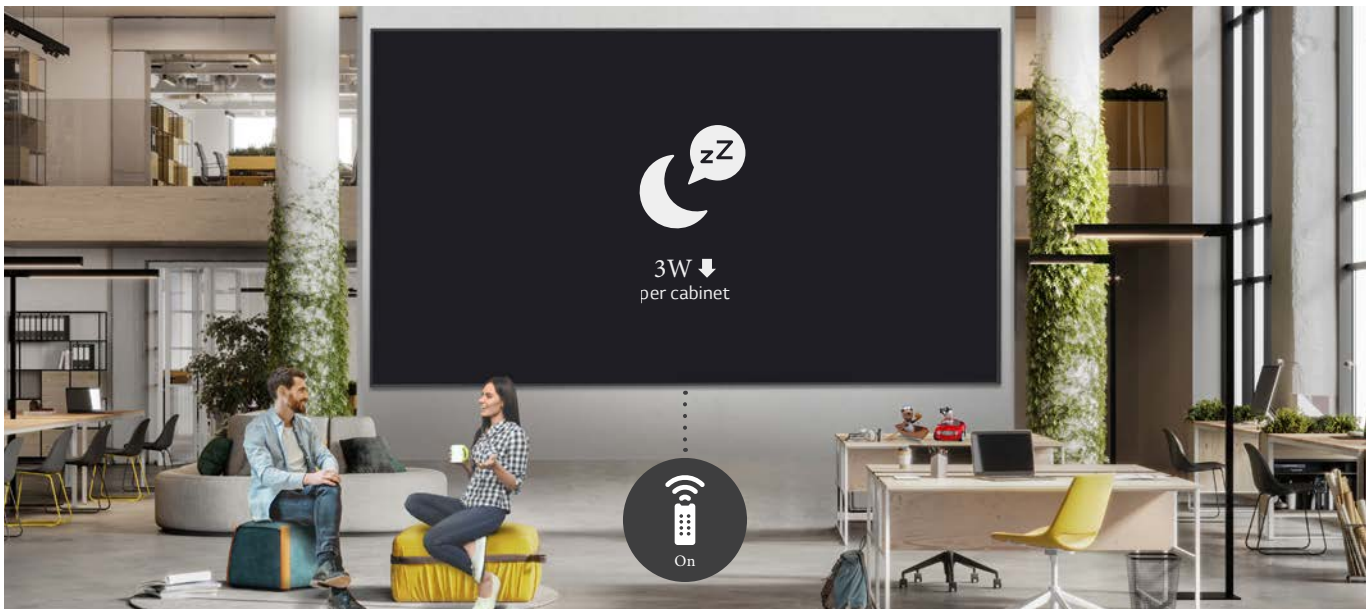
LG MAGNIT uses an innovative broadband wireless transmission for signals between cabinets and a clip-together power delivery system that eliminates the need for cables between the cabinets. When configuring an Ultra HD screen with 16:9 aspect ratio, only 6 signal cables and 6 power cables are needed for the entire assembly to connect all the cabinets to the controller. This facilitates hassle-free installation and simplifies the rear structure of the screen.





## Efficient Power Consumption by Colors

Common Cathode Drive-IC is one of the reasons why LG MAGNIT has low power consumption. It supplies the correct voltage to each R, G, B sub-pixel individually to minimize unnecessary power consumption.



## Power Saving Standby Mode

When there is no input signal for a period of time, the screen turns off and the main circuits inside the LED cabinet enter a standby mode. This saves additional power and enables the product to be reactivated simply by using a remote control.

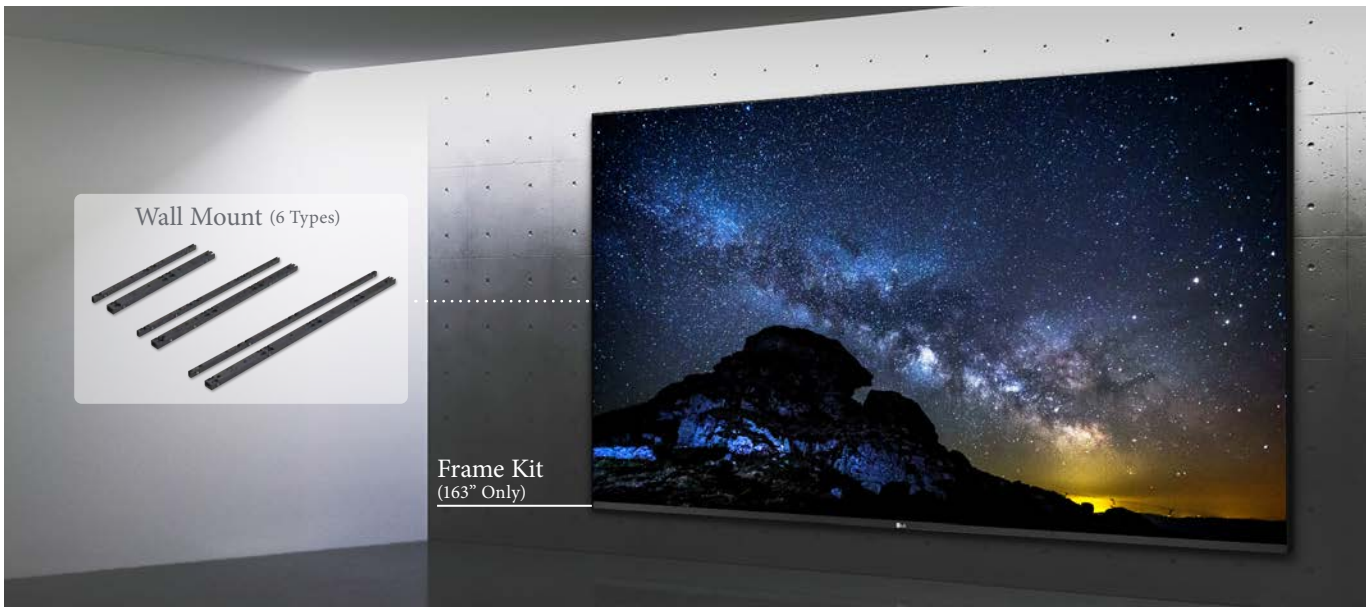


### Intuitive Interface with Remote Control

For screens over 1280 x 720 resolution, LG's webOS- OSD offers a familiar look and feel for virtually anyone who has used LG Digital signage products and the handheld remote control before.

### Compatibility with AV Control System

LG MAGNIT has been certified Crestron Connected® for a higher level of compatibility with professional AV controls to achieve seamless integration and network-based control\*, boosting business management efficiency.



### Dedicated Accessories

Three pairs of wall mount accessories and a frame kit are provided as options for LG MAGNIT. The wall mounts can be combined with any screen size to be installed clearly and neatly. Also, when building a 163-inch screen, Ultra HD resolution, the frame kit will make the display have a smooth edge.





## Total Content Management

LG MAGNIT is compatible with LG's SuperSign CMS solution which is all-in-one content management solution for content editing, scheduling and distribution. Managers can operate LG's commercial displays including LG MAGNIT all at once, enabling systematic and efficient management.

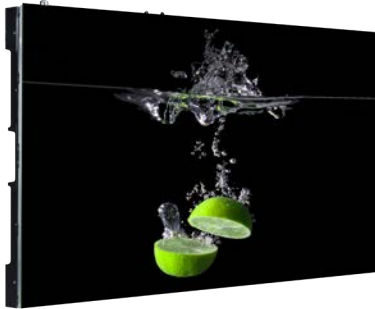


## Real-time ConnectedCare Service

Maintenance is easy and fast with the optional ConnectedCare\* service, a cloud service solution provided by LG. It remotely manages the status of displays in client workplaces for fault diagnosis and remote-control services, enabling the stable operation of clients' businesses.

\* ConnectedCare is the brand name of LG Signage365Care Service. The availability differs by region.

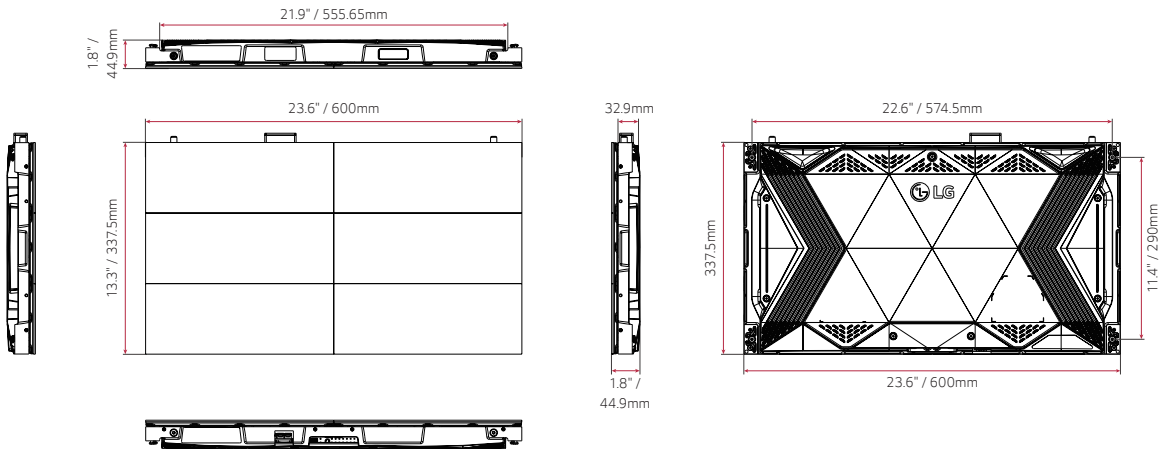
# PRODUCT INFORMATION



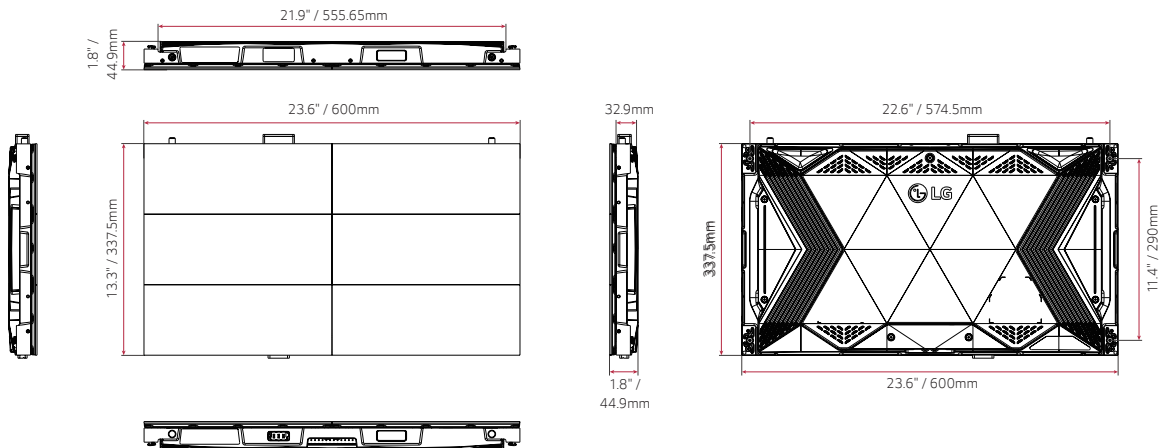
<b>Cabinet</b>	LSAB009
Pixel Configuration	1R, 1G, 1B (Chip on Board)
Pixel Pitch	0.93 mm
Brightness	1,200 nit (Peak.) / 600 nit (Max.)
Contrast Ratio (10 lux)	150,000 : 1
Processing Depth	20 bit
Serviceability	Front
HDR Compatibility	HDR10, HDR10 Pro

## DIMENSIONS

### MAIN CABINET



### SECONDARY CABINET



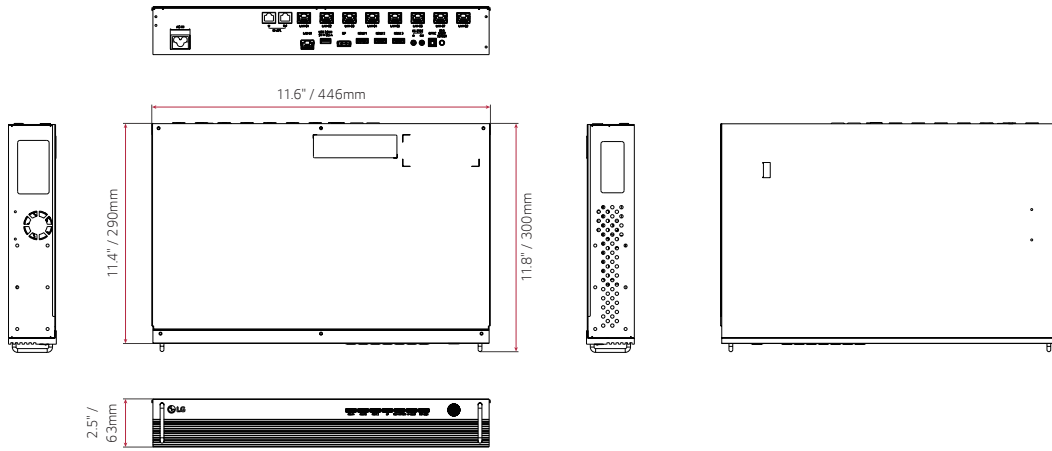
\* Dimensions may differ from the above image, so please contact LG sales team to verify before ordering.

# PRODUCT INFORMATION

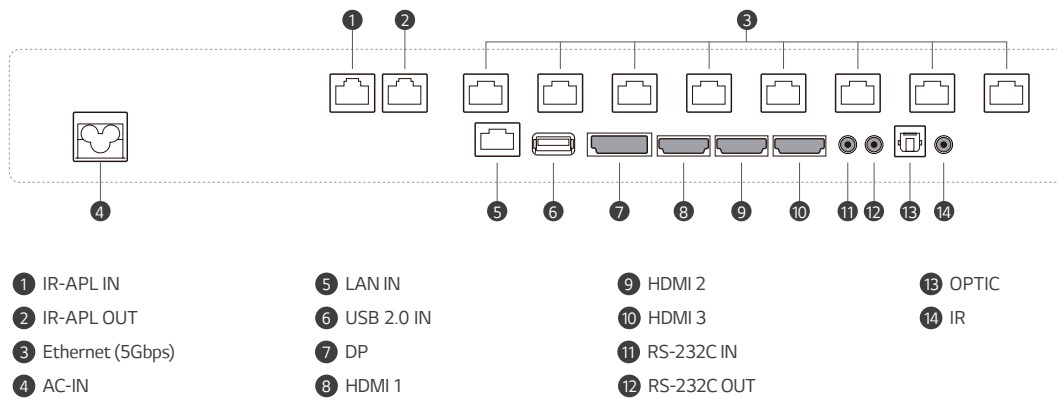


<b>System Controller</b>	CSAB-009X
Resolution	UHD (3,840 × 2,160)
Input	HDMI (3), DP (1)
Output	Ethernet (5 GB × 8 ea), SPDIF (Audio)
Control	IR (1), RS232C In (1) / Out (1), Ethernet (1), USB (1)
Storage	16 GB

## DIMENSIONS



## CONNECTIVITY SYSTEM CONTROLLER



\* Dimensions & Jack Panels may differ from the above image, so please contact LG sales team to verify before ordering.

	LSAB009-M1	LSAB009-S1	
Physical Parameters	Pixel Configuration	COB	COB
	Pixel Pitch	0.938 mm	0.938 mm
	Module Resolution (W x H)	160 x 180	160 x 180
	Module Dimensions (W x H)	5.9 x 6.6 in / 150 x 168.8 mm	5.9 x 6.6 in / 150 x 168.8 mm
	Weight per Module	0.320 lbs / 0.145 kg	0.320 lbs / 0.145 kg
	No. of Modules per Unit Case (W x H)	8 (4 x 2)	8 (4 x 2)
	Unit Case Resolution (W x H)	640 x 360	640 x 360
	Unit Case Dimensions (W x H x D)	23.6 x 13.3 x 1.8 in / 600 x 337.5 x 44.9 mm	23.6 x 13.3 x 1.8 in / 600 x 337.5 x 44.9 mm
	Unit Case Surface Area	2.19 ft <sup>2</sup> / 0.203 m <sup>2</sup>	2.19 ft <sup>2</sup> / 0.203 m <sup>2</sup>
	Weight per Unit Case	15.4 lbs / 7.0 kg	15.4 lbs / 7.0 kg
	Weight per Square Meter	7.1 lb/ft <sup>2</sup> , 34.6 kg/m <sup>2</sup>	7.1 lb/ft <sup>2</sup> , 34.6 kg/m <sup>2</sup>
	Physical Pixel Density	1,137,778 (pixels/m <sup>2</sup> )	1,137,778 (pixels/m <sup>2</sup> )
	Flatness of Unit Case	±0.5 mm	±0.5 mm
	Unit Case material	Die-cast Aluminum	Die-cast Aluminum
	Service access	Front	Front
Optical Specifications	Peak Brightness Before Calibration	1,200 nits	1,200 nits
	Max Brightness After Calibration	600 nits (Typ)	600 nits (Typ)
	Default Color Temperature After Calibration	6,500K	6,500K
	Color Temperature Range (Adjustable by LED Assistant on PC)	2,800-10,000K	2,800-10,000K
	Visual Viewing Angle (Horizontal)	165°	165°
	Visual Viewing Angle (Vertical)	165°	165°
	Brightness Uniformity	95%	95%
	Color Uniformity	±0.02	±0.02
	Contrast Ratio	Typ. 50,000:1	Typ. 50,000:1
	Processing Depth	20 bit	20 bit
	HDR10 / HDR10 Pro1	Yes / Yes	Yes / Yes
Electrical Specifications	Max Power Consumption	115 W/unit, 393 BTU/unit	113 W/unit, 386 BTU/unit
	Average Power Consumption	72 W/unit, 246 BTU/unit	71 W/unit, 242 BTU/unit
	Max Power Consumption per Unit Area	568 W/m <sup>2</sup> , 1939 BTU/m <sup>2</sup>	559 W/m <sup>2</sup> , 1907 BTU/m <sup>2</sup>
	Power Supply	100 to 240 Vac	100 to 240 Vac
	Frame Rate	50 / 60 Hz	50 / 60 Hz
	Refresh Rate	3,840 HZ	3,840 HZ
Operation Specifications	LED Lifetime (Half brightness)	100,000 hrs	100,000 hrs
	Operating Temperature	32°F to 104°F / 0°C to 40°C	32°F to 104°F / 0°C to 40°C
	Operating Humidity	10% to 80% RH	10% to 80% RH
	IP rating Front	IP50	IP50
	IP rating Rear	IP20	IP20
Certifications & Other	IEC 60950-1 (EMC Class A)	Yes	Yes
	RoHS (Environmental)	Yes	Yes
	Controller	CSAB-009X	CSAB-009X
	Standard Warranty	2 Year Limited	2 Year Limited
	Extended Warranty	Up to 3 Additional Years	Up to 3 Additional Years

1) HDR10 Pro is LG's own HDR solution to process HDR signal by using enhanced dynamic tone mapping.

CSAB-009X

Feature	Resolution	UHD (3,840 x 2,160)
	Input Signal	HDMI (3), DP (1)
	Output Signal	Ethernet (5 GB x 8 ea), SPDIF (Audio)
	Control	IR (1), RS232C In (1) / Out (1), Ethernet (1), USB (1)
	Built-in Wi-Fi	Yes
	Storage	16 GB
	Image Enhancement	HDR10 / HDR10 Pro, 3D Color Gamut Mapping, Low Latency, Auto Brightness Control (w/ External Brightness Sensor)
	Sensors	IR / Ambient Light (External), Temperature
Monitoring	LDM2 Defect (Dot, Line), Temperature, Power (LDM, Cabinet, PSU3)	
Power	Power Consumption (W, Max.)	60
Mechanical Specifications	Dimensions (W x H x D)	17.6 x 11.9 x 2.5 in / 446 x 301 x 63 mm
	Weight	9.9 lbs / 4.5 kg
	Shipping Dimensions (W x H x D)	20.0 x 15.4 x 6.7 in / 530 x 392 x 169 mm
	Shipping Weight	14.1 lbs / 6.4 kg
Environment Conditions	Working Temperature	0°C to 40°C / 32°F to 104°F
	Operation Humidity	10% to 80% RH
SW Compatibility	Platform	webOS 4.1
	Software Solution	SuperSign CMS, LED Assistant, ConnectedCare4
Accessory	Basic	AC Power Cable, Phone to RS232C Gender, HDMI Cable,
		IR / Ambient Light Sensor (External), QSG, Rack Bracket, Remote Controller

2) LDM : LED Display Module 3) PSU : Power Supply Unit 4) The availability differs by region