



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

LG MAGNIT

Micro LED True Innovation behind New Depths



Infinity Black



Accurate Colors



Wide Viewing Angle



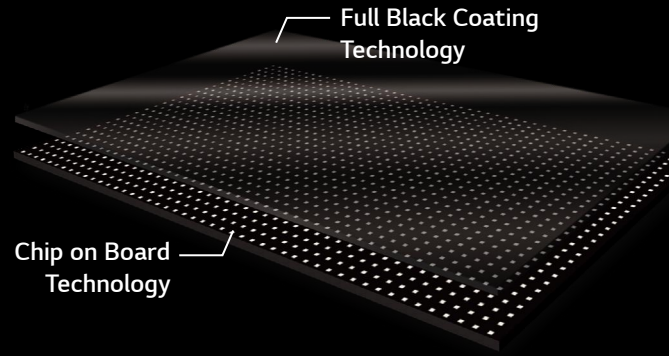
Intelligent Processor



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

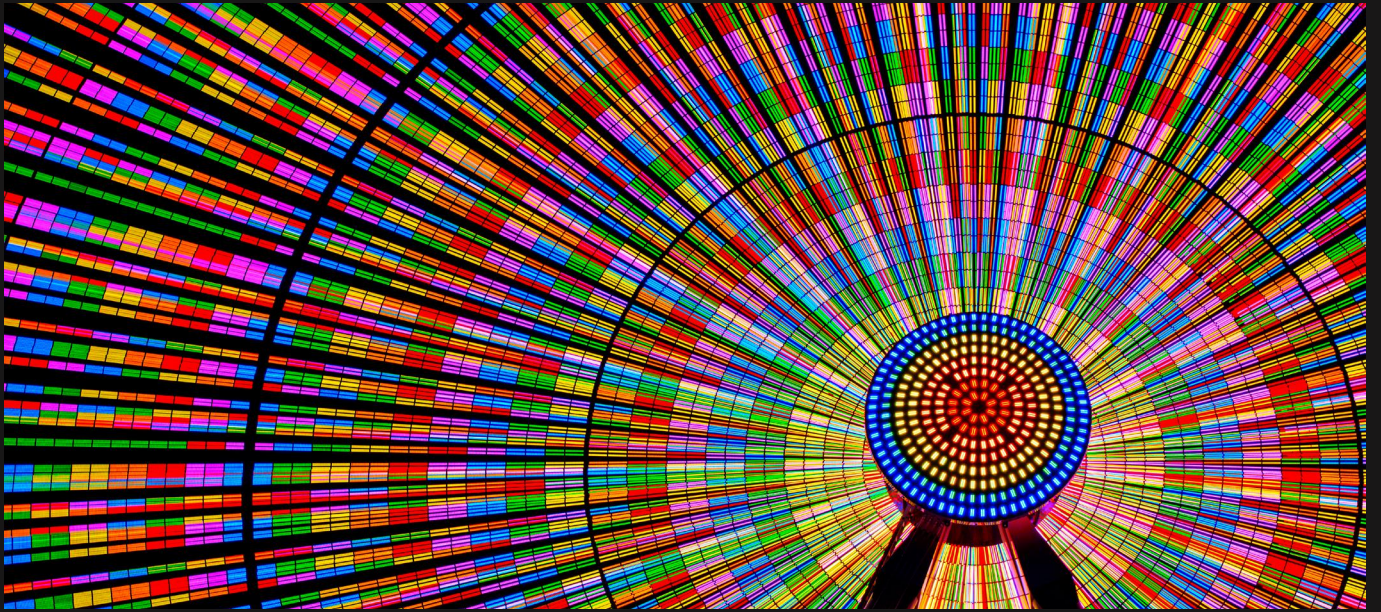


LG MAGNIT



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

By carefully selecting an LED chip which is a key factor to determine color purity, its narrowed wavelength allows LG MAGNIT 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.

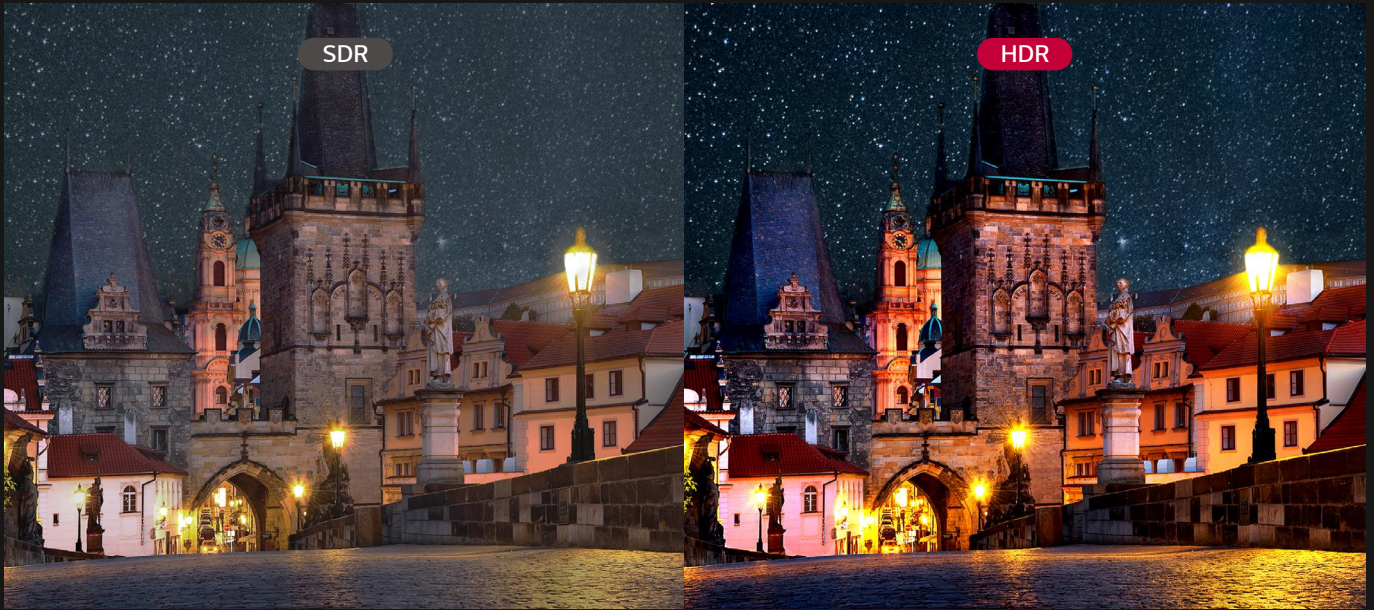


Alpha 7 Intelligent Processor

Intelligent Image Processor

The Alpha 7 Intelligent Processor which is adopted from LG's TV technology recognizes and analyzes the original content, optimizing the clarity and sharpness of the content for itself.

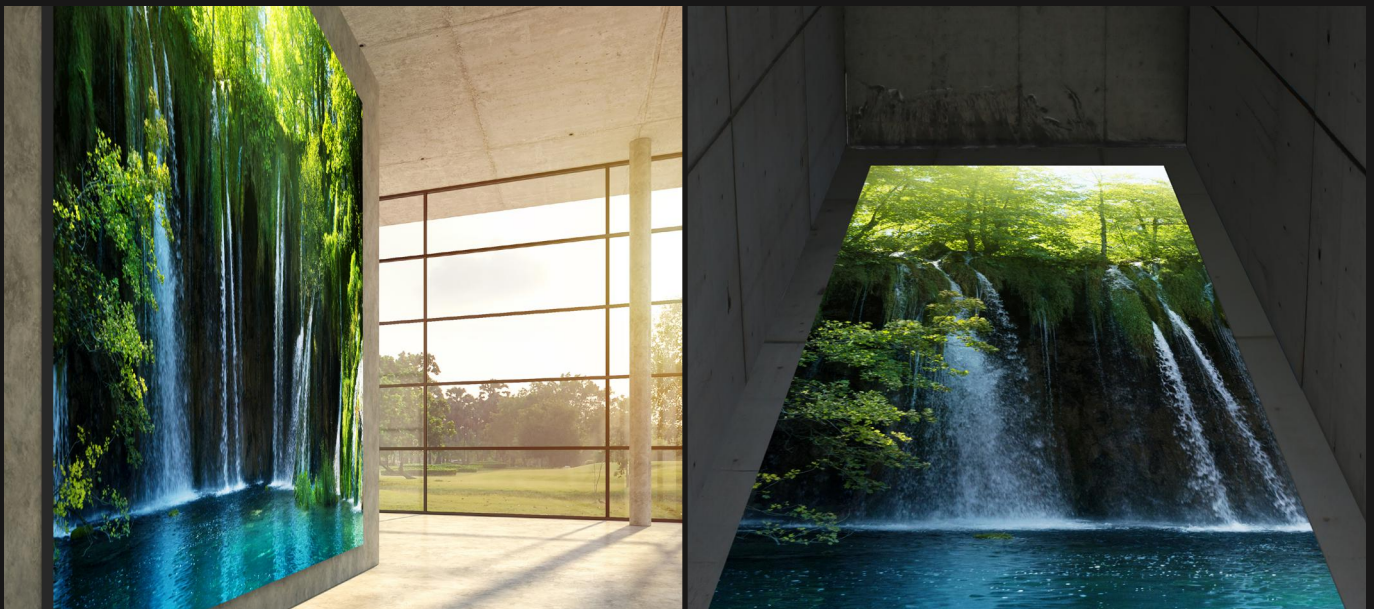
* The above functions are created by using deep learning AI technology to improve the picture quality.



Vivid Color Expression Powered by HDR

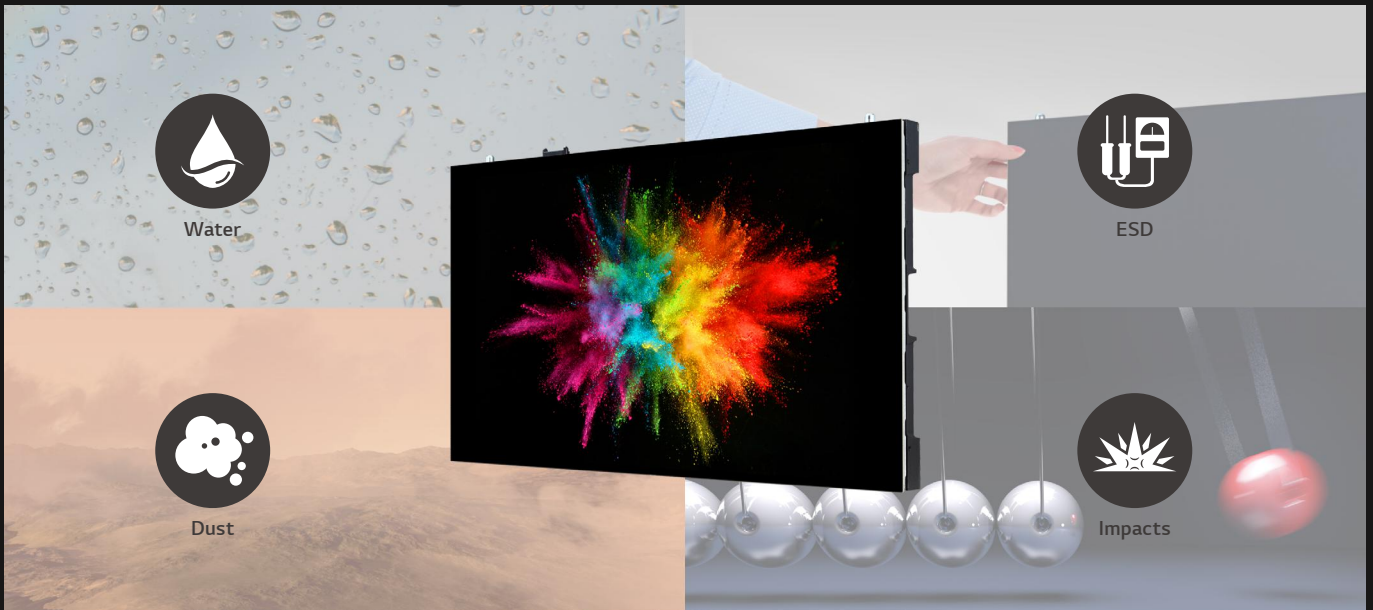
With HDR (HDR10, HDR10 Pro*) support, content becomes vivid with great visual impact. The wider color spectrum and greater contrast ratio allow viewers to fully enjoy lively content.

* 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. In other words, the original color can be appreciated even from the side angles, captivating various pedestrians even if it is installed in a large public places.



Care Less with Sturdy Design

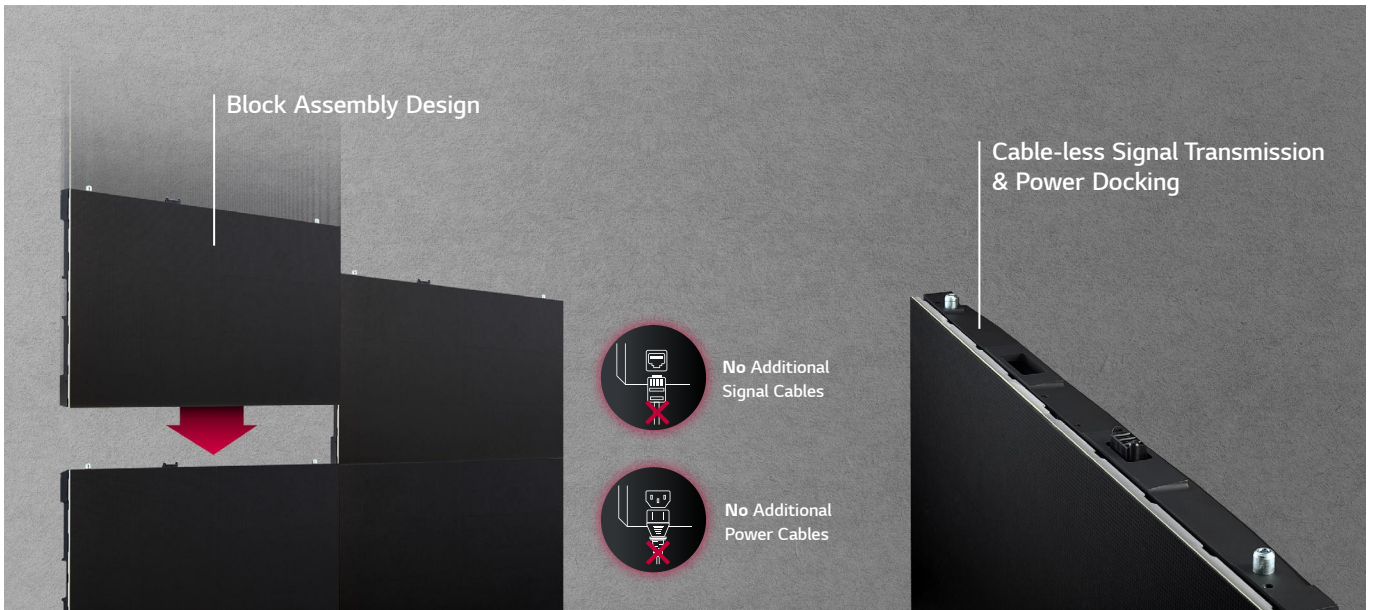
Through several layers of coated film, LG MAGNIT can protect its LED chips from risks caused by water drops, dust, static electricity or physical impacts. Considering that it is usually installed in public places where many people come and go, its stability is vitally important to minimize unforeseen accidents.

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



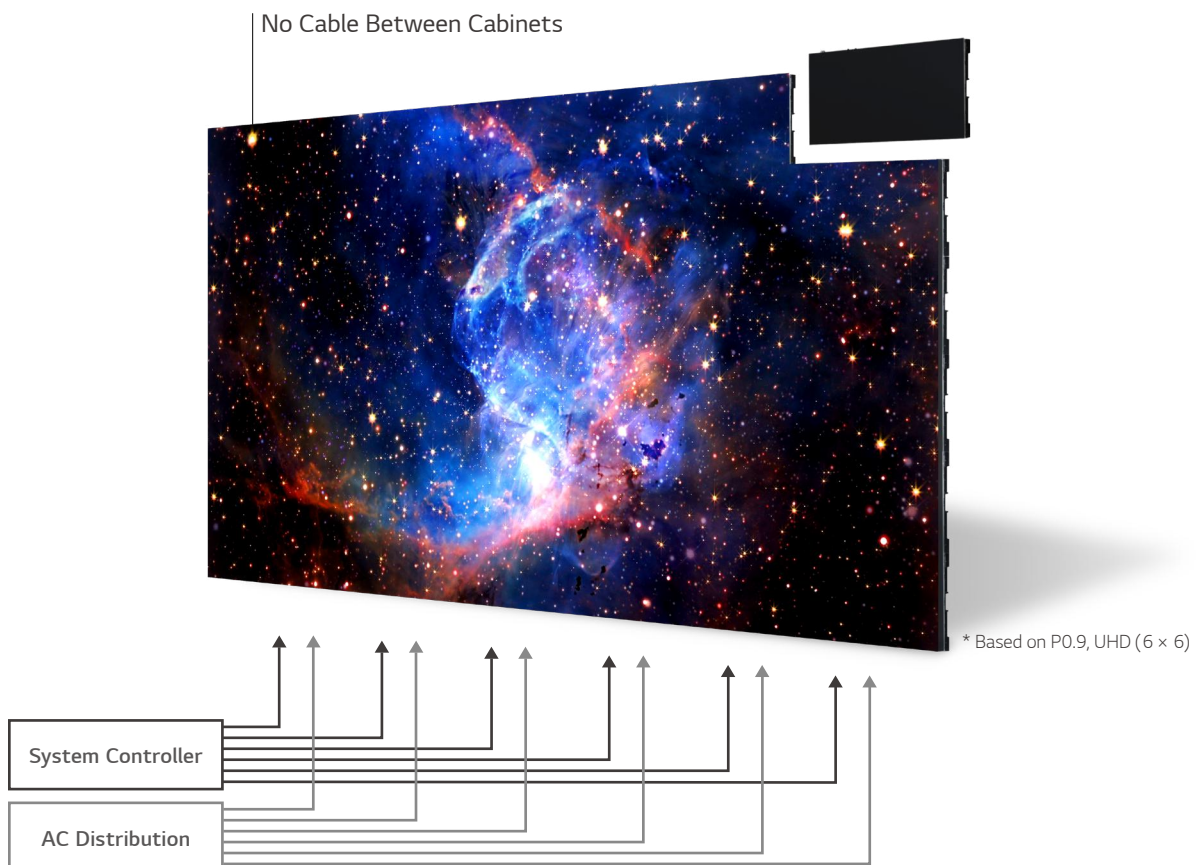
Sleek Look with Smooth Surface

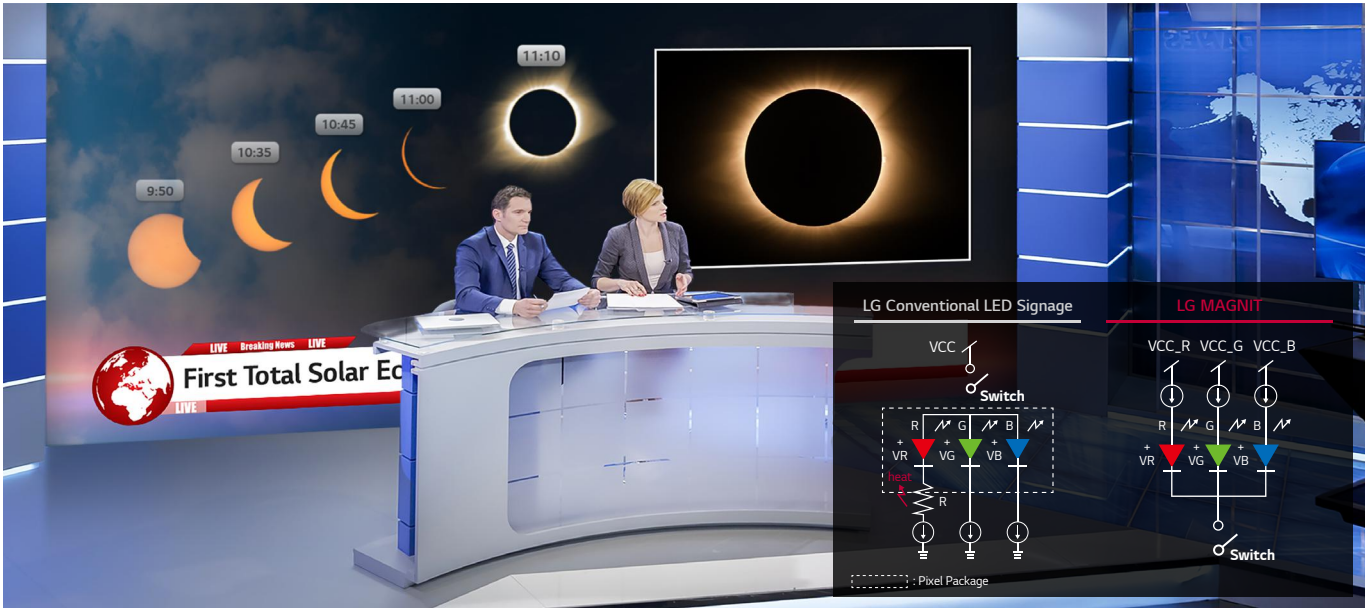
The screen surface of LG MAGNIT is very smooth just as LCD, making it looks nice even when the screen is off. Also, audiences or installers feel soft when touching the screen. If fingerprints are on the surface, they can be simply removed by wiping with a soft cloth without the need for any chemicals.



Optimum Cable-less Design for Simple Installation

The Cable-less Signal Transmission technology has been adopted for innovative LG MAGNIT. Thanks to this, no signal and power cable connection is required between the cabinets and you don't need cables except for connecting the screen to its system controller and power. When configuring a UHD resolution screen of 16:9 ratio, only 6 signal cables and 6 power cables are needed. This way, its block assembly design facilitates hassle-free installation and simplifies 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 right necessary 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 circuit parts inside the LED cabinet go to a standby mode. This saves additional power consumption and enables the product to be reactivated simply by using a remote control.



Intuitive UX with Remote Control

By applying the same intuitive UI* as general LG digital signage, the user can easily adapt to it. It also allows users to easily access the settings by using a remote control instead of connecting to a PC.

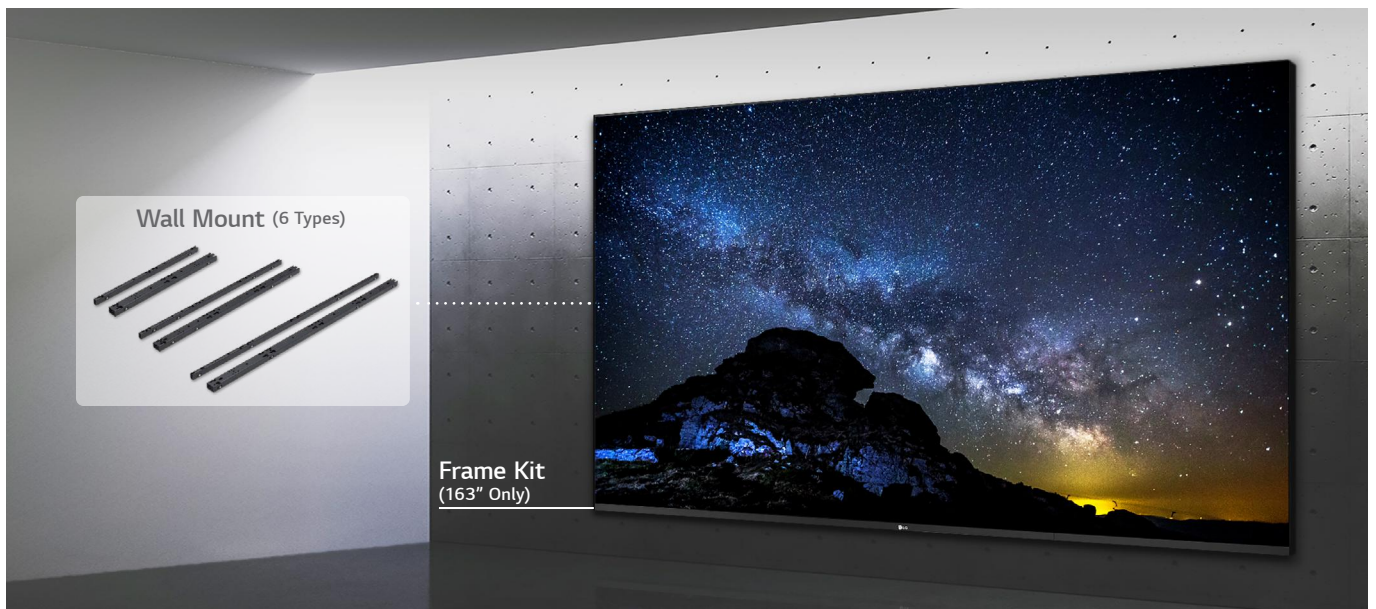
* Available for over 1,280 × 720 resolution screen.



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 automated control*, boosting business management efficiency.

* Network-based control



Dedicated Accessories for Tidiness

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 screen of 163-inch, Ultra HD resolution, the frame kit will make the display have a smooth edge.



Total Content Management

LG MAGNIT is compatible with LG 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.

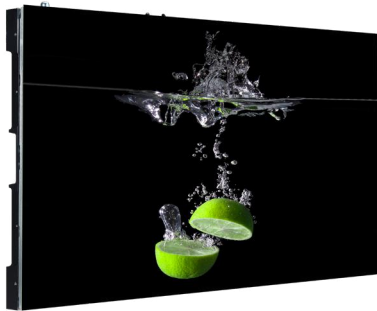


Real-time ConnectedCare Service

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

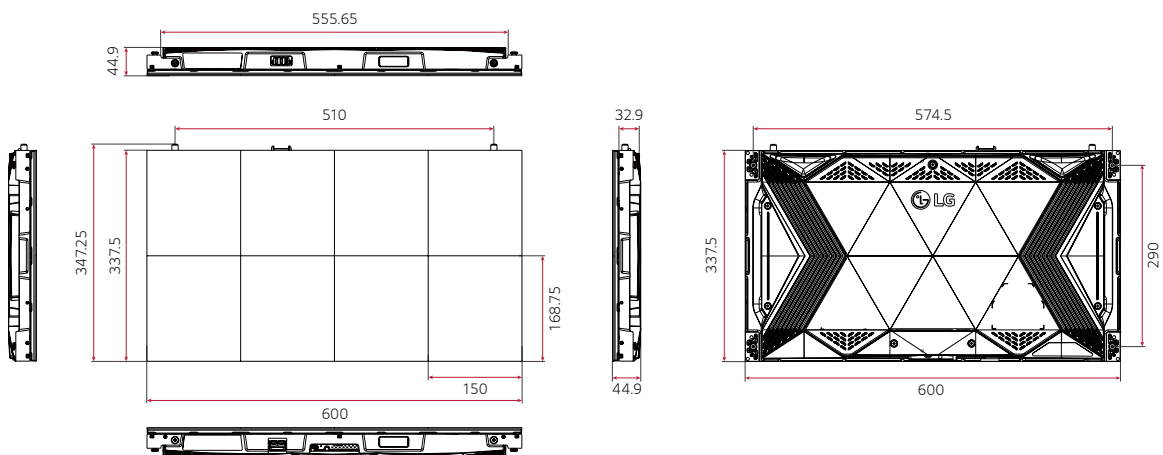


Cabinet	LSAB007 / LSAB009 / LSAB012
Pixel Configuration	Micro
Pixel Pitch	0.78 / 0.94 / 1.25 mm
Brightness	P0.78 : 500 / 1,000 nit (Peak) P0.94 : 600 / 1,200 nit (Peak.) P1.25 : 800 / 1,600 nit (Peak.)
Contrast Ratio	P0.78 / P1.25 : 150,000 : 1 @10lux P0.94 : 100,000 : 1 @10lux
Processing Depth	20 (HDR10, HDR10 Pro)
Service Access	Front and Rear

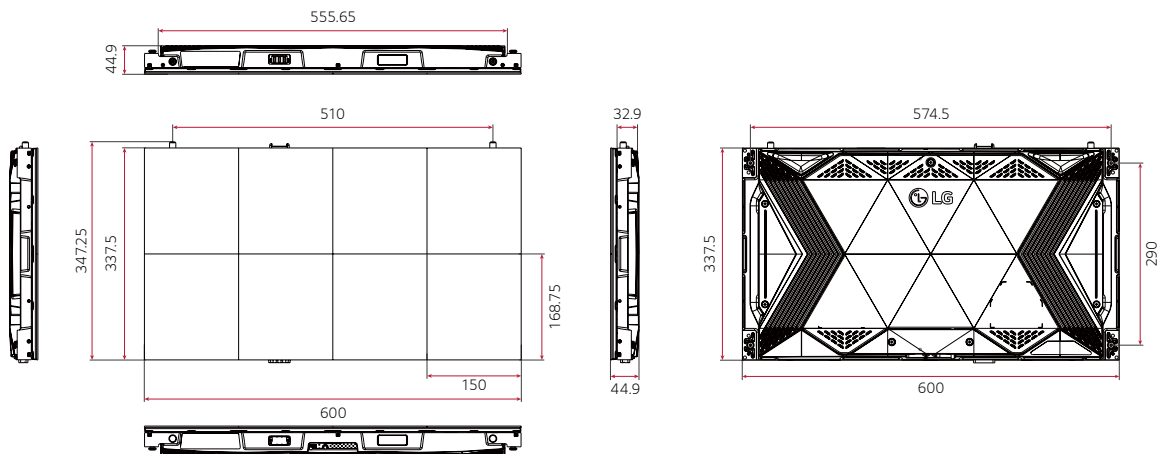
DIMENSION

(unit: mm)

MAIN CABINET



SECONDARY CABINET



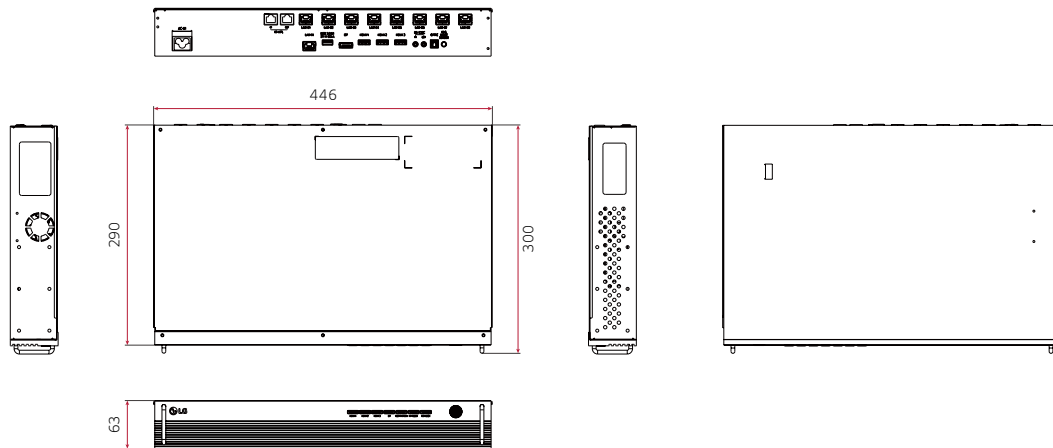
PRODUCT INFORMATION



System Controller	CSAB-00914 / CSAB-00915D / CSAB-012X
Resolution	3,840 × 2,160 @ 60Hz
Input	HDMI 2.0, HDCP 2.2, DP 1.2 / HDCP 1.3
Output	Ethernet (8-channel)
Control	LAN, RS-232C (LOOP)

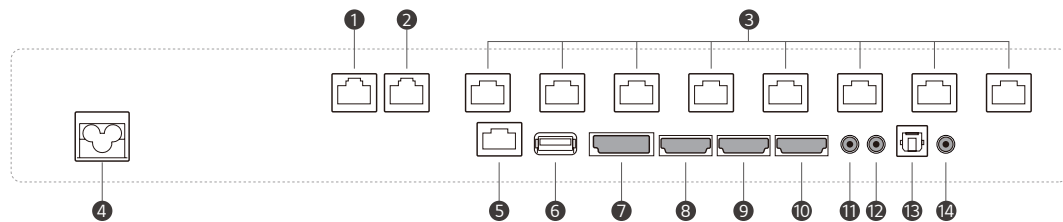
DIMENSION

(unit: mm)



CONNECTIVITY

SYSTEM CONTROLLER



- ① IR-APL IN
- ② IR-APL OUT
- ③ Ethernet (5Gbps)
- ④ AC-IN
- ⑤ LAN IN
- ⑥ USB 2.0 IN
- ⑦ DP
- ⑧ HDMI 1
- ⑨ HDMI 2
- ⑩ HDMI 3
- ⑪ RS-232C IN
- ⑫ RS-232C OUT
- ⑬ OPTIC
- ⑭ IR

SPECIFICATIONS

Panel	Model Name	LSAB007-*2	LSAB009-*14/*16	LSAB009-*15	LSAB012-*12	
Physical Parameters	Pitch Name	P0.78	P0.94	P0.94	P1.25	
	Pixel Configuration	Micro	Micro	Micro	Micro	
	Pixel Pitch (mm)	0.78	0.94	0.94	1.25	
	Module Resolution (W x H)	192 x 216	320 x 120	320 x 120	240 x 90	
	Module Dimensions (W x H, mm)	150 x 168.8	300 x 112.5	300 x 112.5	300 x 112.5	
	Weight per Module (kg)	0.16	0.19	0.19	0.18	
	No. of Modules per Cabinet (W x H)	4 x 2	2 x 3	2 x 3	2 x 3	
	Cabinet Resolution (W x H)	768 x 432	640 x 360	640 x 360	480 x 270	
	Cabinet Dimensions (W x H x D, mm)	600 x 337.5 x 44.9	600 x 337.5 x 44.9	600 x 337.5 x 44.9	600 x 337.5 x 44.9	
	Cabinet Surface Area (m ²)	0.203	0.203	0.203	0.203	
	Weight per Cabinet (kg/Cabinet)	7.6	7.0	6.8	7.2	
	Weight per Square Meter (kg/m ²)	37.5	34.6	33.6	35.5	
	Optical Specifications	Physical Pixel Density (pixels/m ²)	1,638,400	1,137,778	1,137,778	640,000
Flatness of Cabinet (mm)		± 0.5	± 0.5	± 0.5	± 0.5	
Cabinet Material		Die Casting Aluminum	Die Casting Aluminum	Extrusion Aluminum	Die Casting Aluminum	
Service Access		Front and Rear ¹⁾	Front and Rear ¹⁾	Front and Rear ¹⁾	Front and Rear ¹⁾	
Max Brightness (After Calibration, nit)		500 / 1,000 (Peak)	600 / 1,200 (Peak)	600 / 1,200 (Peak)	800 / 1,600 (Peak)	
Color Temperature (K)		3,200-9,300 (Default 7,300)	3,200-9,300 (Default 7,300)	3,200-9,300 (Default 7,300)	3,200-9,300 (Default 7,300)	
Visual Viewing Angle (H x V)		150 x 150	160 x 160	160 x 160	160 x 160	
Brightness Uniformity		95%	95%	95%	95%	
Color Uniformity		±0.02 Cx, Cy	±0.02 Cx, Cy	±0.02 Cx, Cy	±0.02 Cx, Cy	
Contrast Ratio		150,000 : 1 @ 10lux	100,000 : 1 @ 10lux	100,000 : 1 @ 10lux	150,000 : 1 @ 10lux	
Processing Depth (bit)		20 (HDR10, HDR10 Pro)	20 (HDR10, HDR10 Pro)	20 (HDR10, HDR10 Pro)	20 (HDR10, HDR10 Pro)	
Electrical Specifications		Power Consumption (W/Cabinet, Max.)	110	72	72	82
		Power Consumption (W/Cabinet, Avg.)	65	47	47	50
	Power Consumption (W/m ² , Max.)	543	356	356	405	
	Heat Dissipation (BTU/h/Cabinet, Max.)	375	246	246	280	
	Heat Dissipation (BTU/h/Cabinet, Avg.)	222	161	161	171	
	Heat Dissipation (BTU/h/m ² , Max.)	1,853	1,215	1,215	1,385	
	Power Supply (V)	100 to 240	100 to 240	100 to 240	100 to 240	
	Frame Rate (Hz)	50 / 60	50 / 60	50 / 60	50 / 60	
Operation Specifications	Refresh Rate (Hz)	3,840	3,840	3,840	3,840	
	LED Lifetime (Half Brightness)	100,000	100,000	100,000	100,000	
	Operating Temperature (°C)	0 to +40	0 to +40	0 to +40	0 to +40	
	Operating Humidity	10-80% RH	10-80% RH	10-80% RH	10-80% RH	
Certification	IP Rating Front / Rear	IP50 / IP20	IP50 / IP20	IP50 / IP20	IP50 / IP20	
	Certification	Safety 60950-1, EMC Class B, BS476 Part7 Class2Y (TBD)	Safety 60950-1, EMC Class B, BS476 Part7 Class2Y	Safety 60950-1, EMC Class B, BS476 Part7 Class2Y	Safety 60950-1, EMC Class B, BS476 Part7 Class1	
	Environment	RoHS	RoHS	RoHS	RoHS	
	Controller	CSAB-0072	CSAB-00914	CSAB-00915D	CSAB-0121	
	90 Degree Corner Cut	No	No	No	No	

¹⁾ Module can be accessed only from the front.

Controller	Model Name	CSAB-00914	CSAB-00915D	CSAB-012X
Max Output Range	Cabinet	LSAB009-*14	LSAB009-*15	LSAB012-*1
	Loading Capacity	3,840 x 2,160 @ 60Hz	3,840 x 2,160 @ 60Hz	3,840 x 2,160 @ 60Hz
Input	Output Resolution	8.2944 Million Pixels	8.2944 Million Pixels	8.2944 Million Pixels
	HDMI	HDMI 2.0	HDMI 2.0	HDMI 2.0
	HDCP	HDCP 2.2	HDCP 2.2	HDCP 2.2
Output	DP	DP 1.2 / HDCP 1.3	DP 1.2 / HDCP 1.3	DP 1.2 / HDCP 1.3
	Ethernet (To LED Screen)	Yes (8-channel)	Yes (8-channel)	Yes (8-channel)
Control	LAN	Yes	Yes	Yes
	RS-232C	Yes (LOOP)	Yes (LOOP)	Yes (LOOP)
Sensor	Ambient Light	Yes	Yes	Yes
	Temperature	Yes	Yes	Yes
Video Processing	Brightness Adjustment	Yes	Yes	Yes
	Chroma Adjustment	Yes	Yes	Yes
	Improved Grayscale at Low Brightness	Yes	Yes	Yes
	Scaling	Yes	Yes	Yes
Application	HDR	HDR10, HDR10 Pro	HDR10, HDR10 Pro	HDR10 Pro
	CMS	SuperSign CMS	SuperSign CMS	SuperSign CMS
	webOS API	Yes	Yes	Yes
	LG ConnectedCare	Yes	Yes	Yes
Mechanical	Configuration SW	LED Assistant	LED Assistant	LED Assistant
	Size (W x H x D, mm)	443 x 63 x 298	443 x 63 x 298	443 x 63 x 298
	Weight (kg)	4.5	4.5	4.5

* Specifications are subject to change without notice. Please make sure to check the product manual for details about product usage.



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