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

LG MAGNIT

Micro LED   True Innovation behind New Depths

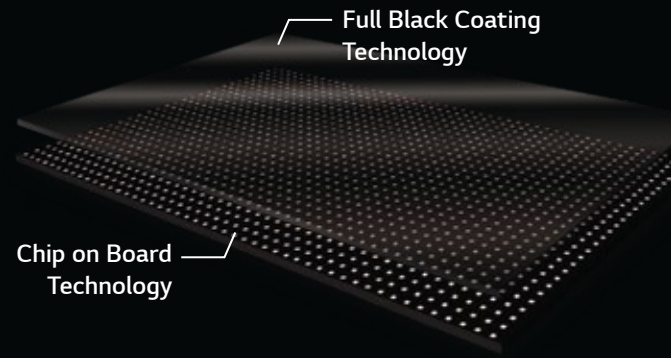Infinity Black

Accurate Colors

Wide Viewing Angle

Intelligent Processor

Cable-Less Concept

High Reliability

Full Black Coating
Technology

Chip on Board
Technology

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
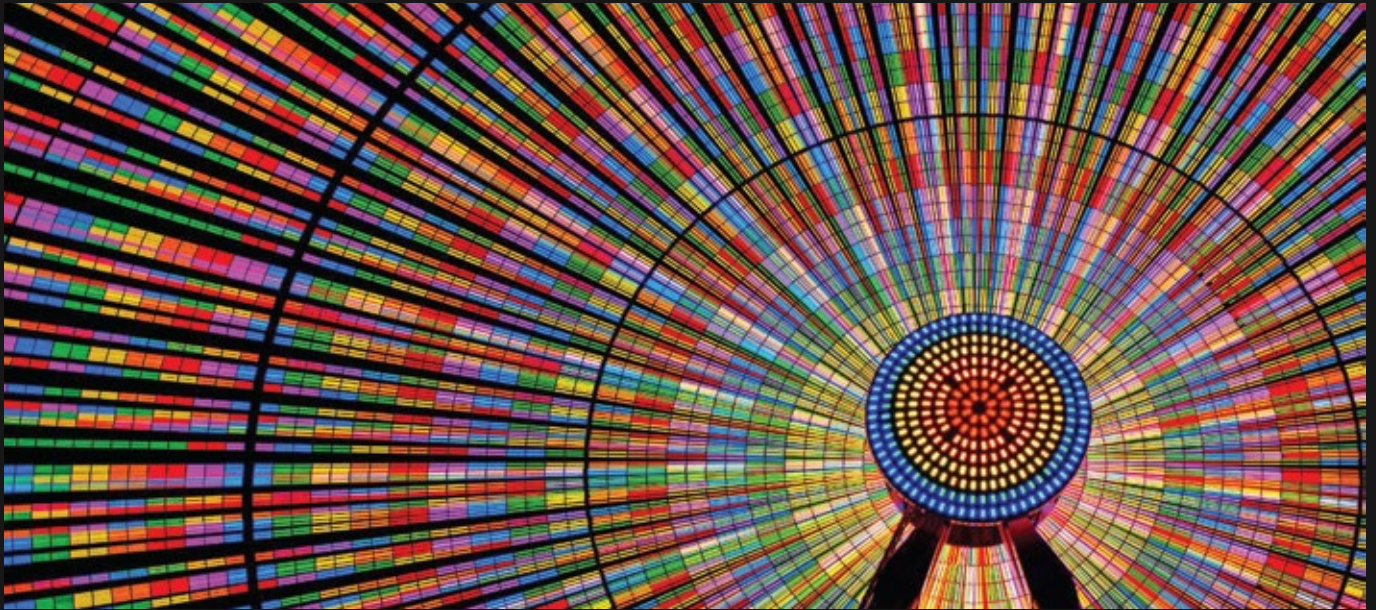
LG Conventional LED Signage

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.

SDR

HDR
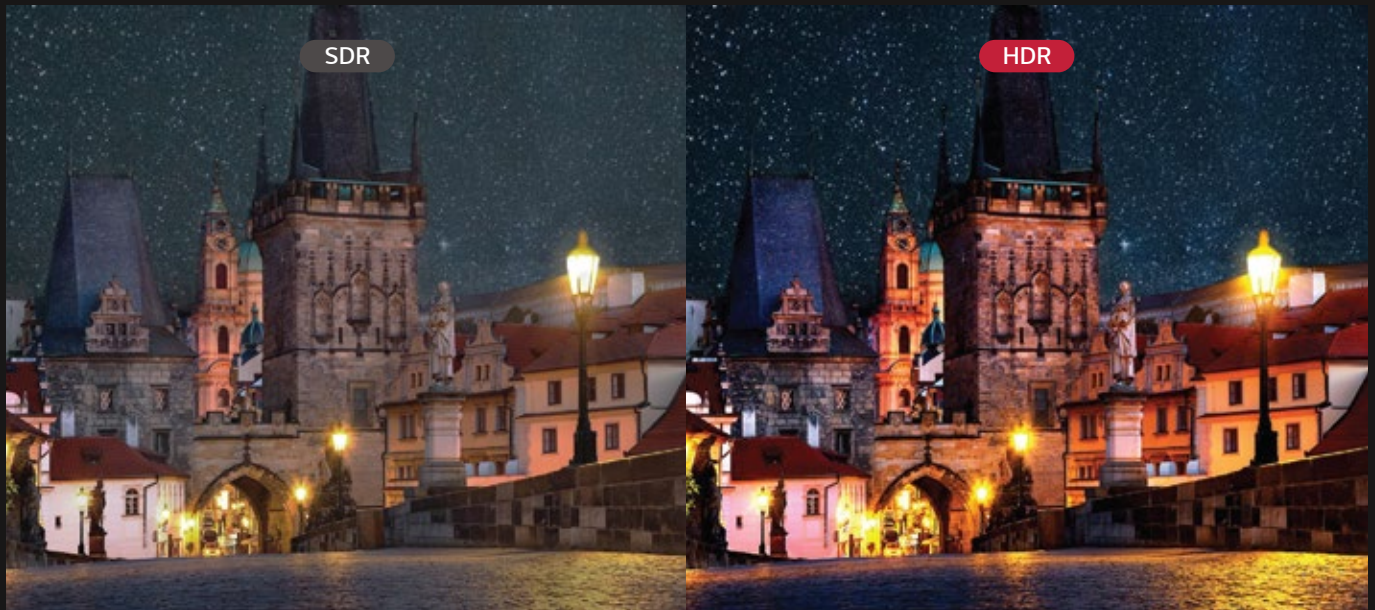
## Vivid Color Expression Powered by HDR

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.
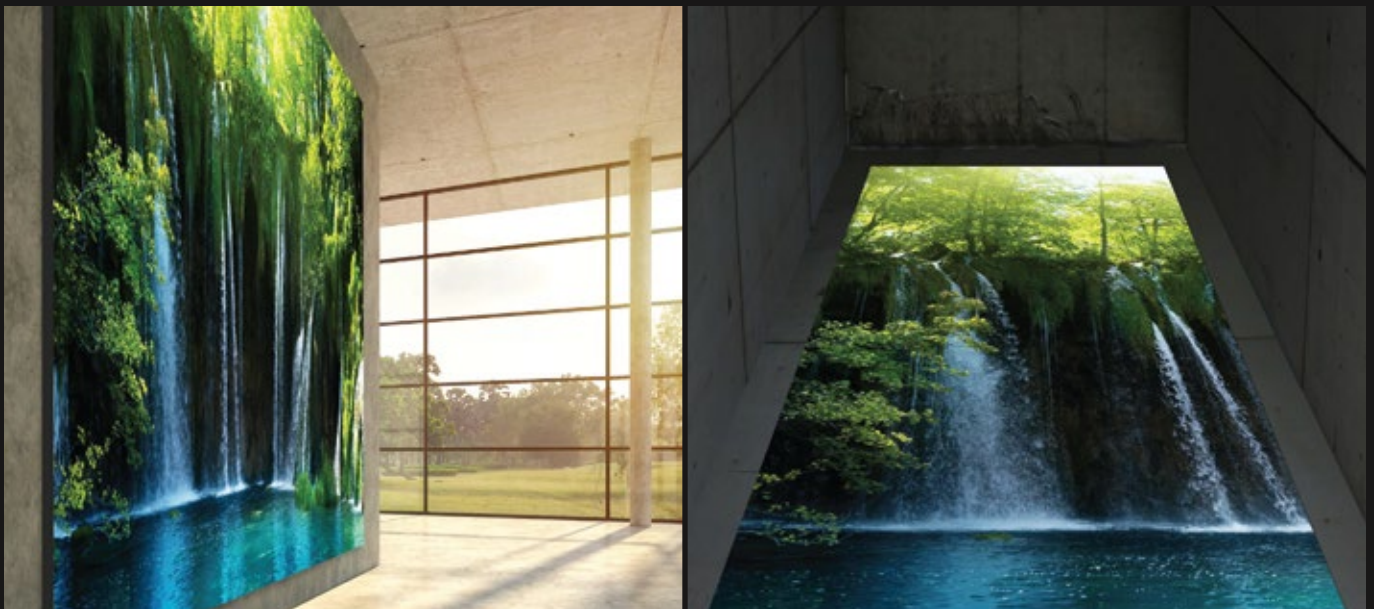
Wide Color Viewing Angle

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.
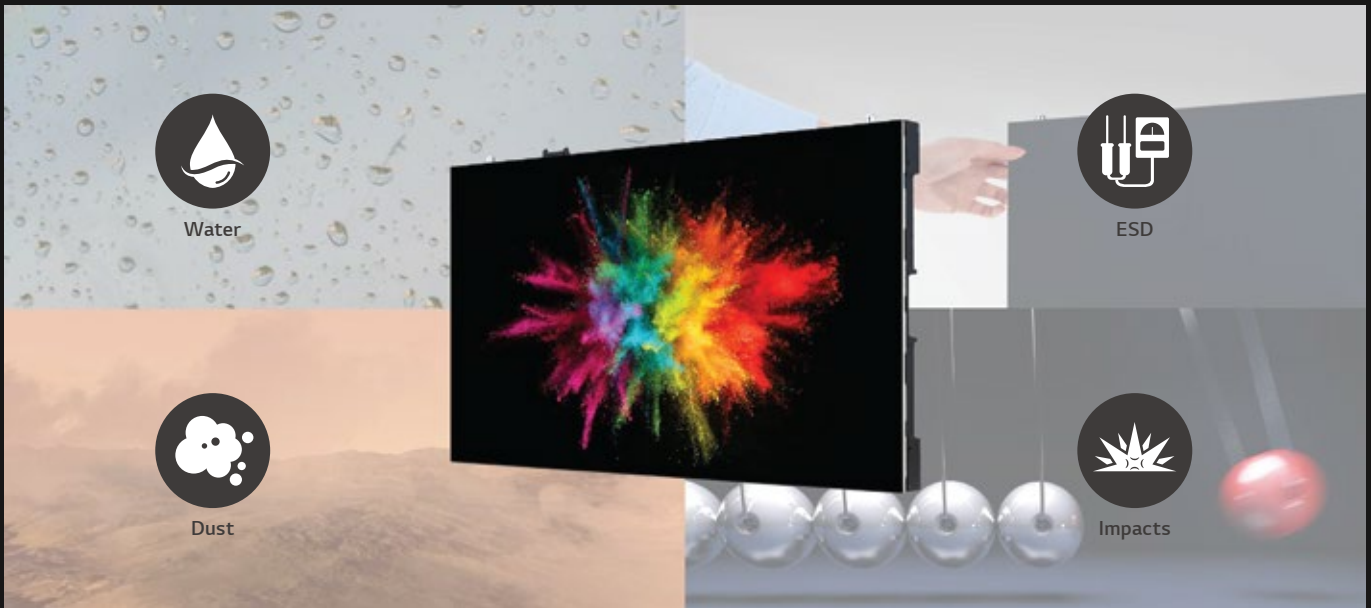
Care Less with Sturdy Design

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.

Block Assembly Design

Cable-less Signal Transmission & Power Docking

No Additional Signal Cables

No Additional Power Cables

Optimum Cable-less Design for Simple Installation

The wireless broadband 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.

No Cable Between Cabinets

* Based on P0.9, UHD (6 × 6)

System Controller

AC Distribution
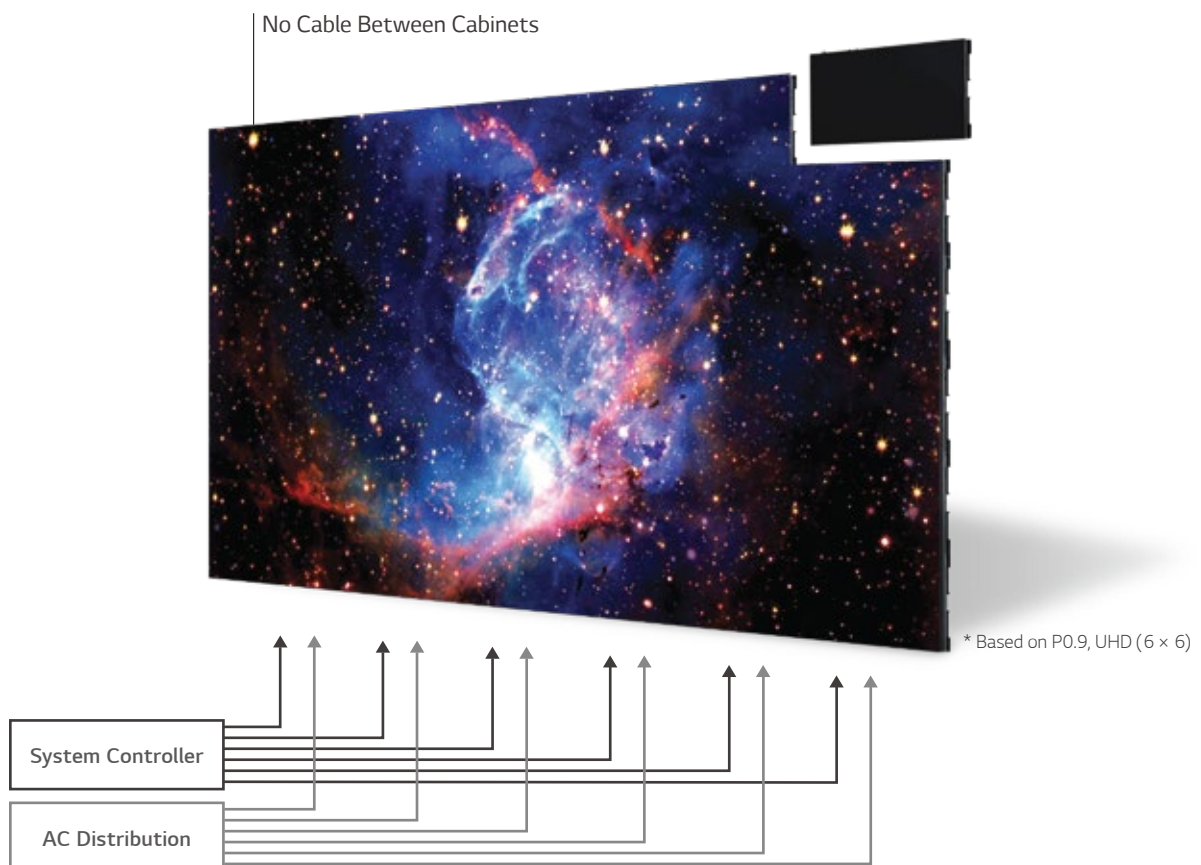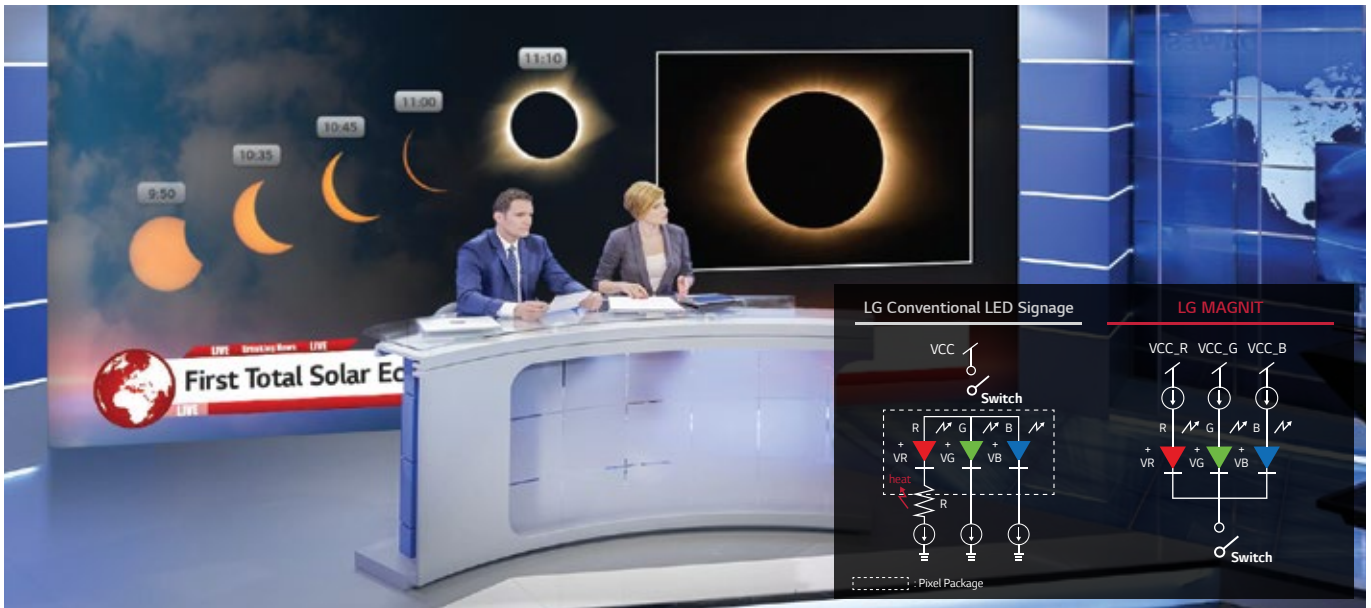
Efficient Power Consumption by Colors

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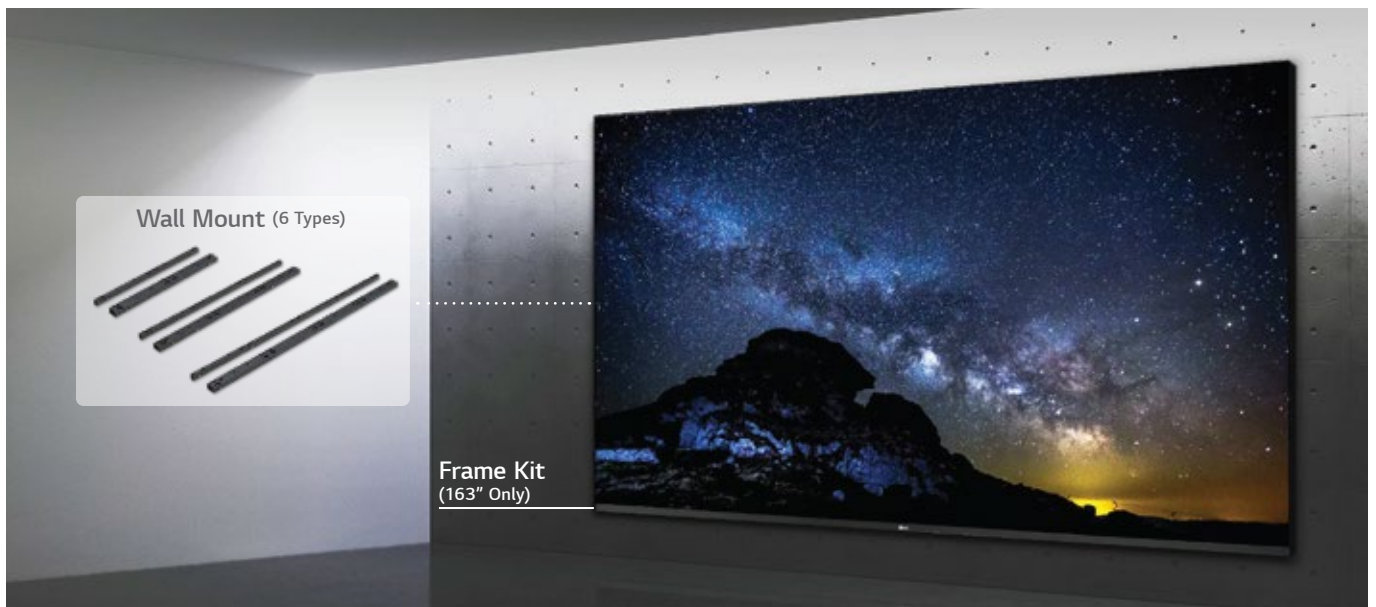
* Available for over 1,280 × 720 resolution screen.

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

Wall Mount (6 Types)

Frame Kit
(163" Only)

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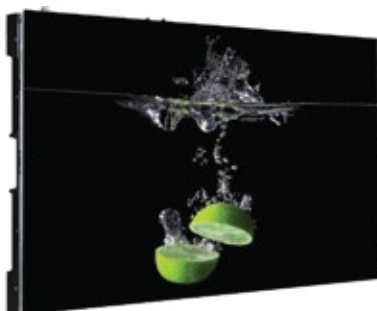
Cabinet	LSAB009 / LSAB012
Pixel Configuration	COB
Pixel Pitch	0.94 / 1.25 mm
Brightness	P0.94 : 600 / 1,200 nit (Peak.) P1.25 : 800 / 1,600 nit (Peak.)
Contrast Ratio	100,000 : 1 @10lux / 150,000 : 1 @10lux
Processing Depth	20 (HDR10, HDR10 Pro)
Service Access	Front and Rear

DIMENSION

(unit: mm)

MAIN CABINET
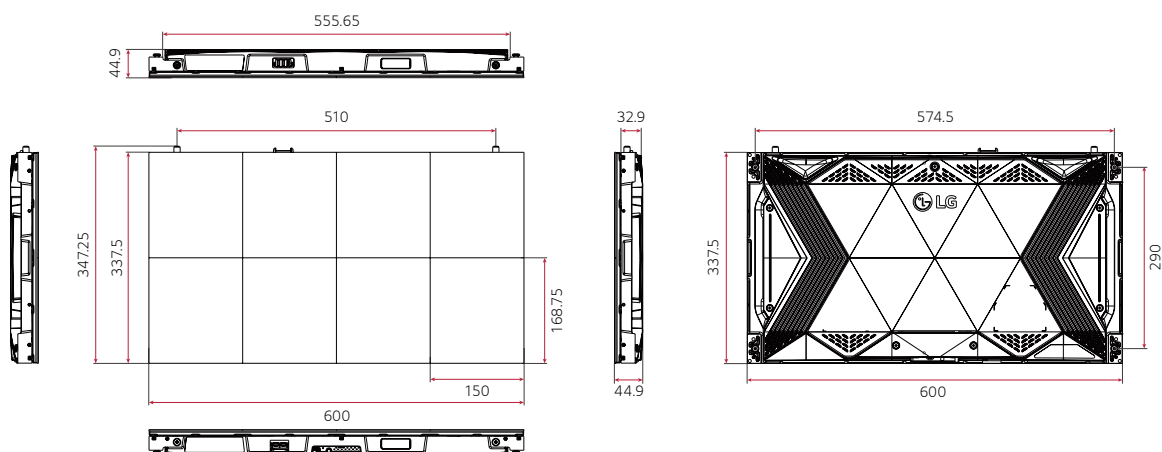
SECONDARY CABINET

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

PRODUCT INFORMATION

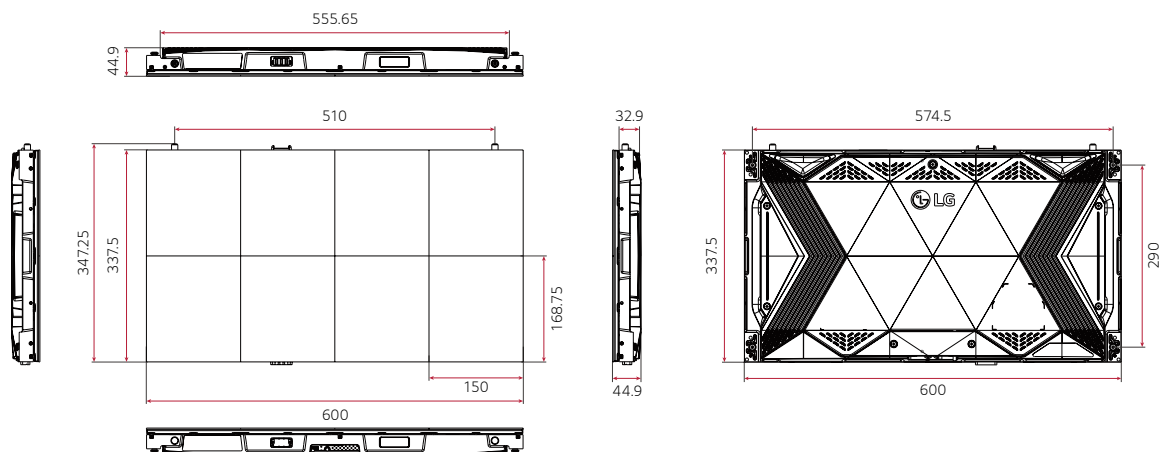| System Controller	CSAB-00914 / CSAB-00915D / CSAB-012X
Resolution	3,840 × 2,160 @ 60Hz
Input	HDMI 2.0, HDCP 2.2, DP 1.2 / HDCP 2.2
Output	Ethernet (8-Channel)
Control	LAN, RS-232C (Loop)

DIMENSION
(unit: mm)

446

290

300

63
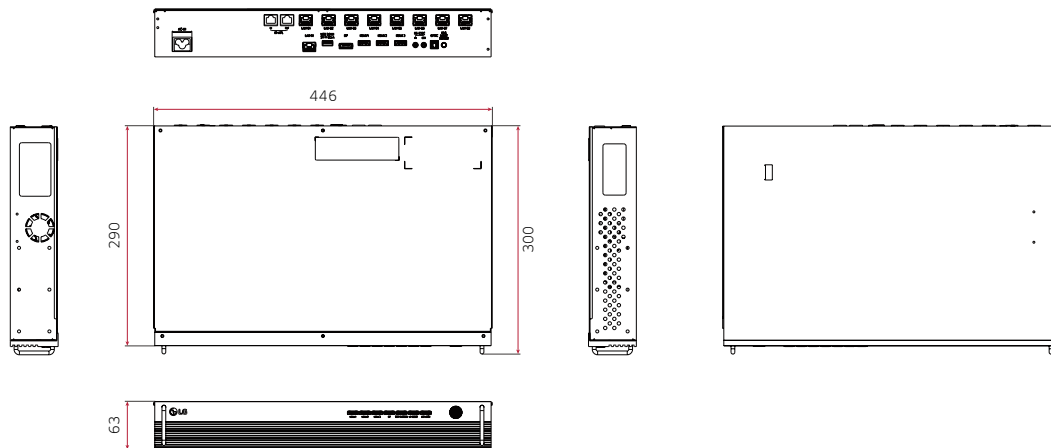
CONNECTIVITY
SYSTEM CONTROLLER

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

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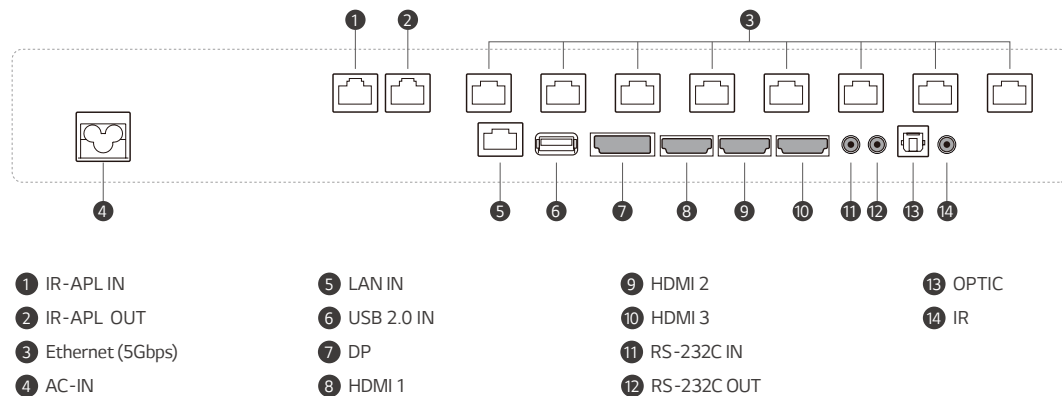
SPECIFICATIONS

Panel	Model Name	LSAB009-M14/S14	LSAB009-M15/S15	LSAB012-M12/S12
Physical Parameters	Pitch Name	P0.94	P0.94	P1.25
	Pixel Configuration	COB	COB	COB
	Pixel Pitch (mm)	0.94	0.94	1.25
	Module Resolution (W × H)	320 × 120	320 × 120	240 × 90
	Module Dimensions (W × H, mm)	300 × 112.5	300 × 112.5	300 × 112.5
	Weight per Module (kg)	0.19	0.19	0.18
	No. of Modules per Cabinet (W × H)	2 × 3	2 × 3	2 × 3
	Cabinet Resolution (W × H)	640 × 360	640 × 360	480 × 270
	Cabinet Dimensions (W × H × D, mm)	600 × 337.5 × 44.9	600 × 337.5 × 44.9	600 × 337.5 × 44.9
	Cabinet Surface Area (m²)	0.203	0.203	0.203
	Weight per Cabinet (kg/Cabinet)	7.0	6.8	7.2
	Weight per Square Meter (kg/m²)	34.6	33.6	35.5
	Physical Pixel Density (pixels/m²)	1,137,778	1,137,778	640,000
	Flatness of Cabinet (mm)	± 0.5	± 0.5	± 0.5
	Cabinet Material	Die Casting Aluminum	Extrusion Aluminum	Die Casting Aluminum
	Service Access	Front and Rear[1]	Front and Rear[1]	Front and Rear[1]
Optical Specifications	Max Brightness (After Calibration, nit)	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)
	Visual Viewing Angle (H × V)	160 × 160	160 × 160	160 × 160
	Brightness Uniformity	95%	95%	95%
	Color Uniformity	±0.02 Cx, Cy	±0.02 Cx, Cy	±0.02 Cx, Cy
	Contrast Ratio	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)
Electrical Specifications	Power Consumption (W/Cabinet, Max.)	72	72	82
	Power Consumption (W/Cabinet, Avg.)	47	47	50
	Power Consumption (W/m², Max.)	356	356	405
	Heat Dissipation (BTU/h/Cabinet, Max.)	246	246	280
	Heat Dissipation (BTU/h/Cabinet, Avg.)	161	161	171
	Heat Dissipation (BTU/h/m², Max.)	1,215	1,215	1,385
	Power Supply (V)	100 to 240	100 to 240	100 to 240
	Frame Rate (Hz)	50 / 60	50 / 60	50 / 60
	Refresh Rate (Hz)	3,840	3,840	3,840
Operation Specifications	LED Lifetime (Half Brightness)	100,000	100,000	100,000
	Operating Temperature (°C)	0 to +40	0 to +40	0 to +40
	Operating Humidity	10-80% RH	10-80% RH	10-80% RH
	IP Rating Front / Rear	IP50 / IP20	IP50 / IP20	IP50 / IP20
Certification		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
Controller		CSAB-00914	CSAB-00915D	CSAB-0121

[1] Module can be accessed only from the front.

Controller	Model Name	CSAB-00914	CSAB-00915D	CSAB-012X
Max Output Range	Cabinet	LSAB009-M14/S14	LSAB009-M15/S15	LSAB012-M1/S1
	Loading Capacity	3,840 × 2,160 @ 60Hz	3,840 × 2,160 @ 60Hz	3,840 × 2,160 @ 60Hz
	Output Resolution	8.2944 Millon Pixels	8.2944 Millon Pixels	8.2944 Millon Pixels
Input	HDMI	HDMI 2.0	HDMI 2.0	HDMI 2.0
	HDCP	HDCP 2.2	HDCP 2.2	HDCP 2.2
	DP	DP 1.2 / HDCP 2.2	DP 1.2 / HDCP 2.2	DP 1.2 / HDCP 2.2
Output	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
	HDR	HDR10, HDR10 Pro	HDR10, HDR10 Pro	HDR10 Pro
Application	CMS	SuperSign CMS	SuperSign CMS	SuperSign CMS
	webOS API	Yes	Yes	Yes
	LG ConnectedCare	Yes	Yes	Yes
	Configuration SW	LED Assistant	LED Assistant	LED Assistant
Mechanical	Size (W × H × D, mm)	443 × 63 × 298	443 × 63 × 298	443 × 63 × 298
	Weight (kg)	4.5	4.5	4.5
Memory	Internal Storage:	16GB	16GB	16GB

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