LG | Business Solutions

SMART CITY PROJECT

reddot winner 2020

LG LED Signage LSAA Series

True Innovation Behind Simplicity

EAN CODE:
8806091052001 (LSAA012-MX)
8806091051998 (LSAA012-SX)
8806091051981 (CSAA-012X)

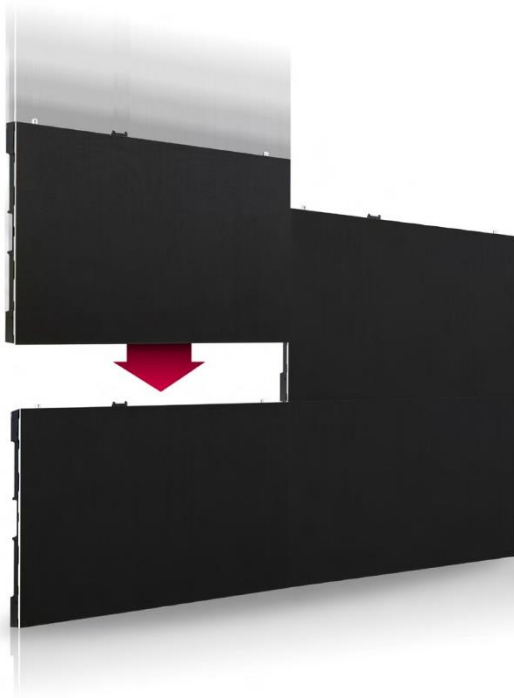Optimum Cable-less Installation

AI-Powered Image Processor

Dedicated Accessories
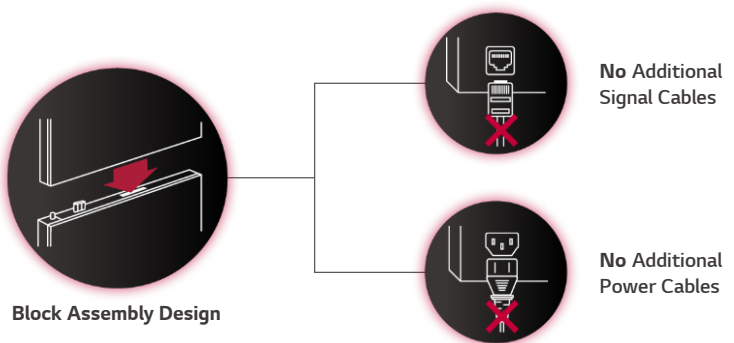
Meeting Room Solution Compatibility

OPTIMUM CABLE-LESS DESIGN FOR SIMPLE INSTALLATION

Why **"Optimum Cable-less"** LED

The LSAA series is the innovative LED signage applying the wireless transmission technology with *non-contact connectors. For up to UHD resolution with the 16:9 ratio, it does not require a cable connection between the cabinets to supply signal & power. Its block assembly design makes the LSAA series easier to be installed than ever before.

* Non-Contact Connectors: Near-field wireless connectors that use RF(Radio Frequency) to transmit and receive data between two devices.
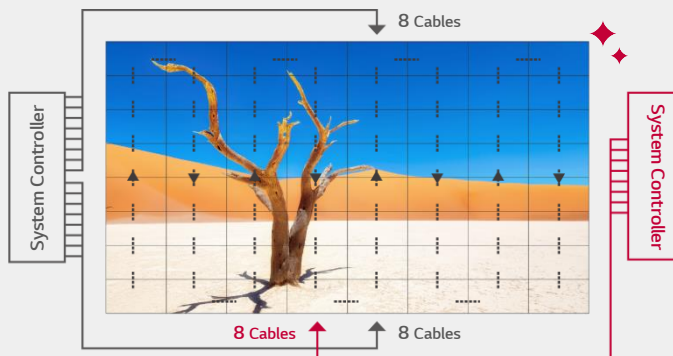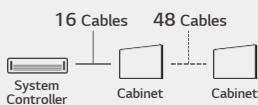
Block Assembly Design

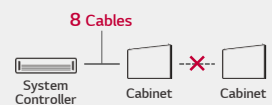**No** Additional Signal Cables

No Additional Power Cables

LG LAS-V Series	LG LSAA Series

Number of Signal Cables

64 Cables

16 Cables   48 Cables

System Controller   Cabinet   Cabinet

8 Cables

System Controller

System Controller

8 Cables   8 Cables

Number of Signal Cables

8 Cables

8 Cables
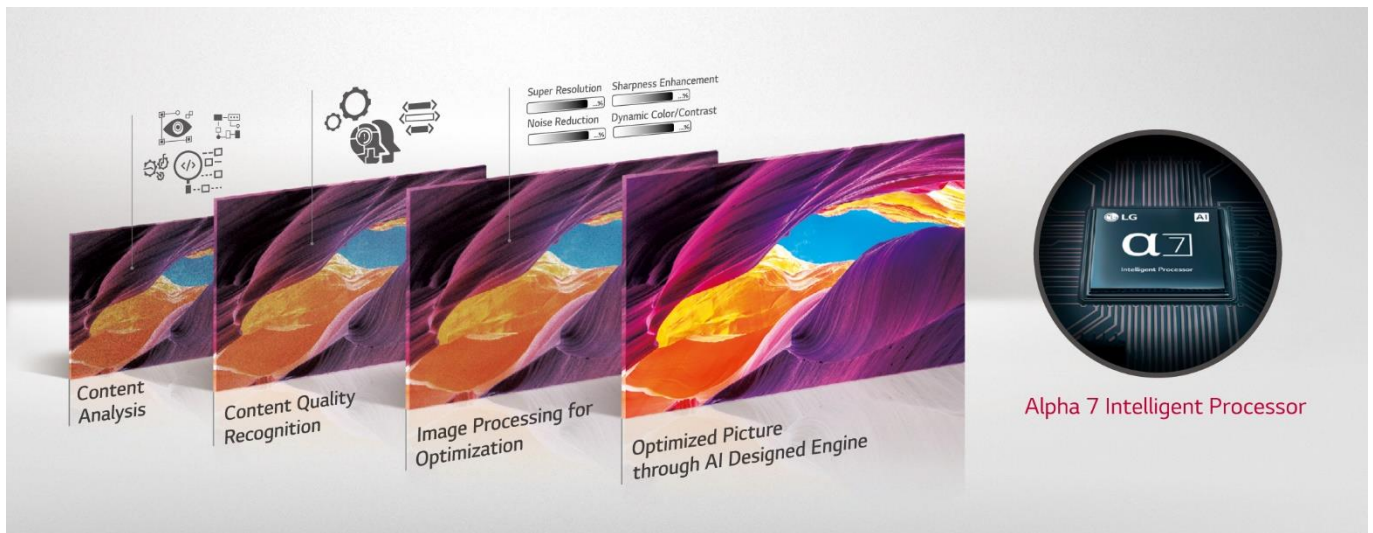
System Controller   Cabinet   Cabinet

* Based on P1.2, 16:9, UHD Resolution (8 x 8 Cabinets)

Wireless Data Transfer & **Cable-less** Power Docking

POWERFUL PICTURE QUALITY

Optimized Image Quality with AI-powered Image Processor

The "Alpha 7 Intelligent Processor" applied to the LSAA series 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.
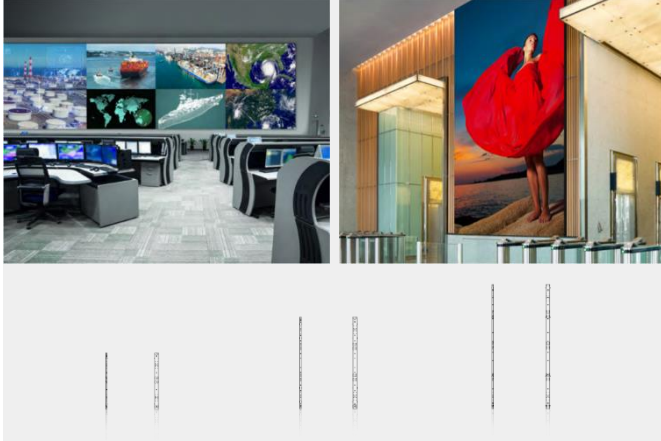

Vivid Color Expression Powered by HDR

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 for processing HDR signal by using enhanced dynamic tone mapping.

OPTIMUM LED DISPLAY FOR ENTERPRISE USAGE
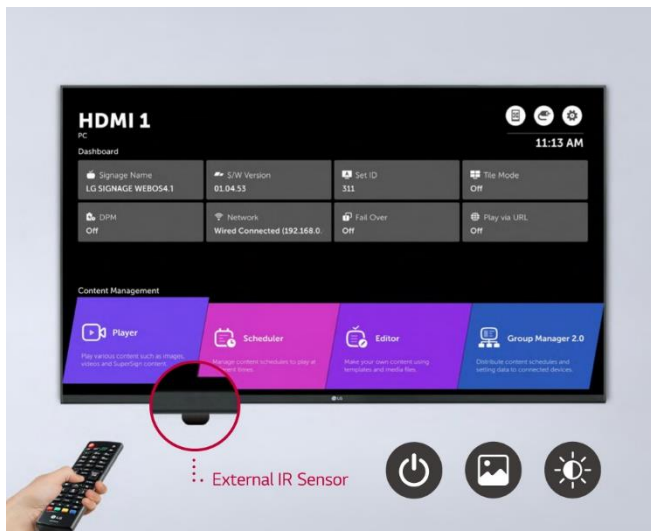
» **Wall Mount Kit**
for Various Installation in Size

» **Frame Kit**
for 16:9 Installation in FHD / UHD Resolution

P0.9 (163". UHD)

P1.2 (108". FHD)

Dedicated Accessories Available

The screen size can be easily expanded as desired by using the dedicated wall mount kits. Also in case of 16:9 FHD / UHD resolution screen, 2 types of frame kit are provided so that the screen can be installed more neatly.

Easy Remote Control Support

The LSAA series allows users to easily access the settings, such as Picture Mode, volume, etc. by using a remote control instead of connecting to a PC. It uses the same UI as general LG digital signage, so users can easily adapt to it.

* The easy-viewing UI menu is available for over 1,280×720 resolution screens.

Compatibility with AV Conference Systems

The LSAA series has been certified Crestron Connected® for a high level of compatibility with professional AV controls to achieve seamless integration and automated control*, boosting business management efficiency.
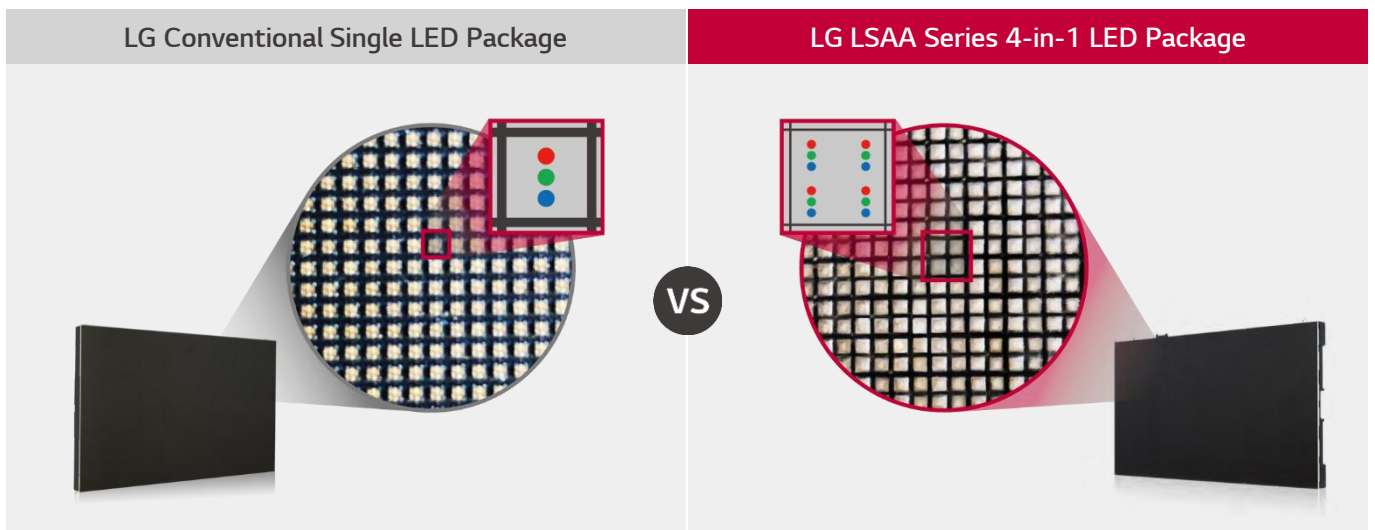
* Network-based control

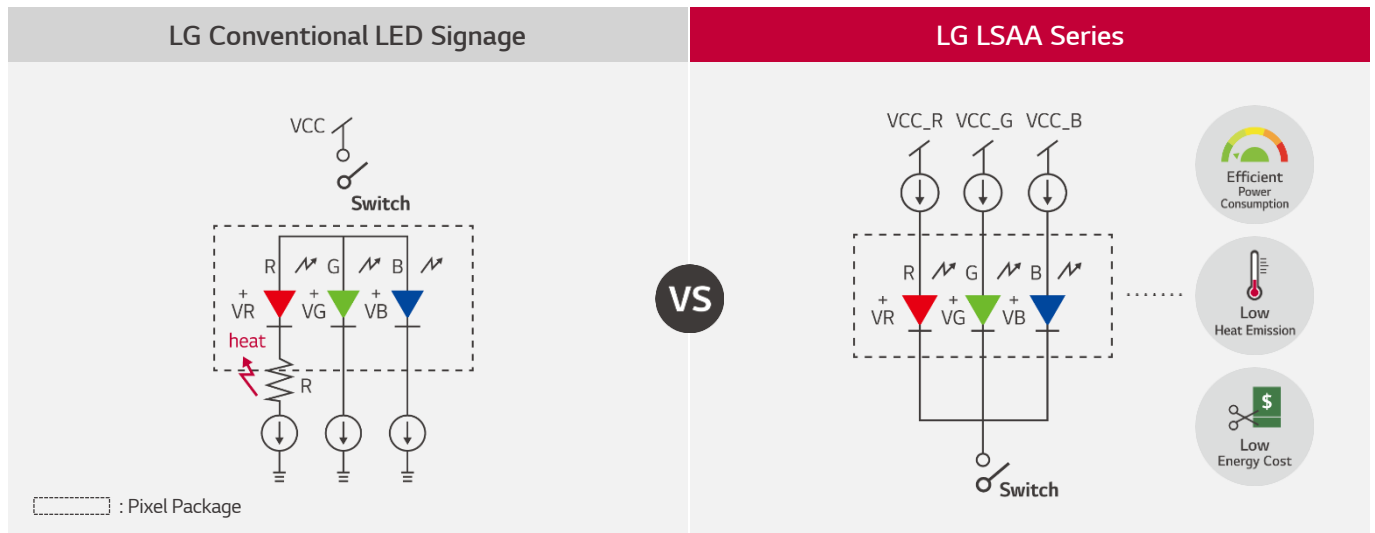# DELICATE FEATURES CONSIDERING UP-CLOSE USE

EMC Class B Certified

The LG LSAA Series is certified as EMC Class B, which requires electronic equipment made for use in residential environments as well as commercial, industrial, or business environments. Therefore, it is suitable for up-close uses such as corporate meeting rooms, board rooms, etc.

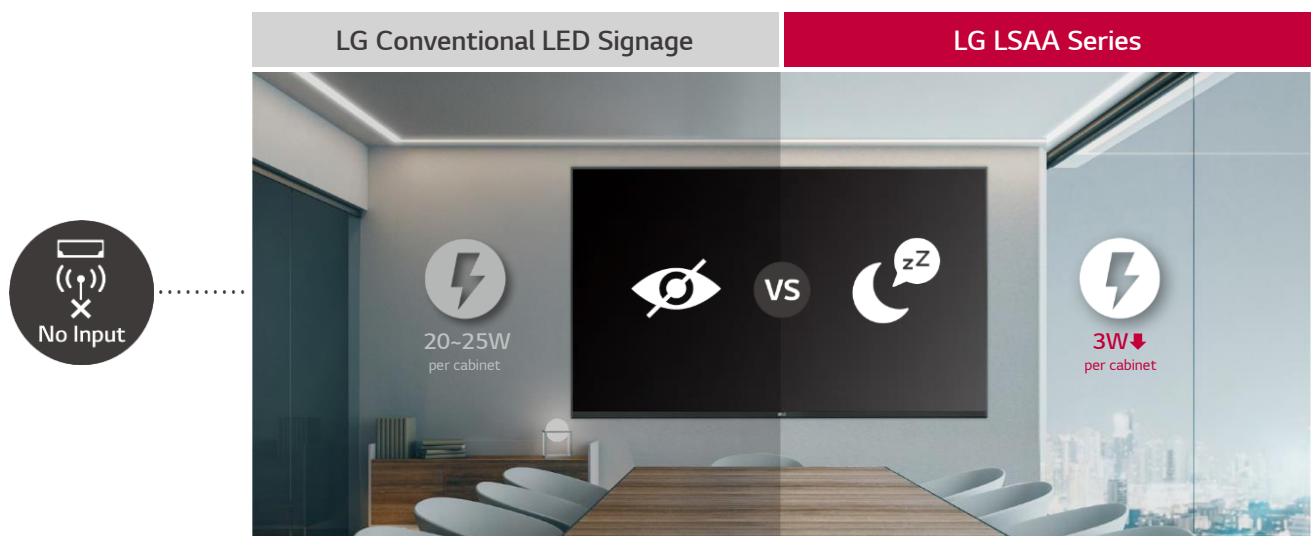## 4-in-1 LED Package

Unlike LG's conventional LED signage in which one light source constitutes one small LED package, the LSAA series has applied four light sources at once to its wider LED package. So the attached area of 4-in-1 LED package can be wider than the conventional single LED package, making the LED signage surface smoother and suitable for up-close uses such as corporate meeting rooms etc.

ENHANCED POWER EFFICIENCY

Energy Saving Power System

By applying Common Cathode Drive-IC, LSAA supplies the right necessary voltage to each R/G/B sub-pixel individually, ensuring efficient power consumption.

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.
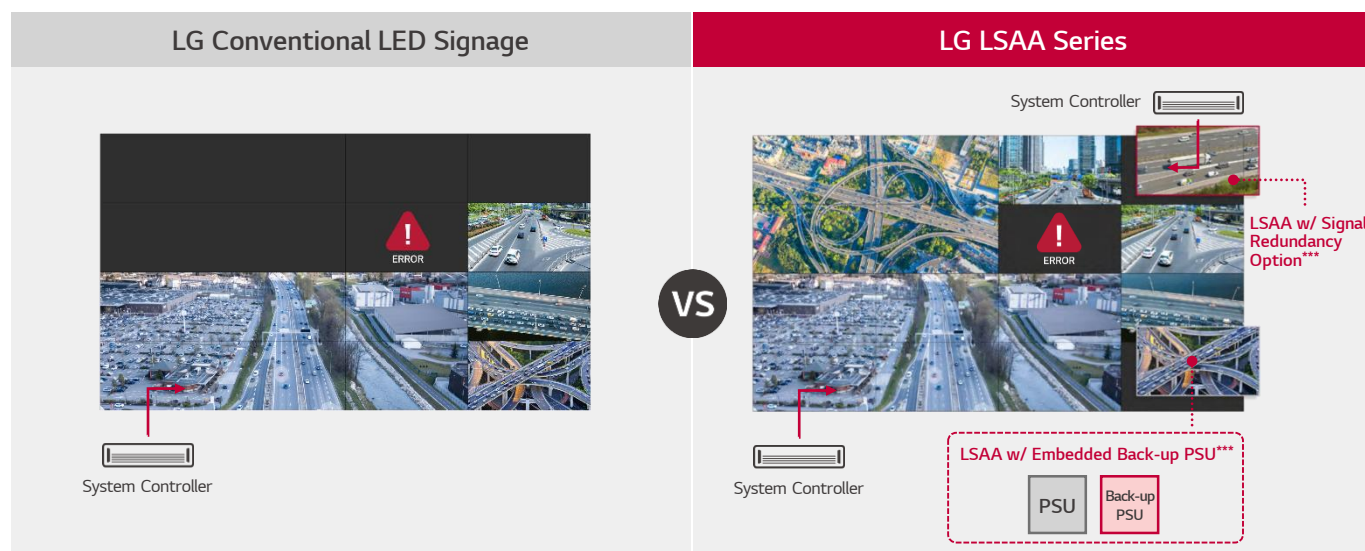
DELICATE FEATURES FOR OPERATION AND MANAGEMENT

Real-time 365 Care Service

Maintenance is easier and faster with the optional Signage365Care* service, a cloud service solution provided by LG service. It remotely manages the status of displays in client workplaces for fault diagnosis and remote-control services, enabling the stable operation of clients' businesses.

* The availability of the "Signage365Care" service differs by region, so please contact the LG sales representative in your region for more details.

LG Conventional LED Signage	LG LSAA Series

System Controller

LSAA w/ Signal Redundancy Option***

System Controller

System Controller

LSAA w/ Embedded Back-up PSU***

PSU | Back-up PSU

Power / Signal Redundancy Support

The LSAA series is designed to support redundancy of signal and power, providing users with comfort. With optional embedded back-up power supply unit and signal redundancy, customers can assure the continuous operation of the screen without power failure, while the dual controllers minimize screen failure with a bi-directional signal input.

* The "Conventional" shown above refers to LED displays which do not support the power/signal redundancy mode.
** The power/signal redundancy features are available from the fourth quarter of 2020.
*** The power/signal redundancy models are optional.

USAGE SCENES

SPECIFICATIONS

Panel	Model Name	LSAA012
	Pixel Configuration	SMD, 4 Pixels in 1 PKG
	Pixel Pitch (mm)	1.25
	Module Resolution (W x H)	240 x 90
	Module Dimensions (W x H, mm)	300 x 112.5
	Weight per Module (kg)	0.20
	No. of Modules per Cabinet (W x H)	2 x 3
Physical Parameters	Cabinet Resolution (W x H)	480 x 270
	Cabinet Dimensions (W x H x D, mm)	600 x 337.5 x 44.9
	Cabinet Surface Area (m²)	0.259
	Weight per Cabinet (kg/Cabinet)	7.3
	Weight per Square Meter (kg/m²)	34.1
	Physical Pixel Density (pixels/m²)	640,000
	Flatness of Cabinet (mm)	±0.5
	Cabinet Material	Die-cast Aluminum
	Service Access	Front and Rear[1]
	Brightness (After Calibration)	600 nit (Typ.) 1,200 nit (Peak)
	Color Temperature (Default/Adjustable)	6,500 K / 2,800 ~ 10,000 K[2]
	Visual Viewing Angle (H x V)	170 x 170
Optical Specifications	Brightness Uniformity	≥ 98%
	Color Uniformity	±0.015 Cx, Cy
	Contrast Ratio	4,000 : 1 (Typ.), 8,000 : 1 (Peak)
	Processing Depth (bit)	20
	HDR Compatibility	HDR10, HDR10 Pro[3]
	Power Consumption (W/Cabinet, Max.)	112
	Power Consumption (W/Cabinet, Avg.)	67
	Power Consumption (W/m², Max.)	527
	Power Consumption (BTU/Cabinet, Max.)	364
Electrical Specifications	Power Consumption (BTU/Cabinet, Avg.)	218
	Power Consumption (BTU/m², Max.)	1,798
	Power Supply (V)	100 to 240
	Frame Rate (Hz)	50 / 60
	Refresh Rate (Hz)	3,840
	Lifetime (Half Brightness)	100,000
	Operating Temperature	0°C to +40°C
Operation Specifications	Operating Humidity	10-80% RH
	IP Rating Front	IP20
	IP Rating Rear	IP20
Certification		Safety 60950-1, EMC Class B
Environment		RoHS
Controller		CSAA-012X
Optional Accessary		Wall Mount Kit (WM-L1080), Frame Kit (KT-BZ1080)

[1] Module can be accessed only from the front.
[2] Adjustable via LED Assistant on PC
[3] LG's own HDR solution to process HDR signal by using enhanced dynamic tone mapping.

Controller	Model Name	CSAA-012
	Resolution	UHD (3,840 x 2,160)
	Input Signal	HDMI (3), DP (1), USB 2.0 (1)
	Output Signal	Ethernet (5 GB x 8 ea), SPDIF (Audio, 5.1 ch)
	Control	IR, RS232C In / Out, Ethernet
Feature	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, Current
	Monitoring	LDM Defect (Dot, Line), Temperature, Power (LDM, Cabinet, PSU), Receiving Card
Power	Power Consumption (Max.)	60
	Power Consumption (Typical)	50
	Dimension (W x H x D)	446 x 63 x 301
Mechanical Specifications	Weight	4.5 kg
	Carton Dimensions (W x H x D)	530 x 169 x 392
	Packed Weight	6.4 kg
Environment Conditions	Working Temperature (°C)	0°C ~ 40°C (32°F to 104°F)
	Operation Humidity	10 ~ 80%
	Platform	webOS 4.1
	SuperSign CMS	Yes
SW Compatibility	Signage365Care	Yes
	LED Assistant	Yes
	LED Calibrator	Yes
Accessory	Basic	AC Power Cable, Phone to RS232C Gender, HDMI Cable, IR / Ambient Light Sensor (External), QSG, Rack Bracket, Remote

www.lg.com/global/business/information-display
www.youtube.com/c/LGECommercialDisplay
www.facebook.com/LGInformationDisplay
www.linkedin.com/company/lginformationdisplay
twitter.com/LG_ID_HQ

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PRODUCT INFORMATION

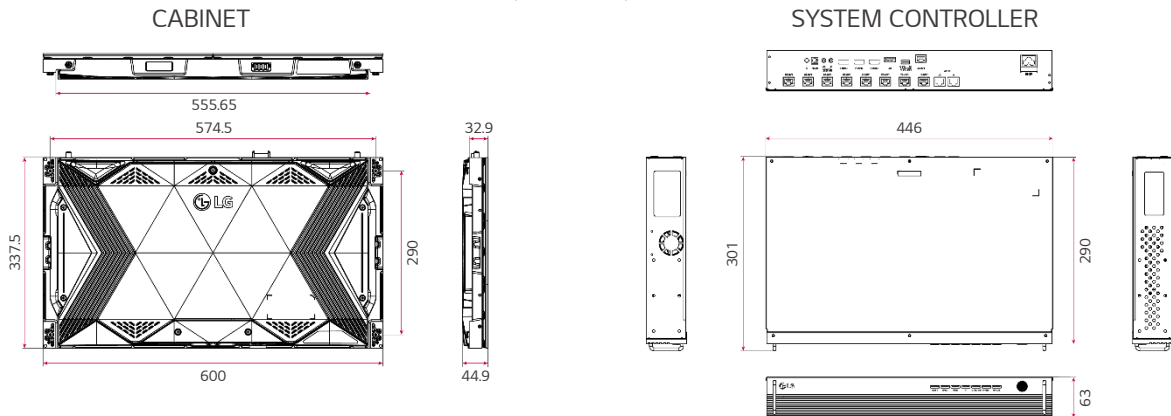| Cabinet	LSAA012
Pixel Configuration	SMD, 4 Pixels in 1 PKG
Pixel Pitch (mm)	1.25
No. of Modules per Cabinet (W×H)	2 × 3
Cabinet Resolution (W×H)	480 × 270
Cabinet Dimensions (W×H×D, mm)	600 × 337.5 × 44.9
Brightness	600 nit (Typ.), 1,200 nit (Peak)
Contrast Ratio	4,000 : 1 (Typ.), 8,000 : 1 (Peak)

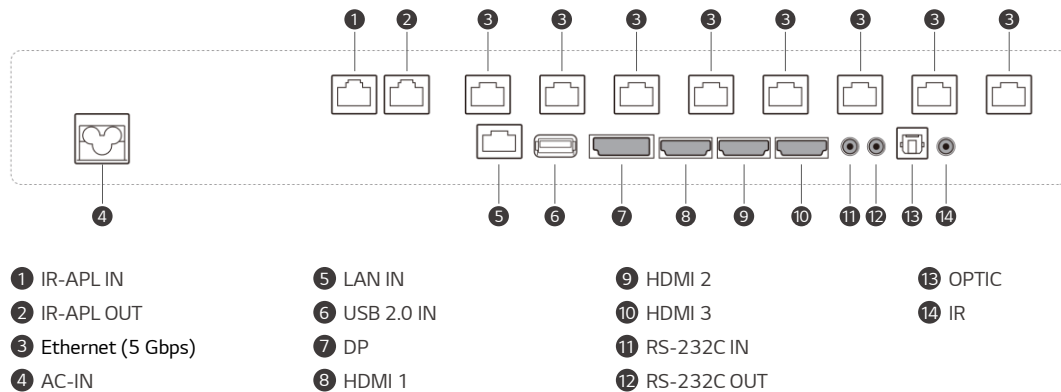| System Controller	CSAA-012
Resolution	UHD (3,840 × 2,160)
Input Signal	HDMI (3), DP (1), USB 2.0 (1)
Output Signal	Ethernet (5 GB × 8 ea), SPDIF (Audio, 5.1 ch)
Control	IR, RS232C In / Out, Ethernet
HDR Compatibility	HDR10, HDR10 Pro
Built-in Wi-Fi	Yes
Storage	16 GB
Image Enhancement	HDR10 / HDR10 Pro, 3D Color Gamut Mapping, Low Latency, Auto Brightness Control (w/ External Brightness Sensor)
Dimensions (W×H×D, mm)	446 × 63 × 301

DIMENSION
(unit: mm)

CABINET

555.65
574.5
337.5
290
600
32.9
44.9

SYSTEM CONTROLLER

446
301
290
63

CONNECTIVITY
SYSTEM CONTROLLER

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

HDMI™

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