DESIGN AWARD 2024

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

LG MAGNIT All-in-One LAAA Series

All-in-One Micro LED Display

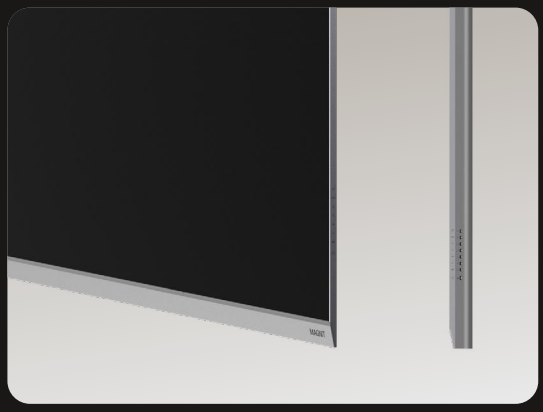
- All-in-One LED Screen
- Achieving Deep Black
- Detailed Color
- Intelligent Processor
- Easy Installation
- Compatible with LG One:Quick | Share

Clear Vision, Great Decision.

All-in-One Micro LED display for easy choice, easy installation

Pre-assembled
LED Display Modules

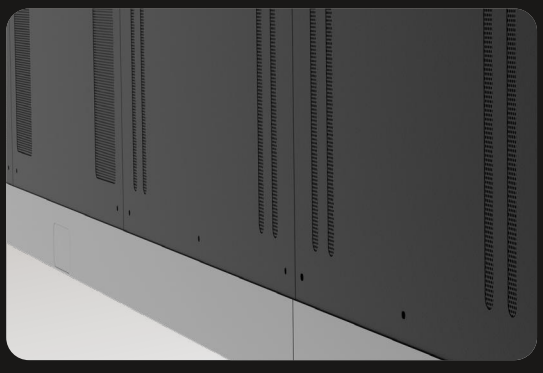
Embedded Controller, Built-in Speaker



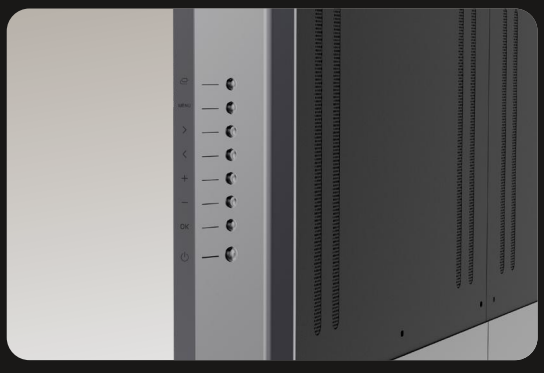
A sleek and slim design

* Connectivity may vary by model.

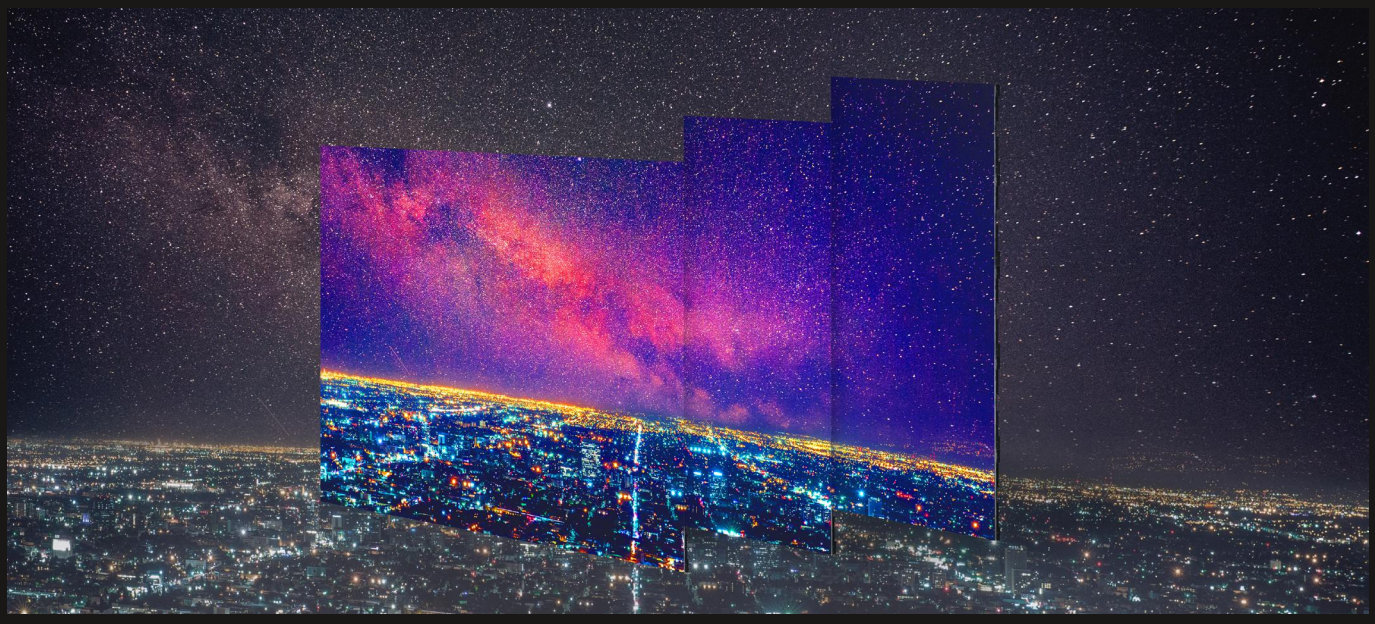
Front-accessible design for
easy interface connectivity



Neatly organized vent hole design
on the back

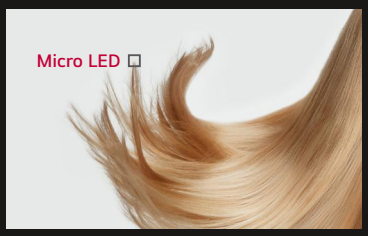


Easy access to buttons



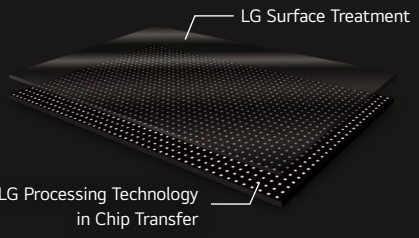
Improving Visual Precision with Micro Pixel Technology

LG MAGNIT's Micro Pixel Pitch Technology offers remarkable visual precision. Our advanced LED chips provide impressive detail accuracy and precise light control, delivering crystal-clear images on the display. With accurate color expression, every hue is rendered with stunning clarity and depth, providing a true-to-life visual experience. Enjoy the fineness of display technology with LG MAGNIT.

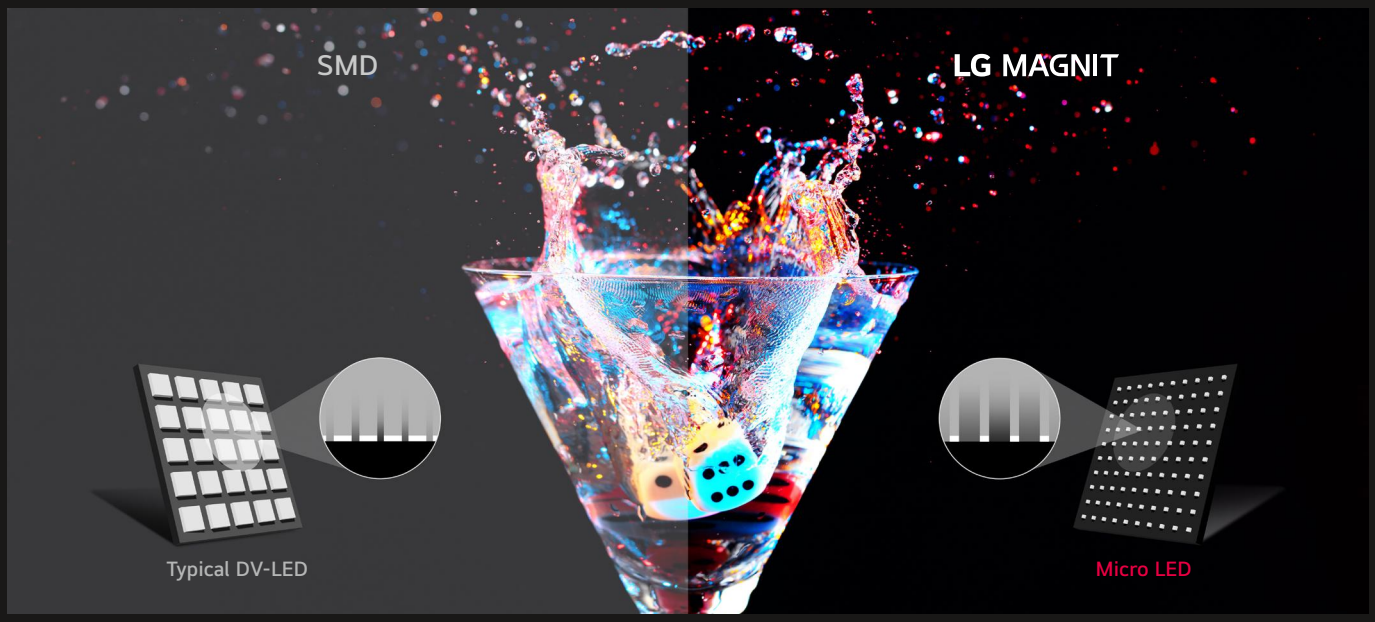


Enhanced Uniformity with LST (LG Surface Treatment) Technology

LG MAGNIT's innovative Chip Transfer and Surface Treatment Technology enhances white uniformity and reduces color distortion across a wide viewing angle, delivering true and accurate viewing experiences. This technology ensures remarkable color uniformity, resulting in superb image quality.

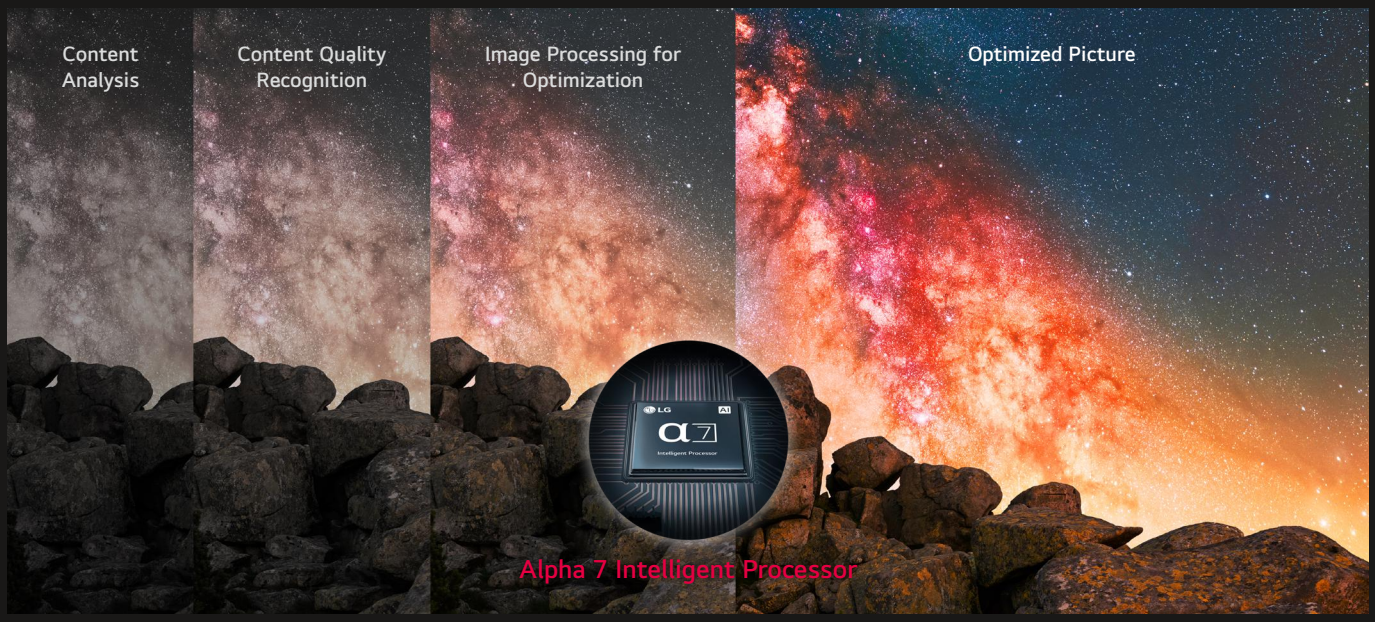


* Based on LG's conventional LED signage without LG's chip transfer and surface treatment technology.



Achieving Deep Black with Black Coating Technology

LG MAGNIT's advanced and precise method for direct bonding micro-sized chips onto circuit boards, combined with the black coating technology and reduced spacing between the chips and the board, creates a stunning black expression that stands out compared to SMD-type LED displays. This makes it the ideal choice for displaying content that requires deep black color, ensuring that every image is rich, vibrant, and true to life.



AI-Powered Viewing Experience with Alpha 7 Processor

LG MAGNIT features an advanced AI-powered Alpha 7 Intelligent Processor that provides clarity and sharpness to deliver an immersive viewing experience. Its advanced AI technology enables the processor to recognize and analyze content, tailoring the display settings for each individual scene to create a highly realistic and vivid image possible.

All-in-One LED Screen with Built-in Speaker

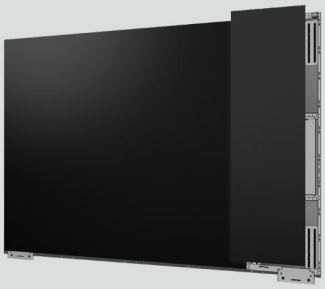
The LAAA series is a 136-inch large screen which is offered as an all-in-one package including an embedded controller and built-in speaker. Eliminating the prejudice that LED displays are difficult and complex to install, it doesn't require controller connections or module configuration. After a simple installation process, all you need to do is to turn on the screen with a remote control like home TV.

High Performance with webOS

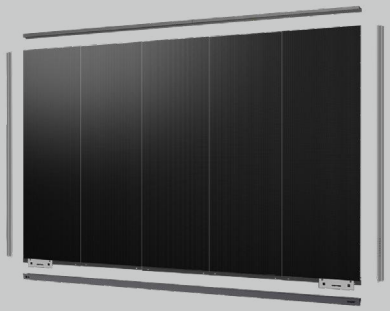
Built-in Quad Core SoC (System on Chip) can execute several tasks at once for providing smooth content playback. Also, LG webOS Smart Platform enhances user convenience with intuitive GUI and provides to SI or/and developers simple app development tools* such as SDK (Software Development Kit), SCAP, sample applications.

* The webOS Signage Developer site (http://webossignage.developer.lge.com) provides SDK tools and documentation for creating apps on LG Digital Signage. This is only open to partners.

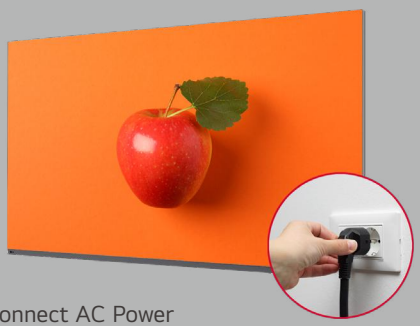
❶ Mount the frame on the wall using the wall mount



❷ Attach an assembled LDM to the frame, preconfigured by LG's module alignment process



❸ Assemble bezels



❹ Connect AC Power
(One for LAAA015, Two for LAAA007)

Simple Installation Process

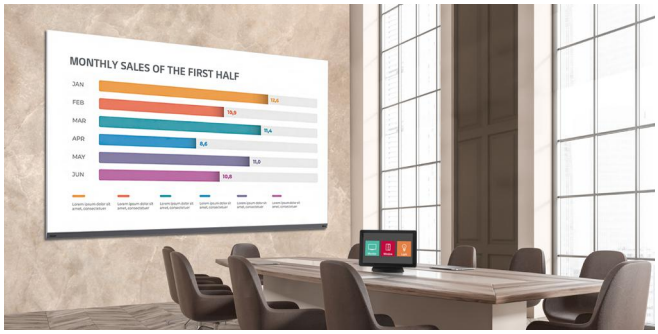
Create a full screen of LG MAGNIT AIO with 5 units of assembled LDM(LED Display Module)s. A unit consisting of 30 modules is preconfigured with reduced gaps thanks to LG MAGNIT's professional module alignment process. Tightly hold the screen with its refined bezels and back cover, and connect AC cables (One for LAAA015, Two for LAAA007). Then, it allows for neat installation without the complicated power connection.

* Fixing screws or installing wall mount/accessories is need additionally.

Office Meeting Mode

With Office Meeting Mode, easily configure meeting room details like the room number and current time. It also includes convenient features like automatic input switching, a presentation timer, and adjustable settings such as auto-brightness and picture mode.

* Users can enable Office Meeting Mode at EZ Setting menu of the Signage.



Compatible with AV Control Systems

The LAAA series supports Crestron Connected®* for high compatibility with professional AV controls to achieve seamless integration and automated control**, boosting business management efficiency.

* Initial setting from display is required for Crestron Connected® compatibility.
** Network based control
*** Crestron Connected® needs to be purchased separately.

Magic Remote for Easy of Use

With the LG Magic Remote, you can select and run the menu of the signage just like using a mouse and its cursor can be used as a laser pointer. In addition, through the newly added 'FREEZE' button on the remote control, users can temporarily freeze the screen while switching contents on the PC, so that users are able to have uninterrupted meetings without exposing its switching process.

* The FREEZE function is only available when the LAAA is connected to an external input signal.

❶ Easy Pairing ❷ Plug and Play ❸ One Click for Wireless Screen Share

LG's Wireless Screen Sharing Solution, LG One:Quick Share

LG One:Quick Share is a wireless screen sharing solution available through the LAAA series, USB transmission unit, and its app. You can simply share personal PC screen to the display with it's USB dongle button and embedded Wi-Fi*, and can adjust the basic setting values (volume, picture mode, auto bright, etc.) of the connected display without a remote control. Also, the Office Meeting Mode** helps you to display the agenda, note before the meeting starts.

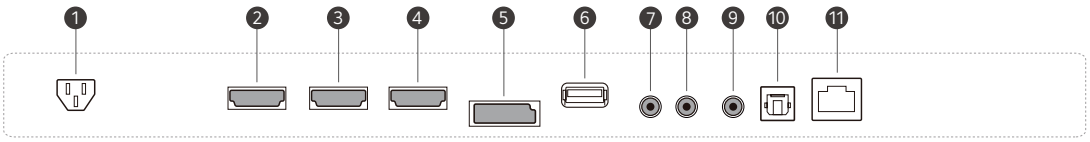
* Users need to set up SoftAP enabled at Network Menu of the Signage.
** Users can enable Office Meeting Mode at EZ Setting Menu of the Signage.
*** LG One:Quick Share needs to be purchased separately and is compatible with PC with the operating system of ~Windows10, ~MacOS 10.15.

PRODUCT INFORMATION

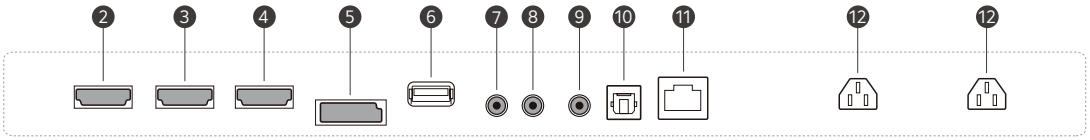
LAAA Series	LAAA007-G22/23	LAAA009-G5	LAAA015-G2	LAAA015-G32
Pixel Pitch	0.78 mm	0.94 mm	1.56 mm	1.56 mm
Screen Size	136"	163"	136"	136"
Screen Resolution	3,840 × 2,160	3,840 × 2,160	1,920 × 1,080	1,920 × 1,080
Brightness (After Calibration)	Max. 500 nits / Peak 1,600 nits	Max. 500 nits / Peak 1,500 nits	Max. 500 nits / Peak 1,000 nits	Max. 500 nits / Peak 1,500 nits
Service Access	Front	Front	Front	Front

CONNECTIVITY

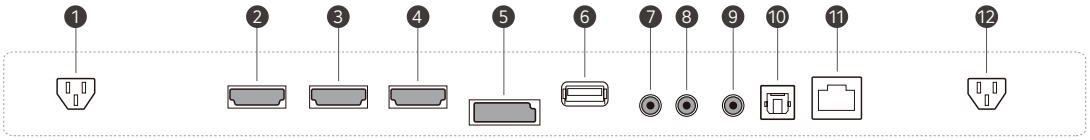
LAAA015



LAAA009



LAAA007



1 AC-IN
2 HDMI 1
3 HDMI 2
4 HDMI 3
5 DP
6 USB
7 RS-232C IN
8 RS-232C OUT
9 IR
10 OPTICAL DIGITAL AUDIO OUT
11 LAN
12 AC-IN

SPECIFICATIONS

		LAAA007-G22[1)]	LAAA007-G23[1)]	LAAA009-G5[1)]
Physical Parameters	Pixel Configuration	Micro	Micro	Micro
	Pixel Pitch (mm)	0.78	0.78	0.94
	Module Resolution	384 × 144	384 × 144	320 × 120
	Module Dimensions (W × H, mm)	300 × 112.5	300 × 112.5	300 × 112.5
	No. of Modules per Screen (W × H)	10 × 15 (Total 150)	10 × 15 (Total 150)	12 × 18 (Total 216)
	Screen Resolution (W × H)	3,840 × 2,160	3,840 × 2,160	3,840 × 2,160
	Screen Dimensions (W × H × D, mm, Including Bezel)	3,004 × 1,742 × 54.9 (Thickest 57.4)	3,004 × 1,742 × 54.9 (Thickest 57.4)	3,604 × 2,078.8 × 54.9 (Thickest 57.4)
	Screen Surface Area (m^2)	5.06	5.06	7.29
	Weight of the Screen (kg)	190	179.6	258.4
	Physical Pixel Density (pixels/m^2)	1,638,400	1,638,400	1,137,778
	Flatness of Cabinet (mm)	±0.2	±0.2	±0.2
	Cabinet Material	Steel	Steel	Steel
	Service Access	Front	Front	Front
Optical Specifications	Max. Brightness (After Calibration, nit)	Max. 500 / Peak 1,600	Max. 500 / Peak 1,600	Max. 500 / Peak 1,500
	Color Temperature (K)	3,200-9,300	3,200-9,300	3,200-9,300
	Visual Viewing Angle (Horizontal)	160	160	160
	Visual Viewing Angle (Vertical)	160	160	160
	Brightness Uniformity	95%	95%	95%
	Color Uniformity	±0.015 Cx,Cy	±0.015 Cx,Cy	±0.015 Cx,Cy
	Contrast Ratio	40,000 : 1 @ 10lux (TBD)	40,000 : 1 @ 10lux (TBD)	40,000 : 1 @ 10lux
	Processing Depth (bit)	20 (HDR10, HDR10 Pro)	20 (HDR10, HDR10 Pro)	20 (HDR10, HDR10 Pro)
Electrical Specifications	Power Consumption (W/Screen, Max.)	1,450	1,450	1,900
	Power Consumption (W/Screen, Avg.)	850	850	950
	Power Consumption (W/m^2, Max.)	277	277	261
	Heat Dissipation (BTU/h/Screen, Max.)	4,950	4,950	6,483
	Heat Dissipation (BTU/h/Screen, Avg.)	2,900	2,900	3,241
	Heat Dissipation (BTU/h/m^2, Max.)	950	950	889
	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	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
Standard	Certification	Safety 62368-1 & 60950-1, EMC Class A	Safety 62368-1 & 60950-1, EMC Class B	Safety 62368-1 & 60950-1, EMC Class A
	Certification (Fire Protection)	BS476 Part 7 Class 1	BS476 Part 7 Class 1	BS476 Part 7 Class 1
Speaker		Built-in (10 W + 10 W)		
Environment		RoHS		
Controller		Embedded (webOS)		
I/O Port		HDMI (3), DP, USB, LAN, RS-232C In/Out, IR, Digital Audio Out (SPDIF Optical)		
Wi-Fi / Bluetooth		Yes / Yes		
etc.		IR Remote (In-box), Magic Remote (In-box), Side by Side : Yes (1 × N), HDCP 2.2, Crestron Connected		

[1)] Low latency not supported.

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

SPECIFICATIONS

		LAAA015-G2	LAAA015-G32
Physical Parameters	Pixel Configuration	Micro	Micro
	Pixel Pitch (mm)	1.56	1.56
	Module Resolution	192 × 72	192 × 72
	Module Dimensions (W × H, mm)	300 × 112.5	300 × 112.5
	No. of Modules per Screen (W × H)	10 × 15 (Total 150)	10 × 15 (Total 150)
	Screen Resolution (W × H)	1,920 × 1,080	1,920 × 1,080
	Screen Dimensions (W × H × D, mm, Including Bezel)	3,004 × 1,742 × 54.9 (Thickest 57.4)	3,004 × 1,742 × 54.9 (Thickest 57.4)
	Screen Surface Area (m^2)	5.06	5.06
	Weight of the Screen (kg)	190	190
	Physical Pixel Density (pixels/m^2)	409,600	409,600
	Flatness of Cabinet (mm)	±0.2	±0.2
	Cabinet Material	Steel	Steel
	Service Access	Front	Front
Optical Specifications	Max. Brightness (After Calibration, nit)	Max. 500 / Peak 1,500	Max. 500 / Peak 1,500
	Color Temperature (K)	3,200-9,300	3,200-9,300
	Visual Viewing Angle (Horizontal)	160	160
	Visual Viewing Angle (Vertical)	160	160
	Brightness Uniformity	95%	95%
	Color Uniformity	±0.015 Cx,Cy	±0.015 Cx,Cy
	Contrast Ratio	25,000 : 1 @ 10lux	40,000 : 1 @ 10lux
	Processing Depth (bit)	20 (HDR10, HDR10 Pro)	20 (HDR10, HDR10 Pro)
Electrical Specifications	Power Consumption (W/Screen, Max.)	1,050	1,000
	Power Consumption (W/Screen, Avg.)	500	500
	Power Consumption (W/m^2, Max.)	208	198
	Heat Dissipation (BTU/h/Screen, Max.)	3,583	3,412
	Heat Dissipation (BTU/h/Screen, Avg.)	1,706	1,706
	Heat Dissipation (BTU/h/m^2, Max.)	710	674
	Power Supply (V)	100 to 240	100 to 240
	Frame Rate (Hz)	50 / 60	50 / 60
	Refresh Rate (Hz)	3,840	3,840
Operation Specifications	Lifetime (Half Brightness)	100,000	100,000
	Operating Temperature (°C)	0 to +40	0 to +40
	Operating Humidity	10-80% RH	10-80% RH
	IP Rating (Front / Rear)	IP50 / IP20	IP50 / IP20
Standard	Certification	Safety 62368-1 & 60950-1, EMC Class A	Safety 62368-1 & 60950-1, EMC Class A
	Certification (Fire Protection)	BS476 Part 7 Class 1	BS476 Part 7 Class 1
Speaker		Built-in (10 W + 10 W)	
Environment		RoHS	
Controller		Embedded (webOS)	
I/O Port		HDMI (3), DP, USB, LAN, RS-232C In/Out, IR, Digital Audio Out (SPDIF Optical)	
Wi-Fi / Bluetooth		Yes / Yes	
etc.		IR Remote (In-box), Magic Remote (In-box), Side by Side : Yes (1×N), HDCP 2.2, Crestron Connected	

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