



\* 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



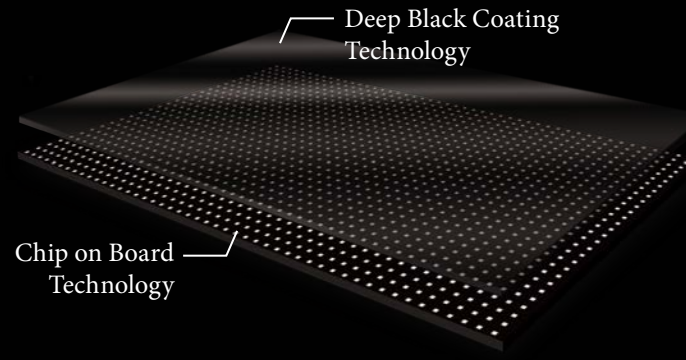
Intelligent Processor



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

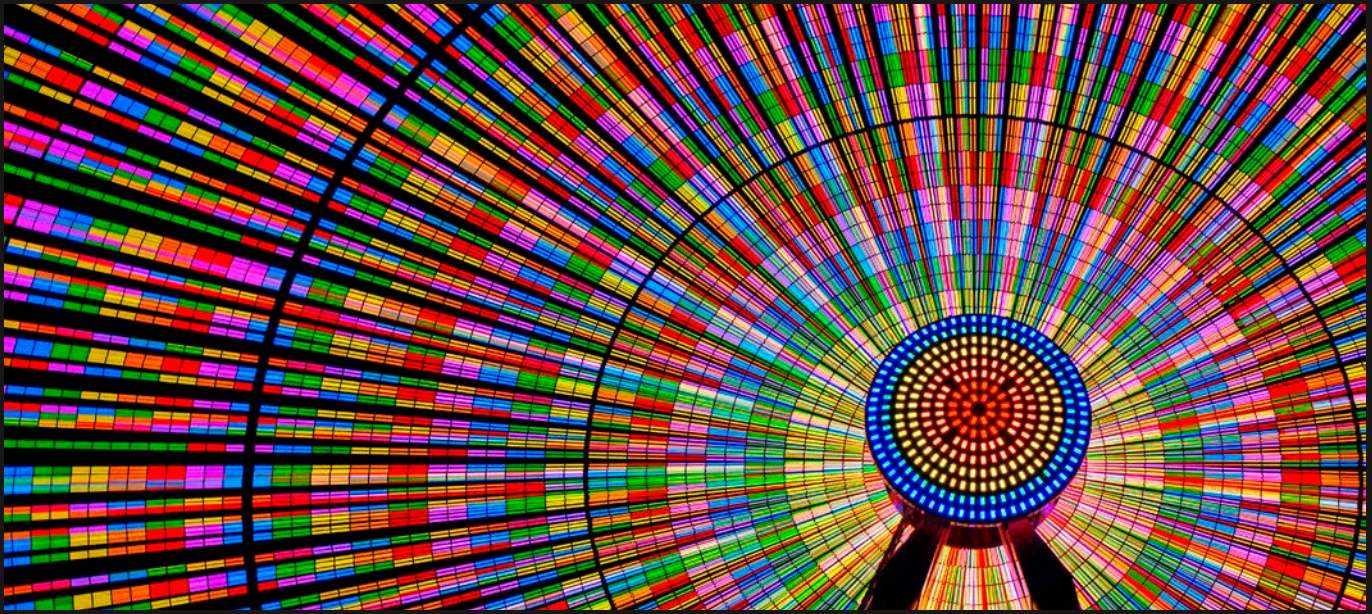


LG MAGNIT



### 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

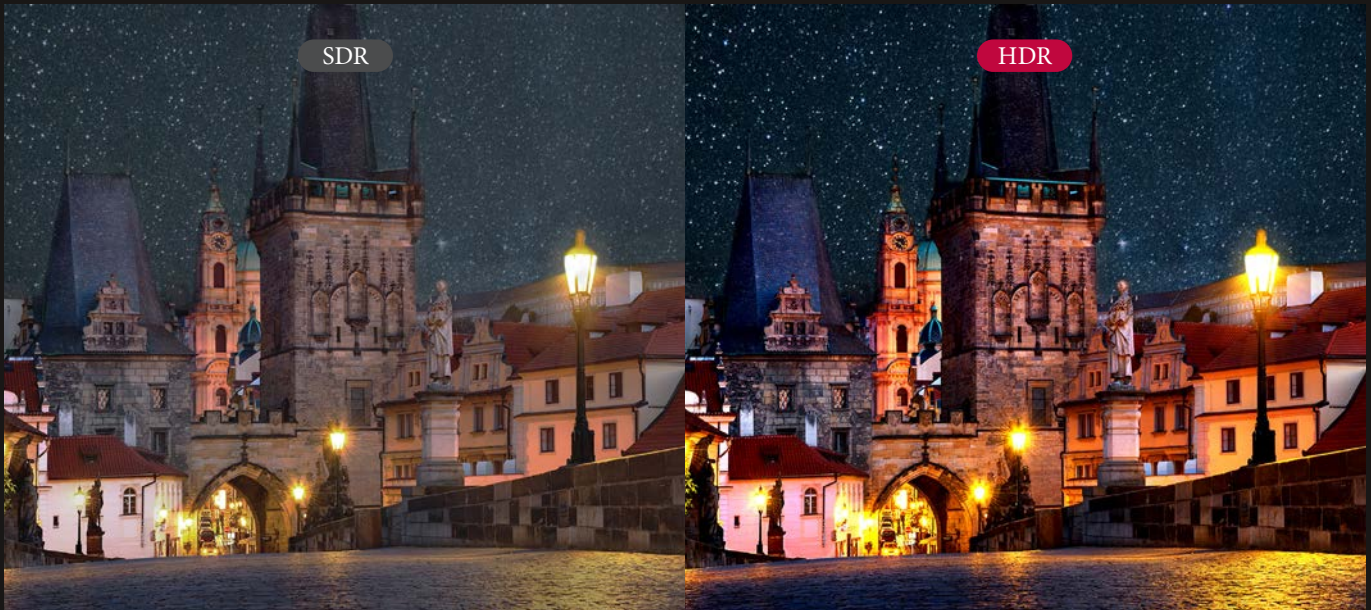
MAGNIT's carefully-selected micro LED chip has a narrowed wavelength that allows it to show uniform colors across the screen. Furthermore, the enhanced Gamut Transfer technology supports it to describe colors close to the original color, which is essential for places where exact color representation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



Alpha 7 Intelligent Processor

## Intelligent Image Processor

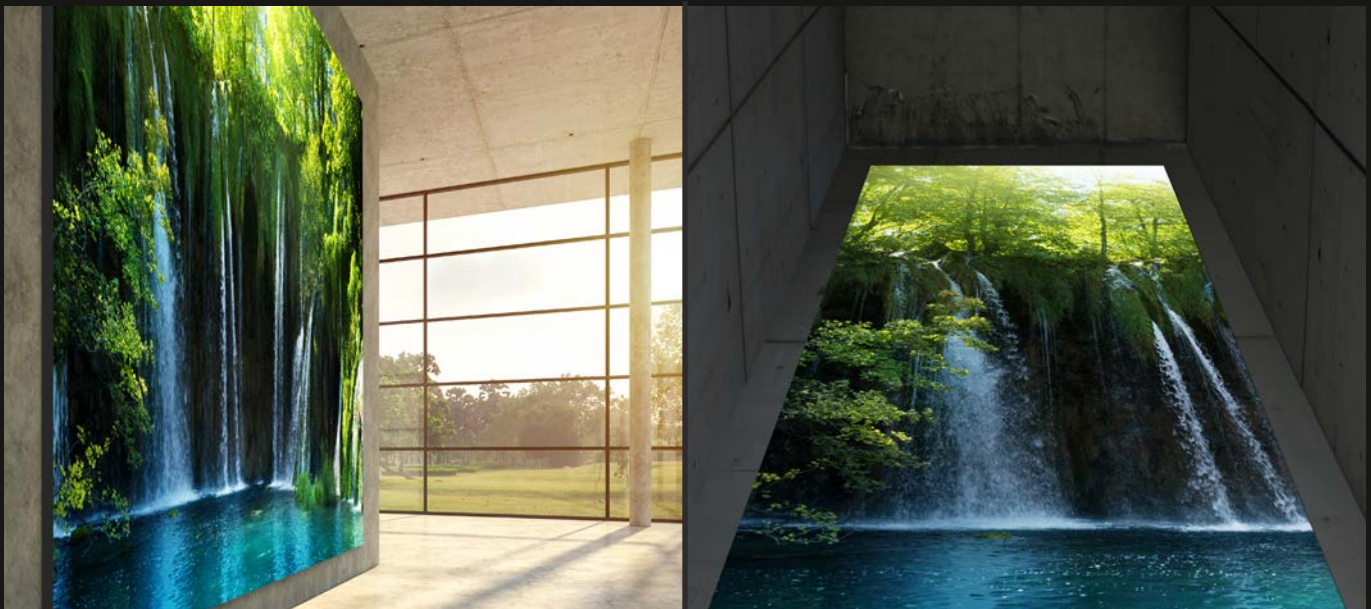
The Alpha 7 Intelligent Processor adopts deep learning AI capability from LG's TV technology to analyze and recognize incoming content and optimize image clarity and sharpness.



## Vivid Color Expression Powered by HDR

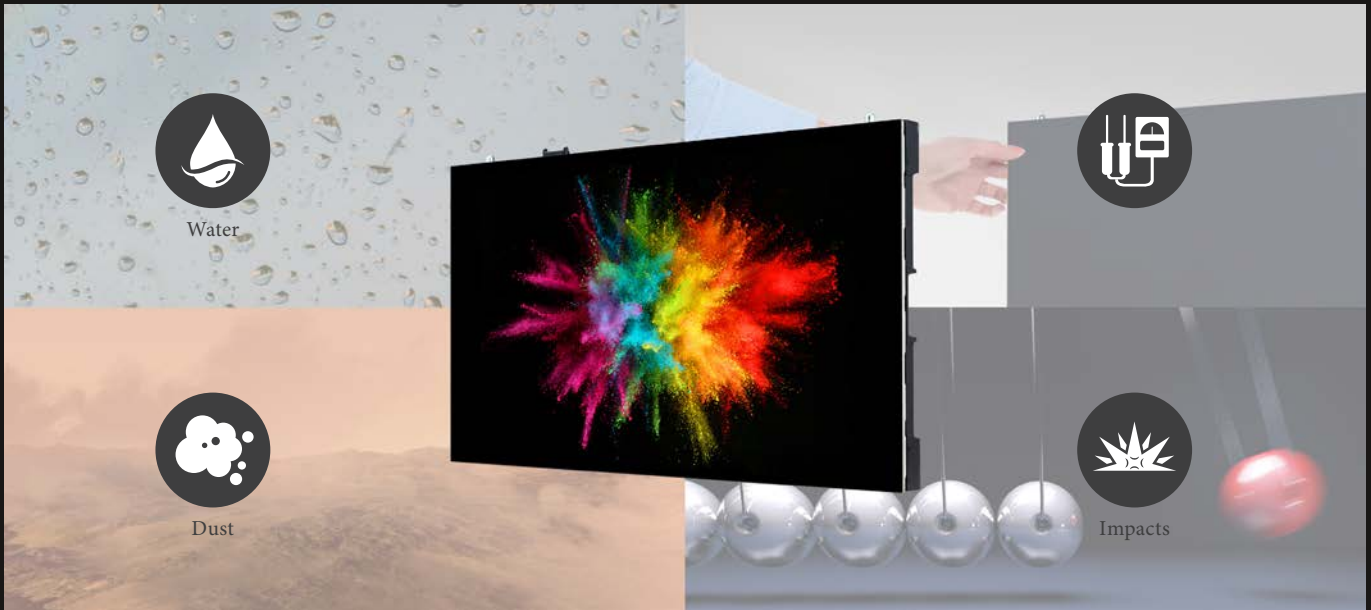
With HDR (HDR10, HDR10 Pro\*) support, content becomes vivid with great visual impact. The wider color spectrum and greater contrast ratio allow viewers to fully enjoy lively content.

\* 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.



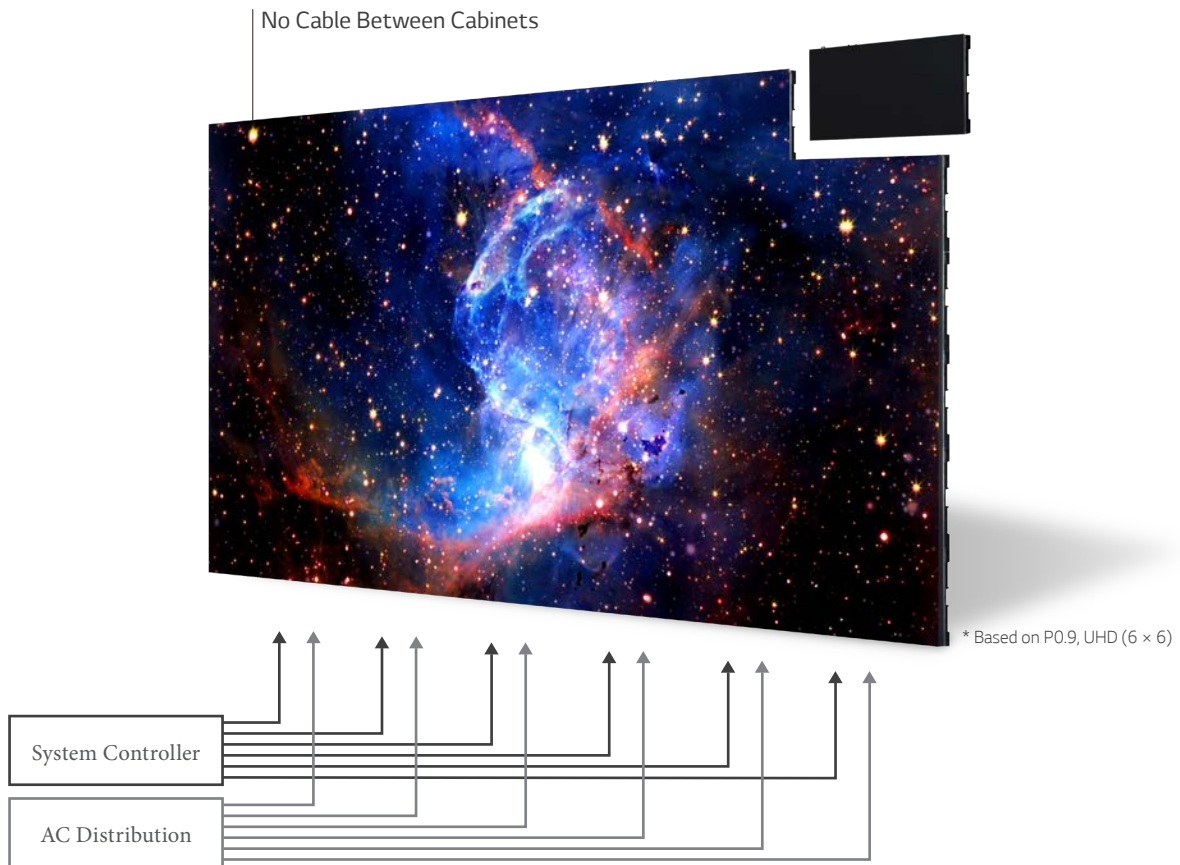
## Sleek Look with Smooth Surface

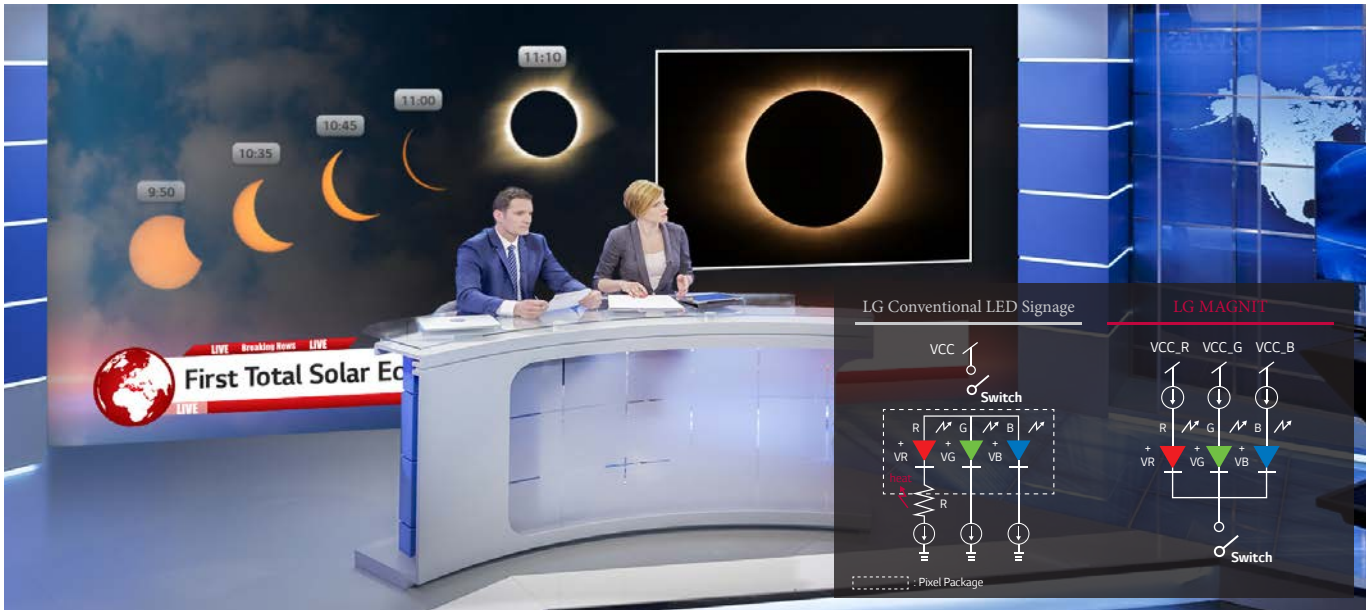
The screen surface of LG MAGNIT is very smooth making it attractive even when the screen is off. If fingerprints are on the surface, they can be simply removed by wiping with a soft cloth without the need for any chemicals.



### Cable-less Design for Simple Installation

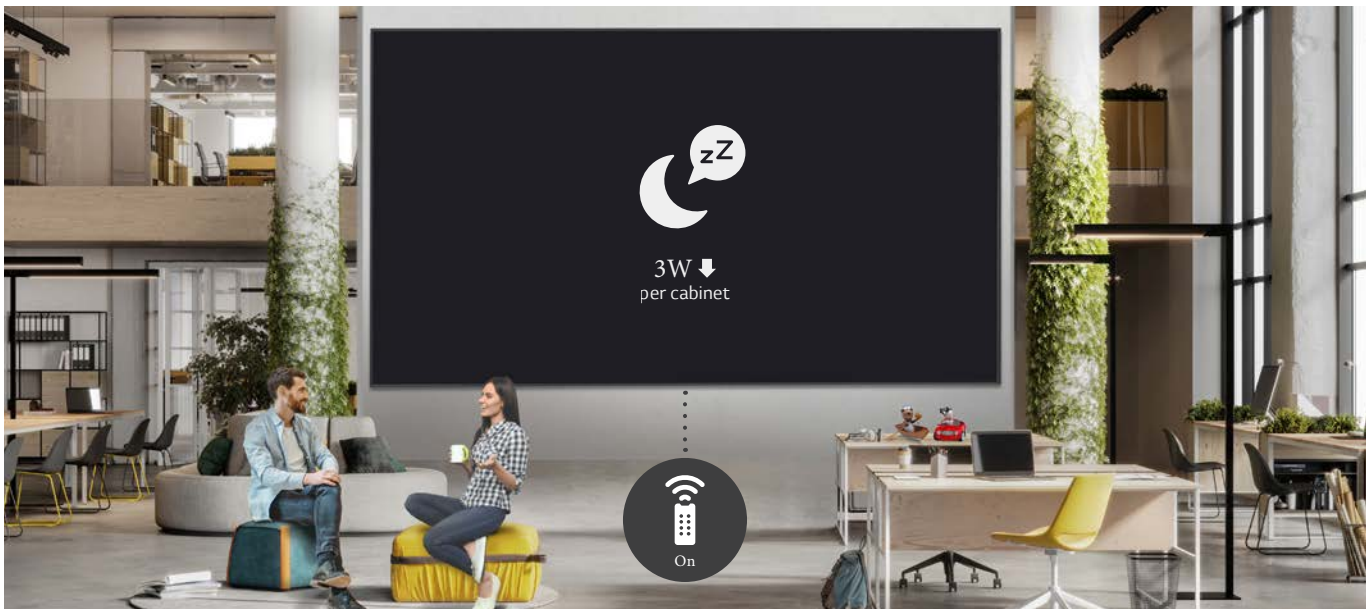
LG MAGNIT uses an innovative broadband wireless transmission for signals between cabinets and a clip-together power delivery system that eliminates the need for cables between the cabinets. When configuring an Ultra HD screen with 16:9 aspect ratio, only 6 signal cables and 6 power cables are needed 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.

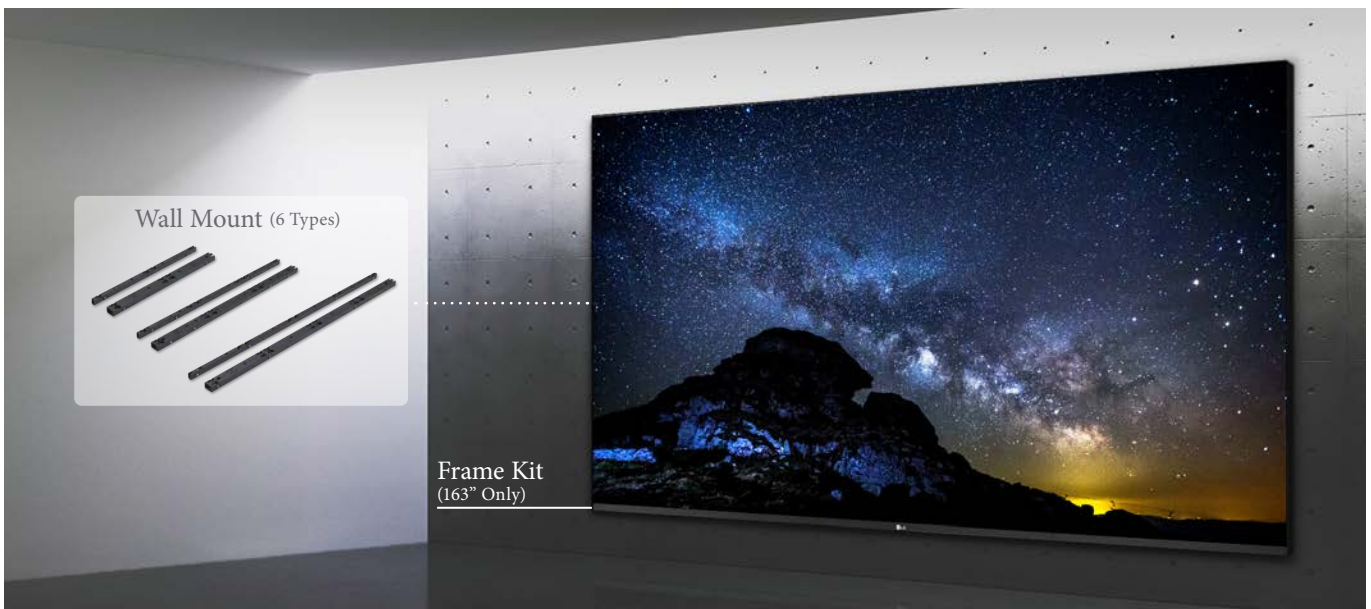


### Intuitive Interface with Remote Control

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.

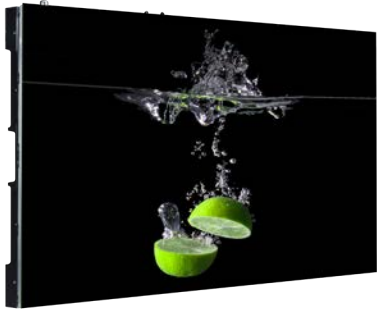


## Real-time ConnectedCare Service

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.

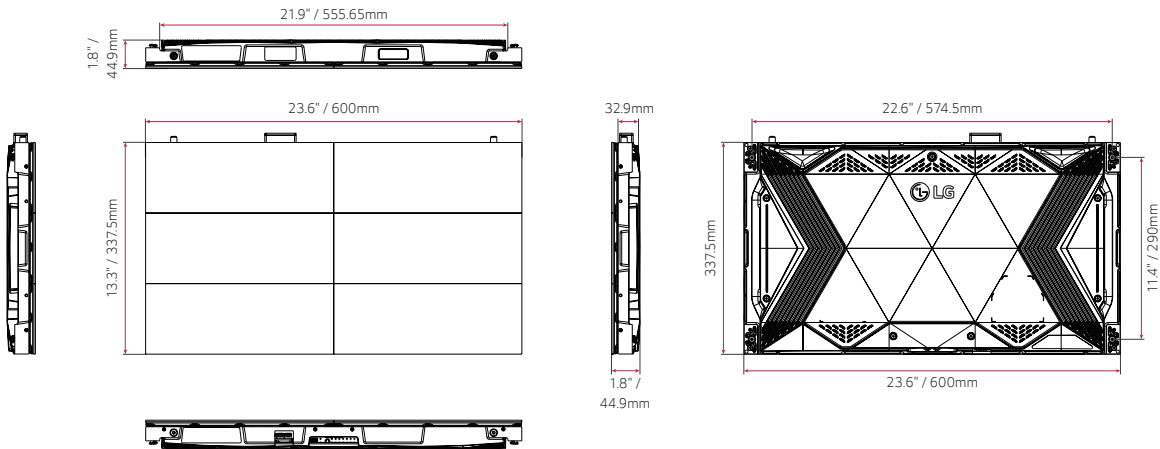
## PRODUCT INFORMATION



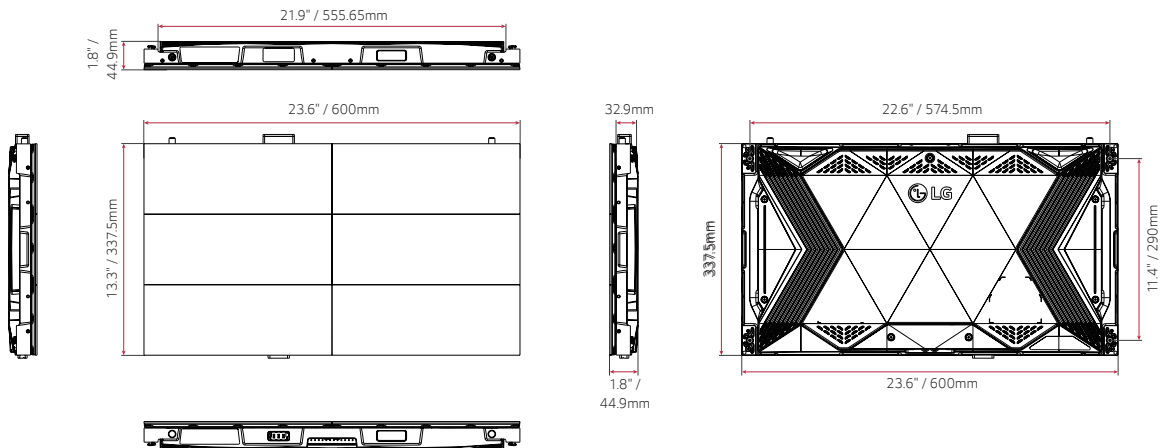
|                         |                                    |
|-------------------------|------------------------------------|
| <b>Cabinet</b>          | LSAB009                            |
| Pixel Configuration     | 1R, 1G, 1B (Chip on Board)         |
| Pixel Pitch             | 0.93 mm                            |
| 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



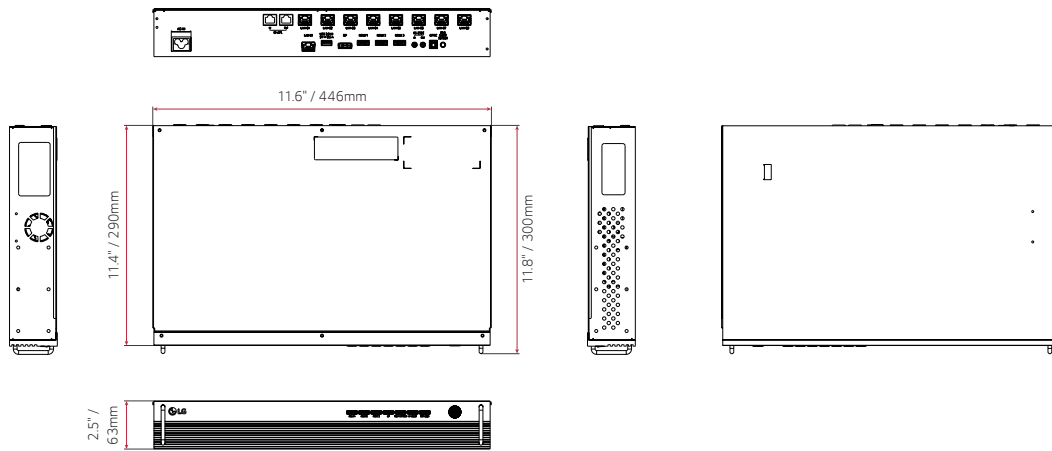
\* Dimensions may differ from the above image, so please contact LG sales team to verify before ordering.

## PRODUCT INFORMATION



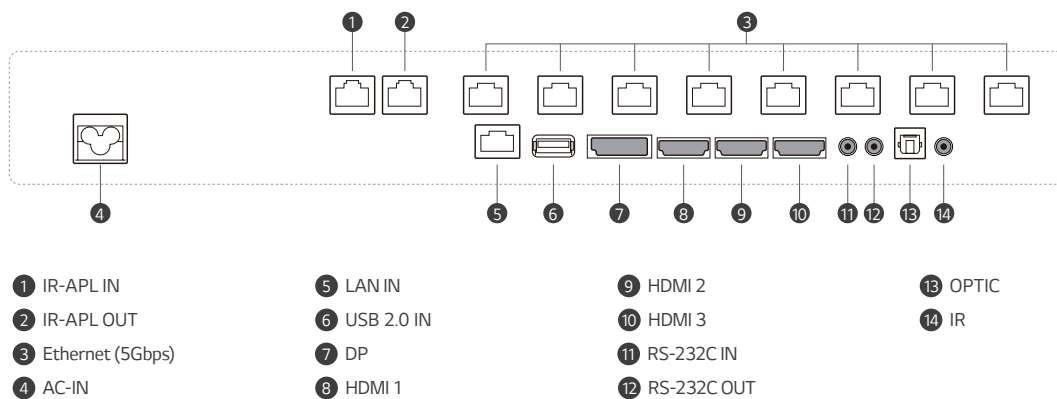
|                          |  |
|--------------------------|--|
| <b>System Controller</b> | CSAB-009X  |
| Resolution               | UHD (3,840 × 2,160)                                    |
| Input                    | HDMI (3), DP (1)                                       |
| Output                   | 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 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



<https://lg-b2b.com.ua>  
[www.youtube.com/channel/UCYTFtyk3YVcZuFVuufhxvUg](https://www.youtube.com/channel/UCYTFtyk3YVcZuFVuufhxvUg)  
[www.facebook.com/LGB2BUkraine](https://www.facebook.com/LGB2BUkraine)  
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