



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

**LG MAGNIT** LSAP Series

# Micro LED Display with Megapixel HELIOS LED Processing Platform



Black Immersion



Power UI/UX with  
Megapixel HELIOS LED  
Processing Platform



Accurate Colors



Wide Viewing Angle  
for Color Uniformity



High Reliability

**LSAP Series**

Pixel Pitch 0.78 / 0.94 / 1.25 mm

Brightness 600 / 800 / 1,000 nit (Min.)

Weight per Cabinet 7.8 kg

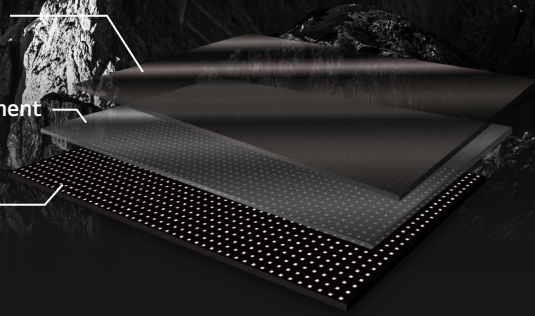
Service Access Front

IP Rating Front / Rear IP50 / IP20

Full Black Coating Technology

LG Surface Treatment Technology






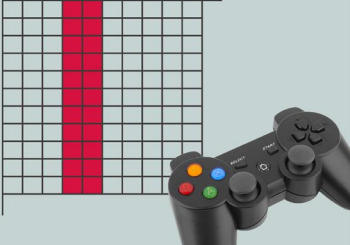
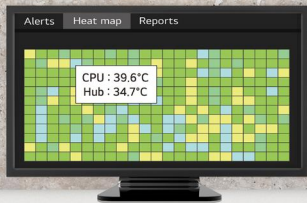

Chip on Board Technology



## Black Immersion, Enlivened Details

LG MAGNIT's revolutionary chip transfer, full black coating, and newly incorporated surface treatment technology unite to provide outstanding black expression, vibrant colors, heightened contrast, and an unparalleled immersive visual experience. Witness the pinnacle of visual excellence as even the most intricate shadow details hidden in darkness.

\* Based on LG's conventional LED Signage

 <p>Real Time Mapping and Multi Use Control</p> 	  <p>Superior Color Control</p>
 <p>Hyper-speed Seam Correction by Using Game Controller</p> 	  <p>Monitoring and Diagnostics Using Connected Diagnostics</p>

## Powerful UI/UX with Megapixel HELIOS LED Processing Platform

With the Megapixel HELIOS LED Processing Platform, LSAP now has the capability to utilize powerful UX and UI functionalities. Real-Time Mapping and Multi-User Control, Superior Color Control, Hyper-Speed Seam Correction using a game controller, and Monitoring and Diagnostics through connected diagnostics are all available.

\* Megapixel HELIOS LED Processing Platform needs to be purchased separately



## Accurate Colors as Intended

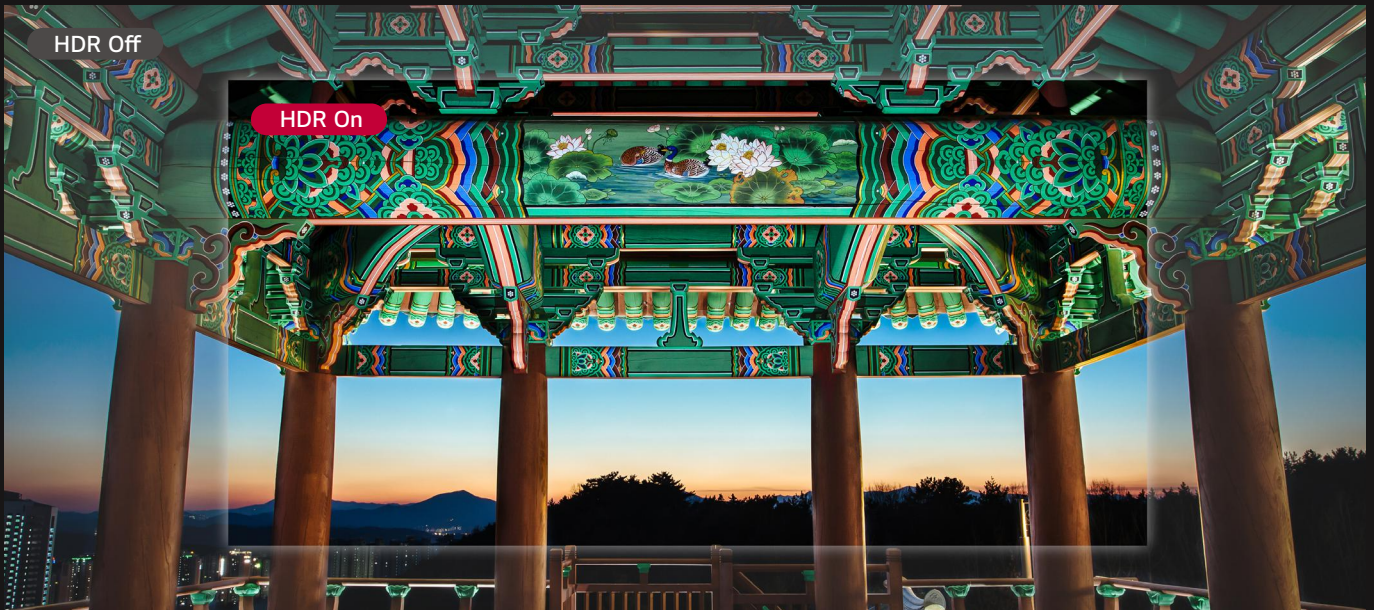
LG MAGNIT's careful selection of LED chips guarantees uniform and pure colors across the entire screen. Experience vibrant and precise colors that faithfully reflect the original source, thanks to the narrowed wavelength. The enhanced Gamut Transfer technology elevates color representation to a new level, ideal for environments that require precise and lifelike color reproduction.



## Wide Color Viewing Angle

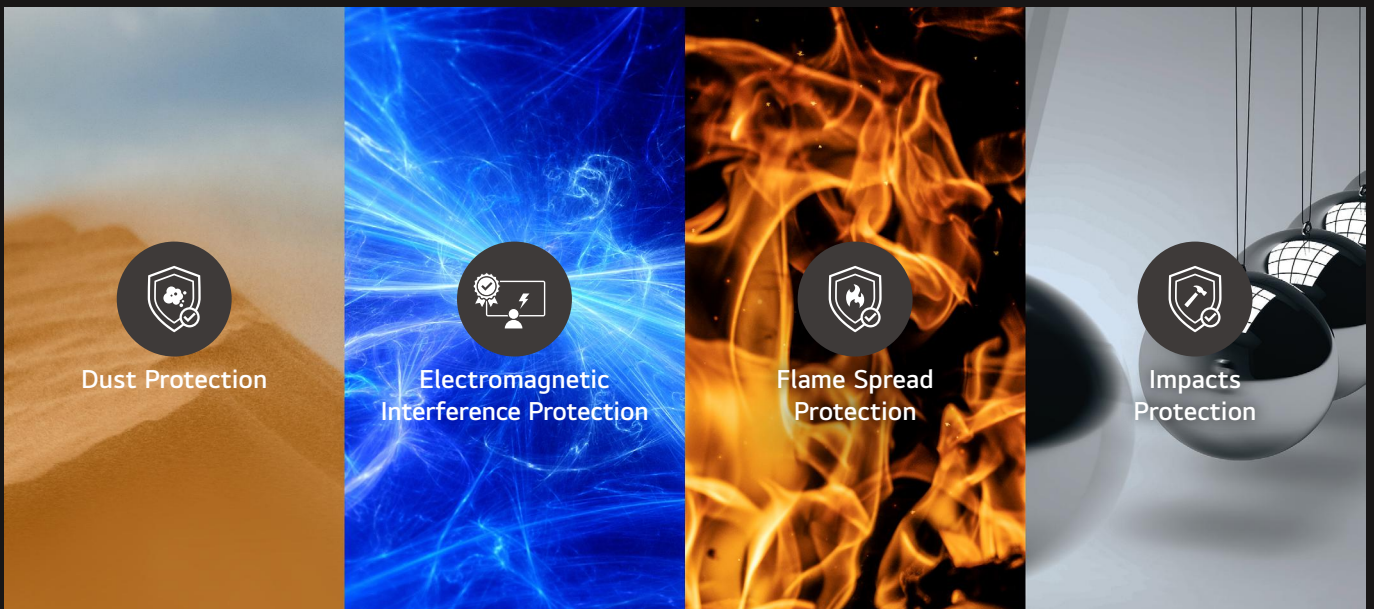
LG MAGNIT sets a new standard for color uniformity, providing vibrant hues from various angles. Whether you're directly in front or off to the side, LG MAGNIT consistently displays precise colors. This reliable performance ensures that attendees in a large space sees consistent color representation. LG MAGNIT's color consistency has also been recognized with TÜV certification for its wide viewing angle.

\* The LSAP007-N2, LSAP009-N2,N5 LED module passed a TÜV Rheinland-approved test following "2 PFG Q2865 / 05.23 Evaluation of Color consistency wide viewing angle". This covers aspects like Color consistency(left/right), Color consistency(top/bottom), Color direction, Viewing angle segmentation(left/right), Color consistency(Color gamut). (Certificate No. Q50589187 0001)



## Vivid Color Expression Powered by HDR

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



## Care Less with Sturdy Design

LG MAGNIT has improved durability to protect against various risks caused by factors such as dust, electro-magnetic interference, flame spread and physical impacts. This is particularly important for installation in public places, as it helps minimize unforeseen accidents.

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

# SPECIFICATIONS

	LSAP007-*5	LSAP009-*2/*5	LSAP012-*2/*22	
<b>Pitch Name</b>	P0.78	P0.94	P1.25	
<b>Physical Parameters</b>	Pixel Configuration	Micro	Micro	
	Pixel Pitch (mm)	0.78	0.94	1.25
	Module Resolution (W × H)	384 × 144	320 × 120	240 × 90
	Module Dimensions (W × H, mm)	300 × 112.5	300 × 112.5	300 × 112.5
	Weight per Module (kg)	0.18	0.17	0.16
	No. of Modules per Cabinet (W × H)	2 × 3	2 × 3	2 × 3
	Cabinet Resolution (W × H)	768 × 432	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 (m <sup>2</sup> )	0.2	0.2	0.2
	Weight per Cabinet (kg/Cabinet)	7.8	7.8	7.8
	Weight per Square Meter (kg/m <sup>2</sup> )	38.5	38.5	38.5
	Physical Pixel Density (pixels/m <sup>2</sup> )	1,638,400	1,137,778	640,000
	Flatness of Cabinet (mm)	±0.5	±0.5	±0.5
	Cabinet Material	Die-casting Aluminum	Die-casting Aluminum	Die-casting Aluminum
	Service Access	Front	Front	Front
<b>Optical Specifications</b>	Max. Brightness (After Calibration, nit)	600 (Min.)	800 (Min.)	1,000 (Min.)
	Color Temperature (K)	2,000-10,000 / Default 6,504	2,000-10,000 / Default 6,504	2,000-10,000 / Default 6,504
	Visual Viewing Angle (H × V)	150 × 150	150 × 150	150 × 150 (TBD)
	Brightness Uniformity	0.95	0.95	0.95
	Color Uniformity	±0.02 Cx, Cy	±0.02 Cx, Cy	±0.02 Cx, Cy
	Contrast Ratio	17,000 : 1 @ 10lux	23,000 : 1 @ 10lux	25,000 : 1 @ 10lux
	Processing Depth (bit)	22 bit Internal Processing (HDR10)	22 bit Internal Processing (HDR10)	22 bit Internal Processing (HDR10)
<b>Electrical Specifications</b>	Power Consumption (W/Cabinet, Max.)	70	75	90
	Power Consumption (W/Cabinet, Avg.)	40	38	45
	Power Consumption (W/m <sup>2</sup> , Max.)	346	370	444
	Heat Dissipation (BTU/h/Cabinet, Max.)	239	256	307
	Heat Dissipation (BTU/h/Cabinet, Avg.)	137	130	154
	Heat Dissipation (BTU/h/m <sup>2</sup> , Max.)	1,180	1,264	1,516
	Power Supply (V)	100 to 240	100 to 240	100 to 240
	Frame Rate (Hz)	23.98 / 24 / 25 / 29.97 / 30 / 50 / 59.94 / 60	23.98 / 24 / 25 / 29.97 / 30 / 50 / 59.94 / 60	23.98 / 24 / 25 / 29.97 / 30 / 50 / 59.94 / 60
Refresh Rate (Hz)	3,840	3,840	15,360	
<b>Operation Specifications</b>	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
<b>Standard</b>	Certification	Safety 62368-1, EMC Class A		
	Certification (Fire Protection)	BS476 Part7 Class1		
<b>Environment</b>	RoHS/REACH			
<b>Controller</b>	MEGAPIXEL VR (HELIOS)			
<b>90 Degree Corner Cut</b>	No			

## Controller

<b>Cabinet</b>		LSAP, LBAG
<b>Max. Output Range</b>	Loading Capacity	8,192 × 4,320 @ 60 Hz
	Output Resolution	35.3 Million Pixels
<b>Input</b>		HDMI 2.0, HDCP 2.2, DP 1.4 (HBR3), SDI (4 × 12G-SDI), OPS (ST2110)
<b>Output</b>		Optic (To LED Screen (8 × 10G))
<b>Control</b>	LAN	Yes
	Remote Control	Yes (+Gamepad)
	GenLock	Yes (In)
<b>Sensor</b>	Temperature (Embedded Sensor)	Yes
<b>Video Processing</b>		Brightness Adjustment, Chroma Adjustment, Improved Grayscale at Low Brightness, Scaling, HDR (PQ, HLG, Custom), EDID Custom
<b>Application</b>		webOS API, Configuration SW (Cross-platform Web Interface)
<b>Mechanical</b>	Size (W × H × D, mm)	481.5 × 44.2 × 393
	Weight (kg)	5.7

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



Download  
LG C-Display+  
Mobile App  
Google Play Store

[www.lg.com/global/business/information-display](http://www.lg.com/global/business/information-display)  
[www.youtube.com/c/LGCommercialDisplay](https://www.youtube.com/c/LGCommercialDisplay)  
[www.facebook.com/LGInformationDisplay](https://www.facebook.com/LGInformationDisplay)  
[www.linkedin.com/company/lginformationdisplay](https://www.linkedin.com/company/lginformationdisplay)  
[www.twitter.com/LG\\_ID\\_HQ](https://www.twitter.com/LG_ID_HQ)

LG may make changes to specifications and product descriptions without notice. Copyright © 2024 LG Electronics Inc. All rights reserved. "LG Life's Good" is a registered trademark of LG Corp. The names of products and brands mentioned here may be the trademarks of their respective owners.

