

ENERGY

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

## LG MAGNIT LSAP Studio Series

# Micro LED Display with Megapixel VR HELIOS® Controller



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Power UI/UX with MVR Controller

Vibrant Colors

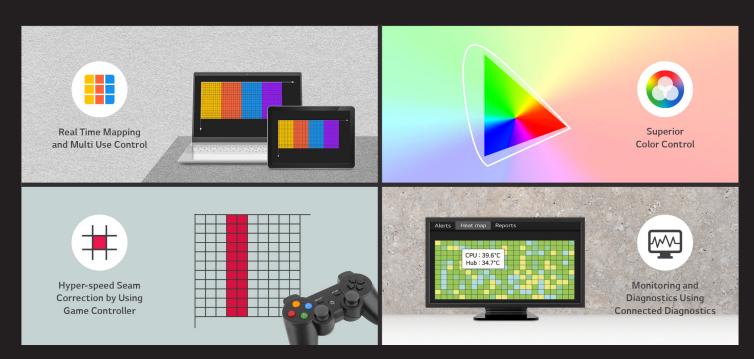


Achieving True Black

High Reliability

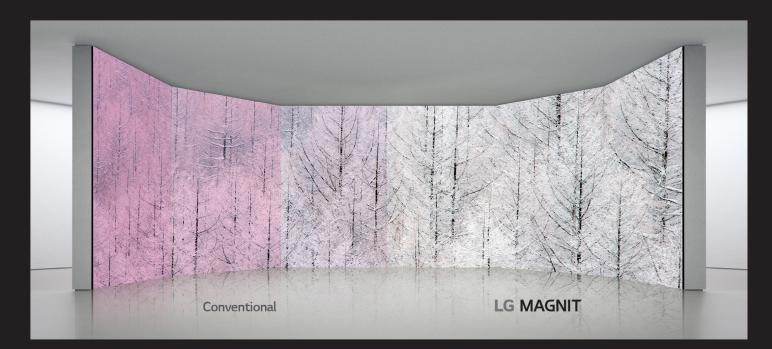
LSAP	Studio	Series

Pixel Pitch	0.78 / 0.94 / 1.25 mm	
Max Brightness After Calibration	600 nits (0.78 mm) 800 nits (0.94 / 1.25 mmm)	
Weight per Cabinet (Ibs. / kg)	17.2 / 7.8	
Service Access	Front	
IP Rating Front / Rear	IP50 / IP20	



#### Powerful UI/UX with MVR Controller

With the purchase of the MVR controller, LSAP now has the capability to utilize powerful UX and UI functionalities. Real-Time Mapping, Multi-User Control, Superior Color Control, Hyper-Speed Seam Correction, Monitoring, and Diagnostics are all available.



### 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 precise viewing experiences. This technology ensures remarkable color uniformity, resulting in superb image quality.

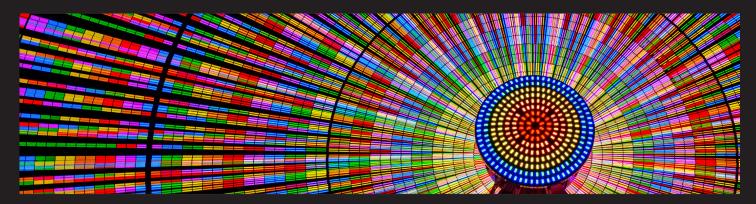
LG Processing Technology in Chip Transfer

LG Surface Treatment



#### Achieving Deep Black Color with Direct Chip Mounting

LG MAGNIT's black coating technology and direct bonding micro-sized chips onto circuit boards created a stunning black expression. This makes it the ideal choice for displaying content, ensuring that every image is rich and vibrant.



#### Vibrant 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. The enhanced Gamut Transfer technology delivers colors close to the original color, which is essential for places where color representation is demanding.



### Sturdy Design

LSAP protects its LED chips through several layers of coated film. Considering that it is usually installed in public places and professional work areas where many people come and go, its stability is vitally important to minimize unforeseen accidents.

	Model Name	LSAP007	LSAP009	LSAP012
	Pixel Configuration	СОВ	СОВ	СОВ
Physical Parameters	Pixel Pitch (mm)	0.78	0.94	1.25
	Module Resolution (WxH)	384 x 144	320 x 120	240 x 90
	Module Dimensions (W x H)	11.8 x 4.4 in. 300 x 112.5 mm	11.8 x 4.4 in. 300 x 112.5 mm	11.8 x 4.4 in. 300 x 112.5 mm
	Weight per Module	0.4 lbs. / 0.18 kg	0.4 lbs. / 0.17 kg	0.4 lbs. / 0.16 kg
	No. of Modules per Cabinet (WxH)	2 x 3	2 x 3	2 x 3
	Cabinet Resolution (WxH)	768 x 432	640 x 360	480 x 270
	Cabinet Dimensions (W x H x D, mm)	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	23.6 x 13.3 x 1.8 in. 600 x 337.5 x 44.9 mm
	Cabinet Surface Area	2.2 ft <sup>2</sup> / 0.2 m <sup>2</sup>	2.2 ft <sup>2</sup> / 0.2 m <sup>2</sup>	2.2 ft <sup>2</sup> / 0.2 m <sup>2</sup>
	Weight per Cabinet	17.2 lbs. / 7.8 kg	17.2 lbs. / 7.8 kg	17.2 lbs. / 7.8 kg
	Weight per Unit Area	7.9 lbs/ft² / 38.5 kg/m²	7.9 lbs/ft <sup>2</sup> / 38.5 kg/m <sup>2</sup>	7.9 lbs/ft² / 38.5 kg/m²
	Physical Pixel Density (pixels/m)	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
	Brightness (After Calibration, nits)	Max. 600	Max. 800	Max. 800
	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 (Horizontal)	150°	150°	150°
	Visual Viewing Angle (Vertical)	150°	150°	150°
Optical Specifications	Brightness Uniformity	0.95	0.95	0.95
	Color Uniformity	±0.02Cx,Cy	±0.02Cx,Cy	±0.02Cx,Cy
	Contrast Ratio	17,000:1 @10lux	23,000:1 @10lux	24,000:1 @10lux
Pro	Processing Depth (bit)	22bit Internal processing (HDR10)	22bit Internal processing (HDR10)	22bit Internal processing (HDR10)
(W)	Max. Power Consumption per Cabinet (W)	70	75	90
	Avg. Power Consumption per Cabinet (W)	40	38	45
	Max. Power Consumption (W/m²)	346	370	444
	Max. Heat Dissipation per Cabinet (BTU/hr)	239	256	307
-	Avg. Heat Dissipation per Cabinet (BTU/hr)	136	130	154
	Max. Heat Dissipation (BTU/h/m²)	1,179	1264	1,516
	Power Supply (Vac)	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	7,680 (Wall) / 3,840 (Ceiling)
	LED Lifetime* (Half brightness)	Up to 100,000 Hours	Up to 100,000 Hours	Up to 100,000 Hours
	Operating Temperature	32°F to +104°F 0°C to +40°C	32°F to +104°F 0°C to +40°C	32°F to +104°F 0°C to +40°C
Operation Specifications	Operating Humidity	10% to 80% RH	10% to 80% RH	10% to 80% RH
	IP rating Front	IP50	IP50	IP50
	IP rating Rear	IP20	IP20	IP20
Regulatory & Certifications	Certifications	Safety 62368-1 EMC Class A	Safety 62368-1 EMC Class A	Safety 62368-1 EMC Class A
	Fire Protection	BS476 Part7 Class1	BS476 Part7 Class1	BS476 Part7 Class1
Warranty & Other	Warranty	3 Year Limited Up to 5 w/ ExtendedCare (Optional)	3 Year Limited Up to 5 w/ ExtendedCare (Optional)	3 Year Limited Up to 5 w/ ExtendedCare (Optional)
	Environmental	RoHS, REACH	RoHS, REACH	RoHS, REACH
	Controller	MEGAPIXEL (HELIOS)	MEGAPIXEL (HELIOS)	MEGAPIXEL (HELIOS)
	90 degree corner cut	No	No	No

Lifetime spec does not supercede the 3 Year Limited Warranty.

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

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