

**Outdoor LED** GNPA Series

# Marine Grade Outdoor LED Signage



Durability for Rough Environment



Lightweight Design



Wide Viewing Angle



Flexible Configuration and Installation



High Refresh Rate



Compatible with LG Software Solutions

#### GNPA Series

Pixel Pitch	6.25 / 8.33 mm		
Brightness	6,000 nits (Max.)		
Weight per Cabinet	10.5 lbs. / 4.6 kg		
Service Access	Front and Rear		
IP Rating Front / Rear	IP67 / IP67		



#### Perfectly Complimenting the Cruise Experience

Cruise travel offers a special moment that goes beyond just a means of transportation, allowing passengers to experience both comfort and luxury. LG marine-grade outdoor DVLED technology envelops guests in vibrant and clear images from the moment they board, creating the perfect stage for an exciting cruise journey. The IP67-rated GNPA series performs exceptionally well even by the poolside or outdoors, providing a visual experience that all passengers can enjoy.



## **Durability for Rough Environment**

The GNPA series is designed to ensure durability through its powder coating and conformal coating, which help protect against moisture in challenging marine environments and weather conditions. Both the front and rear of the cabinet are IP67-certified, featuring robust designs that are particularly suitable for seaside locations. Notably, the concealed front screws on the front side minimize the potential risk of corrosion. This design helps to ensure stable power and data connections, safeguarding them from outdoor elements such as wet weather. Additionally, each LED module is independent, equipped with its own receiver card and power supply unit (PSU), ensuring that it does not rely on the cabinet configuration.



#### Flexible Configuration

The cabinet size can be adjusted based on the screen configuration, starting with the basic unit of the Super Module ( $400 \times 600$ ). Based on the Super Module as the basic unit, various sizes of Super Cabinets can be configured with optional reinforcing bars. For example, a configuration of up to  $3,200 \times 3,600$  is also possible. This design minimizes the inconvenience of lifting multiple smaller cabinets.



#### Easy Maintenance

The product provides convenient access from both the front and rear, featuring a modular cabinet power distribution unit that can be easily attached or detached for straightforward maintenance. Additionally, a self-contained power supply unit and receiver card equipped with handles enable quick and virtually effortless replacement.



# Compatibility with LG Software Solutions

When connected with LG's CVGA system controller, the GSPC series is compatible with LG software solutions including SuperSign® CMS, LED Assistant, and ConnectedCare™, which help customers operate their own business effectively. The items that can be monitored by LG ConnectedCare include main board temperature, signal status, FPGA version, ethernet connection status, receiving card temperature, and LED power.

<sup>\*</sup> Actual user interface may vary in different webOS versions. LG software solutions are optional and need to be purchased separately

## **SPECIFICATIONS**

		GNPA062-CG/CGW	GNPA083-CG/CGW	
	Pitch Name	P6.25	P8.33	
	Pixel Configuration	Single SMD	Single SMD	
	Pixel Pitch (mm)	6.25	8.33	
Physical Parameters	Module Resolution (W × H)	64 × 96	48 × 72	
	Module Dimensions (W × H)	15.7 × 23.6 in. / 400 × 600 mm	15.7 × 23.6 in. / 400 × 600 mm	
	Weight per Module	10.1 lbs. / 4.6 kg	10.1 lbs. / 4.6 kg	
	No. of Modules per Cabinet (W × H)	1 × 1	1 × 1	
	Cabinet Resolution (W × H)	64 × 96	48 × 72	
	Cabinet Dimensions (W × H × D)	15.7 × 23.6 × 2.3 in. 400 × 600 × 58 mm	15.7 × 23.6 × 2.3 in. 400 × 600 × 58 mm	
	Cabinet Surface Area	2.6 ft² / 0.24 m²	2.6 ft <sup>2</sup> / 0.24 m <sup>2</sup>	
	Weight per Cabinet	10.1 lbs. / 4.6 kg	10.1 lbs. / 4.6 kg	
	Weight per Square Meter	3.9 lbs/ft² / 19 kg/m²	3.9 lbs/ft² / 19 kg/m²	
	Physical Pixel Density (pixels/m²)	25,600	14,400	
	Flatness of Cabinet (mm)	±1.0	±1.0	
	Cabinet Material	Aluminum	Aluminum	
	Service Access	Front & Rear	Front & Rear	
	Max. Brightness (nits)	Up to 6,000	Up to 6,000	
	Color Temperature (K)	3,200-9,300	3,200-9,300	
	Visual Viewing Angle (H × V)	160 × 120	160 × 120	
Optical pecifications	Brightness Uniformity	97%	97%	
pecifications	Color Uniformity	±0.03 Cx,Cy	±0.03 Cx,Cy	
	Contrast Ratio	10,000:1	10,000:1	
	Processing Depth (bit)	16 (HDR10, HDR10 Pro)	16 (HDR10, HDR10 Pro)	
	Max. Power Consumption (W)	145	145	
	Avg. Power Consumption (W)	48	48	
	Max. Power Consumption per Unit Area (W/m²)	605	605	
	Max. Heat Dissipation (BTU/h)	495	495	
Electrical pecifications	Avg. Heat Dissipation (BTU/h)	164	164	
ppecifications	Max. Heat Dissipation per Unit Area (BTU/h/m²)	2,064	2,064	
	Power Supply (Vac.)	100 to 240	100 to 240	
	Frame Rate (Hz)	50 / 60	50 / 60	
	Refresh Rate (Hz)	7,680	7,680	
	Lifetime - Half Brightness (hours)	Up to 100,000	Up to 100,000	
Operation	Operating Temperature	-22°F to +122°F / -30°C to +50°C	-22°F to +122°F / -30°C to +50°C	
pecifications	Operating Humidity	0-90% RH	0-90% RH	
	IP Rating Front / Rear	IP67 / IP67	IP67 / IP67	
	Warranty	3 Year Limited	3 Year Limited	
	Regulatory	CE, FCC, ETL	CE, FCC, ETL	
Warranty & Other	Regulatory (Fire Protection)	BS476 Part7 Class1 & EN13501-1 Class B	BS476 Part7 Class1 & EN13501-1 Class B	
	Environmental	RoHS, REACH	RoHS, REACH	
	Controller	CVCA / LCIN	CVCA / LCIN	
	90 Degree Corner Cut	No	No	

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

### **SPECIFICATIONS** (CONTROLLER)

#### CVCA

Max Output Range	Loading Capacity	3,840 × 2,160 @ 60 Hz	
	Output Resolution	8.2944 Million Pixels	
Input	HDMI	HDMI 2.0	
	HDCP	HDCP 2.2	
	DP	DP 1.2 / HDCP 1.3	
	DVI	No	
	SD I /ST2110	No	
	OPS	Yes	
Output	HDMI	No	
	DVI	No	
	Fiber Optic (To LED Screen)	No	
	Ethernet (To LED Screen)	Yes (16-channel)	
	LAN	Yes	
Control	USB	Yes	
Control	RS-232C	Yes (LOOP)	
	GenLock	No	
-	Ambient Light (External Sensor)	No / Yes (Must use together with MFN300B)	
Sensor	Temperature (Embedded Sensor)	Yes	
Video Processing	Brightness Adjustment	Yes	
	Chroma Adjustment	Yes	
	Improved Grayscale at Low Brightness	Yes	
	Scaling	Yes	
	HDR	HDR10 Pro	
	EDID Custom	No	
	CMS	SuperSign CMS	
Application	webOS API	Yes	
	LG ConnectedCare <sup>1</sup>	Yes	
	Configuration SW	LED Assistant	
Masharian	Size (W × H × D)	17.5 × 2.5 × 12.1 in. / 443 × 63 × 307.5 mm	
Mechanical	Weight	10.8 lbs. / 4.9 kg	

 $<sup>^{\</sup>mbox{\scriptsize 1)}}$  The availability can differ by region.

		LCIN006	LCIN007	LCIN008	LCIN009	LCIN010
L	Loading Capacity	1,920 × 1,200 @ 60 Hz	1,920 × 1,200 @ 60 Hz	4,096 × 2,160 @ 60 Hz	1,920 × 1,200 @ 60 Hz	1,920 × 1,200 @ 60 Hz
	Max Output Range (Maximum Width/Height)	3,840 / 2,560 Pixels	3,840 / 2,560 Pixels	7,680 / 7,680 Pixels	3,840 / 2,560 Pixels	3,840 / 2,560 Pixels
C	Output Resolution	2.304 Million Pixels	2.304 Million Pixels	8.8 Million Pixels	2.304 Million Pixels	2.304 Million Pixels
F	HDMI	HDMI 1.3	HDMI 1.3	HDMI 2.0	HDMI 1.4	No
F	HDCP	HDCP 1.4	HDCP 1.4	HDCP 1.4 / 2.2	HDCP 1.4	No
Input D	DP	No	No	DP 1.2 / HDCP 1.3	No	No
D	DVI	Yes	Yes	Yes (2-channel)	Yes	Yes
S	SDI / ST2110	No	No	No	Yes (1-channel 3G-SDI)	No
F	HDMI	No / Yes (LOOP)	No / Yes (LOOP)	No	Yes (LOOP)	No
Output	DVI	No / Yes (LOOP)	No / Yes (LOOP)	No	Yes (LOOP)	No / Yes (LOOP)
F	Fiber Optic (To LED Screen)	No	No	Yes (4-channel)	Yes (2-channel)	No / Yes (Optional)
E	Ethernet (To LED Screen)	Yes (4-channel)	Yes (4-channel)	Yes (16-channel)	Yes (6-channel)	Yes (4-channel)
L	LAN	No	No	Yes	Yes	Yes
Control	USB	Yes	Yes	Yes (LOOP)	Yes	Yes
R	RS-232C	No / Yes (LOOP)	No / Yes (LOOP)	No	No	Yes
6	GenLock	No	No	Yes	Yes	No
	Ambient Light (External Sensor)	Yes	No / Yes (Must use together with MFN300B)	No / Yes (Must use together with MFN300B)	No / Yes (Must use together with MFN300B)	No / Yes (Must use together with MFN300B)
T	Temperature (External Sensor)	No / Yes (Must use together with MFN300B)				
E	Brightness Adjustment	Yes	Yes	Yes	Yes	Yes
C	Chroma Adjustment	Yes	Yes	Yes	Yes	Yes
	Improved Grayscale at Low Brightness	No	No	Yes	Yes	No
F	HDR	No	No	HDR10 / HLG	No	No
E	EDID Custom	Yes	Yes	Yes	Yes	Yes
Application C	Configuration SW	NovaLCT	NovaLCT	NovaLCT	NovaLCT	NovaLCT
Mechanical	Size (W×H×D)	18.9 × 1.7 × 9.8 in. 482 × 44.4 × 250 mm	19 × 2.2 × 10.2 in. 483 × 55.3 × 258.1 mm	19 × 3,8 × 14.7 in. 482.6 × 96 × 372 mm	19 × 1.9 × 14 in. 482.6 × 50.1 × 356 mm	16.8 × 1.7 × 9.8 in. 428 × 44.4 × 250 mm
V	Weight	6.4 / 7.9 lbs. / 2.9 / 3.6 kg	6.4 / 7.9 lbs. / 2.9 / 3.6 kg	10.1 lbs. / 4.6 kg	10.1 lbs. / 4.6 kg	6.4 / 7.9 lbs. / 2.9 / 3.6 kg

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



