

## DP-W250GF

## Outdoor P2.5 Full-Color LED Module (1 / 16 Scan)



Note: This image is for reference only. The product appearance and color are subject to the actual product.

## Description

The DP-W250GF is a high-performance outdoor LED display with a 2.5 mm pixel pitch and full-color SMD1415 RGB LEDs. Each module measures 320 × 160 mm with a resolution of 128 × 64 pixels, delivering bright and uniform images at  $\geq 6,000 \text{ cd/m}^2$ . Featuring 14-bit grayscale, constant current driving, and automatic brightness and chromaticity calibration, it ensures stable performance, smooth visuals, and long lifespan. With a wide 140° viewing angle and optimal viewing distance of 2.5 m, it is ideal for outdoor signage, video walls, and professional digital display applications.

## Features

- Ultra-fine 2.5 mm pixel pitch for sharp, detailed images
- High pixel density of 160,000 dots/ $\text{m}^2$  for clear visuals

- Wide viewing angle for consistent image quality
- Brightness  $\geq 6,000 \text{ cd/m}^2$  for excellent visibility even outdoors
- High gray scale (14-bit) for smooth color gradients
- Fast refresh rate and frame rate for flicker-free display
- Automatic per-module data calibration for uniform color
- IP65-rated protection for outdoor durability
- Long lifespan and high MTBF for stable long-term operation
- Flexible control: computer-controlled, video-synchronized, real-time display
- Flame-retardant module material for safety and durability

## Specifications

LED parameters (for reference only, parameters vary by shipping batch) (T=25° C)

Product Model	Color	IF (mA) TEST	Rd (nm) Typ	Iv (mcd) Typ	Vf (V) Typ	View Angle (deg.)
SMD1415	Red	15	620	400	2.0	110
	Green	10	525	650	3.0	110
	Blue	8	470	95	3.0	110

Pixel Pitch	2.5mm
Pixel Density	160000dots/m <sup>2</sup>
Module Resolution	128 × 64 pixels (Width×Height)
Module Dimensions	320mm × 160mm × 18mm (Width×Height×Thickness)
Module Weight	Approx. 350kg
Driving Method	Constant Current
Scanning Method	1/16 scan
Operating Voltage	DC5V±10%
Maximum Current	15A (Typical) <sup>(1)</sup>
Maximum Power Consumption	75W (Typical) <sup>(2)</sup>
Power Interface	VH4
Signal Interface	HUB75E (IDC16)
Brightness	$\geq 6000 \text{ cd/m}^2$
Color Temperature	9000K±500K (Adjustable)
Viewing Angle	$\leq 140^\circ$
Optimal Viewing Distance	$\geq 2.5 \text{ m}$
Gray Scale Level	14 Bit
Brightness and Chromaticity Calibration	Support
Refresh Rate	$\geq 1920 \text{ Hz}$ <sup>(3)</sup>
Supported Resolution	128 × 256 pixels (Width×Height)
Brightness	0-255 (Adjustable)

Adjustment Range	
Lifespan	100,000 Hours
Operating Temperature	-20°C-60°C
Operating Humidity	10%-90%RH Non-condensing
Storage Temperature	-40°C- 80°C

Note: The value of ① ② depends on the brightness of the lamp, which is for reference only; ③ Refresh frequency achieved using PWM driving chip: 3840Hz.