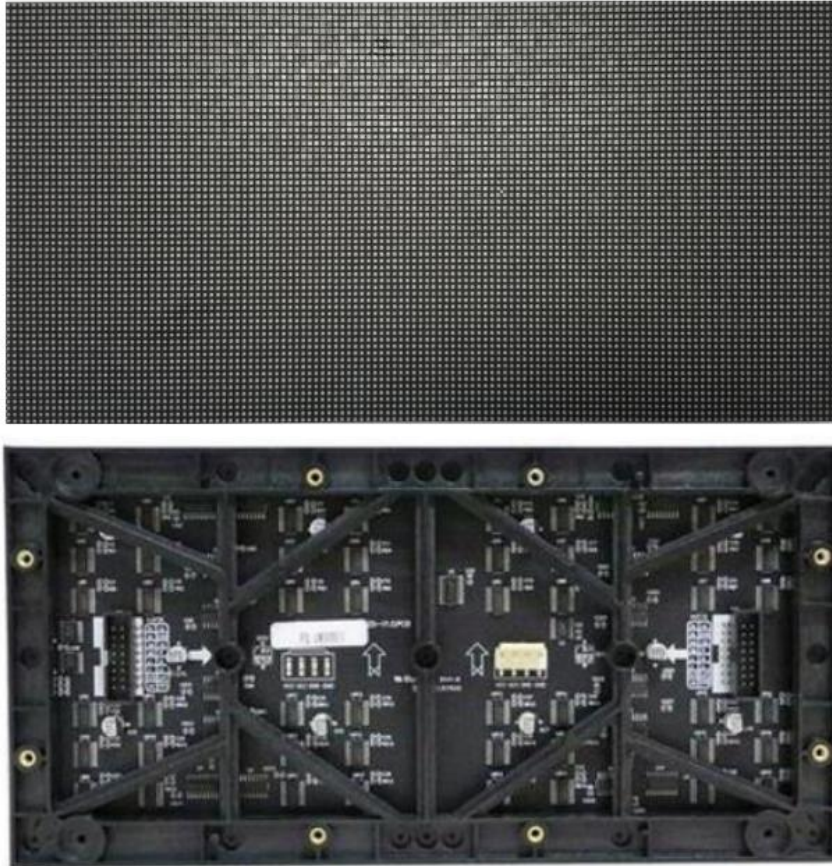


DP-N200BC

Indoor P2 Full-Color LED Module



Description

The DP-N200BC Indoor P2 Full-Color LED Module is a high-definition, ultra-fine-pitch indoor LED display module, engineered for applications demanding exceptional image clarity at close viewing distances. With a 2mm pixel pitch and SMD1515 RGB LEDs, the module delivers vibrant colors, high brightness, and a wide 170° field of view. Featuring 16-bit grayscale, a high refresh rate of $\geq 3840\text{Hz}$ (PWM driving), and adjustable color temperature from 1000K to 20000K, it ensures smooth, vivid visuals for indoor environments such as control rooms, exhibition halls, conference rooms, and other high-resolution digital signage applications.

Features

- Ultra-fine 2mm pixel pitch for high-definition indoor display
- SMD1515 RGB LEDs with wide 110° viewing angle and high brightness $\geq 800\text{cd/m}^2$
- 16-bit grayscale with high refresh rate $\geq 3840\text{Hz}$ (PWM driving) for smooth, flicker-free images
- Adjustable color temperature: 1000K–20000K and brightness range 0–255
- Wide 170° field of view for optimal viewing experience
- Reliable indoor operation: -20°C to 60°C , 10%-90% RH non-condensing
- HUB75D (IDC16) signal interface with $\text{DC5V} \pm 10\%$ operating voltage
- Supports brightness and chroma calibration for consistent image quality

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.)
SMD1515	Red	8	620	50	2.0	110
	Green	5	525	170	3.0	110
	Blue	3	470	23	3.0	110

Pixel Pitch	2mm
Pixel Density	250000dots/m ²
Unit Board Resolution	128 × 64 pixels
Unit Board Dimensions	256mm × 128mm × 14.6mm (Width×Height×Thickness)
Unit Board Weight	0.4kg
Drive Type	16-bit Constant Current (PWM)
Scanning Method	1/32 scan
Operating Voltage	DC5V±10%
Maximum Current	5A (Typical)①
Maximum Power Consumption	25W (Typical)②
Power Interface	VH4
Signal Interface	HUB75D (IDC16)
Max. Brightness	≥800cd/m ²
Color Temperature	1000K-20000K (Adjustable)
Field of View	170°
Optimal Viewing Distance	≥2m
Grayscale Level	≥16 Bit
Brightness and Chroma Calibration	Support
Refresh Frequency	≥3840Hz③
Operating Temperature	Indoor
Brightness Range	0-255 (Adjustable)
Service Life	100,000 Hours
Operating Temperature	-20℃-60℃
Operating Humidity	10%-90%RH Non-condensing
Storage Temperature	-40℃- 80℃

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.