

P2.5 Indoor Full Color LED Module Specification

Product name	P2.5 Indoor full color LED module
Pixel Pitch	P2.5 -32S-128*64-2020
Module Size	320mm*160mm*14mm
File No.	MST -202405-A



Catalogue of Specs

一、 Indoor P2.5 full-color LED module (320*160)	3
1. Module information	3
2. Module pictures and size	4
3. Module Parameters	4
4. Module Data interface definition	6
5. Module hole diagram	7
6. Power Supply Configuration	7
7. Module packaging type and size	8
8. Accessories	8
9. Precautions for usage	9

Notice:

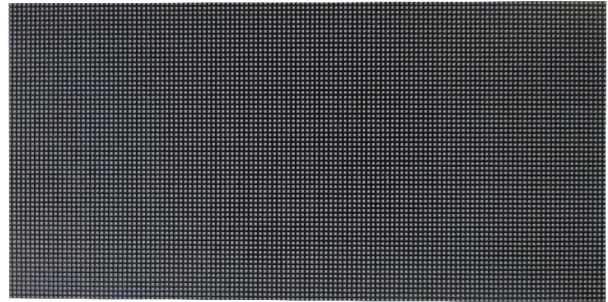
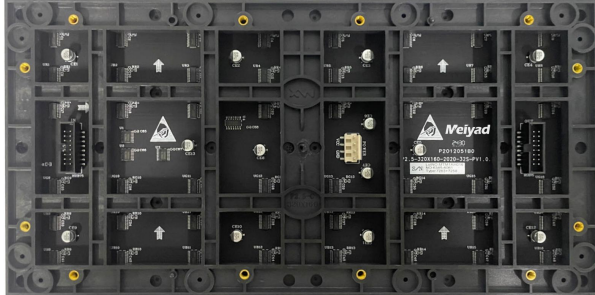
1-Due to the rapid product updates, if this specification is subject to modification, we will not prior notice!

2-Without the signed permission of Meiyad Optoelectronics Co., Ltd., any editing, reprinting, copying or publishing in any form is not allowed.



一、Indoor P2.5 full-color LED module (320*160)

1. Module information

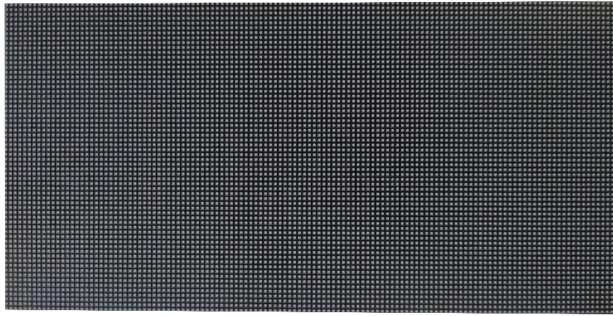


Module features:

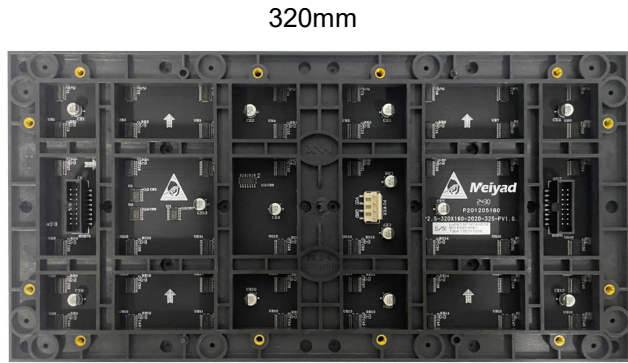
- PWM high refresh rate IC, 4K refresh rate
- Low bright and high gray, fine and delicate picture quality
- Good ink color consistency, black screen without color difference
- High quality lamp beads, higher quality stability and longer life
- High contrast, restore the real color of the picture quality
- Optional magnetic suction installation or die cast aluminum cabinet installation



2. Module pictures and size



Front



Back (For reference)

3. Module Parameters

Parameter Name		Indoor P2.5 full color LED module
Module Form	Pixel structure	1R1G1B
	Lamp Spec	SMD2020
	Pixel Pitch(mm)	2.5
	Drive IC	Constant current drive
	Scan mode	1/32S
	Module Resolution (W*H)	128*64
	Module Size(W*H*D, mm)	320*160*14
	Pixel Density(dot/m²)	160000
	Weight ((typical))	365g (For reference)
	Power interface	VH4
	Signal interface	HUB75
	Brightness(nits)	≥500cd (adjustable)
	Colour Temperature (K)	3000-9300K (adjustable)

Company: Shenzhen Meiyad Optoelectronics Co.,Ltd

Add: No.9 building Nangang third industrial park, tangtou village,
Shiyan Town, Baoan district, Shenzhen, China 518108

Tel: 400-888-7260 **Fax:** 0755-82687591

Web: www.myddisplay.com



Optics Parameter	Viewing Angle(V ; H) °	120±10° : 140±10°
	Deviation of the center distance	<3%
	Brightness uniformity	≥98%(After correction)
	Chromaticity uniformity	within±0.003Cx,Cy(After correction)
	Grey scale	16-65536 (adjustable)
	Contrast Ratio	5000:1
	Best Viewing Distance	≥4m
	Brightness correction	support
Electrical Parameter	Maximum current (typical))	4.0A±0.1A
	Maximum power ((typical))	≤18W
	Working Voltage	DC5V±10%
	Maintenance mode	Front&Rear Service
	Refresh Rate (Hz)	1920Hz / 3840Hz
	Refresh frame frequency (Hz)	50&60
Screen Operation Parameters	Working Voltage	AC: 220V~240V、 50~60Hz
	Peak power consumption (W/ m²)	≤350
	Ave. power consumption(W/ m²)	120W ~ 170W
	Continuous working hours	≥7×24hrs Support for continuous display
	Lifespan(theoretical)	100,000 Hours
	Operating Temperature (°C)	-20—60°C
	Storage temperature (°C)	-40—60°C



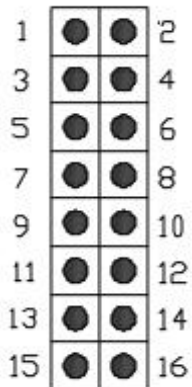
	Operating humidity (RH)	10 - 90%RH No Gel
	Storage humidity (RH)	10 - 85%RH No Gel

Notice:

- 1、The grayscale level and refresh rate of module display may vary depending on the model or controllerbrand used.
- 2、The final right of interpretation for product specifications, models and technical indicators are belongs to our company.

4. Module Data interface definition

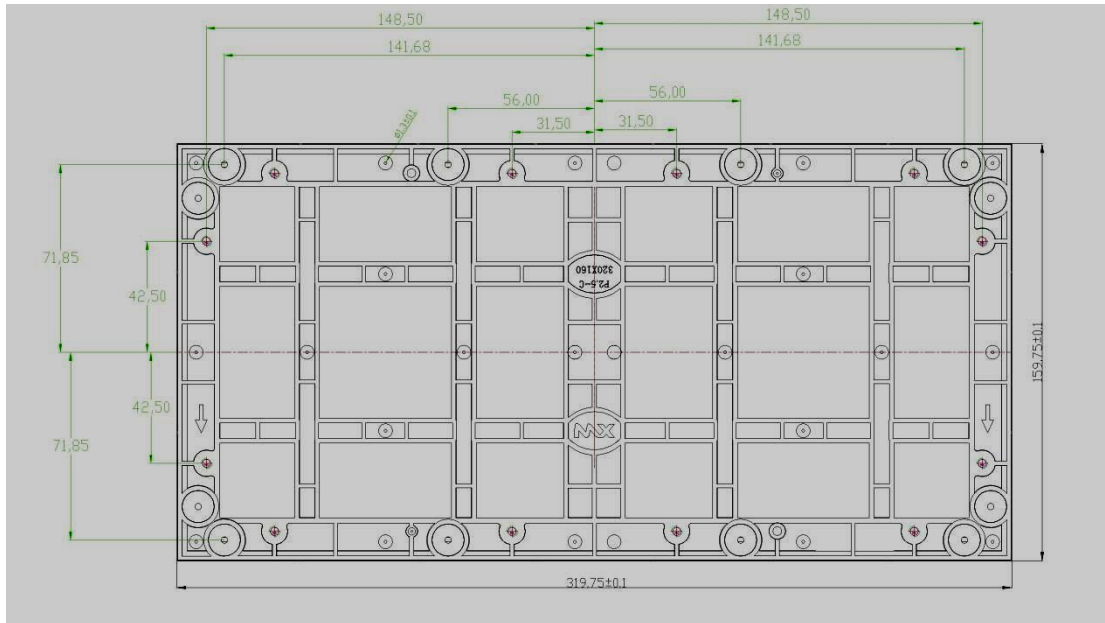
**HUB75 interface
definition**



Pin	Signal	Function	Pin	Signal	Function
1	RD1	Red data signal 1	2	GD1	Green data signal 1
3	BD1	Blue data signal 1	4	GND	Power supply
5	RD2	Red data signal 2	6	GD2	Green data signal 2
7	BD2	Blue data signal 2	8	E	Row control signal
9	A	Row control signal	10	B	Row control signal
11	C	Row control signal	12	D	Row control signal
13	CLK	clock signal	14	LAT	Latching
15	OE	Enabling signal	16	GND	Power supply



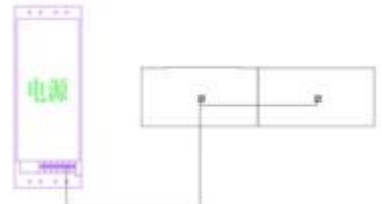
5、Module hole diagram



All dimensions are in millimeters (mm); unless otherwise specified, the shape tolerance is ± 0.1 and the hole tolerance is ± 0.05 (for reference)

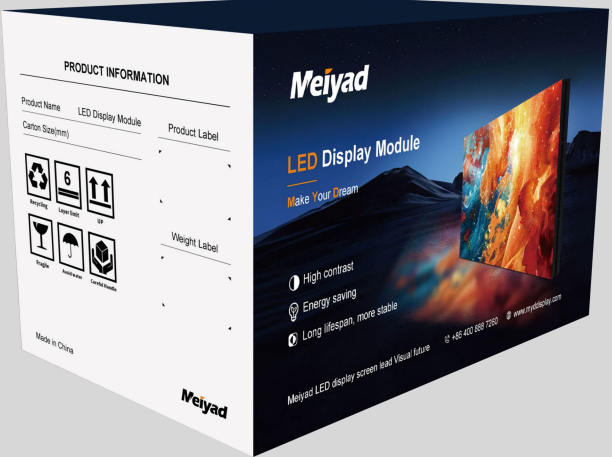
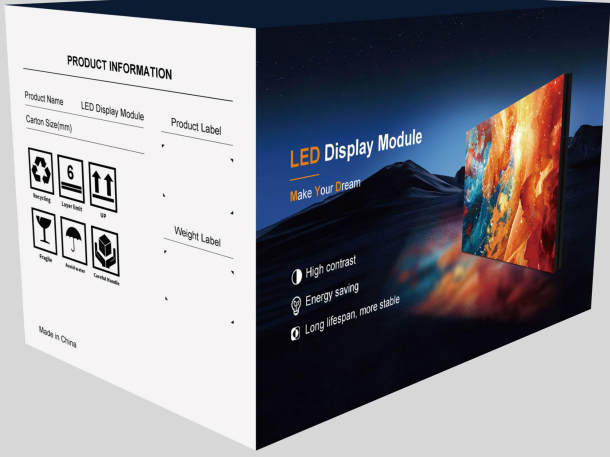
Note: The hole drawing Just for reference, The hole layout diagram may vary for different batches of products.

6. Power Supply Configuration

P2.5-32S-320160-Power Configuration table			
Power Supply	Module current/PC	Power supply weight	QTY of load modules
200W	4.0A	1.05kg/pc	6pcs (Suggestion)
Diagram		Installation Notes	
		A 200W power supply is recommended to carry 6 pcs modules, and a 1 to 2 power cable can carry 2 modules, using a total of 3 power cables.	



7. Module packaging type and size

	
Meiyad logo package (Reference only)	Neutral package(Reference only)
(L*W*H)580mm*380mm*415mm	(L*W*H)580mm*380mm*415mm
40PCS/Carton	40PCS/Carton

8. Accessories

Data Cable	Power Cable (5V)
40 PCS	20 PCS



9. Precautions for usage

- (1) Since LEDs and driver IC chips are both electrostatically sensitive devices, so need to be careful to prevent static electricity when using LED modules. The following measures can effectively prevent static electricity:
 - Personnel using the module must wear grounded anti-static wristbands or anti-static gloves.
 - The power supply housing, cabinet, screen, etc. need to be connected to the ground wire, and the grounding resistance is required to be ≤ 10 ohms. Inspections should be performed every six months.
 - Various tools used in the assembly process must be connected to the ground wire.
- (2) When cleaning the lamp surface of the LED module, do not use unknown chemical liquids to avoid damaging or corroding the LED:
 - When cleaning the LED tube, use a clean soft rag dipped in alcohol to wipe it gently, and wait until it is dry before using it.
 - When cleaning the kits, use a clean soft rag dipped in clean water to wipe it gently. No water marks should be left after wiping, and it must be dried before use.
- (3) When repairing LED modules, it is recommended to use a constant temperature soldering iron. The temperature of the soldering iron should be adjusted according to the composition of the tin wire:
 - When re-soldering LEDs, the temperature of the soldering iron is generally set at around 315°C , the soldering time should not exceed 5s (preferably 3s), and the number of soldering times should not exceed three times.
 - When re-soldering driver IC chips, the temperature of the soldering iron must be kept below 315°C , the soldering time should not exceed 3s, and the number of soldering times should not exceed three times.
- (4) To ensure the stability and prolong the service life of the LED, the surface temperature of the module during operation shall not exceed 60°C , and the storage temperature shall not exceed 60°C . Otherwise, necessary cooling measures must be taken.
- (5) To prevent the service life of the module from being reduced or the module from being burned due to improper use of the power supply, the following precautions should be strictly followed when connecting the LED modules with power supplies.
 - A special power supply for LED display screen is required. The module adopts DC 5V input and must not be directly connected to 220V, otherwise it will cause damage to the entire screen. When installing the LED module, please pay attention to the correct wiring of the power port. The positive and negative poles must correspond; if the positive and negative poles are connected in reverse, the power must be turned off in time to avoid damage to the components.
 - The working voltage of the module should not exceed its maximum allowable working voltage of 5.5V.



- (6) It is not recommended to use magnetic assembly in areas of -10°C or below, as this will cause deformation of the module and affect the flatness of the display screen. Screw-lock installation is required.
- (7) The distribution power box is required to be equipped with lightning protection facilities, such as surge protectors.
- (8) During use and transportation, the module must not be dropped, pushed, squeezed or pressed to avoid damage to the module.
- (9) Moisture-proof and storage requirements
 - ✧ After unpacking, SMD-LED products must be stored in an environment with a temperature $<30^{\circ}\text{C}$ and a humidity $<60\%$.
 - ✧ If the screen has not been used for more than 3 days, the preheating method must be used each time the screen is turned on: preheat at 30%-50% brightness for 4-8 hours, then adjust to normal brightness (80%-100%) to light up the screen, it can remove moisture so that there will be no abnormalities during use..
 - ✧ If the screen has not been used for more than 7 days, the preheating method must be used each time the screen is turned on: preheat at 30%-50% brightness for more than 12 hours, then adjust to normal brightness (80%-100%) to light up the screen, it can remove moisture so that there will be no abnormalities during use

The operation process is shown in the pictures below:



A、 Over 3 days, LED screen (30%-50% brightness) preheat 4-8 hours

B、 Over 7 days, LED screen (30%-50% brightness) preheat over 12 hours

