

## PRODUCT SPECIFICATION

(Outdoor Rental series 250X250mm)

**Product Name:** Outdoor Full Color Display P4.81 13S Module

**Model :** P4.81-1921-13S-\*\*

**Document Number:** 2305191605

**Version Number:** Rev3.0

Fiction:	Audit:	Ratify:

**Statement:**

This document strives to be accurate but may still be errors, it is for reference only, please refer to actual product.

If product information is updated, pls refer to the latest specification for details without prior notice.

Xiamen Haijia Technology Co., Ltd reserves the final right of interpretation.

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## Catalog

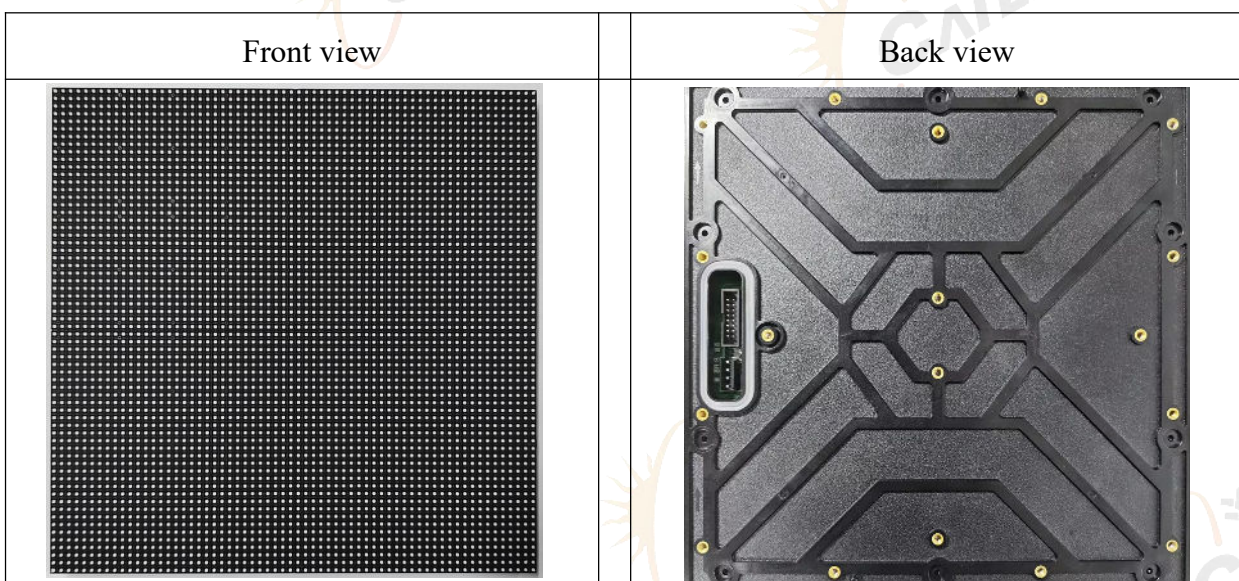
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## 1、 Product description

- Outdoor rental series has uniform kit size& hole position& cabinet hole position, which can be used universally;
- High performance: Dedicated driver chip and input buffer chip for LED high-density full-color screen, bright colors, more delicate and smooth video images;
- Good Effect: The driver IC drives red, green, and blue three-color LED through OE signals, which can form 4,398 billion color transformations;
- Ultra-wide field: SMD lamps, multi-directional viewing effect is the same from multiple direction;
- Display effect: high contrast, enhance the contrast between light and dark, enhance the details of the picture, and restore the true color;
- Low power consumption: It adopts constant current mode to activate LED, with uniform luminescence and low power consumption performance;
- Good portability: The module is light in weight and easy to install and disassemble;
- Strong reliability: It adopts high protection lamp beads, glue filling on the front, and three-proof paint spraying on the back, waterproof and moisture-proof, stable and reliable;
- 4.807mm pixel pitch , with52\*52 pixels totally, each pixel is composed of 1R1G1B

## 2、 Appearance and structure

### 2.1 Module picture



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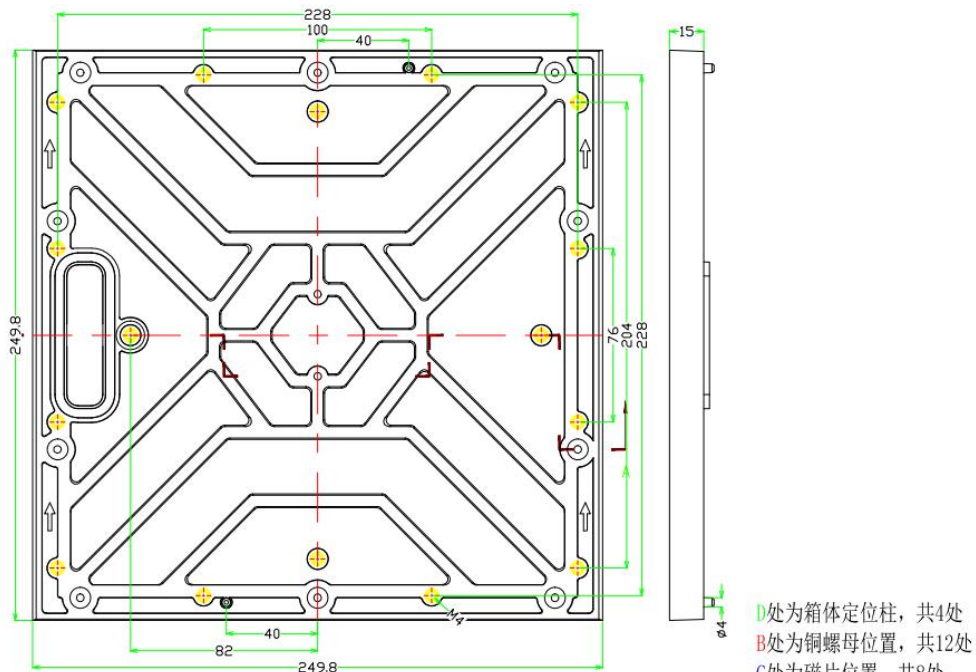
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## 2.2 Packing and accessories

Outer packing	Size(mm): 550*295*565 Volume(m <sup>3</sup> ): 0.09167125
	Gross weight: 25kg
Inner packing	32pcs/box
	Module Packing: transparent PE bag
Standard fittings	Wiring specification: 16P pin header, 35mm long
	Power cord specifications: 2.5mm <sup>2</sup> one-to-two copper power cord, 36cm tow 25cm/10cm

## 2.3 Mounting hole location



**Remarks: If you want to make a cabinet, please inform and confirm the hole position diagram of the order product in advance, and refer to the CAD drawing for details; the unit of all dimensions is mm.**

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### 3、 Technical parameters

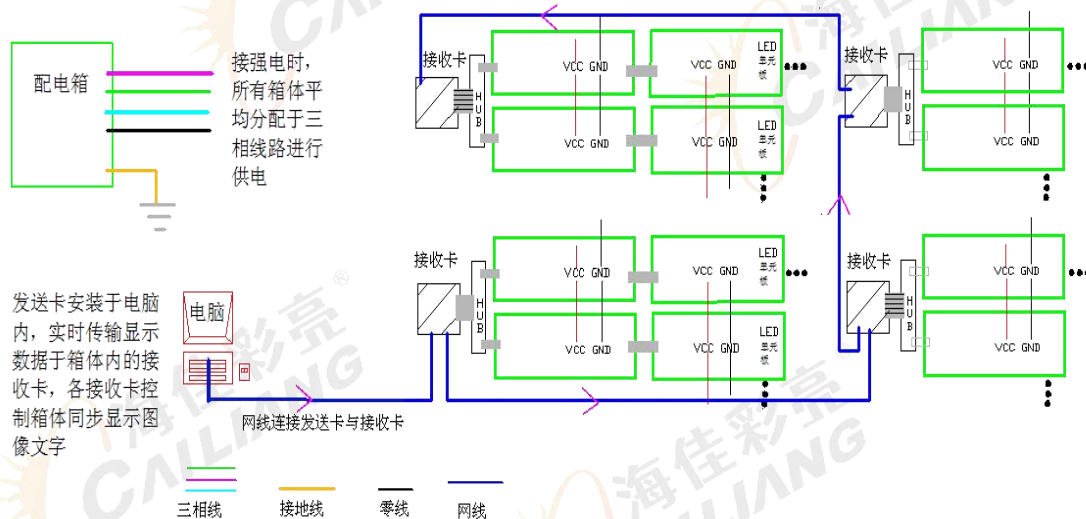
#### 3-1 Product technical parameters

Items	Technical parameters	
Module	Module size	250mm (W)*250mm (H)*17mm (T)
	Pixel pitch	4.807mm
	Pixel density	43264dots/m <sup>2</sup>
	LED lamp	SMD1921
	Resolution	52 dot(W)*52 dot(H)
	Module area	0.0625 m <sup>2</sup>
	Weight	0.68kg±0.01 kg
optical parameter	Viewing distance	≥5m
	Viewing angle	140 (H)/130 (V)
	Pixel configuration	1R1G1B
	Brightness range	3500-4000cd/m <sup>2</sup>
electrical parameter	Working voltage	DC 4.5-5V
	max power consumption	≤45W
	Driver IC	Constant current driver
	Drive mode	1/13 S
	Refresh rate	≥1920Hz/3840Hz
	Gray scale	13-14bit
	Control mode	Synchronous control
	Maximum power	≤ 720w/m <sup>2</sup>
	Power distribution	1085.9w/m <sup>2</sup> (Maximum power per square ÷ 78% ÷ 85%)
System working characteristic	Operating environment	Outdoor
	Working temperature	-20℃~50℃
	Working humidity	10%to 90%RH
	MTBF	≥ 10000 hours
	Work life	≥100000 hours
	Blind spot rate	≤1/10000
	Attenuation rate(Working 3 years)	≤15%
Flatness	Horizontal flatness of the screen<1mm/m <sup>2</sup>	
*The contents and information in the product will be subject to change without further notice, the company does not undertake any responsibility.		

### 3-2 Pin definition

Pin assignment				Pin function description					
PIN (HUB75)				Pin number	Function	Remark	Pin number	Function	Remark
1	•	•	2	1	R1	Red data signal	2	G1	Green data signal
3	•	•	4	3	B1	Blue data signal	4	GND	Grounding
5	•	•	6	5	R2	Red data signal	6	G2	Green data signal
7	•	•	8	7	B2	Blue data signal	8	GND	Grounding
9	•	•	10	9	A	A scanning signal	10	B	B scanning signal
11	•	•	12	11	C	C scanning signal	12	GND	Grounding
13	•	•	14	13	CLK	Clock latch signal	14	LAT	Displacement latch signal
15	•	•	16	15	OE	Enable signal	16	GND	Grounding

### 4、Electrical connectivity diagrams



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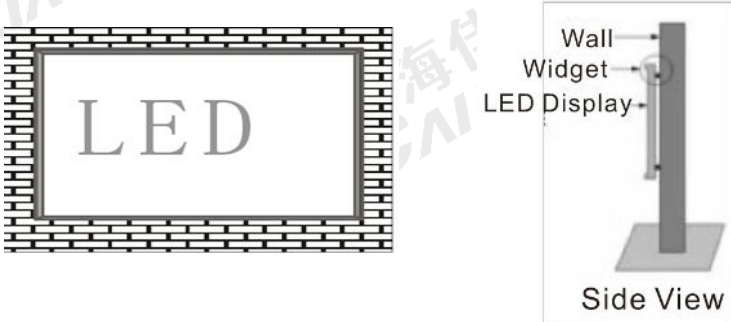

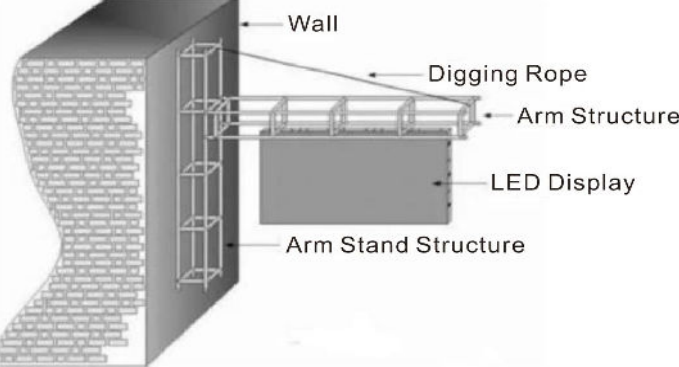
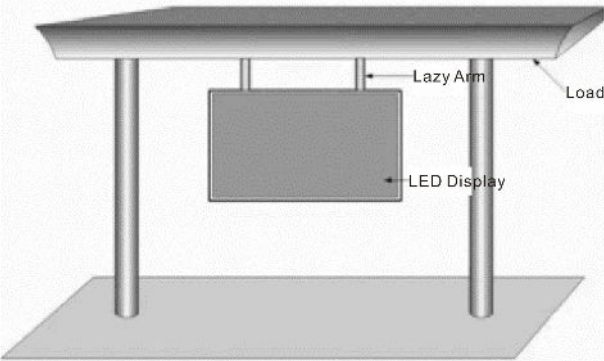
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## 5、Installation

Installation Type	Picture
<p>Wall hanging</p>	 <p>Labels in diagram: Wall, Widget, LED Display, Side View</p>
<p>Wall mount</p>	 <p>Labels in diagram: LED Display, Fixed Steel Frame and Rim, Load-bearing Well</p>
<p>Cantilever mount</p>	 <p>Labels in diagram: Wall, Digging Rope, Arm Structure, LED Display, Arm Stand Structure</p>
<p>Hanging</p>	 <p>Labels in diagram: Lazy Arm, Load-Bearing Top, LED Display</p>

## 6、Acceptance criteria and methods

Items	Acceptance criteria and methods
<b>LED Display Brightness</b>	<p>Turn the screen to a fully bright state, adjust the brightness efficiency in the test software to 80% on the computer, and use a light gun to measure the brightness of the screen body within 10 minutes. When measuring brightness, the light gun is required to be aimed at the screen body, it is best to measure that the time gun can be kept level with the screen body, ensure that the black position of the observation window covers more than 16 pixels, adjust the focus so that you can clearly see the luminous point before measuring and reading.</p>
<b>Visual angle</b>	<p>When measuring, people stand at the left and right positions of the screen body 150°, and the viewing angle under the screen body is 70° (that is, the vertical viewing angle of the screen body is 140°), which requires no obvious black spots and no obvious dark blocks in the screen body.</p>
<b>Grounding &amp; lightning protection treatment</b>	<p><b>Grounding:</b> The structure of the switching power supply shell, cabinet and screen body is correctly grounded, and the grounding point is correctly marked with landmarks, and the grounding resistance is required to be <math>\leq 10</math> ohms, and the spot check is carried out every six months.</p> <p><b>Lightening:</b> It is required that the building has lightning rod or lightning protection belt facilities and is effectively grounded, and the distribution box is required to be equipped with a surge protector, and the lightning protection facilities are inspected every six months.</p>