Product Specification

Datasheet



AV-Z SERIES

Product Version：V1.0

Date：20240814

Declaration

Welcome to choose the products of Shenzhen Asia Vision Technology Co., Ltd. To better and more quickly understand the products, please read this specification carefully before using our company's products. If this document helps and facilitates your understanding and use of the products, we are very pleased. When compiling this document, we strive for accuracy and reliability. Content may be modified or changed at any time without prior notice. If you encounter any problems during use or have any suggestions, please contact us according to the contact information provided in the document. We will do our best to provide support for the problems you encounter during use.

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oduct Description

This is a product suitable for Rental&Stage scenario. The product adopts COB encapsulation technology, which is different from the traditional SMD surface-mount encapsulation. It integrates the light-emitting RGB chip on the PCB board instead of soldering LED lamp to the PCB one by one. This technology effectively improves the reliability, light color and protection performance of LED display. The product adopts no backshell design, the lamp board is in direct contact with the structural frame, which effectively improves the flatness of the display surface. In addition, the proprietary sealing technology effectively solves the pain point that SMD lamp beads are easily knocked out in leasing scenarios.

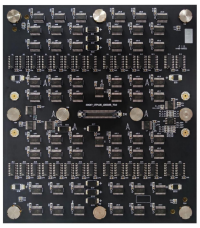
1.1 Application Scope

This technical specification is only applicable to Rental&Stage Z series product. Module size:250mm*250mm and its supporting die cast aluminum cabinet:500mm*500mm*69mm.

1.2 Product Features

- Standard with mainstream Z1.953/Z2.6 dot pitch, optional virtual Z1.3/Z0.97 smaller pitch solution;
- Unique COB sealing technology, surface gel thickness of 600um, hardness of 80D or more, anti-knock ability is 3.5times than traditional SMD technology;
- Cabinet can be left and right splicing arc ± 5 °, optional right-angle splicing;
- Selecting large-size high-quality raw material chips, pad sinking gold process, with stronger waterproof, dust-proof, anti-oxidation, anti-static, anti-impact ability;
- General standardized 500mm*500mm*69mm ultra-thin box, front mounting/front and rear maintenance design, easy to install and maintain;
- Illuminated viewing angle up to 170 degrees, point-to-point matching 2K/4K/8K resolution;
- Flip chip COB support optional common cathode solution, low consumption, and more stable;
- High refresh rate at low gray, refresh rate ≧7680Hz, Grey scale ≧15Bit；
- Excellent heat dissipation and low light decay, PCB board dissipate heat directly, extended service life;
- Cabinet can be customized to 45° , and quick lock spliced to 90° right angles.

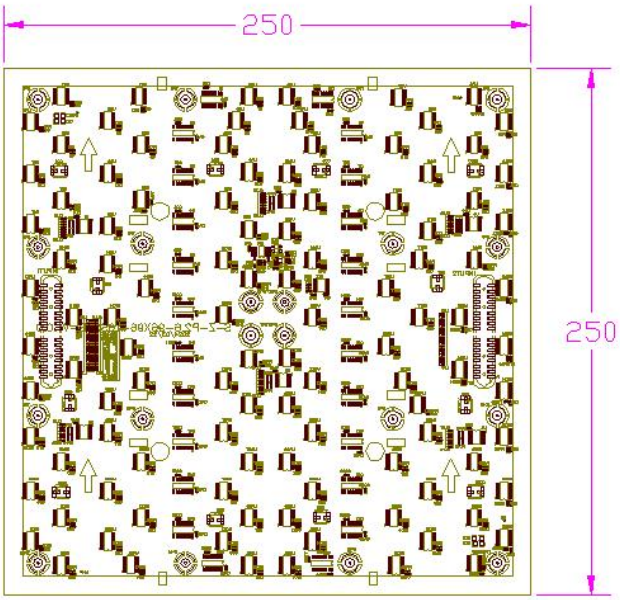
0mm*250mm Module Specification

Item	Specification	Module Picture
Series	COB Z Series module	
Material	No Back shell	
Pixel Pitch	1.953mm，2.6mm	
Resolution	128*128, 96*96(W*H)dot	
Module Size	250 *250(W * H)mm	
Module Weight	360g±10g	

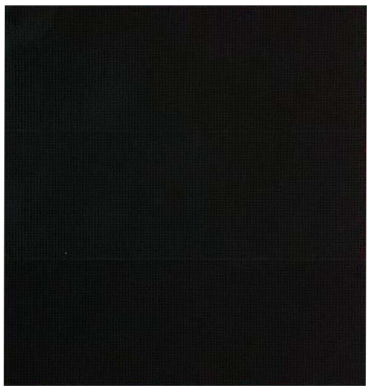
3. 500mm*500mm Cabinet Specification

Item	Specification	Cabinet Picture
Series	COB Z Series Cabinet	
Material	Die-casting aluminum	
Pixel Pitch	1.953mm，2.6mm	
Resolution	256*256, 192*192(W*H)dot	
Cabinet Size	500*500*69(W*H*D)mm	
Cabinet Weight	7.5Kg	

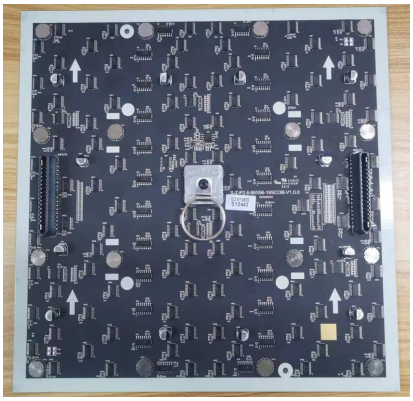
4. Module Dimension Structure



odule Picture

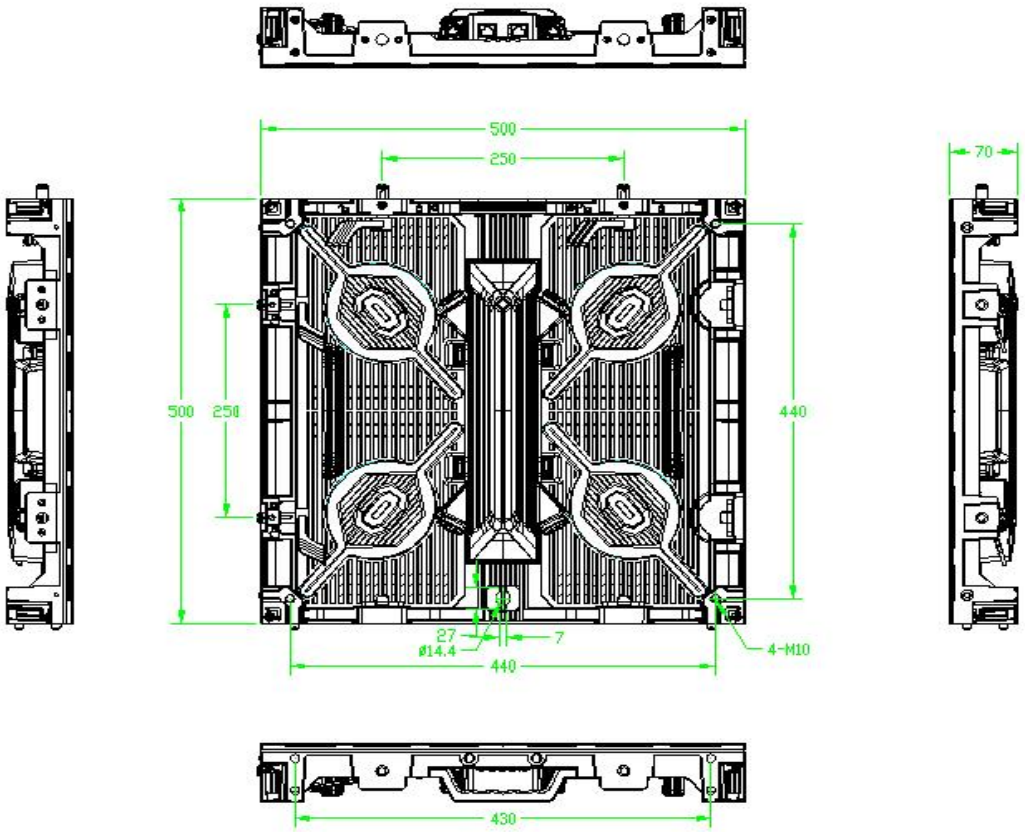


Front View



Back View

6.Cabinet Dimension Structure



abinet Picture



Front View



Back View



Front side View

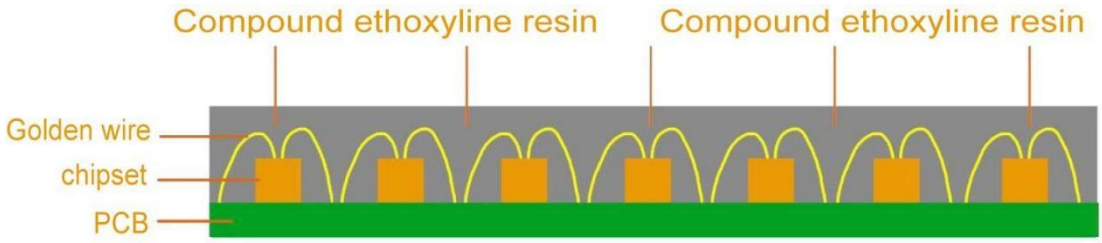


Back side View

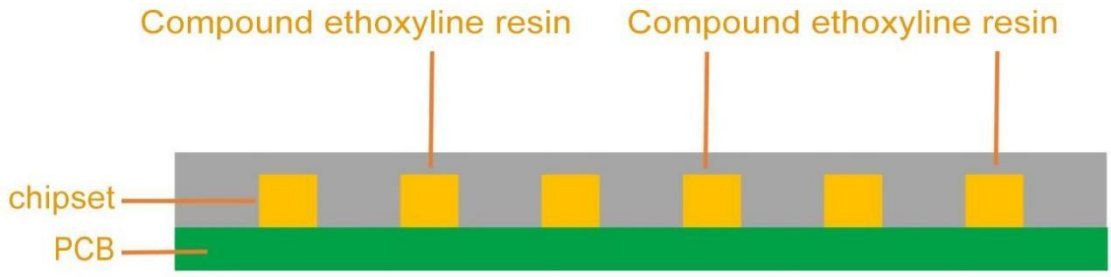
chnical Parameter

Item	Specification	Z1.95	Z2.6	Z1.95Virtual	Z2.6Virtual
Module Parameter	**Pixel Pitch (mm)**	1.95	2.6	0.97	1.3
	Pixel Structure	COB 1R1G1B Flip Chip Process			
	Pixel Density(dot//m²)	262144	147456	1048576	589824
	Module Size(W*H)(mm)	250*250	250*250	250*250	250*250
	Backshell Material	No backshell			
	Module Resolution(W*H)(dot)	128*128	96*96	256*256	192*192
	Maximum Current(A)	6	6	6	6
	Supply Voltage(V)	DC 4.2	DC 4.2	DC 4.2	DC 4.2
	Scanning Method	1/16	1/16	1/16	1/16
	Refresh Frequency(Hz)	≥7680	≥7680	≥7680	≥7680
	Illumination(cd//m²)	1200			
	Driver IC	Constant current driver			
	Contrast Ratio	≥10000:1			
Cabinet Parameter	**Cabinet Size(W*H*D)(mm)**	500*500*69			
	Cabinet Material	Die-casting aluminum			
	Cabinet Weight(kg)	7.5			
	Enclosure Connection Method	Quick Lock			
	Installation/Maintenance Methods	Front mounting/front and back maintenance			
	Color Temperature /Luminance Uniformity	3200-12000K Adjustable; ≥98%			
	Chromatic Uniformity	±0.003Cx, Cy			
	Horizontal/Vertical View	≥170°/≥140°			
	Single-point Color Correction	Yes			
	Single Point Brightness Correction	Yes			
	Standard Receiver Card	A8S-N		A8S-PRO	
	Frame Rate(Hz)	50/60			
	Protection Level	IP30			
	Signal Interface Mode	RJ45			
	Power Interface Method	Connector			
	Input Voltage Range AC(V)	100-240			
	Peak Power Consumption(W/m²)	≤600			
	Average Power Consumption(W//m²)	≤270			
	Working Temperature and Humidity Range	-20℃～+50℃,10%～95%RH			
	Storage Temperature and Humidity Range	-40～+70℃,10%～95%RH			
	Service Life(H)	≥100000			
	Mean Time Between Failure(H)	≥10000			

ackage Comparison

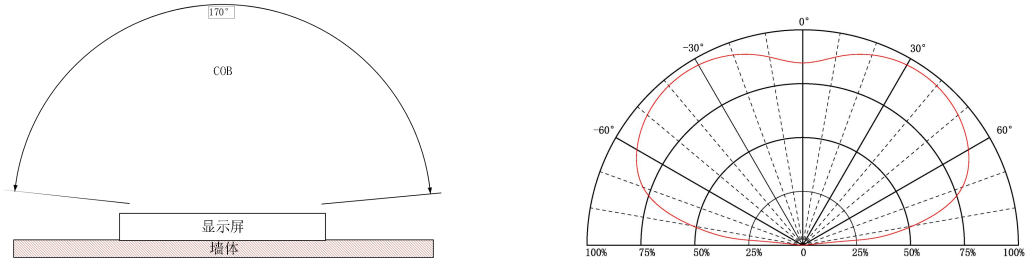


COB （regular technology)



Flip Chip COB（Customized ）

8.2 Optical Feature



Light Angle and Schematic Diagram

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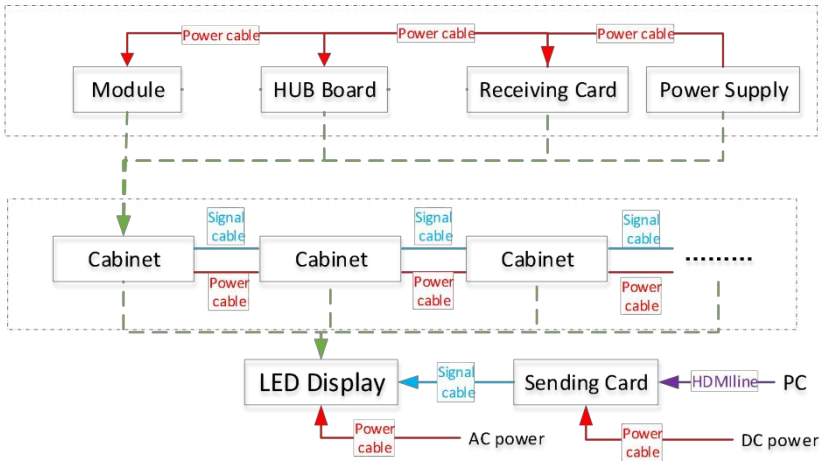

10. Packing and After-sale Service

10.1 Packing

Plywood case/Honeycomb carton/Flight case option



10.2 After-sale Service

If need any help during using display, please for free to contact your salesman.