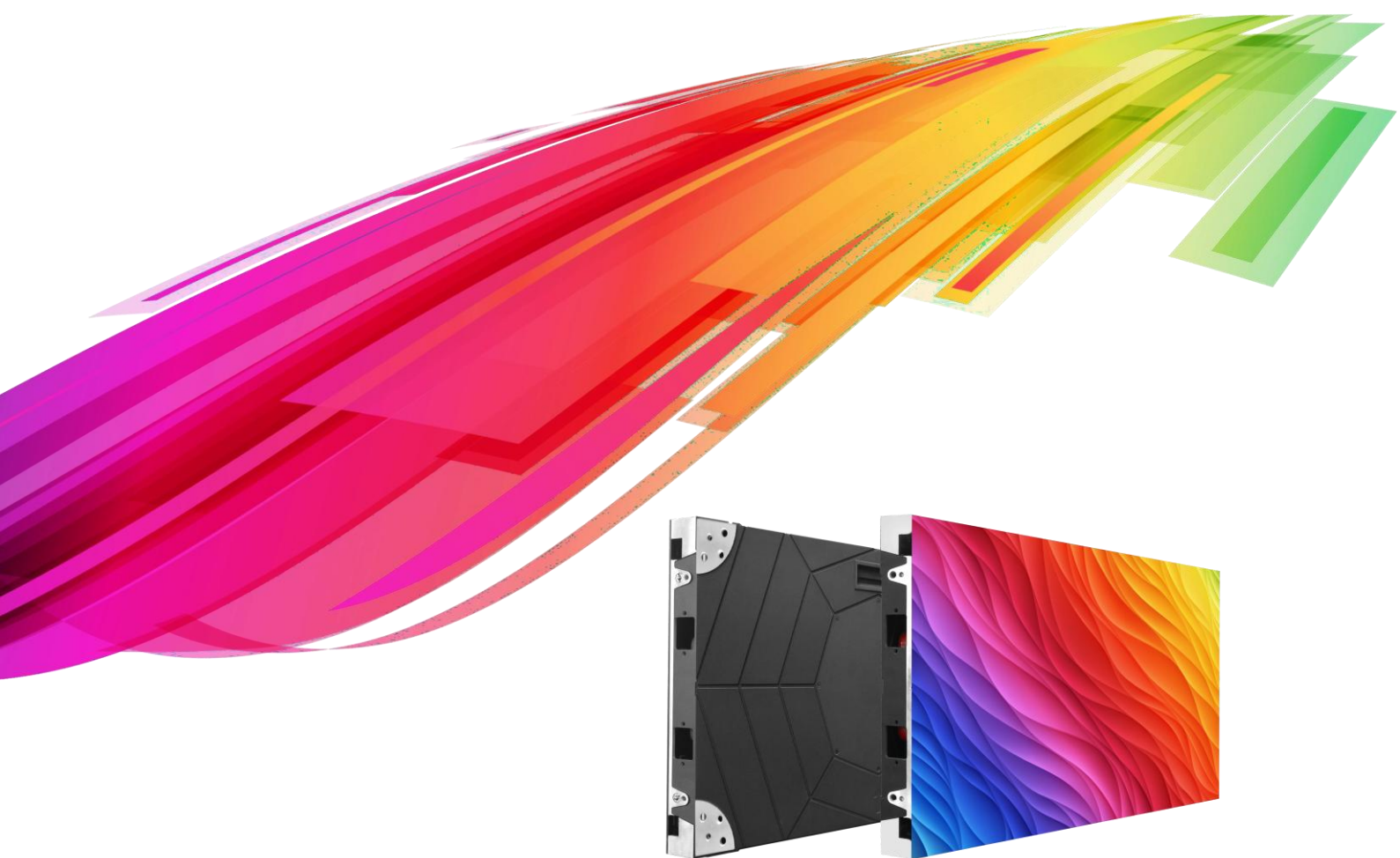




Product Specification Datasheet



LR-CV FLIP CHIP COB SERIES

Product Version: V3.1

Date: 20240719

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Statement

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1. Product Description

This 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.

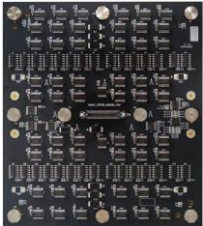
1.1 Application Scope

This technical specification is only applicable to Colorlit LED indoor Nigh Elf product. Module size:150mm*168.75mm and its supporting die cast aluminum cabinet:600mm*337.5mm.

1.2 Product Features

- 600mm*337.5mm die-casting aluminum cabinet with very thin thickness 39mm;
- compatible pitch 0.93mm/1.25mm/1.56mm/1.875mm;
- The Horizontal and vertical viewing angle reach 170 degrees, wider than SMD screen;
- Big high-quality chip, pure gold bonding wires, and pads are immersed gold technology, which is more reliable;
- lip chip COB support common cathode solution, low consumption, and more stable;
- High refresh rate at low gray, refresh rate $\geq 3840\text{Hz}$, Grey scale $\geq 14\text{Bit}$;
- Excellent heat dissipation and low light decay, PCB board dissipate heat directly, extended service life;
- Module face IP65,water-proof, dust-proof, anti-oxidation, anti-static, anti-impact;
- 16:9 ratio cabinet design,2K/4K/8K dot to dot match resolution,100% front service.

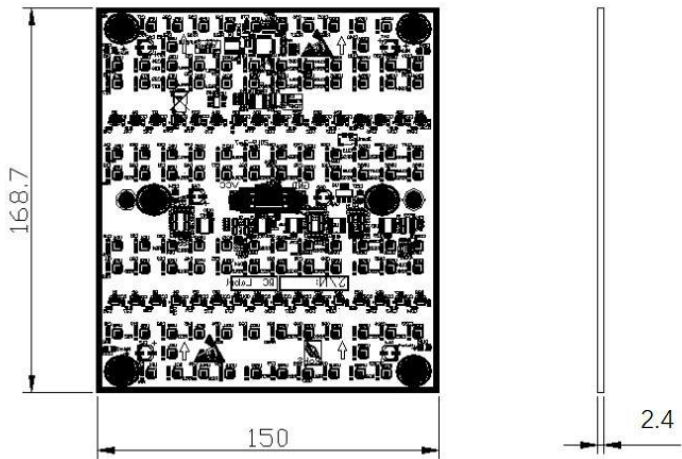
2. 150mm*168.75mm Module Specification

Item	Specification	Module Picture
Series	CV-Flip chip COB Series	
Material	No Plastic housing	
Pixel Pitch	0.9375mm, 1.25mm, 1.5625mm , 1.875mm	
Resolution	160*180, 120*135, 96*108, 80*90(W*H)dot	
Module Size	150*168.75(W*H)mm	
Module Weight	150g $\pm$ 10g	

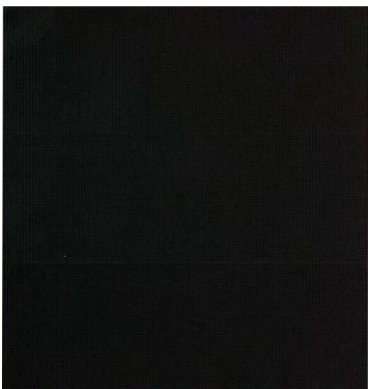
3. 600mm*337.5mm Cabinet Specification

Item	Specification	Cabinet Picture
Series	CV-Flip chip COB Series	
Material	Die-casting aluminum	
Pixel Pitch	0.9375mm, 1.25mm, 1.5625mm, 1.875mm	
Resolution	640*360,480*270,384*216,320*180(W*H)dot	
Cabinet Size	600* 337.5*39(W*H*D)mm	
Cabinet Weight	5.3Kg	

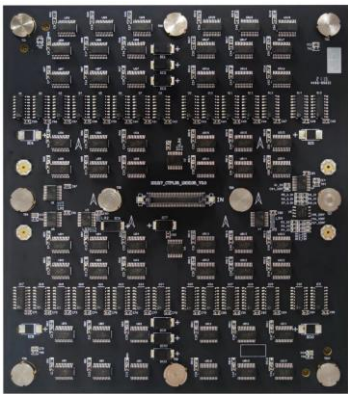
4. Module Dimension Structure



5. Module Picture

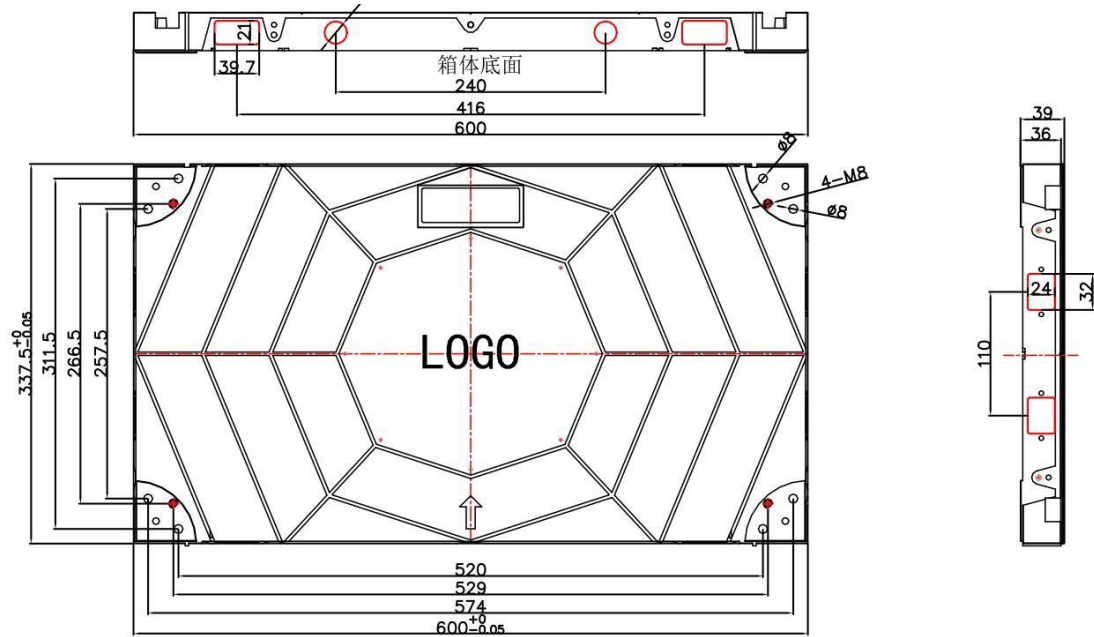


Front View



Back View

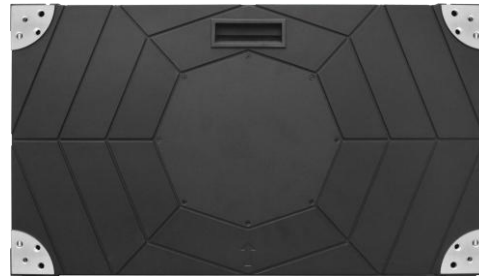
6. Cabinet Dimension Structure



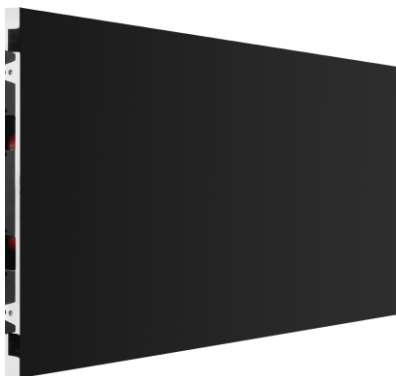
7. Cabinet Picture



Front View



Back View



Front side View

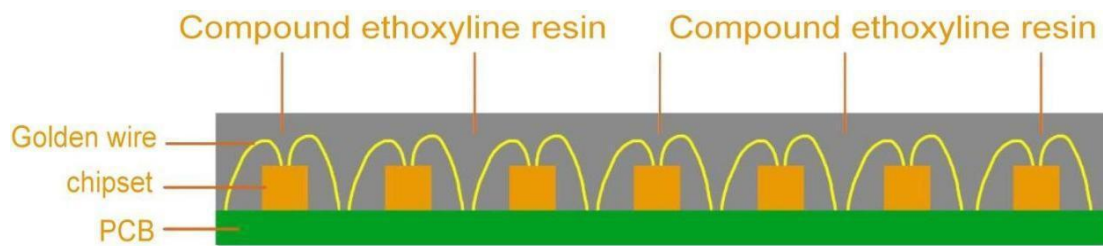


Back side View

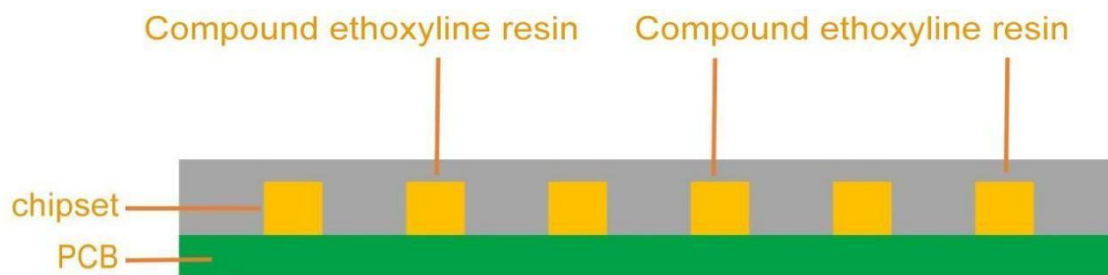
8. Technical Parameter

Item	Specification	CV0.93	CV1.25	CV1.56	CV1.87
Module Parameter	Pixel Pitch (mm)	0.9375	1.25	1.5625	1.875
	Pixel Structure	COB 1R1G1B Flip Chip Process			
	Pixel Density(dot//m ²)	1,137,778	640,000	409,600	284,444
	Module Size(WxH)(mm)	150*168.75	150*168.75	150*168.75	150*168.75
	Backshell Material	No Backshell			
	Module Resolution(W*H)(dot)	160*180	120*135	96*108	80*90
	Maximum Current(A)	2.5	2.5	2.5	2.5
	Supply Voltage(V)	DC4.2	DC4.2	DC4.2	DC4.2
	Scanning Method	1/60	1/45	1/48	1/30
	Refresh Frequency(Hz)	≥2880	≥3840	≥3840	≥3840
	Illumination(cd//m ²)	50-500 Adjustable			
	Driver IC	Constant Current Drive			
	Contrast Ratio	≥10000:1			
	Cabinet Parameter	Cabinet Size(W*H*D)	600*337.5*39		
Cabinet Material		Die Casting Aluminum			
Cabinet Weight(kg)		5.3			
Enclosure Connection Method		Screw Fixing			
Installation/Maintenance Methods		Front Installation/Front or back Maintenance			
Color Temperature /Luminance Uniformity		3200-9300K Adjustable; ≥98%			
Chromatic Uniformity		± 0.003Cx,Cy			
Horizontal/Vertical View		160° （±10°）			
Single-point Color Correction		Yes			
Single Point Brightness Correction		Yes			
Standard Receiver Card		A10SPLUS-N	A8S-N		
Frame Rate(Hz)		50/60			
Protection Level		IP34			
Signal Interface Mode		RJ45			
Power Interface Method		Three Pole Flat Connector			
Input Voltage Range AC(V)		110-220			
Peak Power Consumption(W/m ²)		≤450			
Average Power Consumption(W//m ²)		≤150			
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			

8.1 Package Comparison

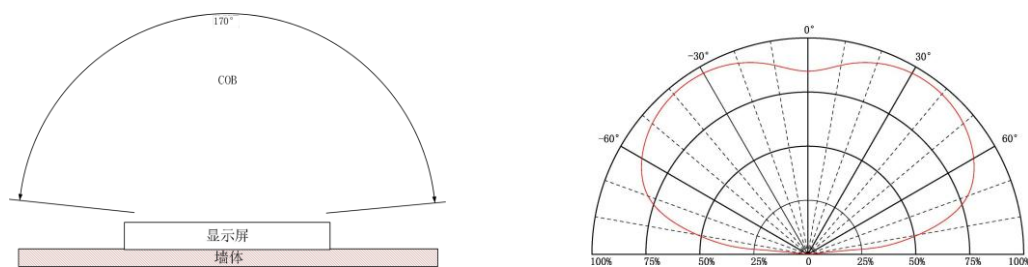


COB (regular technology)



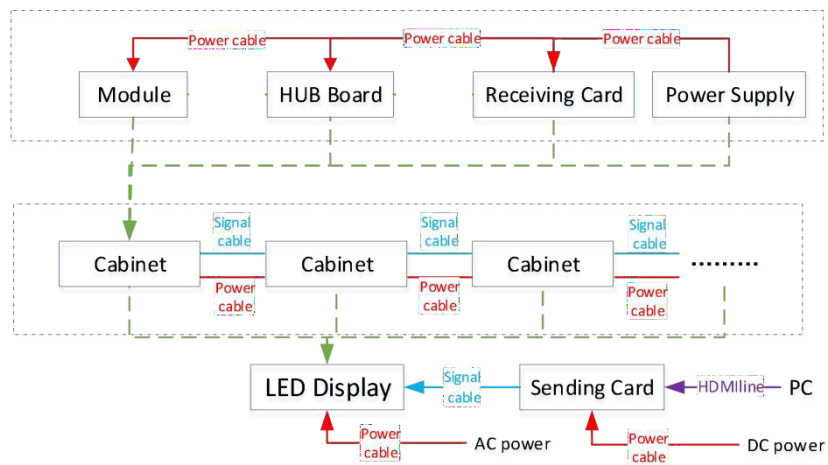
Flip Chip COB (Colorlit Customized)

8.2 Optical Feature



Light Angle and Schematic Diagram

9. Connecting Diagram



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 Colorlit display, please for free to contact your salesman.