

# COB PRO

Indoor Fine Pitch LED Display

P0.7, P0.9, P1.25, and P1.56.



High Resolution



16:9 Aspect Ratio



Seamless Connection



3840Hz~7680Hz



Large Viewing Angle



Strong Module

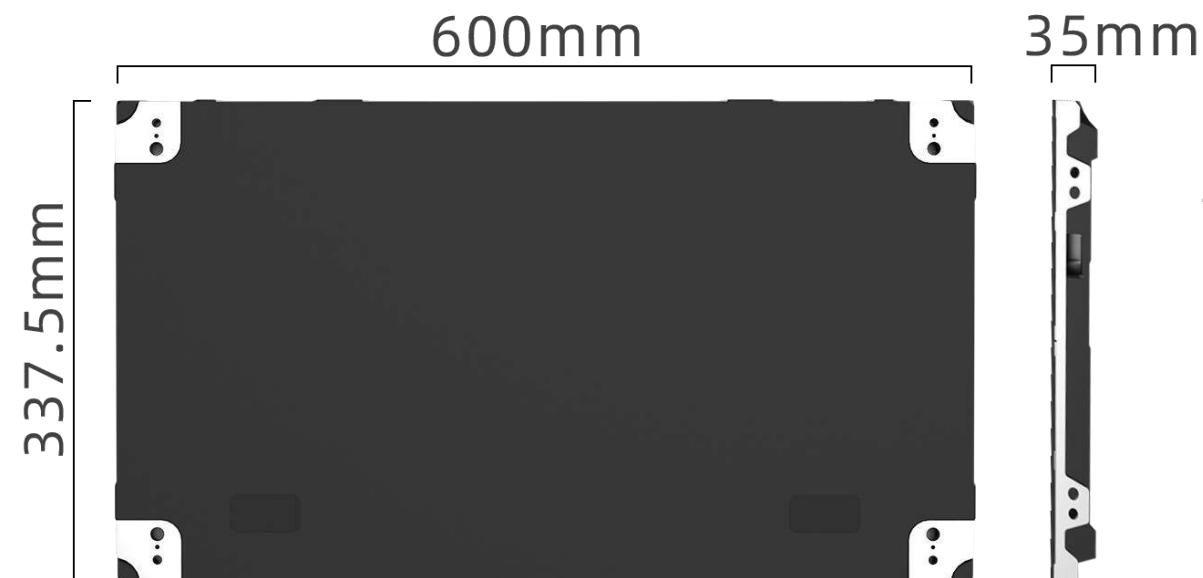


Front Access



Easy Maintenance

## Die-Casting Aluminum design



With the arrival of the 5G era, the market for ultra-high-definition 4k and 8k display has an urgent need, LED to the development of small pitch display to make the inevitable trend, the birth of the flip COB and COB technology to a new height. This LED panel has garnered high praise for delivering an exceptional user experience.

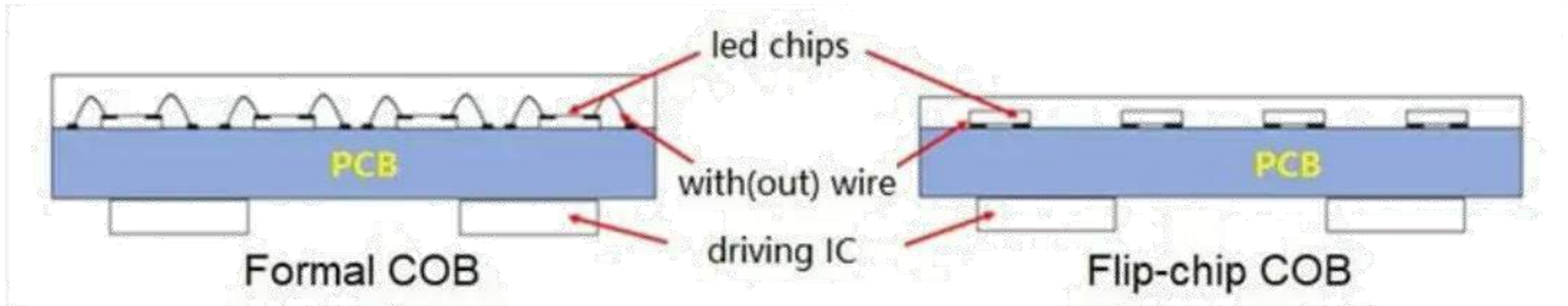
- 600(w)mm x 337.5(h)mm
- 35mm thickness

The pixel pitch P0.7, P0.9, P1.25 and P1.56 are available.

## Flip-chip COB

Premteco offers super thin COB LED display screens with advanced flip-chip COB technology.

- Encapsulates the pixels on the PCB board, realizing full sealing of the PCB board, crystal particles, soldering pins and leads, etc.
- Without using wire on the LED chips, this Flip-chip technology has much lower power consumption than the normal LED.



## The Common Cathode and Common Anode Design

- The common anode display current flows from the PCB board to the lamp beads, and the RGB lamp beads are uniformly powered. (P1.56)
- In the common cathode mode, the R, G, and B chips individually provide power, ensuring precise distribution of voltage and current to the red, green, and blue diodes. (P0.7, P0.9, P1.25)

Advantages of the common cathode mode:

- Enhance power supply efficiency. Reduce power consumption. Diminish heat generation by approximately 40%.
- Lower the rate of pixel failures, enhance the overall performance of the display screen and extend its lifespan.



## Lightweight, Great Cabinet Design, Front maintenance



Lightweight design, only 4.6kgs/panel.

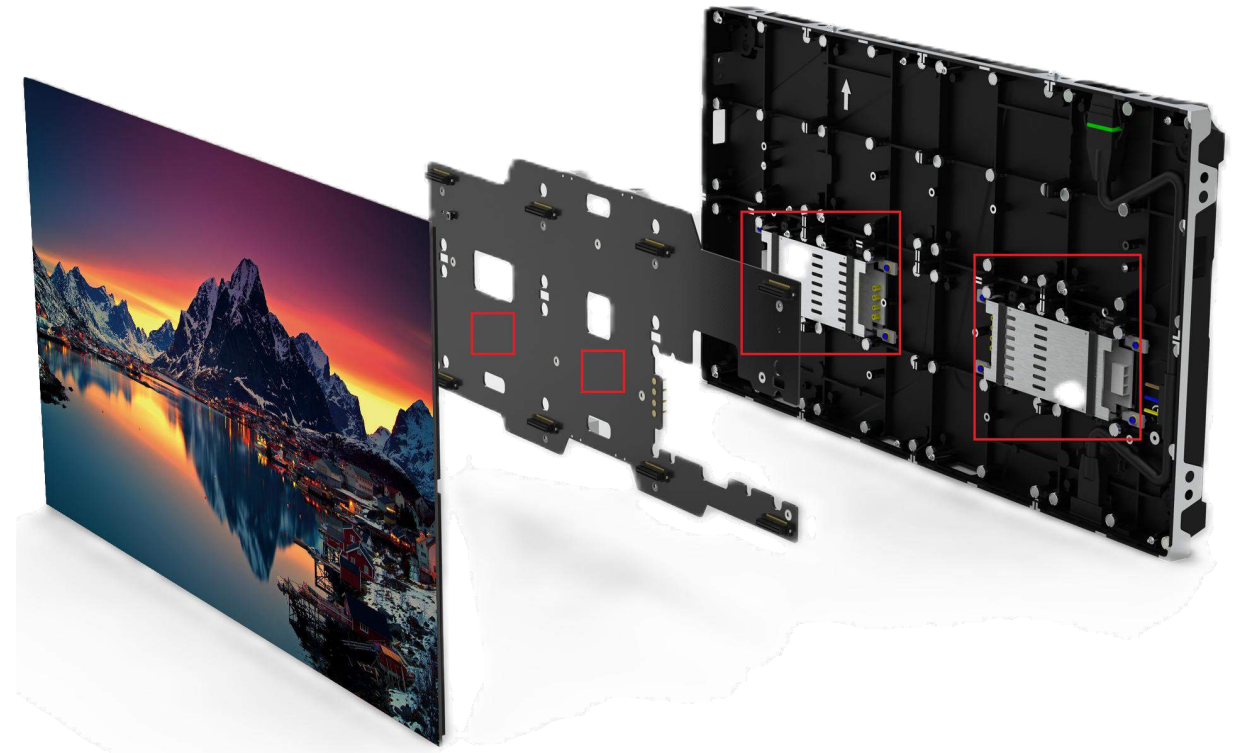
Our COB Pro Series uses high CNC die-casting aluminum cabinet, both the screen flatness and heat dissipation function are the best compared to other cabinet material.

Meanwhile, all components including LED module, power box, receiving card and other accessories can be removed in the front, so it is fully front service design.



## Power and Signal redundancy

We have reasonable space to support two power supply and two receiving cards. This design ensures the operation of cabinets, since when there is something wrong with one of the power supplies or receiving cards, the other one will take charge in the operation.





## **Protective Method: IP 54**

Compared with ordinary indoor LED products, we adopt IP54 high protection level.

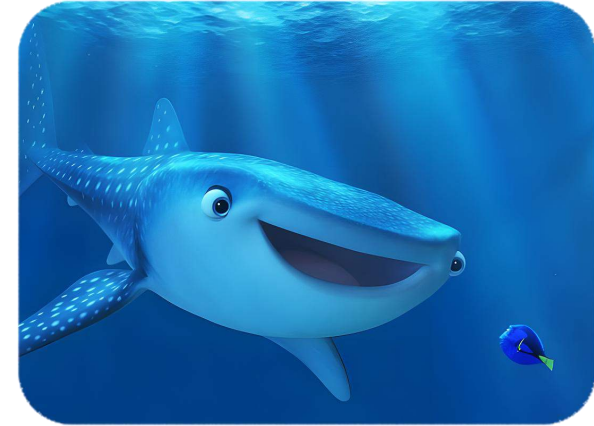
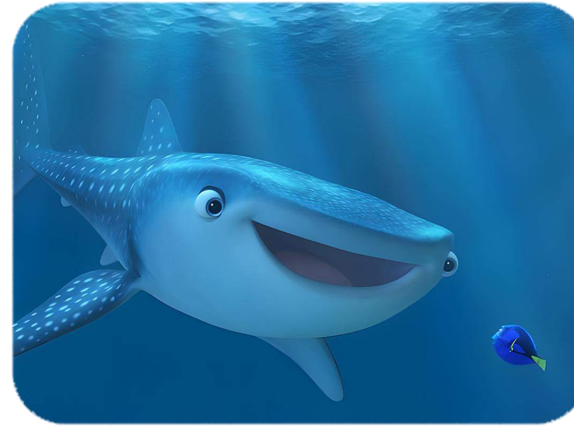
IP54 is an international standard that indicates that an electrical enclosure is dust tight and watertight against light pressure water spray.

Have higher shockproof level, greater reliability and high level surface protection.

## Excellent Color Contract Ratio

The color contrast ratio of 10,000:1.

A high contrast ratio enhances visual clarity; colors appear more vibrant for a better viewing experience; depth and detail perception can be enhanced; and the optimal contrast ratio minimizes eye fatigue ratio and ensures viewer comfort.





## Larger Viewing Angle

COB package adopts the class of surface luminescence, so the viewing angle is wider, so that the COB encapsulated micro-pitch LED display screen has a vertical and horizontal bidirectional 160 ° wide viewing angle, which ensures that any angle of viewing no color deviation, the images and videos can always be displayed perfectly.



## Extraordinary Visual Effects

We adopt great PCB design and high quality LED material.

With the high refresh rate(3840Hz~7680Hz) and gray scale(up to 14bits to 22bits) , the LED display can bring amazing visual effects to the customers.

High refresh rate makes the screen stable without ripples and black screen, enhance the clarity and contrast of the image, make the video screen delicate and smooth.





## Application Fields

The high-precision screen is well-suited for a range of installation settings and has received positive feedback from customers for its reliable performance and superior image quality.

Its application fields are as follows:

- Meeting Room
- TV Studio
- Exhibition Center
- Shopping Mall
- Airport
- Cinema





# COB PRO Parameters

Item	P0.7	P0.9	P1.25	P1.56
<b>Pixel Pitch</b>	0.78mm	0.93mm	1.25mm	1.56mm
<b>LED Type</b>	COB	COB	COB	COB
<b>Module Resolution</b>	41,472dots	29,141dots	16,200dots	10,368dots
<b>Driving Mode</b>	1/64scan	1/54scan	1/60scan	1/54scan
<b>Module Pixels</b>	192dots×216dots	161dots×181dots	120dots×135dots	96dots×108dots
<b>Module Size</b>	150mm×168.75mm	150mm×168.75mm	150mm×168.75mm	150mm×168.75mm
<b>Cabinet Size</b>	600mm×337.5mm×35mm	600mm×337.5mm×35mm	600mm×337.5mm×35mm	600mm × 337.5mm × 35mm
<b>Cabinet Resolution</b>	769dots×432dots	645dots×362dots	480dots×270dots	384dots x 216dots
<b>Pixel Density</b>	1,643,655dots/m <sup>2</sup>	1,156,203dots/m <sup>2</sup>	640,000dots/m <sup>2</sup>	410,913dots/m <sup>2</sup>
<b>Minimum Viewing Distance</b>	≥0.7mm	≥0.9mm	≥1.25mm	≥1.56m
<b>Brightness</b>	600nits~1000nits	600nits~1000nits	600nits~1000nits	600nits-1000nits
<b>IP Grade</b>	IP54	IP54	IP54	IP54
<b>Refresh Rate</b>	3840Hz~7680Hz	3840Hz~7680Hz	3840Hz~7680Hz	3840Hz~7680Hz
<b>Gray Scale</b>	14bits~22bits	14bits~22bits	14bits~22bits	14bits~22bits
<b>Viewing Angle</b>	H:160° / V:160°	H:160° / V:160°	H:160° / V:160°	H:160° / V:160°
<b>Maximum Power</b>	360W/m <sup>2</sup>	380W/m <sup>2</sup>	320W/m <sup>2</sup>	330W/m <sup>2</sup>
<b>Average Power Consumption</b>	120W/m <sup>2</sup>	127W/m <sup>2</sup>	110W/m <sup>2</sup>	110W/m <sup>2</sup>
<b>Input Voltage</b>	AC100V~AC240V @ 50Hz / 60Hz	AC100V~AC240V @ 50Hz / 60Hz	AC100V~AC240V @ 50Hz / 60Hz	AC100V~AC240V @ 50Hz / 60Hz
<b>Operating Temperature</b>	- 20℃~60℃	- 20℃~60℃	- 20℃~60℃	- 20℃~60℃
<b>Operating Humidity</b>	10%~90%	10%~90%	10%~90%	10%~90%
<b>Cabinet Material</b>	Die-casting Aluminum	Die-casting Aluminum	Die-casting Aluminum	Die-casting Aluminum
<b>Cabinet Weight</b>	4.6kg/panel	4.6kg/panel	4.6kg/panel	4.6kg/panel
<b>Operating System</b>	Windows (Win7, Win8, etc.)	Windows (Win7, Win8, etc.)	Windows (Win7, Win8, etc.)	Windows (Win7, Win8, etc.)
<b>Signal Source Compatibility</b>	HDMI1.3, DP1.2, SDI, HDMI2.0, etc.	DVI, HDMI1.3, DP1.2, SDI, HDMI2.0, etc.	DVI, HDMI1.3, DP1.2, SDI, HDMI2.0, etc.	DVI, HDMI1.3, DP1.2, SDI, HDMI2.0, etc.