Maxtell LED

MAXTELL

COB SERIES VIDEO WALL

Revolutionizing Display, Redefining Impact



High Performance COB Solution for Indoor Screen

Unlike traditional LED displays, Maxtell's MXCOB Series employs advanced Chip-on-Board (COB) packaging technology, which directly attaches LED chips onto the PCB board. This innovative approach enables significantly smaller pixel pitches — available in P-0.7, 0.9, 1.25mm, 1.56mm, and 1.8 mm — resulting in higher pixel density. The absence of plastic housing further enhances the display's reliability and performance, providing improved color accuracy, greater brightness, and a smooth, uniform surface for delicate visual applications. Designed specifically for indoor use, the MXCOB Series is an ideal choice for:

- **Command Center**
- **Seminar Halls**
- **NOC Rooms (Network Operations Centers)**
- **Monitoring rooms and TV studios**
- **Conference rooms**
- **Home theaters and cinemas**
- **Any space requiring 2K, 4K, or 8K resolution**

COB Packaging Technology
The MXCOB Series uses Chip-on-Board technology, directly attaching LED chips to the PCB for higher pixel density, enhanced durability, and more vibrant, crystal-clear visuals.

Built-in Android Control Box

HDR

HDR

Quick Installation

Why Choose COB LED Video Walls?

COB (Chip-on-Board) LED video walls excel in multiple scenarios due to their advanced design, superior durability, and exceptional performance. Here's why they are often preferred over traditional SMD LED displays:

1. Better Durability and Protection

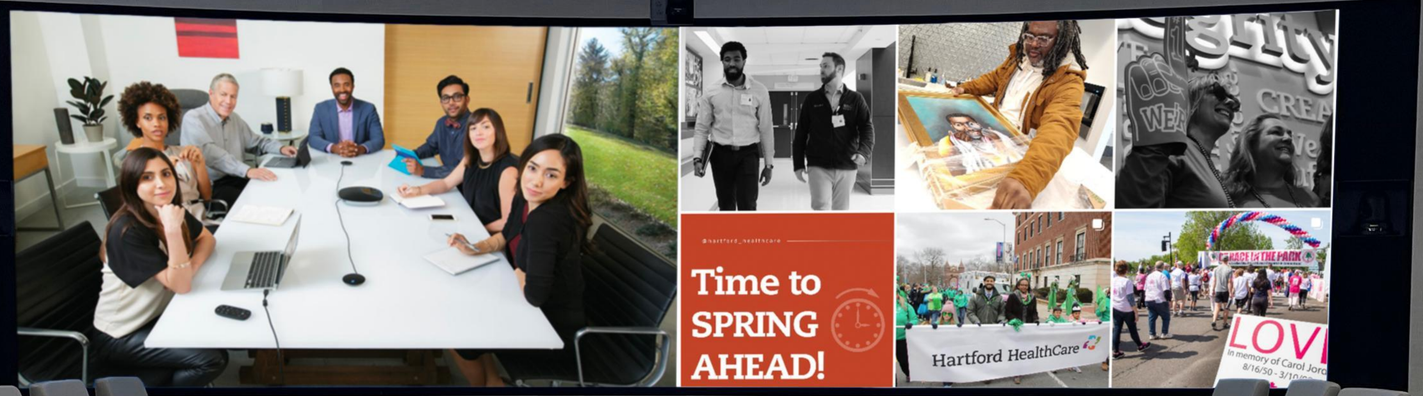
- **Surface Coating: COB LEDs are coated with resin, making the screen dustproof, waterproof, anti-collision, and anti-static.**
- **No Exposed Components: Unlike SMD LEDs, COB LEDs have no delicate lamp beads protruding, making them highly resistant to physical damage — ideal for public or high-traffic environments.**

2. Superior Image Quality

- **Higher Contrast Ratio: The black resin coating reduces reflections, delivering deeper blacks and richer colors, even in brightly lit environments.**
- **Seamless Picture Quality: Supports ultra-fine pixel pitches (as low as P0.9), delivering exceptional clarity and detail perfect for close-range viewing in "control rooms, studios or boardrooms".**

3. Excellent Heat Dissipation

- **COB LED modules are mounted directly onto the substrate for efficient thermal conductivity.**
- **No external fans or ACs required, resulting in:**
  - **Silent operation**
  - **Longer lifespan**
  - **Lower energy consumption**


Time to
SPRING
AHEAD!
Hartford HealthCare

4. Wide Viewing Angles

- **Offers a 170° or wider horizontal and vertical viewing angle, ensuring consistent color and image quality from almost any direction.**

5. Easy to Clean & Maintain

- **Flat, smooth surface can be cleaned with a soft cloth without risk of damage.**
- **Requires less maintenance compared to traditional SMD LED modules.**

6. Low Power Consumption

- **Compact design and efficient heat dissipation make COB technology highly power-efficient, reducing operational costs over time.**

7. Ideal for Small Pixel Pitch Applications

- **Perfect for P-0.7,P0.9 P1.25, P1.5,P-1.8 displays where high resolution and durability are critical.**
- **Commonly used in:**
  - **Command and control centers**
  - **Broadcast studios**
  - **Corporate boardrooms**
  - **High-end retail environments**



* Comparison Summary: COB vs. SMD		
Feature	COB LED	SMD LED
Durability	High	Low
Pixel Pitch	Ultra-fine	Limited
Maintenance	Easy	Delicate
Contrast & Black Levels	Superior	Moderate
Viewing Angle	Very Wide	Wide
Power Efficiency	More Efficient	Less Efficient
Surface Protection	Yes	No
Price	Higher Upfront	Lower Upfront



Flip-Chip COB LED Display Details

The new COB technology provides an alternative to traditional Surface Mount Device (SMD) and Integrated Matrix Device (IMD) LED options. It brings a lower amount of heat to the display face and removes the wire bonds to increase reliability. It also decreases the power consumption for a lower cost of ownership over time.

The cabinet for the COB product is the thinnest in the marketplace today and also the lightest in weight. Bringing this product to market with the company's Speed Frame installation process ensures a quick installation with borders to deliver a sleek, clean appearance.

Indoor LED Display Series

Ultra-slim
27mm

Refresh rate
7680Hz

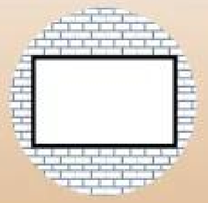
Pixel Pitch
0.78mm



COB-Series







Wall mounting



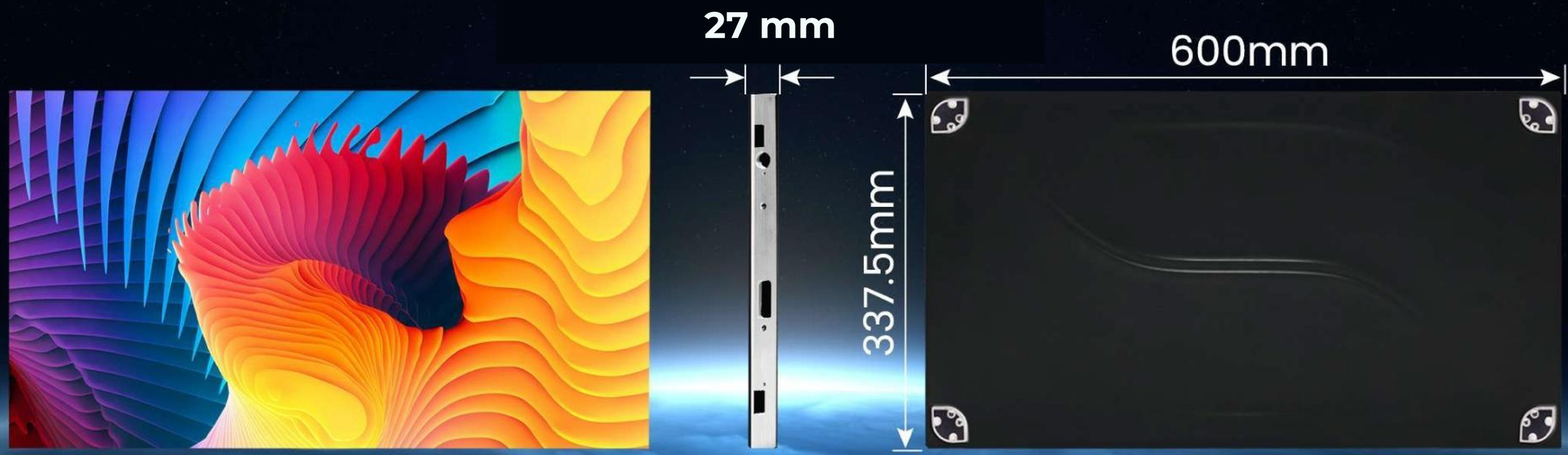
Floor mounting



Front maintenance


NO COLOR DEVIATION

DIMENSIONS



Cabinet size: 600x337.5mm





300x168.75mm

NO COLOR DEVIATION

The unification of three-color materials brings uniformity of light shape, ensuring consistent display at any angle.

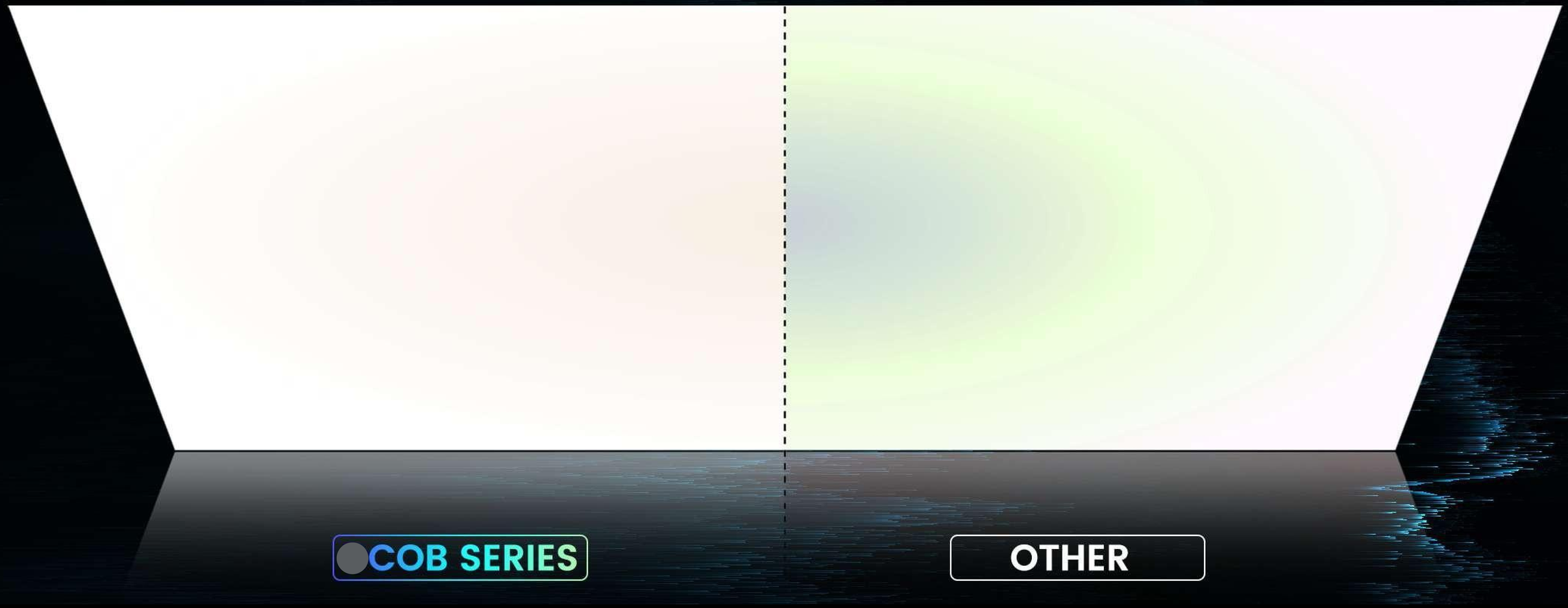


No clolor deviation at all angles, “color temperature changes less than 200K, better than traditional screens.”

Severe color coat at large color temperature changes exceeding 300k.

BETTER COLOR STABILITY

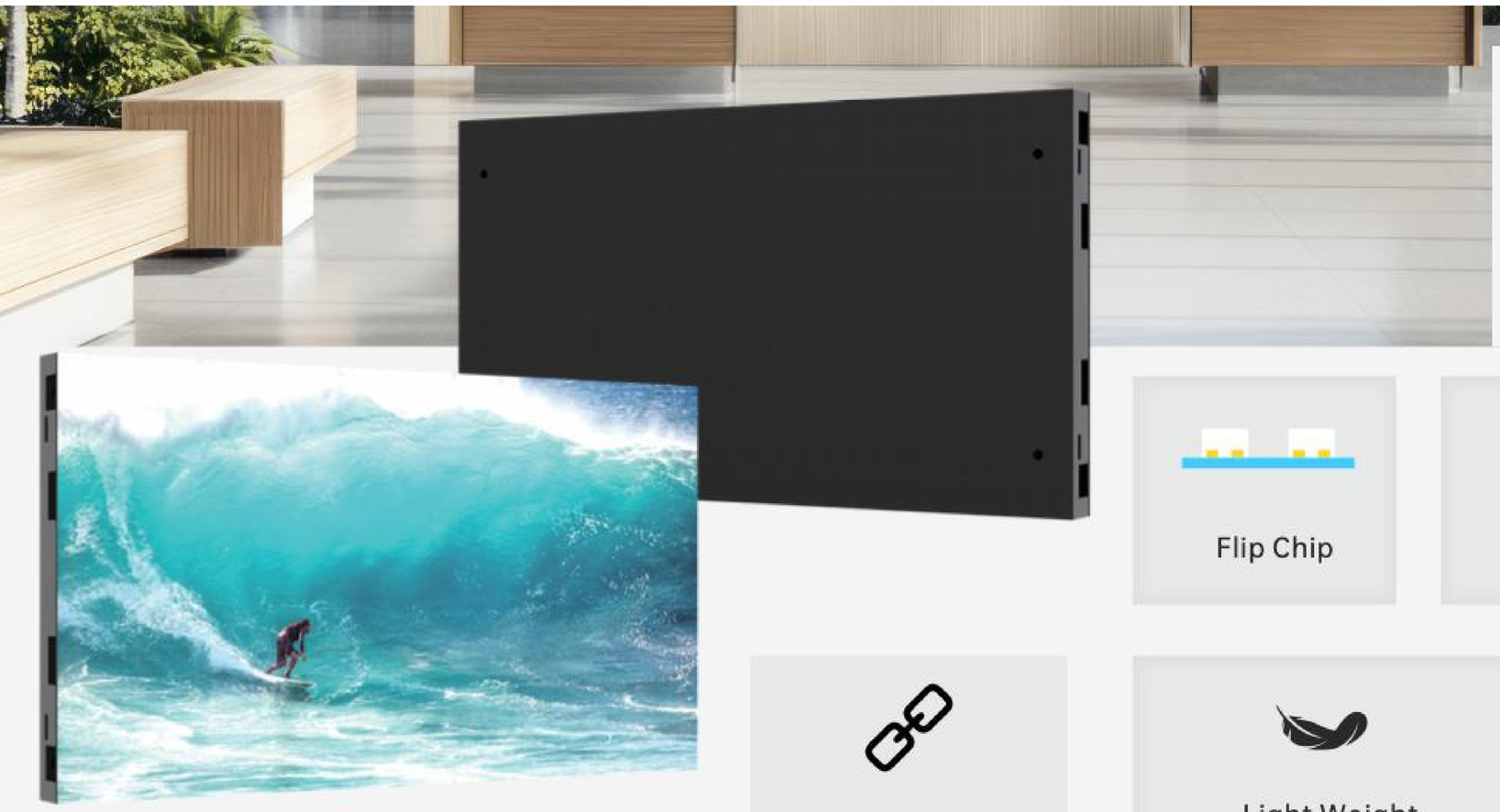
Eliminate color deviation caused by uneven screen temperature and current



20% lower variation in color uniformity compared to the boot temperature effect of traditional screens.

The real light chip is easily affected by current and temperature changes, and the brightness and wavelength fluctuate significantly, leading to unstable picture colors during prolonged use.

SPECIAL FEATURES



600×337.5×28mm

5G System
Large Bandwidth

Flip Chip

High Brightness
1000/3000nits

Hard Link

Light Weight
Design 4.8KG/cabinet

170°

Wide
View Angle

97% DCI-P3

16bit+32 bit

Full Front
Maintenance

High Refresh Rate
3840-7680Hz

Common
Cathode

20,0 0 0 0 :1

HDR 10

90°

90° splicing

Comprehensive
Protection

QUANTUM DOT LEVEL HIGH COLOR ACCURACY

Affected by the size control advantages of quantum dots themselves, the output of quantum dot chip have Extremely narrow (2mm) red light band with extremely high red light consistency.



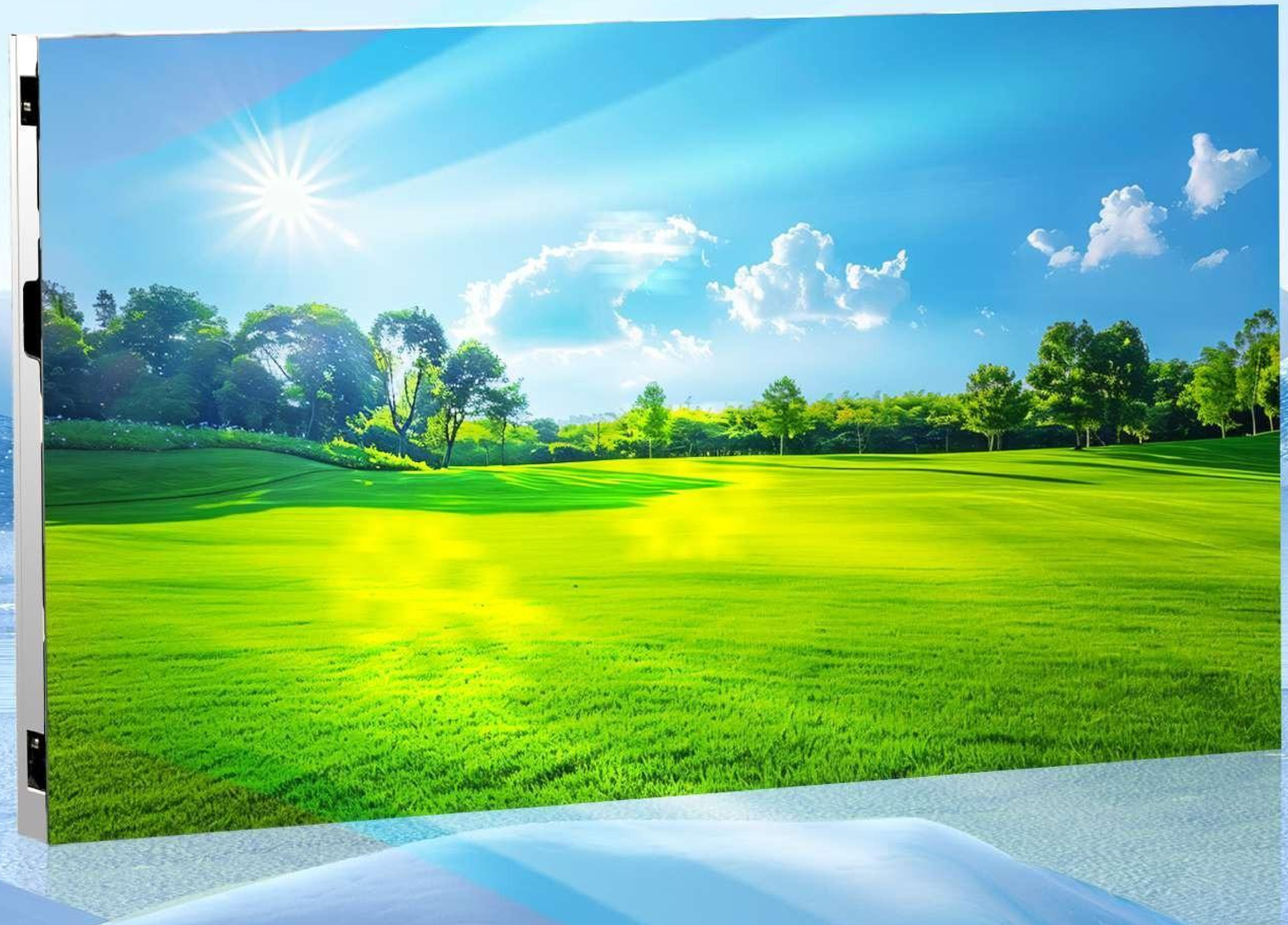
COB SERIES



OTHER

EXCELLENT HEAT DISSIPATION

The gallium nitride material used in quantum dot chips has high thermal conductivity, which helps the screen dissipate heat.

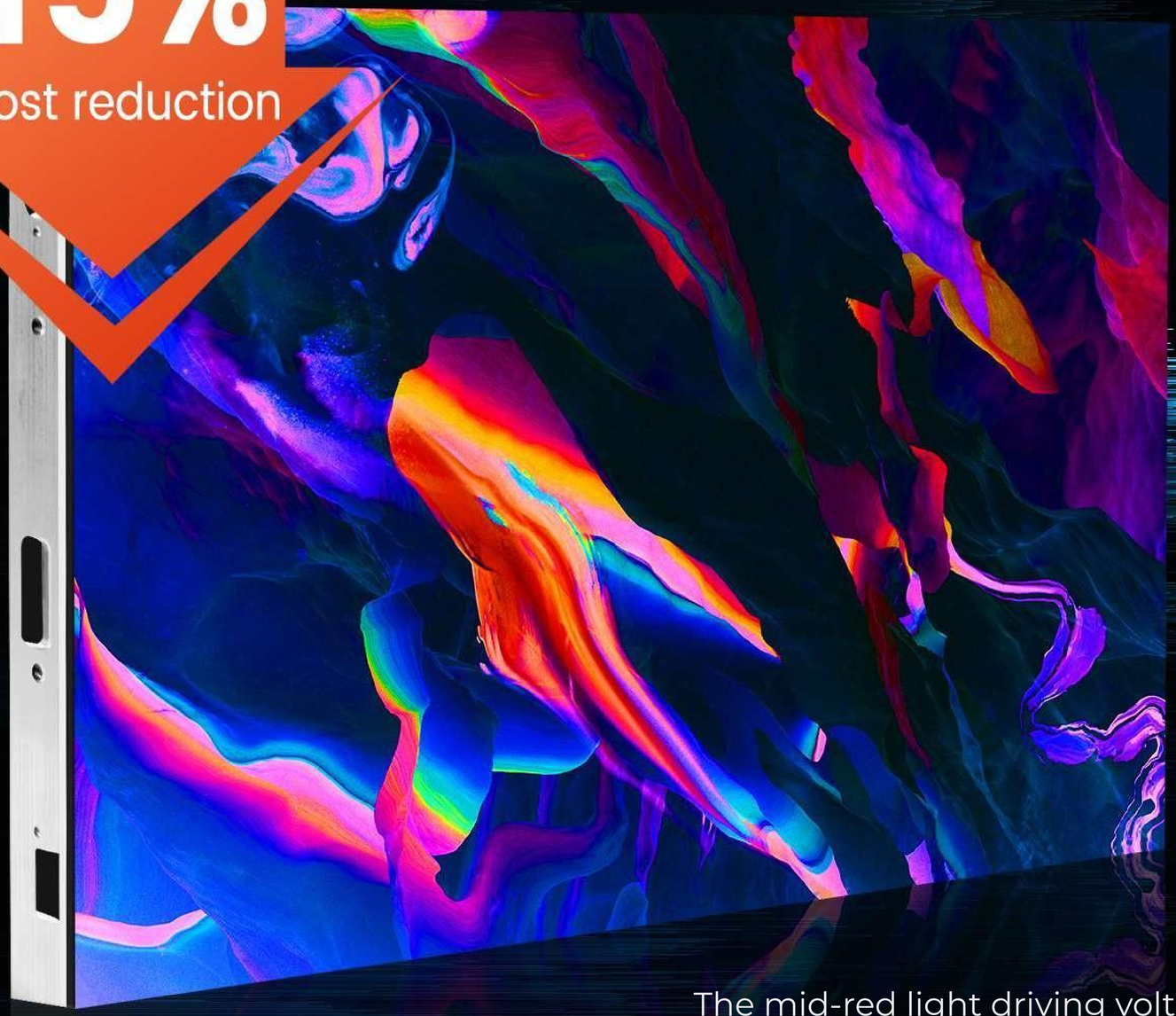


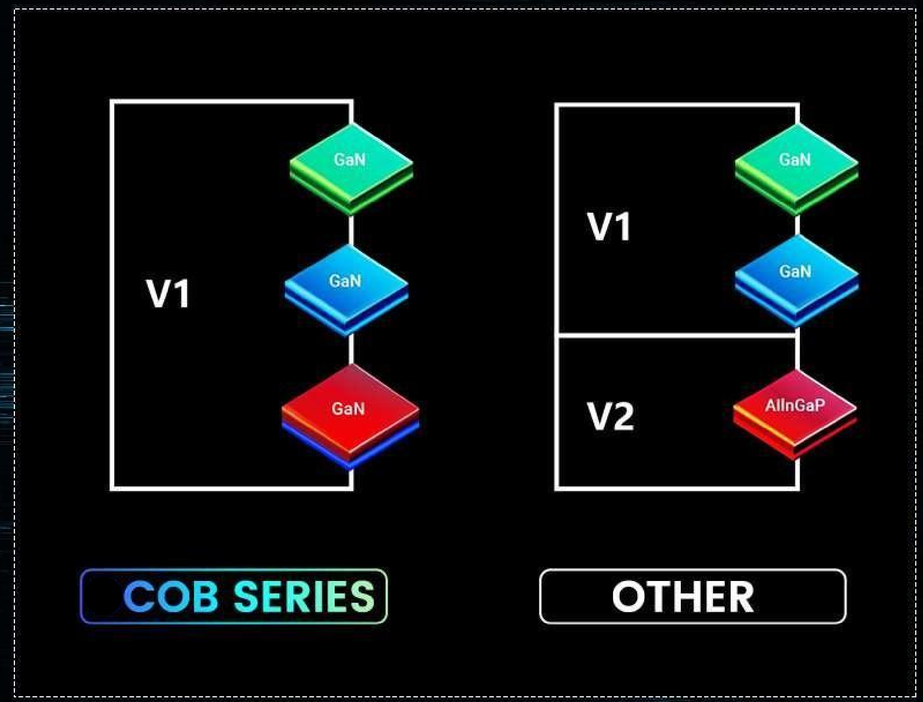


SAVE ELECTRICITY COST

The three-color chips are made from the same material and operate at the same driving voltage. They can be controlled by an integrated IC system, which helps reduce failure rates and lowers maintenance costs.

15%
Cost reduction





The mid-red light driving voltage is the same as the blue-green driving voltage, so there is no need to use a dual-voltage interface driver like traditional displays.

Magnetic Wall Mounted

Magnetic cabinet
4 magnet

Seamless splicing
Freely adjust at 6 directions

Quick installation
3 steps



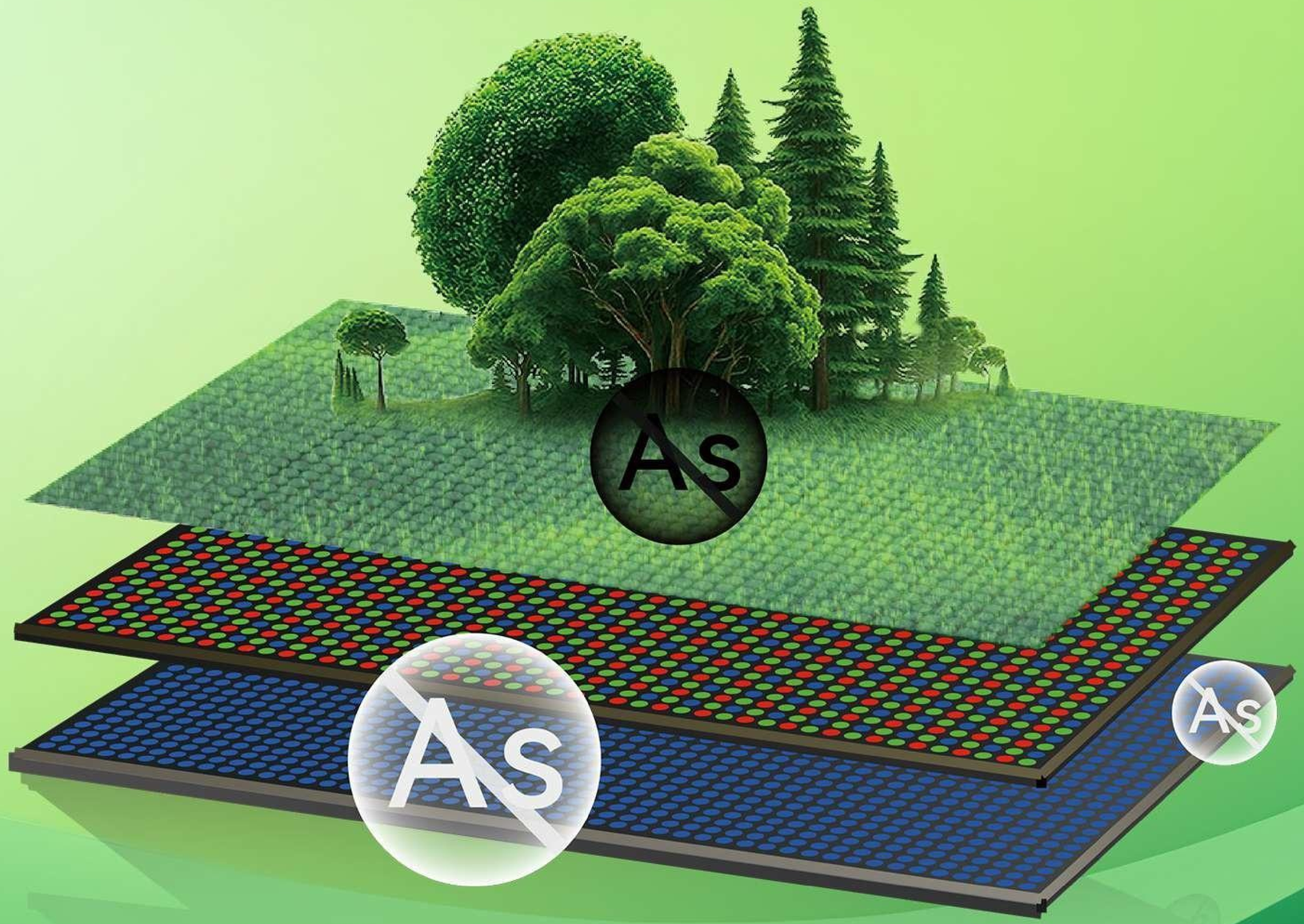






NEW ARSENIC-FREE ENVIRONMENTAL STANDARDS

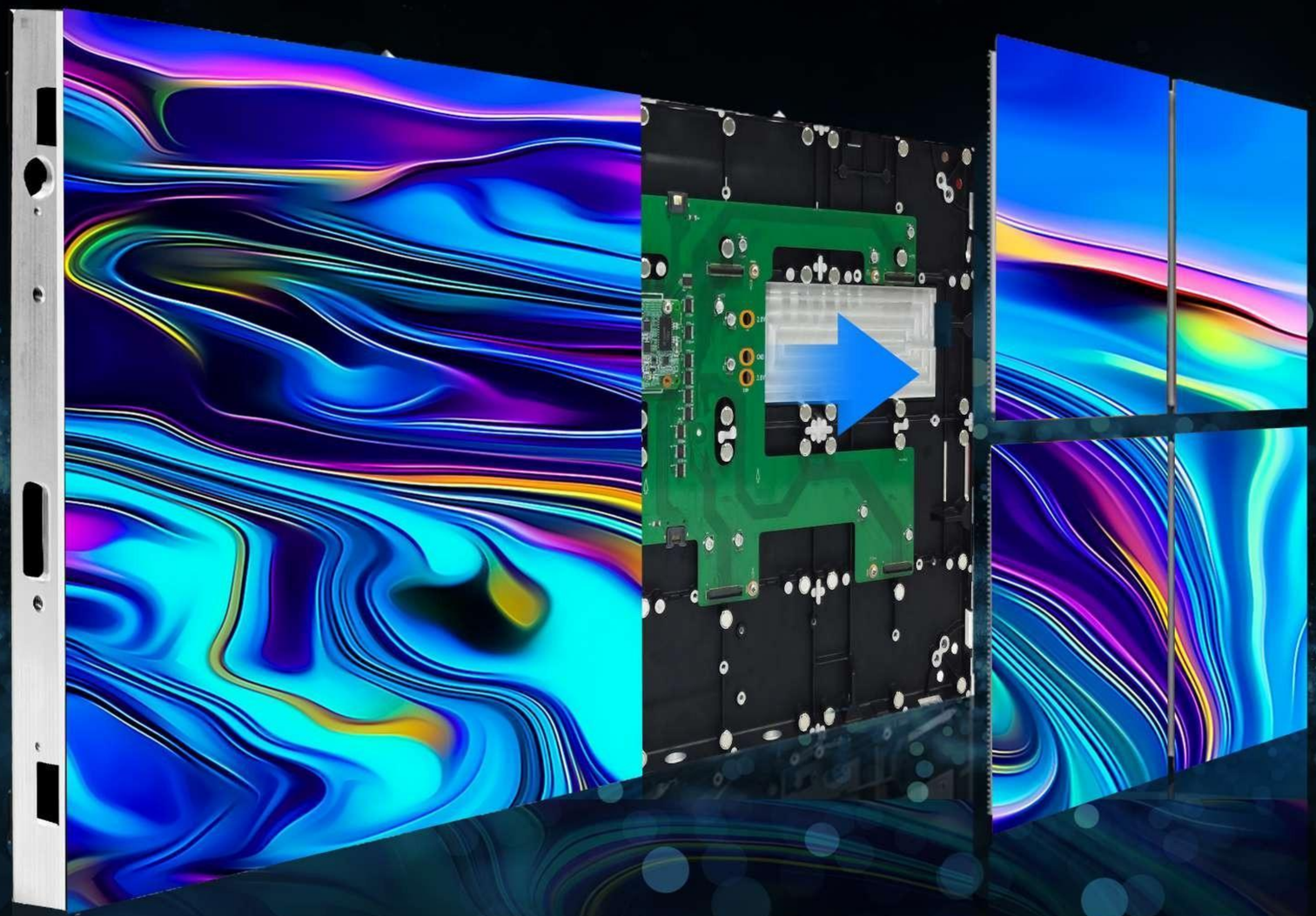
Quantum dot COB is arsenic-free and non-toxic, more environmentally friendly and safer:
Implement corporate social responsibility



The cadmium concentration in quantum dot COB is less than
0.03ug/mm², which complies with international safety standards.

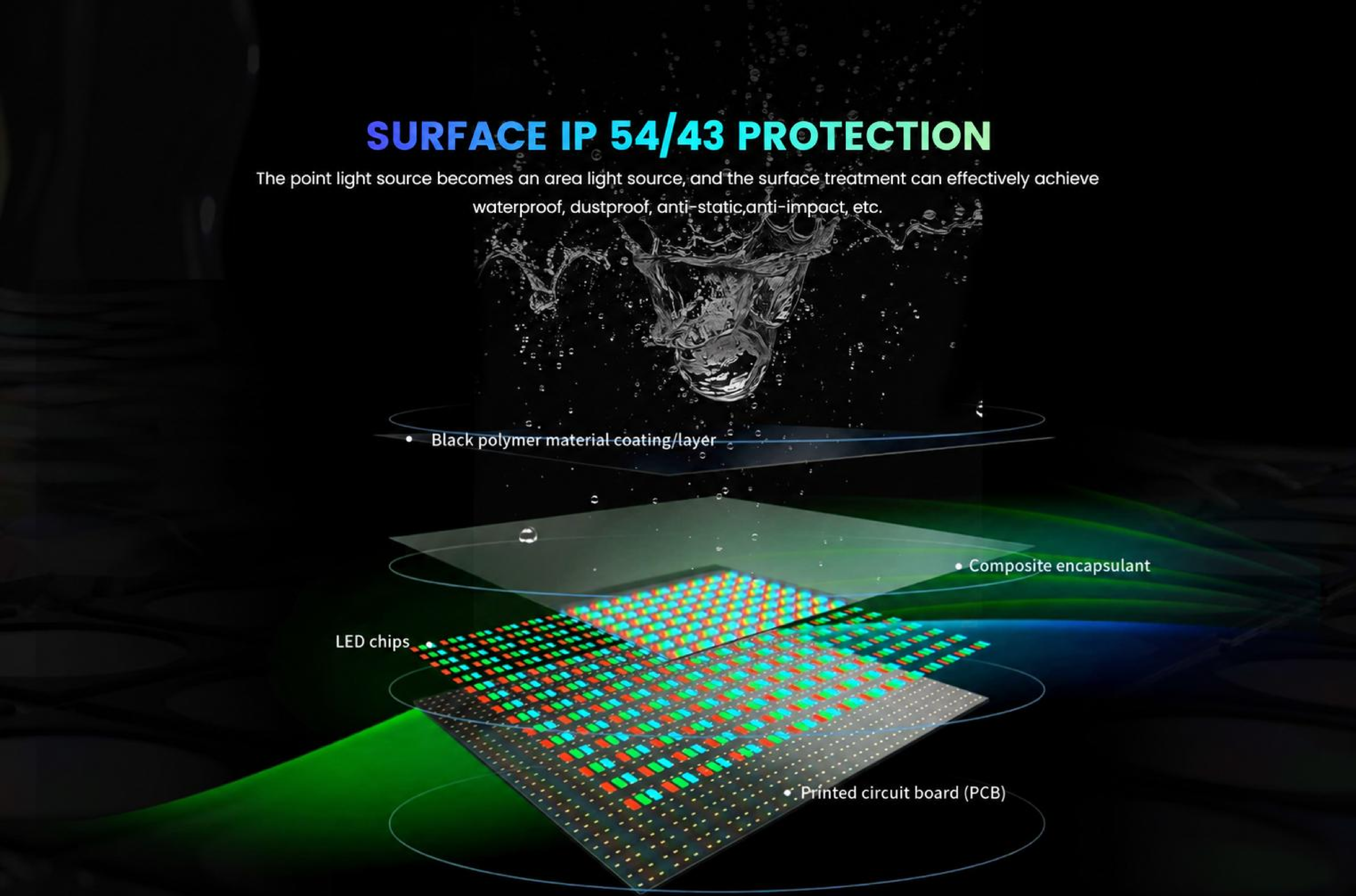
FULL FRONT MAINTENANCE

The full front maintenance design of COB series LED display allows for easy maintenance of the LED module, power supply, and receiving card from the front.



SURFACE IP 54/43 PROTECTION

The point light source becomes an area light source, and the surface treatment can effectively achieve waterproof, dustproof, anti-static,anti-impact, etc.



170 ° WIDE VIEWING ANGLE

170 ° ultra wide viewing angle presents a perfect picture in multiple dimensions



WIDER COLOR GAMUT

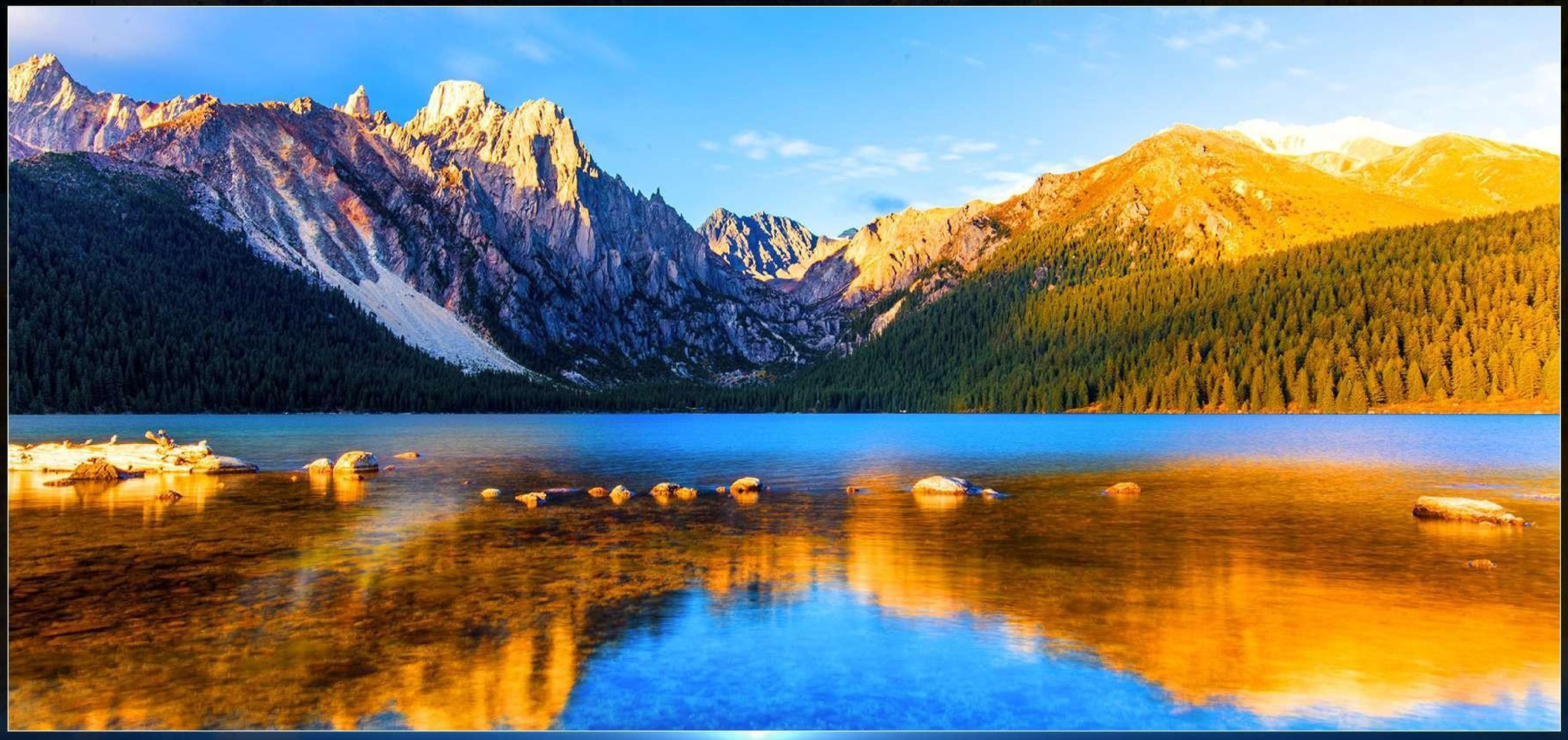
The monochromatic light produced by quantum dot materials can cover almost all natural colors seen by the human eye.And can provide more saturated colors, so it can reach 100% Rec

100% Rec
Color Gamut

7680Hz
High Refresh

16Bit
High Grayscale

20,000:1
High Contrast



PACKAGING



WOODEN CASE



FLIGHT CASE

VARIOUS INSTALLATION CHOICE



Wall mounted



Hoisting



Portable Mobile Stand



Floor stand mount

SPECIFICATIONS

Pixel Pitch(mm)	MXC 0.73	MXC 0.93	MXC 1.25	MXC 1.5625	MXC 1.875
Panel Resolution	768x432	640 x 360	480 x 270	384 x 216	320 x 180
Panel Technology	Full flip-chip COB				
Cabinet Size (W × H × Dmm)	600 x 337.5 x 31 mm				
Module Size	300x168.75mm				
Module Resolution	192x216	320x180	240x135	192x108	160x90
LED Configuration	COB	COB	COB	COB	COB
Panel Density	1638400dot/m2	1137777dot/m2	640000dot/m2	410900dot/m2	284444dot/m2
Unit Composition(WxH)	2x2				
Dimension(m2)	0.2025				
Supported Hanging or not	yes				
Cabinet weight	4 kg	4kg Small 8 kg (Big)	4kg Small 8kg (Big)	4kg Small 8 kg(Big)	8 kg (Big)
Cabinet Flatness(mm)	≤0.1				
Emitting Point Center Distance Deviation	<3%				
Surface Hardness	4H				
Surface Treatment	Matte black finish				
Brightness(nits)	800-1000				
Brightness Uniformity	≤98%				
Brightness adjustment / Dimming	0 to 260 discrete levels or higher				
Processing Depth:	16 bit				
Contrast Ratio	20,000 : 1				
Color Uniformity	Within ±0.0035 Cx,Cy				
Drive Mode	Constant Current Drive				
Colour Temperature(K)	3000 ~ 9300				
Frame Rate(Hz) Cabinet	9300K (Standard)				

SPECIFICATIONS

Frame Rate (Module)	50/60				
Refresh Rate(Hz)	3840Hz-7680Hz				
Working Voltage	AC:100V~240V,50/60Hz				
Power Consumption Max(W/m2)	395W/m2	370	320	350	325
Power Consumption AVG (W/m2)	130W/m2	125	100	120	110
Viewing Distance	>1m	>1.5m	>2m	>2m	>2m
Viewing Angle(H./V.)	170°/170°				
Lifetime(Hours)	100000				
Operating Temp(°C)	-10 ~ +50				
Operational hour	24/7				
Color spectrum	16.7 quadrillion color display capacity.				
Scanning Method	1/24 Scanning	1/24 Scanning	1/24 Scanning	1/21 Scanning	1/21 Scanning
working Environment (°C)	–10 ~ 45	–10 ~ 45	–10 ~ 45 ±10%	–10 ~ 45 ±10%	–10 ~ 45 ±10%
Maintenance	Front Service				
IP Rating	Front IP54 / Rear IP43				
IP Level of PCB Surface	IP54 (Washable by clean water)				
Storage Temp/Humidity (°C)	10 ~ 95				
Applications	Indoor				
Frame Material	Die-casting Aluminium				
Certifications	CE/FCC/ROHS/BIS/NABL/EMC/ ISO 9001:2015, 14001:2015, 270001:2022, 450001:2018, 500001:2018, 22301:2019, 20000-1:2018				

APPLICATIONS

















INDOOR COB VIDEO WALL





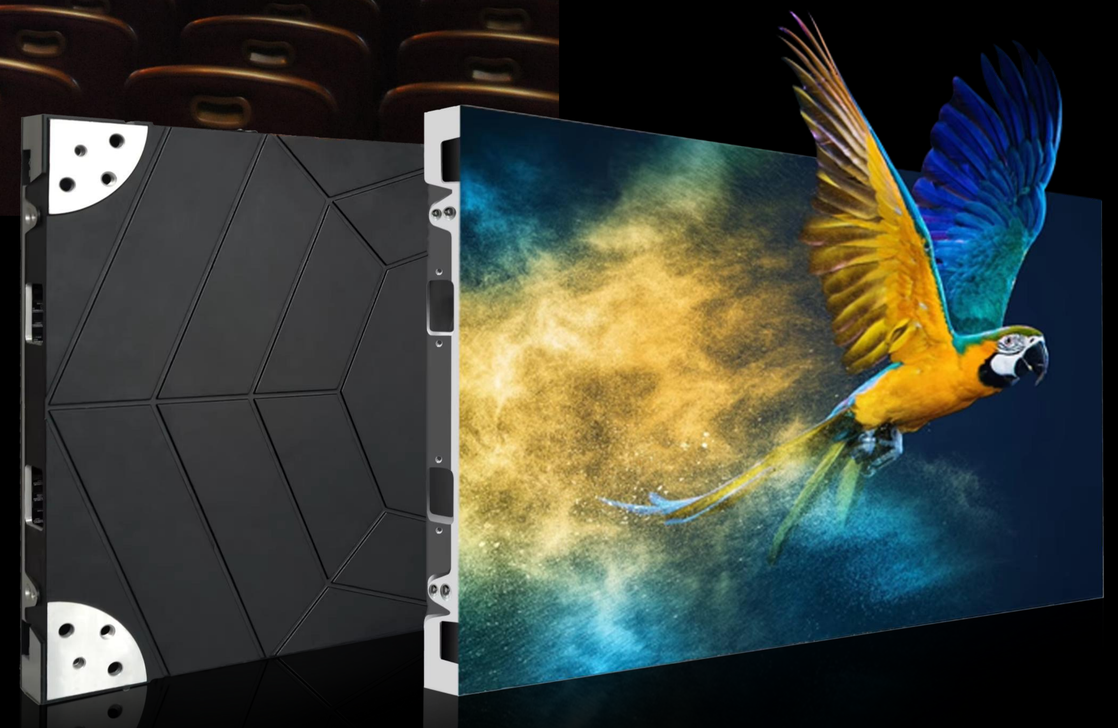
About our company






TOP NEWS
Stocks Push Higher on Earnings, Growth Prospects: Markets Wrap
PAGE 1 OF 3
U.S. stocks pushed higher for a third day as investors looked past weak economic data and mixed corporate results, including an unexpected quarterly loss for Boeing.
For more information on this story, go to
TOP <GO>
SCARLET FU ROMAINE BOSTICK JOE WEISENTHAL
Bloomberg
CORN 430.75 -0.75 -0.17%
WHEAT 497.75 +0.50 0.10%
SOYBEANS 908.25 +4.50 0.50%
SUGAR 12.06 +0.08 0.67%
COFFEE 101.00 -1.30 -1.27%
LUMBER 343.50 +10.80 3.25%


P3 20 12
THE POWER IN PARTNERSHIP



Get In Touch

Info@maxtellindia.com

Maxtell LED

Jaipur Office:

MAXTELL INDIA
257, Malvea Apartment, 3rd Floor, T-8, sardar Patel marg,
Near BJP Office, C-Sheme, Jaipur-302001, Raj.

Bangalore Office:

MAXTELL INDIA
A003, Alpine Fiesta, Hoodi, Mahadevpura,
Bangalore-560048
Contact Number: 6378273866

New Delhi Office:

MAXTELL INDIA
New Delhi office, Plot no 140/141, Sector 28
Bamnoli, Dwarka, New Delhi-110077
Contact Number: 9828088446, **9116562201**

Mumbai Office:

AURUM REAL ESTATE DEVELOPERS PVT LTD
Plot No. Gen-4/1, Flat No. R3-2002, Q Residences, G Thane
Thane, Navi Mumbai (M Corp.) 400701
Contact Number: 9257032390

24/7 Sevice Support Number: 6367255392

Media Presence : Maxtellindia

CONTACT

+91 9828052866 | +91 9257032390 | 0141-4012271
info@maxtellindia.com

FIND MORE INFORMATION