# P2.5 | INDOOR LED DISPLAY

- **Ultra-Fine Pixel Pitch** – 2.5 mm spacing for crystal-clear, high-definition indoor visuals.
- **Wide Viewing Angle** – Vivid and consistent colors from every direction.
- **High Brightness & Refresh Rate** – **≥800 cd/㎡** and **≥1920** Hz for sharp, flicker-free images.
- **Compact & Lightweight** – 320 × 160 mm module, only 0.4 kg for easy handling and installation.

# LED Display Parameters

## Product: P2.5 Indoor Full Color LED Display

| Item | Parameter |
|---|---|
| Product Model | P2.5 |
| Module Size | 320x160 |
| Pixel Pitch | 2.5mm |
| Pixel Density | 160,000 pixels/㎡ |
| Pixel Configuration | 1R1G1B |
| LED Package | SMD2020 |
| Module Resolution | 128 (W) × 64 (H) dots |
| Best Viewing Distance | 2.5m – 30m |
| Panel Current | 4 – 4.5A |
| Max Power Consumption | 36W |
| Module Thickness | 16mm |
| Module Weight | 0.4kg |
| Drive Type | Constant Current Drive |
| Scan Mode | 1/32 Scan |
| Port Type | HUB75E |
| Brightness (White Balance) | ≥600-1200 cd/㎡ |
| Refresh Rate | ≥1920Hz |
| Ingress Protection (Front/Rear) | IP30 / IP20 |
| Maintenance Type | Front Service |
| Life Span | ≥ 100,000 hours |

## 2. Product Features

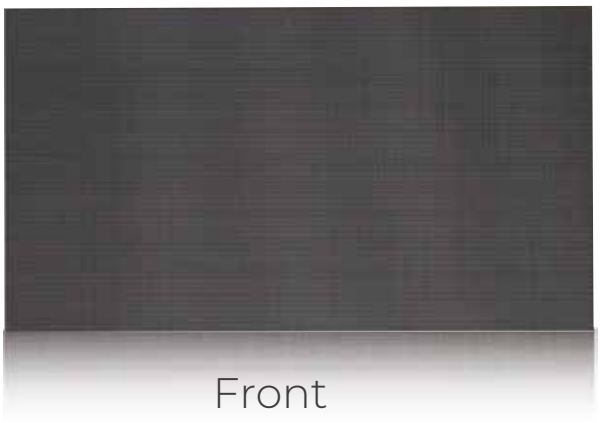
- Ultra-Fine Pixel Pitch (2.5mm): Achieves ultra-high resolution indoors, delivering stunning, high-definition visuals.
- Wide Viewing Angle: Colors remain vivid, natural, and consistent when viewed from any direction—top, bottom, left, or right.
- RGB 3-in-1 LED: Superior color mixing, vibrant performance, and realistic imagery.
- Compact & Lightweight Design: Saves space, reduces cabinet weight, and ensures fast installation and dismantling—saving both time and labor costs.
- Advanced SMD Technology: Ensures excellent brightness uniformity, high image quality, and wide viewing angles.

## 3. Core Components

- LEDs: High-quality 2020 LEDs, using premium black-surface packages from globally recognized manufacturers, ensuring long lifespan and superior image quality.
- Driving IC: High refresh rate, high grayscale constant current IC from world-leading suppliers, delivering stable and reliable performance.
- PCB Board: Multi-layer design ensures uniform current distribution, excellent heat dissipation, prevents color blocks at low grayscale, and enhances EMI resistance.
- Drive & Control: Dedicated 16-bit high grayscale, high refresh IC with unique shadow elimination circuitry, protecting LEDs and preventing surge leakage.

# Cabinet Image Display

Back



Front

## 6. Installation

Simplified LED screen installation structure available.
Application Areas: Government halls, corporate lobbies, conference rooms, exhibition centers, commercial complexes, stage performances, event venues, and more.

## Wall-Mounted Installation

- The most common type.
- The LED screen is fixed directly onto the wall using a metal frame.
- Ideal for conference rooms, auditoriums, showrooms, malls, and lobbies.
- Clean look, saves space.

## Hanging / Suspended Installation

- The LED screen is hung from the ceiling using steel cables or brackets.
- Used where wall mounting isn't possible.
- Perfect for events, exhibitions, airports, or shopping malls.

## Floor-Standing / Free-Standing Installation

- The LED display is mounted on a movable or fixed stand.
- Portable and flexible — can be repositioned anytime.
- Common in retail stores, events, and stage setups.

## Curved or Creative Installation

- LED modules are shaped into curves or creative 3D designs.
- Adds visual appeal.
- Used for brand activations, experience centers, and premium interiors.

## Cube / Column / Pillar LED Display

- Installed around pillars or columns to utilize vertical space.
- Used in malls, stadiums, and exhibition halls.

**6. Precautions**

**Working Environment**
**Designed for indoor use only.**
**Avoid high temperature, humidity, or corrosive environments (acid/alkali/salt).**
**Keep away from flammable materials, gases, and dust.**
**Operating Temperature: -20 ~ +50 (Optimal: -10 ~ +40 ).**
**Storage Temperature: -30 ~ +60 . Keep away from corrosive, humid, or flammable storage environments.**
**Prevent strong impacts and sharp object damage during transportation.**

## Operation Guidelines

Do not reverse-connect the power terminals.
If malfunction occurs during the warranty period, return to our company or repair under authorized after-sales guidance.
Handle carefully during assembly/disassembly to avoid tool damage.
Ensure proper grounding, lightning, and static protection.
Do not switch power on/off repeatedly; maintain at least a 1-minute interval.
Do not keep the display powered off for long periods:
Normal use: Power on at least once every 15 days for 4 hours.
High-humidity environments: Power on once a week for 4 hours.
Do not display a full-white screen at maximum brightness for more than 30 minutes; dynamic video playback is recommended.

## Cleaning

Use a soft-bristle brush only for cleaning.
Do not use liquids or chemical cleaners, as they may damage the LEDs.

# 7. Wiring Diagram

*LED Display*

LED Display Controller

Video Splicer

Video Matrix

Switcher

Surveillance Camera

Computer

Wireless Router

Video Camera

Media Player

Mobile Device

Input Source

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## Contact Us

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