

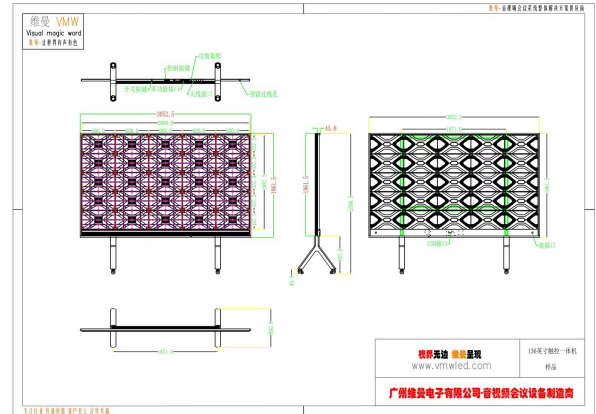
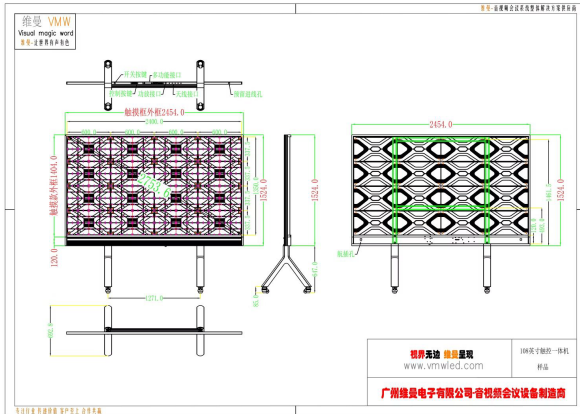


# Commercial Display Large Screen 108"/136"

Specification

# Product Overview

The COB ultra-large touch all-in-one floor-standing display is available in two models: the MLE108-FDT (108-inch) and the MLE136-FDT (136-inch). Both models feature COB flip-chip packaging technology, high brightness, wide viewing angles, and custom infrared multi-touch capability. The units are supplied with a standard mobile floor-standing "character" shaped bracket and support multiple installation methods including wall-mounting, cabinet installation, and ceiling suspension.



*Left: 108-inch Touch All-in-One Unit · Right: 136-inch Touch All-in-One Unit*



**Note:** Due to continuous product updates and iterations, the dimensions and specifications above are for reference only. Please consult with our technical team before placing orders. Actual delivery is subject to the physical product.

# Main Technical Parameters

Technical parameters are measured at T = 25°C. The table below presents the complete specification data for both models.

| Parameter                                | MLE108-FDT                                                                                                                                                                                                                                                                             | MLE136-FDT             |
|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Diagonal Size                            | 108 inches                                                                                                                                                                                                                                                                             | 136 inches             |
| Pixel Pitch                              | 1.25 mm                                                                                                                                                                                                                                                                                | 1.56 mm                |
| Packaging Type                           | COB Flip-Chip                                                                                                                                                                                                                                                                          |                        |
| Scanning Method                          | 1/45S                                                                                                                                                                                                                                                                                  | 1/54S                  |
| Resolution                               | 1920 × 1080                                                                                                                                                                                                                                                                            |                        |
| Display Size (W × H, m)                  | 2.4 × 1.35                                                                                                                                                                                                                                                                             | 3.0 × 1.6875           |
| Installation Method                      | Mobile Floor-Standing Bracket                                                                                                                                                                                                                                                          |                        |
| Touch Method                             | Custom Infrared 10-Point / 20-Point Touch (Optional)                                                                                                                                                                                                                                   |                        |
| OPS Configuration (Optional)             | i5-10200H / 4G / 128G (4K60Hz) · i7-10750H / 4G / 128G (4K60Hz) · i5-11260H / 4G / 128G (4K60Hz) · i7-11600H / 4G / 128G (4K60Hz) · i5-1235U / 4G / 128G (4K60Hz) · i7-1255U / 4G / 128G (4K60Hz) · Supports memory expansion: 8G / 16G / 32G · Supports storage expansion: 512G / 1TB |                        |
| Brightness                               | 1-600 cd/m <sup>2</sup> (Adjustable, Auto / Manual)                                                                                                                                                                                                                                    |                        |
| Brightness Uniformity                    | ≥ 99.8%                                                                                                                                                                                                                                                                                |                        |
| Luminous Point Centre Distance Deviation | < 1%                                                                                                                                                                                                                                                                                   |                        |
| Colour Temperature                       | 1,000-15,000 K (Adjustable)                                                                                                                                                                                                                                                            |                        |
| Viewing Angle (H / V)                    | ≥ 179° / 179°                                                                                                                                                                                                                                                                          |                        |
| Contrast Ratio                           | 100,000 : 1                                                                                                                                                                                                                                                                            |                        |
| Input Interfaces                         | 2 × HDMI 1.3, 1 × USB 2.0, 1 × USB 3.0                                                                                                                                                                                                                                                 |                        |
| Output Interfaces                        | 1 × HDMI 1.3 LOOP, 1 × SPDIF Digital Audio Output, 2 × 3.5 mm Audio, 1 × Type-C (connects network port module, load 260W), 1 × Network Port Module, 1 × Relay Module, 1 × Button Module, 1 × USB Module                                                                                |                        |
| Wireless Screen Projection               | Supports 4-Channel Wireless Projection (Mobile, PC, Tablet)                                                                                                                                                                                                                            |                        |
| Internal Storage                         | 2GB + 32GB / 4GB + 32GB (Optional)                                                                                                                                                                                                                                                     |                        |
| Maximum Power Consumption                | 1,200 W                                                                                                                                                                                                                                                                                | 1,800 W                |
| Average Power Consumption                | 600 W                                                                                                                                                                                                                                                                                  | 900 W                  |
| Drive Method                             | Constant Current Drive                                                                                                                                                                                                                                                                 |                        |
| Frame Rate                               | 50 / 60 / 120 Hz                                                                                                                                                                                                                                                                       |                        |
| Grey Scale                               | 16-22 bit                                                                                                                                                                                                                                                                              |                        |
| Refresh Rate                             | ≥ 3,840 Hz                                                                                                                                                                                                                                                                             |                        |
| Service Life                             | 100,000 Hours                                                                                                                                                                                                                                                                          |                        |
| Operating Temperature                    | 0°C - 60°C                                                                                                                                                                                                                                                                             |                        |
| Overall Dimensions (W × H × D, mm)       | 2,452.5 × 1,402.5 × 66                                                                                                                                                                                                                                                                 | 3,052.5 × 1,833.8 × 66 |
| Operation Control                        | Network / Remote Control (Bluetooth 5.0)                                                                                                                                                                                                                                               |                        |
| Weight                                   | 99 kg                                                                                                                                                                                                                                                                                  | 155 kg                 |

# Product Features — Integrated Design & Signal Processing



The all-in-one unit adopts an integrated design, combining video processing, Android display control system, wireless screen projection, power sequencing, HD signal input/output, and audio processing into a single chassis. The display aspect ratio is a standard 16:9, satisfying daily HD signal proportional display requirements. The display module, power supply, and control motherboard support front maintenance and independent replacement.

## Signal Input Interfaces

2 × HDMI 1.3, 1 × USB 2.0, 1 × USB 3.0

## Linked Output Interfaces

1 × HDMI 1.3 LOOP, 1 × SPDIF Digital Audio Output, 2 × 3.5 mm Audio, 1 × Type-C (connects network port module, load 260W), 1 × Network Port Module, 1 × Relay Module, 1 × Button Module, 1 × USB Module

## Internal Storage

2GB + 32GB / 4GB + 32GB (Optional)

## Remote Control Operation

Supports remote control operation with simple and convenient controls. Enables adjustment of brightness, colour temperature, contrast, and volume; signal source switching; and test mode selection.

# Product Features — Wireless Projection & Multi-Signal Display

The display supports wireless screen projection compatible with Windows, Mac, Android, and iOS platforms. Users can wirelessly transmit HD content from computers, mobile phones, and tablets to the large screen without any cabling. The system supports multi-user or multi-channel signal access simultaneously, enabling one-touch seamless signal switching, as well as 2-picture or 4-picture split-screen display.



## 4-Platform Compatibility

Windows, Mac, Android, and iOS

## 4-Channel Projection

Supports simultaneous wireless projection from up to four devices

## Split-Screen Display

Supports 2-picture or 4-picture split-screen display modes

## One-Touch Switching

Seamless signal switching with a single touch

# Product Features — Touch Technology & OPS Computer

## Custom Infrared Multi-Touch

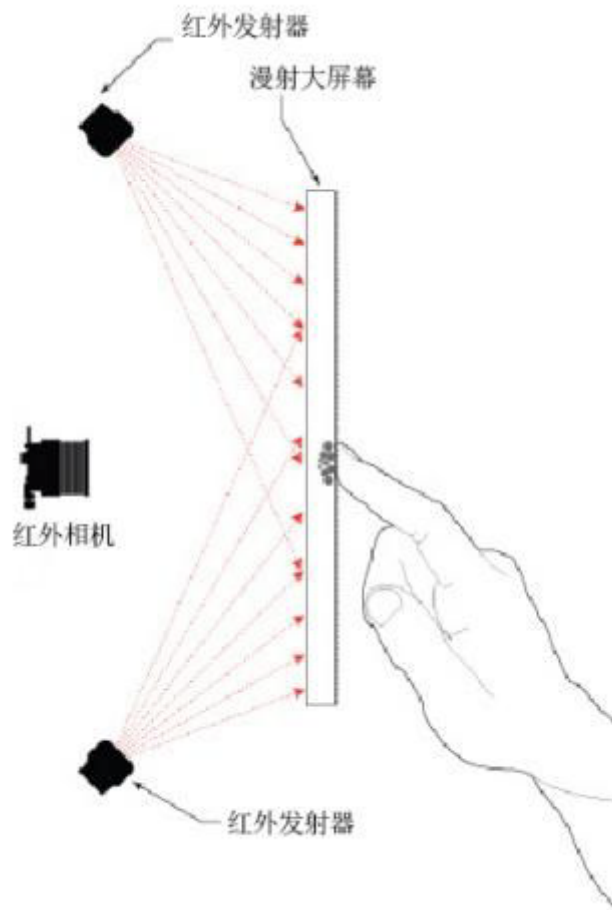
The display supports custom infrared multi-touch technology. The minimum single-point touch object is a finger, stylus, or other non-transparent object with a diameter of not less than 6 mm. The minimum multi-point touch object diameter is 8 mm. Standard configuration supports 10-point infrared touch; 20-point infrared touch is available as an optional upgrade.

- Single-point minimum touch object:  $\geq 6$  mm diameter (finger, stylus, or other non-transparent object)
- Multi-point minimum touch object:  $\geq 8$  mm diameter
- Standard: 10-point infrared touch
- Optional: 20-point infrared touch

## OPS Computer & Dual System Support

The unit supports an OPS computer module (optional), enabling embedded computing capability. Dual system support is also available as an optional configuration, providing additional flexibility for different application requirements.

- OPS computer module (optional)
- Dual system support (optional)



android



Windows7/10



# Product Features — Maintenance & Installation

The display is designed for full front-access maintenance. The display module, power supply, and mainboard can be completely removed from the front without dismantling the frame or bracket. The standard configuration includes a "character" shaped mobile floor-standing bracket. Multiple installation methods are supported to suit different venue requirements.



## Front Maintenance Design

Enables complete disassembly of the module, power supply, and mainboard from the front without removing the frame or bracket, simplifying servicing and reducing downtime.

## Installation Methods

The standard "character" shaped bracket supports the following installation configurations:

- Mobile floor-standing
- Wall-mounted
- Floor-standing cabinet
- Ceiling suspension

## Effect diagram of "herringbone" bracket



# Product Application Scenarios



会议室



高管商洽室



高管办公室



培训室



报告厅



洽谈厅



众创空间



医疗会诊

The COB ultra-large touch all-in-one display is suitable for a wide range of professional and commercial environments requiring large-format interactive display. The integrated design, wireless projection capability, multi-touch support, and flexible installation options make it well-suited for applications across corporate, educational, and public sectors.

# Reliability Testing

The product undergoes comprehensive reliability testing covering environmental, lifetime, and mechanical vibration categories. All tests are conducted in accordance with international and national standards. The acceptance criterion for all tests is 0 failures out of 50 samples (0/50).

| Category                        | Test Item                 | Reference Standard      | Test Conditions                                                                                                                | Duration / Acceptance |
|---------------------------------|---------------------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| LED Emitter — Environmental     | Temperature Cycling       | JESD22-A104-A           | -40°C → 25°C → 100°C → 25°C (30 min, 5 min, 30 min, 5 min)                                                                     | 100 cycles / 0/50     |
|                                 | Thermal Shock             | JESD22-A106             | -40°C ↔ 100°C (30 min each)                                                                                                    | 100 cycles / 0/50     |
|                                 | High-Temperature Storage  | JIS C 7021 (1977) B-11  | Ta = 60°C, RH = 90%                                                                                                            | 1,000 hrs / 0/50      |
| LED Emitter — Lifetime          | Room Temperature Lifetime | JESD22-A108-A           | Ta = 25°C, powered-on display                                                                                                  | 1,000 hrs / 0/50      |
|                                 | High-Temperature Lifetime | JESD22-A101             | Ta = 85°C, RH = 85%, powered-on display                                                                                        | 1,000 hrs / 0/50      |
| LED Emitter — Mechanical        | Mechanical Vibration      | MIL-STD-883 Method 2007 | 20G, 20–2,000 Hz, 4 cycles × 4 min each (X, Y, Z axes)                                                                         | — / 0/50              |
| LED Finished Unit Box — Storage | Low-Temperature Storage   | GB2423.2                | (-40 ± 2)°C for 4 hrs; restore at room temperature for 4 hrs; display mode and uniformity normal, no abnormalities or失控 points | 8 hrs / 0/50          |
|                                 | High-Temperature Storage  | GB2423.2                | (60 ± 2)°C for 4 hrs; restore at room temperature for 4 hrs; display mode and uniformity normal, no abnormalities or失控 points  | 8 hrs / 0/50          |
| LED Finished Unit Box — Ageing  | Room Temperature Ageing   | —                       | Ta = 25°C, 72 hrs continuous powered display playback                                                                          | 72 hrs / 0/50         |
|                                 | High-Temperature Ageing   | GB2423.2-89             | (40 ± 2)°C, powered operation 8 hrs, hourly inspection; display mode and uniformity normal, no abnormalities or失控 points       | 8 hrs / 0/50          |
|                                 | Mechanical Vibration      | GB6587.4-86             | Vibration frequency 5 Hz → 55 Hz → 5 Hz, amplitude 0.19 mm                                                                     | 5 min / 0/50          |

# Usage Guidelines & Important Notes

## Operating Environment

- Indoor display only
- Avoid high temperature, high acid / alkali / salt environments
- Keep away from flammable materials, gases, and dust
- Operating temperature: -30°C to 60°C (optimal: -10°C to 40°C)
- Storage temperature: -20°C to 80°C
- Avoid strong impacts and sharp objects during transport

## Operation

- DC +5V supply only (working voltage: 3.5–4.5V); do not use AC supply; do not reverse polarity
- Return to manufacturer for warranty repairs or follow after-sales guidance
- Handle with care during installation/removal; avoid tool impacts
- Implement lightning and electrostatic protection; ensure cabinet and steel structure are grounded
- Do not switch power on/off consecutively; allow at least 1 minute between operations
- Do not leave powered off long-term: use at least once per fortnight for 4 hours; in high-humidity environments, use at least once per week for 4 hours
- Do not display full-white maximum-brightness content for more than 30 minutes; dynamic video is recommended

## Cleaning

The HD display panel uses advanced COB packaging technology. To clean the module surface, use a soft brush for gentle brushing, or apply cleaning agent with a damp cloth directly on the LED module surface — convenient, safe, and efficient.

## Moisture Protection & Storage

- After unpacking, store at temperature < 30°C and humidity < 80%
- If unused for more than 3 days: pre-heat at 30%–50% brightness for 4–8 hours before normal operation (80%–100% brightness)
- If unused for more than 7 days: pre-heat at 30%–50% brightness for 12+ hours before normal operation (80%–100% brightness)

 **Pre-heat Procedure:** Pre-heat → Normal Use. This process removes moisture and ensures abnormal-free operation.