



# 65-inch Dual-System Infrared Touch Interactive Flat Panel

Product Specifications

Model: LYB65BSN

## Product Overview

This 65-inch dual-system interactive flat panel combines a 4K UHD LED display with high-precision infrared touch technology. It runs Android 16.0 natively and supports an optional OPS PC module for dual-system Windows operation. Designed for smart classrooms, multimedia meeting rooms, lecture halls and training rooms, the panel supports multi-point writing, wireless screen mirroring and multi-source switching.

## 1. Product Rendering



Product rendering (for reference only; the actual product may vary)



Main system interface

AI features

## 2. AI Features (Key Highlights)

### AI Assistant

Voice assistant, phone calls, speech-to-text, QR-code commands from a phone and image analysis; voice-controlled smart subtitles and online lookup

### AI Whiteboard Lasso

Recognises images and suggests search keywords; searches K-12 question banks by image; generates images from sketches or photos

### DMS Remote Control

Start a remote session from a web page and operate the panel in real time

### AI Large Model + Formula Pen

Natural-language understanding with a 10,000+ command training set; handwritten formulas are recognised, then deleted or inserted into the whiteboard

### Whiteboard OCR

Handwriting recognition in most languages, backed by a library of 10,000+ handwritten shape models

### Collaborative Whiteboard

Host and guest devices join one room with two-way sync of writing, erasing, lasso selection and chart insertion

Note: DMS remote control and the formula pen require a paid activation.

3. Design Highlights

Chassis

- 1. Aluminium alloy frame with sandblasted anodised finish and a steel rear cover, giving a strong metallic feel and active heat dissipation.
- 2. 4 mm fully tempered anti-shatter glass protects the LCD panel, improves visual quality and enhances the touch experience.
- 3. Low-friction structural design for a smooth, responsive writing feel.
- 4. Front-facing speakers prevent the sound degradation caused by recessed installation.

Interaction and Display

- 5. High-precision infrared touch frame: touch accuracy <1 mm, lift-off height <1 mm.
- 6. Supports simultaneous writing with two 2 mm pen tips or five 3 mm pen tips, and handwriting as small as 1 cm by several users at once.
- 7. 100% two-colour pen recognition (requires the Android whiteboard application).
- 8. No cursive joining when writing Latin script; meets the Promethean standard for UNESCO suppliers.
- 9. Gesture side menu for quick brightness, volume and input-source control; a side navigation bar calls up frequently used shortcuts.
- 10. Direct-lit (DLED) backlight module for stable, durable performance.
- 11. Freehand annotation over any Android or PC image, including live and full-screen annotation.

System and Expansion

- 12. Dual-system architecture: Android 16.0 built in, with an optional OPS PC module for Windows.
- 13. Standard international OPS slot with a one-piece plug-in design for easy upgrades and maintenance; no visible PC cabling on the outside.
- 14. The touch frame switches seamlessly between Android and Windows.
- 15. Multiple themes can be switched at any time, and the boot logo can be customised.
- 16. Built-in screen mirroring, electronic whiteboard and annotation functions.
- 17. Supports WiFi wireless and wired Ethernet connections.
- 18. Front expansion ports: 1x PC-USB, 1x full-channel USB, 1x HDMI input, 1x Type-C and 1x TOUCH USB for external devices.
- 19. Built-in 48 MP camera and an eight-microphone array.

4. Display Specifications

|                   |                                                     |
|-------------------|-----------------------------------------------------|
| Screen Size       | 65-inch LED panel (16:9), 1431.2 x 805.1 mm (H x V) |
| Panel Type        | Brand-new ultra-high-definition LED panel           |
| Resolution        | 3840 (H) x 2160 (V)                                 |
| Viewing Angle     | 178° (H) / 178° (V)                                 |
| Brightness        | 400 cd/m²                                           |
| Contrast Ratio    | 5000:1                                              |
| Response Time     | 8 ms                                                |
| Colour Depth      | 16.7M                                               |
| Scan Rate         | 4K@30Hz                                             |
| Backlight         | DLED (direct-lit)                                   |
| Display Output    | HDMI                                                |
| Colour System     | PAL, NTSC                                           |
| Audio Output      | Three-dimensional stereo, 2 x 10 W output           |
| Screen Protection | 4 mm fully tempered anti-shatter glass              |

## 5. Touch Specifications

|                             |                                                             |
|-----------------------------|-------------------------------------------------------------|
| <b>Touch Integration</b>    | Built-in one-piece design, not externally mounted           |
| <b>Touch Technology</b>     | Infrared touch recognition (20-point)                       |
| <b>Input Method</b>         | Finger, touch pen or any tip at least 2 mm in diameter      |
| <b>Cursor Speed</b>         | 120 points/s                                                |
| <b>Positioning Accuracy</b> | ±1 mm over more than 90% of the touch area                  |
| <b>Communication Port</b>   | USB Type-B male                                             |
| <b>Touch Resolution</b>     | 32767 x 32767                                               |
| <b>Touch Endurance</b>      | Unlimited in theory                                         |
| <b>Response Time</b>        | Auto-recognition by the system, <=15 ms                     |
| <b>Driver</b>               | Driver-free                                                 |
| <b>Touch Functions</b>      | 20-point PC touch operation, image zoom in/out and rotation |

## 6. Unit Specifications

|                                     |                                                                         |
|-------------------------------------|-------------------------------------------------------------------------|
| <b>Operating System</b>             | Android 16.0 (optional OPS PC module for dual-system Windows operation) |
| <b>Mounting</b>                     | Wall bracket (standard)                                                 |
| <b>Bracket Hole Spacing</b>         | 597 x 398 mm                                                            |
| <b>Power Type</b>                   | Three-core power cord / fixed                                           |
| <b>Power Connector</b>              | IEC C14 socket                                                          |
| <b>Power Consumption</b>            | Approx. 253 W                                                           |
| <b>Standby Power</b>                | <=0.5 W                                                                 |
| <b>Voltage Range</b>                | 110~240 V / 50~60 Hz                                                    |
| <b>Speakers</b>                     | 2 x 8 ohm 10 W front mid-range speakers                                 |
| <b>Recessed Mounting Dimensions</b> | 1469.9 x 873.3 x 70.8 mm                                                |
| <b>Recessed Mounting Clearance</b>  | 20 mm on each side                                                      |
| <b>Operating Environment</b>        | -10 °C to 55 °C; 10% RH to 90% RH                                       |
| <b>Storage Environment</b>          | -20 °C to 60 °C; 10% RH to 90% RH                                       |
| <b>Service Life</b>                 | >=50,000 hours                                                          |

7. Mainboard Solution: YS-EM3576

|                   |                                                                                                                                                         |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mainboard Model   | YS-EM3576 education display mainboard                                                                                                                   |
| SoC               | Octa-core 64-bit, 4x Cortex-A72 + 4x Cortex-A53, up to 2.2 GHz                                                                                          |
| GPU               | Mali-G52 MC3                                                                                                                                            |
| NPU               | 6 TOPS                                                                                                                                                  |
| Memory            | 4 GB DDR4 (8 GB / 16 GB optional, expandable to 16 GB)                                                                                                  |
| Storage           | 32 GB (64 GB / 128 GB / 256 GB optional, expandable to 512 GB)                                                                                          |
| Video Decoding    | 8K@30fps H.265 / H.264 / AVS3 / VVC / AV1 / HEVC                                                                                                        |
| Video Encoding    | 4K@30fps H.265 / H.264                                                                                                                                  |
| Display Output    | VBYONE 4K@60Hz x1; HDMI OUT 1080P x1; DP 4K@60Hz x1; VGA 4K@60Hz x1                                                                                     |
| Display Input     | OPS 4K@60Hz x1; HDMI IN 4K@60Hz x1                                                                                                                      |
| Audio Interface   | LINE IN x2; LINE OUT x1; SPDIF OUT (coaxial) x1; speaker output up to 4 x 8 ohm 15 W, 2.0/2.1 channel by default, 2.2 channel optional                  |
| Network           | Gigabit adaptive Ethernet x2 (10/100/1000M); dual-band WiFi 6; Bluetooth 5.4; WiFi AP 2.4G/5G                                                           |
| USB               | USB 2.0 x8; USB 3.0 x3; Type-B_OUT x2; Type-C_OTG x1 (65 W fast charging and DP1.4 display input)                                                       |
| Serial Ports      | TTL x2; TTL-Debug x1; RS485 x1; DB9 RS232 x1                                                                                                            |
| Expansion         | IIC x1; GPIO x4; ADC KEY x8; IR x1; LED x1; TF card slot x1 (optional)                                                                                  |
| Front Panel Board | YS-MTEXT-V1: USB 2.0 Type-A x3, USB 2.0 TOUCH_OUT x1, USB 2.0 Type-C x1, HDMI IN x1 (4K@60Hz), light sensor x1, IR receiver x1, LED x2, power button x1 |
| Board Dimensions  | 230.0 x 245.0 x 18.0 mm, mounting holes Ø3.2 mm x6                                                                                                      |
| Board Power       | Normal 11.33 W; light sleep 10.30 W; standby 0.2 W                                                                                                      |

Mainboard specifications are compiled from the YS-EM3576 Product Approval Document V3.4 (Shenzhen Yisheng Technology Co., Ltd.). The actual shipping configuration may vary.

8. Optional OPS PC Configuration

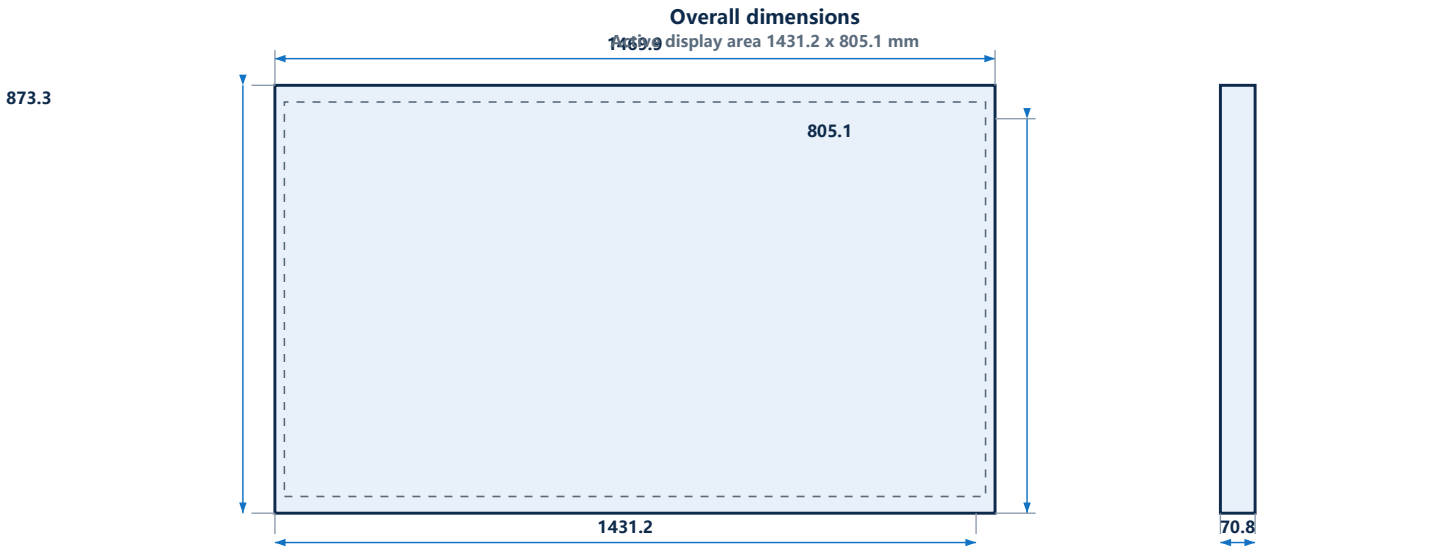
| Item             | i5 configuration (optional)                                                                   | i7 configuration (optional)              |
|------------------|-----------------------------------------------------------------------------------------------|------------------------------------------|
| Processor        | Intel Core i5                                                                                 | Intel Core i7                            |
| Chipset          | Intel chipset                                                                                 | Intel chipset                            |
| Memory / Storage | 8 GB DDR3 memory / 2.5-inch 256 GB drive                                                      | 8 GB DDR3 memory / 2.5-inch 256 GB drive |
| Graphics         | Intel HD Graphics                                                                             | Intel HD Graphics                        |
| Input Ports      | 1x LAN, 3x USB 3.0, 3x USB 2.0, 1x MIC-IN                                                     |                                          |
| Output Ports     | 1x HDMI, 1x VGA, 1x LINE-OUT                                                                  |                                          |
| Operating System | Windows 10 / Windows 11 (optional; the actual version depends on the purchased configuration) |                                          |

9. Standard Accessories

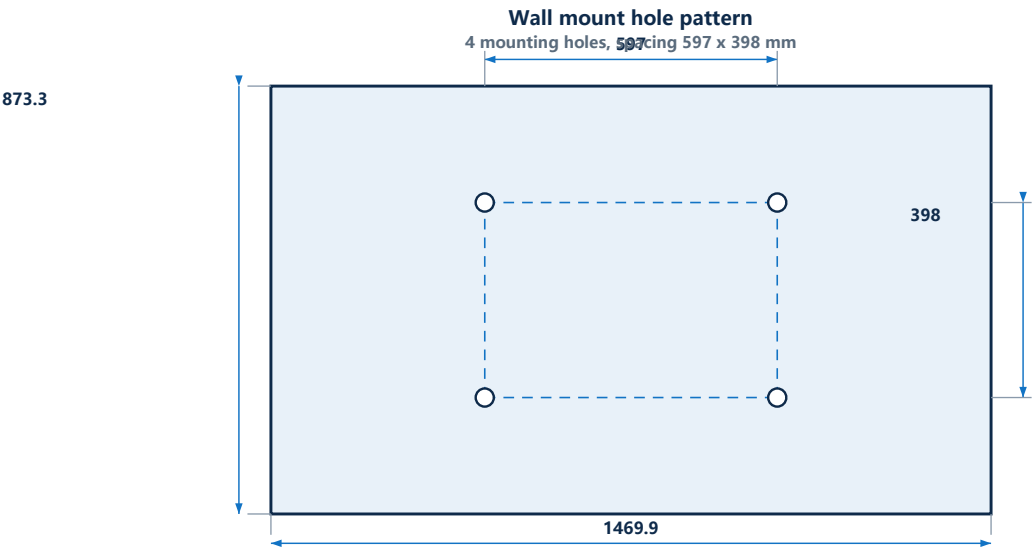
Standard accessories:

|                                                                                                  |                                                                                                     |                                                                                                                  |
|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| <br>Touch pen   | <br>Warranty card  | <br>Certificate of conformity |
| <br>User manual | <br>Remote control | <br>5 m power cord            |

10. Dimensions



Unit: mm



Unit: mm

## 11. Typical Applications

# 适用行业

更广泛商业应用



企业会议



方案讲解



教案培训



幼儿教育



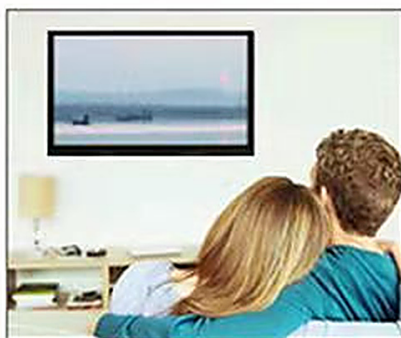
产品展示



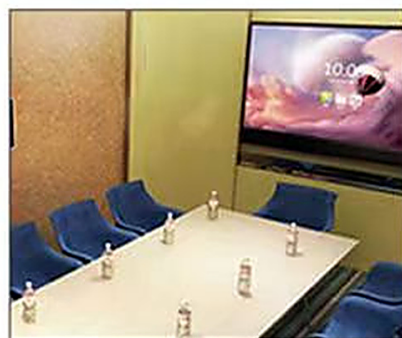
视频会议



教程录制



家庭娱乐



展览展示

Typical applications: smart classrooms, multimedia meeting rooms, training rooms and lecture halls