

DHI-LPH86-MC480-U-S2

86 inch Smart interactive whiteboard



Series Overview

Dahua DeepHub Ultra Smart Interactive Whiteboard has powerful processing capabilities with its built-in 8-core CPU, 4-core GPU, 16 GB RAM, 128 GB storage, and Android 15 operating system with EDLA. With a high-precision infrared touch sensor and a 4K DLED display, this interactive whiteboard will give you an extraordinary experience whether you are writing, controlling or displaying content. It features video conferencing, wireless screen sharing, UHD display, scan and go, and more. Let this whiteboard be your go-to choice to digitalize your office and classrooms.

Functions

4K HD Display

With up to 3840 × 2160 resolution, the 4K HD display delivers a clear image in sharp, vivid colors.

AI Recognition of Drawings

Identifies hand-drawn structures such as straight lines, arrow, straight lines, arrow-dotted lines, triangles, parallelograms, trapezoids, rectangles, pentagons, circles, cylinders, pentagrams, semicircles, and ellipse. Handwritten content supports real-time editing and corrections, and the recognition results will change accordingly.

File Management

Supports managing and using Office files, image, video and audio files, and file formats such as PDF and TXT.

- Featuring an AI-powered 150 MP triple-camera system with 9× digital zoom, it includes Gallery Mode, Auto-Framing, and Voice Tracking for an immersive video conferencing experience.
- A 16-microphone array captures voices with pristine clarity from up to 12 meters away, eliminating echoes and background noise for smooth audio.
- 500 cd/m² high brightness, 90% NTSC wide color gamut, and $\Delta E \leq 1.5$ color accuracy deliver stunningly vivid visuals.
- Equipped with two built-in mid-to-high-frequency speakers and two low-frequency speakers, the device features top-firing sound and 2.2-channel audio output.
- Unlocks via NFC.
- Radar-based human motion detection.
- Includes a full-featured Type-C IN port with USB PD charging up to 100 W.
- EDLA-certified with pre-installed Google Suite and third-party Android apps from the Play Store.
- Integrated 4K ultra-high-definition display with 4K user interface.
- Supports one-tap screen casting from smartphones, computers, and tablets, plus multi-screen display functionality.
- Compatible with Microsoft Office and other software; it plays audio/video files in multiple formats.
- Smooth, responsive handwriting and pen input with fast recognition, accurate pen strokes, and pressure sensitivity.
- AI-powered text and drawing recognition ensures precise conversion.
- Supports intelligent pen-lift detection, automatically activating annotation and whiteboard functions when the pen is lifted.
- BYOM: Access the whiteboard's camera and microphone via Type-C IN using casting devices.

Similar to Real Writing Experience

The electronic whiteboard supports pen-point writing. It comes equipped with specialized pressure-sensitive writing pens, designed to enhance the writing experience. With its soft, comfortable nib, writing on the whiteboard feels natural, similar to the real writing experience.

Text Recognition

Converts written letters into text in real time, using the default font of the system.

Technical Specification

Built-in System	
Operating System	Android 15
CPU	Quad-core A76 + Quad-core A55
CPU Frequency	2.4 GHz
GPU	Mali-G610 MC4
RAM	16 GB
ROM	128 GB

LCD Panel	
Screen Size	86 inch
Backlight	DLED
Aspect Ratio	16:9
Brightness	500 cd/m ² (typ.)
Resolution	3840 (H) × 2160 (V)
Viewing Angle	178° (H)/178° (V)
Lifespan	≥50,000 hrs
Refresh Rate	60 Hz
Display Color	1.07 Billion (10 bits)
Color Gamut	90% NTSC
Static Contrast Ratio	1200:1 (typ.)
Response Time	8 ms

Camera	
Camera	Android: Photo: 3×50 MP; Video: 8 MP Windows: Photo: 8 MP; Video: 8 MP
Auto Control	Auto flip cover; Auto white balance
Distortion	−8.6%
Max. Resolution	Photo: 9632 (H) × 5418 (V); Video: 3840 (H) × 2160 (V)
Storage	8GB eMMC
Field of View	H: 87°; V: 49°; D: 99°
Face Detection	Yes
Digital Zoom	Yes, supports up to 9x digital zoom.
Other Functions	Gallery mode, Auto-framing, Voice-tracking

Device Ports	
Light Sensor	1
Front Button	8 buttons: custom, volume down, volume up, curtain control, touch lock, input source selection, home and power
Front Ports	2 × USB 3.2 Gen1 Type-A , 1 × HDMI IN, 1 × USB Type-C IN (100 W fast charge, data transmission, local area network, BYOD), 1 × TOUCH USB 2.0 Type-B
Rear Port	3 × HDMI IN (4K@60 Hz) , 1 × HDMI OUT (4K@60 Hz) , 1 × DP IN (4K@60 Hz),

Rear Port	1 × USB 2.0 Type-A Android, 2 × USB 3.2 Gen1 Type-A Follow, 1 × USB Type-C IN (15 W charge, data transmission), 1 × USB Type-C OUT (4K@60 Hz), 3 × TOUCH USB 2.0 Type-B, 1 × VGA IN , 1 × VGA AUDIO IN (3.5 mm port), 1 × LINE IN (3.5 mm port), 1 × LINE OUT (3.5 mm port), 1 × SPDIF OUT, 1 × RS232, 1 × microSD card slot, 1 × RJ45 IN (10/100/1000 Mbps), 1 × RJ45 OUT (10/100/1000 Mbps)
Wi-Fi	Wi-Fi 6, 1 × Station, 1 × AP
Wi-Fi Standard	Station: 802.11b/g/n/a/ac/ax AP: 802.11b/g/n/a/ac/ax
Wi-Fi Frequency Range	2400–2483.5 MHz, 5150–5350 MHz, 5470–5725 MHz, 5725–5850 MHz
MAX Power Transmission (Wi-Fi)	≤20 dBm@2400–2483.5 MHz; ≤23 dBm@5150–5250 MHz; ≤20 dBm@5250–5350 MHz; ≤27 dBm@5470–5725 MHz; ≤14 dBm@5725–5850 MHz
Bluetooth	Yes
Bluetooth Standard	BR/EDR/BLE, BT5.4
Bluetooth Frequency Range	2400–2483.5 MHz
MAX Power Transmission (Bluetooth)	≤20 dBm@2400–2483.5 MHz
RFID Modulation Method	ASK
RFID Frequency Range	13.56 MHz
MAX Power Transmission (RFID)	42 dBuA/m @ 10 m
TF Card Slot	1 microSD card slot, expandable up to 512GB
Others	Supports detection of human motion via Radar.

Function	
NFC	Supports quick unlock via NFC.
Wireless Access Point	Wi-Fi 6, 2.4 GHz and 5 GHz dual band, 802.11b/g/n/a/ac/ax
IR Receiver	1

Touchscreen	
Response Time	≤1.67 ms
Other Functions	Pen Writing, Finger Dragging, Dual-Color Pen, Multi-Touch, Palm Erasing, and Palm Rejection.
Touch Technology	Infrared
Attachment Method	Zero Air Gap
Touch Points	Android: 64 pionts, Windows: 64 pionts
Valid Touch	1.5 mm (0.06") (over 90% touch area)
Writing Mode	Finger + Pen (attaches magnetically)
Touch Height	≤0.99 mm (average)
Anti-light Interference	Anti-dazzle tempered glass
Surface Hardness	≥9H
Touch Resolution	32768 × 32768

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Speaker

Frequency	90 Hz–20 kHz
Power	2 × 10 W + 2 × 20 W
Built-in Speaker	4 (CH2.2)

Fingerprint

Fingerprint Capacity	100
Fingerprint Resolution	160 × 160
FAR	<0.001%
FRR	<3%

Microphone

Microphone	16 arrays
Pick-up Distance	0 m–12 m (0 ft–39.37 ft)
AGC	Yes
Echo Cancellation	Yes
Polar Pattern	Omnidirectional
Intelligent Noise Filtering	YES

General

Power Supply	100–240 VAC, 50/60 Hz
Power Consumption	156 W (basic), 446 W (max)
Standby Power Consumption	≤0.5 W
Operating Temperature	0 °C to +40 °C (+32 °F to +104 °F)
Storage Temperature	–20 °C to +60 °C (–4 °F to +140 °F)
Operating Humidity	10%–90% (RH), non-condensing
Storage Humidity	10%–90% (RH), non-condensing
Product Material	Metal casing
Protective Glass	3.2 mm anti-glare tempered glass
Casing Color (Frame/Rear)	Black on the left and right, Lunar Rock Gray on the top and bottom.
Product Dimensions	1,914.9 mm × 116.2 mm × 1226.8 mm (75.39" × 4.57" × 48.3") (L × W × H)
Frame Size	Top border: 35.9 mm (1.41"), left and right borders: 17.5 mm (0.69"), bottom border: 40.7mm (1.6")
Packaging Dimensions	2,090 mm × 227 mm × 1,315 mm (82.28" × 8.94" × 51.77") (L × W × H)
Operating System of External Module	Windows 7/8/10/11
Net Weight	60.6 kg (133.6 lb)
Gross Weight	75.5 kg (166.45 lb)
Holes Distance	800 mm × 400 mm (31.50" × 15.75")
Installation	Wall mount or mobile bracket
Packing List	1 × Smart interactive whiteboard, 1 × Power cord, 2 × Stylus pen, 1 × Quick start guide,

Packing List	1 × Wall mount bracket, 1 × Remote control, 1 × Legal and regulatory information, 1 × Wall-mount screw pack, 1 × Wireless plug-in module, 1 × Plug-and-play camera
Glass Thickness	3.2 mm

Ordering Information

Type	Model	Description
Smart interactive whiteboard	DHI-LPH86-MC480-U-S2	86 inch Smart interactive whiteboard
Accessories (Optional)	DHI-SP-PI5C75IS	Open Pluggable Specification
	DHI-PKC-MS1A	DHI-PKC-MS1A
	DHI-PKC-WM1A	Omnidirectional Digital Microphone
	DHI-SP-PI5C82IS	Open Pluggable Specification
	DHI-SP-PI5C72IS	Open Pluggable Specification
	DHI-PKP-IP1A	Smart Pen
	DHI-PKP-WP1B	Wireless transmitter
	DHI-PKP-UC10A	USB Camera

Accessories

Optional:



DHI-SP-PI5C75IS
Open Pluggable
Specification



DHI-PKC-MS1A
DHI-PKC-MS1A



DHI-PKC-WM1A
Omnidirectional Digital
Microphone



DHI-SP-PI5C82IS
Open Pluggable
Specification



DHI-SP-PI5C72IS
Open Pluggable
Specification



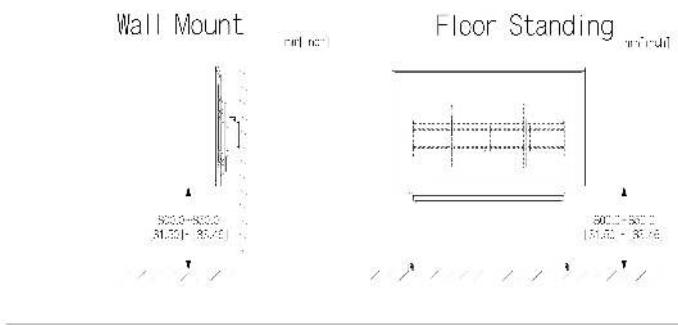
DHI-PKP-IP1A
Smart Pen



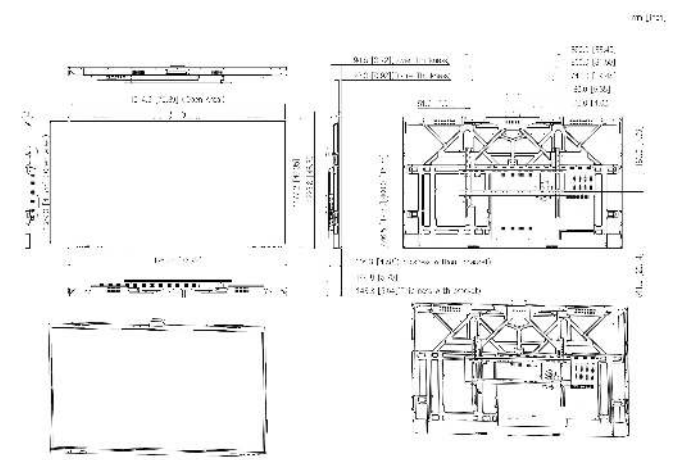
DHI-PKP-WP1B
Wireless transmitter



DHI-PKP-UC10A
USB Camera



Dimensions (mm[inch])



Panels

