

DHI-LPH86-MC470-P

86 inch Smart interactive whiteboard



Series Overview

The Dahua DeepHub Professional Smart Interactive Whiteboard represents a new generation of smart interactive solutions, featuring a high-performance main controller and a range of intelligent functions. It comes equipped with built-in DeepHub Meeting software, enabling cloud-based online conferencing with real-time collaboration and AI assistance. Utilizing direct-type LED backlight technology, the whiteboard boasts a stunning 4K LCD display available in sizes of 65", 75", 86", and 98". This ultra-thin touchscreen also integrates motorized lenses, speakers, and microphone arrays. With a variety of capabilities, including video conferencing, writing directly on the whiteboard, wireless screen sharing, and the ability to scan codes for easy access to content, the DeepHub provides a seamless interactive experience.

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.

Easy to Share

Enhances the experience of sharing files by scanning a code. It automatically determines the network of the device to readily share the QR code across the extranet and the intranet. QR code encryption and extraction are also featured, providing privacy and data security through the required entry of a 6-digit password for verification.

- Built-in DeepHub Meeting software for cloud base online conference and with real-time collaboration function.
- (The Meeting software installed on the device includes a one-year usage license, after which a renewal fee will be required for continued use.)
- Displays in 4K Ultra HD and uses 4K UI.
- With its 2 built-in mid-high frequency speakers, and 1 low-frequency speaker, the device supports 2.1-channel audio output. The total power is 60 W.
- Produces vibrant visuals through its high color coverage (90% NTSC High Gamut Screen) and accurate color reproduction ($\Delta E \leq 1.5$).
- Features split screen, and performs screen sharing between the whiteboard and phones, computers, tablets and more devices.
- Microsoft Office and other related software can be installed, and it can play audio and video files in various formats.
- Offers a smooth writing experience through handwriting recognition, pen writing, the fast writing response speed, and pen pressure recognition for a real writing experience.
- Support AI recognition of text and drawings.
- Intelligent pen detection that automatically wakes up the whiteboard for annotations when the pen is lifted.
- Built-in AI 52M camera and 16 array microphone that produces excellent quality visual and audio communication. Supports auto-framing and voice tracking.
- Features sound source positioning.
- NFC and Fingerprint unlock for protection of user information.
- Includes a full-featured Type-C IN port and supports charging through USB PD up to 65 W.

File Management

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

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 14
CPU	Quad-core A73 + Quad-core A53
CPU Frequency	2.2 GHz + 2.0 GHz
GPU	ARM Mali-G52 MP8 (8EE)
RAM	20 GB (System: 16 GB, Camera: 4 GB)
ROM	128 GB
NFC	Supports quick unlock via NFC

Function	
Operating System of External Module	Windows 7/8/10/11
Wi-Fi Hotspot	Dual-band 2.4 G/5 G; supports enabling Hotspot and Wi-Fi at the same time

LCD Panel	
Screen Size	86 inch
Backlight	DLED
Aspect Ratio	16:9
Brightness	450 cd/m ² (typ.)
Resolution	3840 (H) × 2160 (V)
Viewing Angle	H (178°) / V (178°)
Lifespan	≥50, 000 hr
Display Color	90% NTSC (typ.)
Refresh Rate	60 Hz
Static Contrast Ratio	1200 (typ.)
Response Time	8 ms (typ.)

Camera	
Camera	Android: Photo: 52 MP; Video: 8 MP Windows: Photo: 8 MP; Video: 8 MP
Auto Control	Auto flip; 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.

Device Ports	
Light Sensor	1
Front Button	1 × power button (right side)
Front Ports	1 × USB 3.2 Gen1 (left side)
Network Port	1 × RJ-45
Wi-Fi	Yes, 1 × Station, 1 × AP

Wi-Fi Standard	Station: 802.11b/g/n/a/ac 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, BT5.3
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)	42dBuA/m @10 m
USB	3 × USB 3.2 Gen1 Type-A; 1 × Micro USB 2.0
RS-232	1 × DB9 port, male connector
Video Input	2 × HDMI 2.0 (4K@60 Hz)
Video Output	1× HDMI 2.0 (4K@60 Hz)
Audio Output	1 × 3.5 mm Line Out port; 1 × SPDIF port
Others	1 × Touch port
IrDA	1
Microphone	16 arrays
Type-C Port	1 × Type-C IN (DP IN (4K60 fps) + USB 3.2 Gen1 HOST+ USB 2.0 Device (touch) + PD 65 W)

Touchscreen	
Response Time	≤3.3 ms
Touch Technology	Infrared
Touch Points	32@Android, 50@windows
Valid Touch	1.5 mm (0.06") (over 90% touch area)
Writing Mode	Finger + Pen (attaches magnetically)
Anti-light Interference	Anti-dazzle tempered glass
Surface Hardness	≥9H
Touch Resolution	32767 × 32767
Number of Multi-user Writing Points	10 points (over 90% touch area)

Speaker	
Number of Cavities	3
Frequency	150 Hz–20 kHz
Power	2.1 channel, front-end 2 × 20 W + rear-end 20 W
Built-in Speaker	3

Fingerprint

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

Microphone

Pick-up Distance	Far-field sound pickup: 8 m–12 m (26.25 ft–39.37 ft)
Number of Microphones	16 arrays
AGC	Yes
Echo Cancellation	Yes
Polar Pattern	Omnidirectional
Intelligent Noise Filtering	YES

General

Power Supply	100–240 VAC, 50/60 Hz
Power Consumption	425 W (basic), 500 W (max)
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-dazzle tempered glass
Casing Color (Frame/Rear)	Black on the left and right, Starry Gray on the top and bottom.
Product Dimensions	1,955.3 mm × 93.3 mm × 1,232.2 mm (77.00" × 3.67" × 48.55") (L × W × H)
Frame Size	Top border: 28.6 mm (1.13"), left and right borders: 17.9 mm (0.70"), bottom border: 69.6 mm (2.74")
Packaging Dimensions	2,090 mm × 227 mm × 1,315 mm (82.28" × 8.94" × 51.77") (L × W × H)
Net Weight	73 kg (160.94 lb)
Gross Weight	86.5 kg (191.80 lb)
Holes Distance	800 mm × 400 mm (31.50" × 15.75")
Installation	Wall mount; mobile bracket
Standby Power Consumption	≤0.5 W
Packing List	1 × Smart interactive whiteboard 1 × Power cord 2 × Stylus pen 1 × Quick start guide 1 × Wall mount bracket 1 × Remote control 1 × Legal and Regulatory Information 1 × Wall-mount screw pack
Glass Thickness	3.2 mm (0.13")

Ordering Information

Type	Model	Description
Smart interactive whiteboard	DHI-LPH86-MC470-P	86 inch Smart interactive whiteboard
Accessories (Optional)	DHI-SP-PI7C75IS	Open Pluggable Specification
	DHI-SP-PI5C72IS	Open Pluggable Specification
	DHI-PKP-WP1B	Wireless transmitter
	DHI-SP-PI7C72IS	Open Pluggable Specification
	DHI-PKC-MS1C	Mobile Stand
	DHI-SP-PI5C82IS	Open Pluggable Specification
	DHI-SP-PI7C82IS	Open Pluggable Specification
	DHI-PKC-WM1A	Omnidirectional Digital Microphone
	DHI-SP-PI5C75IS	Open Pluggable Specification
	DHI-PKC-MS2B	Mobile Stand
	DHI-PKP-UC10A	USB Camera
	DHI-PKP-IP1A	Smart Pen
	DHI-PKC-MS1A	DHI-PKC-MS1A

Accessories

Optional:

DHI-PKC-MS1A
DHI-PKC-MS1ADHI-PKC-MS1C
Mobile StandDHI-PKC-MS2B
Mobile StandDHI-PKC-WM1A
Omnidirectional Digital
MicrophoneDHI-PKP-IP1A
Smart PenDHI-PKP-UC10A
USB CameraDHI-PKP-WP1B
Wireless transmitterDHI-SP-PI5C72IS
Open Pluggable
SpecificationDHI-SP-PI5C75IS
Open Pluggable
Specification

