# DS-86NL2A-NLT
# 86-inch Interactive Flat Panel




The Hikvision WonderHub Interactive Flat Panel is an advanced all-in-one interactive display designed for modern collaboration and smart learning environments. Featuring a stunning 4K UHD touchscreen, intuitive interactive controls, and seamless wireless screen sharing, it delivers an engaging and efficient user experience. Powered by the WonderOS operating system and enhanced by the WonderHub Class cloud platform together with WonderHub AI intelligent capabilities, it provides powerful tools for teaching, presentations, and teamwork. The solution is ideally suited for classrooms, training centers, meeting rooms, and a wide range of collaborative spaces.

- UHD 4K display with a resolution of 3840 × 2160 and 480 nits brightness.
- Anti-Glare and Anti-Fingerprint design to ensure smooth interaction.
- Dual systems of Android and Windows (optional with 195×30×180mm OPS) saving cost and easy to use, video conferencing software is recommended to run on the Windows system.
- Supports up to 50-point multi-touch interaction with smooth and responsive writing.
- Built-in network switch chip eliminates the need for an external network switch.
- Multi-button front design for convenient classroom use.
- Durable all-in-one design with tempered safety glass and intelligent thermal management.
- Built-in Android 16 operating system with EDLA certification.
- Dual full-function USB Type-C ports, supporting up to 100W total power delivery and DisplayPort 1.2 input.
- Built-in sensors for ambient light, humidity, and temperature monitoring.

## ▪ Specification

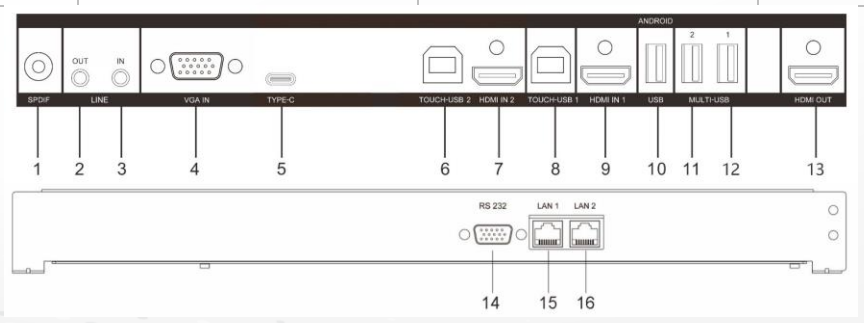
| | |
|---|---|
| **Product Model** | |
| Product Model | DS-86NL2A-NLT |
| **Display** | |
| Screen Size | 86 inch |
| Backlight | DLED |
| Pixel Pitch | 0.164 (H) × 0.493 (V) mm |
| Resolution | 3840 × 2160 @60 Hz |
| Brightness | 480 cd/m² (Typ.) |
| Color Depth | 10 bit (8 bit + FRC) |
| Display Color | 1.07 G |
| Response Time | 5 ms |
| Panel Type | VA |
| Contrast Ratio | 5000:1 (Static)<br>30,000:1 (Dynamic) |
| Color Gamut | 72% NTSC (CIE1931) (Typ.) |
| Refresh Rate | 60 Hz |
| Viewing Angle | 178° (H)/178° (V) |
| Aspect Ratio | 16:9 |
| Surface Hardness | 9H (Pencil)<br>7 (Mohs) |
| Surface Glass | Anti-Glare & Anti-Fingerprint glass |
| Surface Haze | 25% Haze |
| Glass Bonding Method | Zero Lamination |
| Display Area | 1895.04 (H) × 1065.96 (V) |
| Working Duration | 7 × 16 H |
| Transmittance | 88% ± 3 |
| Lifespan | 50,000 hours |
| **Touch** | |
| Type | Infrared Touch Screen |
| Touch Point | Up to 50-point multi-touch |
| Touch Response Time | ≤ 2 ms |
| Minimum Touch Object | ≥ 1.5 mm (≥ 90% touching area) |
| Touch Precision | ± 0.5 mm (≥ 90% touching area) |
| Touch Resolution | 32768 × 32768 |
| **Built-in System** | |
| Operation System | Android 16.0 |
| Memory | 8 GB (Optional 16 GB) + Max 16 GB Virtual RAM |
| Built-in Storage | 128 GB (Optional 256 GB) |
| Processor | Quad-core Cortex-A76 × 4 ( 2.4 GHz ) and quad-core Cortex-A55 × 4 ( 1.8 GHz ) |
| GPU | Mali-G610 MC4 |
| HDCP Version | 2.3 & 2.0 & 1.4 |
| NPU | 6TOPs |
| **Internal Function** | |
| Loudspeaker | Built-in 2 × 20 W + 25 W loudspeaker; |

| | |
|---|---|
| Bluetooth | Built-in BLE (Bluetooth Low Energy) module supports Bluetooth 5.4 |
| Language Supported | Simplified Chinese, German, Italian, Arabic, Portuguese, Dutch, French, Indonesian, Thai, Vietnamese, Japanese, Spanish, English, Czech, Danish, Hungarian, Polish, Turkish, Russian, Romanian, Slovak, Korean, Uzbek, Bulgarian, Greek, Swedish, Norwegian, Finnish, Croatian, Slovenian, Serbian, Hebrew, Ukrainian, Traditional Chinese (HK), Traditional Chinese (TW), Hindi, Latvian, Kazakh, Nepali |
| NFC | Support card reader<br>13.56 MHz, (ISO 14443A/ ISO 14443B/ ISO 15693) |
| Light Sensor | Yes |
| Humidity and Temperature Sensor | Relative humidity accuracy: up to ± 1.5 %RH; Temperature accuracy: up to ± 0.1 °C |
| AI Function | AI Assistant, AI Identify, and AI Notes. Free for a 1-year validity period with 6,000 minutes for AI Notes. |
| Whiteboard | Built-in whiteboard supports handwriting recognition, graphics recognition, document insertion, and more. |
| ScreenCast | Built-in WonderCast software supports screen casting for up to 9 devices simultaneously. |
| **Interface** | |
| Video & Audio Input | HDMI 2.1 TMDS × 3 ( Front x 1; Rear x 2; Support HDCP2.3 & 2.0 & 1.4; Support HDMI CEC protocol )<br>VGA × 1 ( Rear )<br>Audio × 1 ( Rear ) |
| Video & audio output | HDMI 2.1 TMDS × 1 ( Rear )<br>Audio × 1 ( Rear )<br>SPDIF × 1 ( Rear ) |
| Control interface | TOUCH-USB 3.0 × 1 ( Front × 1 )<br>TOUCH-USB 2.0 × 2 ( Rear × 2 )<br>RS232 × 1 ( Rear ) |
| Network Interface | LAN (1000 Mbps) × 2 ( Rear )<br>Wi-Fi AP & Station, 2.4 G/5 G<br>Wi-Fi 6, IEEE 802.11 a/b/g/n/ac/ax 2 × 2 MIMO (2.4 GHz and 5 GHz) authentication protocols WEP, WPA, WPA2, PSK and 802.1X EAP |
| Data Transmission Interface | USB 3.0 × 4 ( Front × 2; Rear × 2 )<br>USB 2.0 × 1 ( Rear )<br>Type-C × 2 (Front × 1; Rear × 1; Support USB 2.0, 100 W charging functions, DP IN 1.2 ) |
| **Power** | |
| Power Supply | 100 to 240 VAC, 50/60 Hz |
| Standby Consumption | ≤ 0.5 W |
| Average Consumption | < 274 W |
| **Working Environment** | |
| Working Temperature | 0 °C to 40 °C (32 °F to 104 °F) |

| | |
|---|---|
| Working Humidity | 10%~90% RH |
| **General** | |
| VESA | 800 mm × 600 mm (4 × M8-25 mm) |
| Accessory | Wall mount bracket, hook, user manual, touch writing pen, packing list, 3 M touch USB cable, 3.5 M HDMI cable (2.0), 3 M power cable, remote control, screen cleaning cloth. |
| Package Dimensions (W × H × D) | 2157 × 1345 × 223 mm |
| Net Weight | 58.5 ± 0.5 kg |
| Gross Weight | 78.5 ± 0.5 kg |
| Product Dimensions （With Wall Attachment） | 1960.4 × 1158.2 × 106.4 mm |
| Product Dimensions （Without Wall Attachment） | 1960.4 × 1158.2 × 82.4 mm |
| Certification | CE, CB, ANATEL, IP5X, LOA, REACH, EDLA, Energy Star, SUBTEL, TUV Low Blue Lgiht, MIC, CFP(ISO 14067/ISO14040/EN50693) |

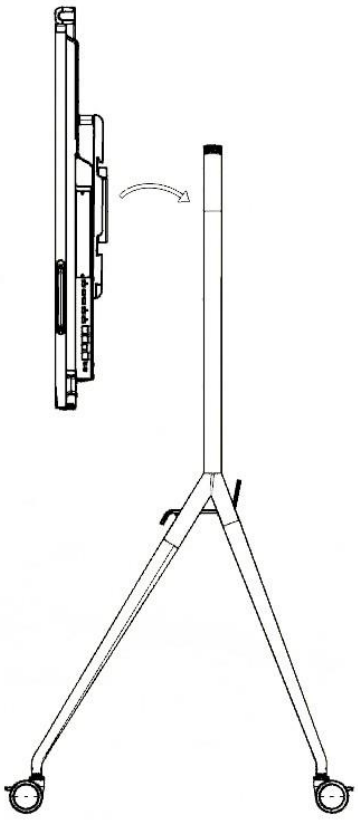
## ▪ Physical Interface

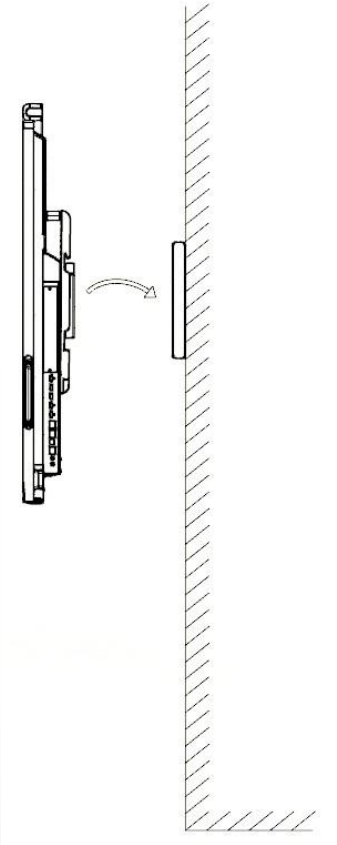
| Interface | Description | Interface | Description |
|---|---|---|---|
| 1.SPDIF | SPDIF interface | 2.Line OUT | Audio output interface |
| 3.Line IN | Audio input interface | 4.VGA IN | Video devices connection interface |
| 5.TYPE-C | Type-C interface with DP input | 6.TOUCH-USB 2 | Peripheral touch interface |
| 7.HDMI IN 2 | HDMI 2 input interface | 8.TOUCH-USB | Peripheral touch interface |
| 9.HDMI IN 1 | HDMI 1 input interface | 10.USB | USB 2.0 interface |
| 11.MULTI-USB 2 | Multi-functional USB 3.0 interface | 12.MULTI-USB 1 | Multi-functional USB 3.0 interface |
| 13.HDMI OUT | HDMI output interface | 14.RS 232 | RS 232 Control interface |
| 15.LAN 1 | LAN 1 interface | 16. LAN 2 | LAN 2 interface |
| A.USB | USB 3.0 interface | B.USB | USB 3.0 interface |
| C.TOUCH-USB | Peripheral touch interface | D.HDMI IN | HDMI input interface |
| E.TYPE-C | Type-C interface with DP input | F. | Light sensor |
| G. | Remote-control unit | H. | Power Key |
| J. | Volume - | K. | Volume + |
| L. | Android host menu | M. | Return |
| N. | Control menu | P. | PC shutdown |
| R. | NFC sensing area | S. | Humidity&Temperature Sensor |



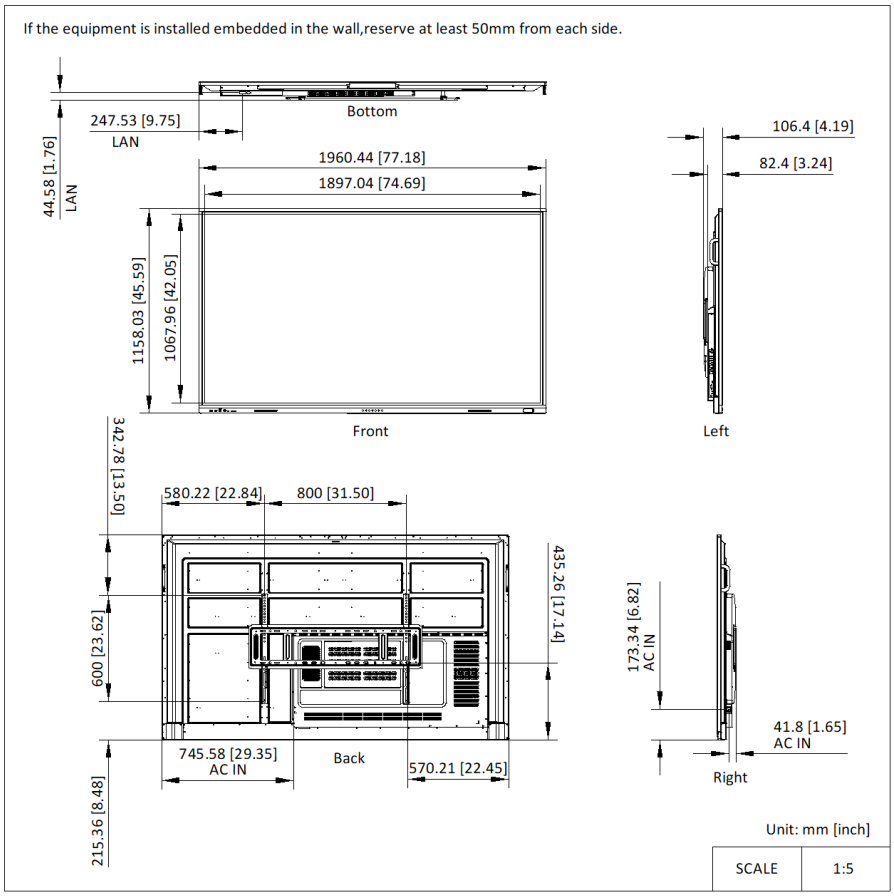


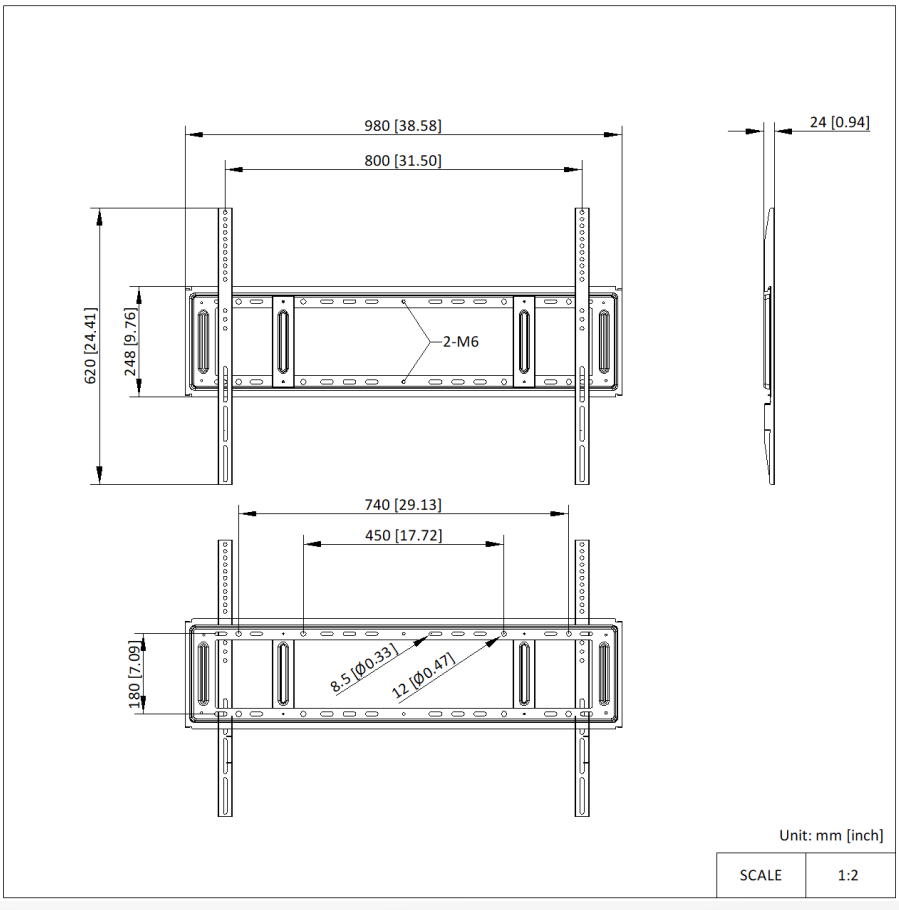
- **Installation**





## ▪ Dimension


If the equipment is installed embedded in the wall,reserve at least 50mm from each side.
Bottom
247.53 [9.75]
LAN
44.58 [1.76]
LAN
1960.44 [77.18]
1897.04 [74.69]
1158.03 [45.59]
1067.96 [42.05]
Front
106.4 [4.19]
82.4 [3.24]
Left
342.78 [13.50]
580.22 [22.84]
800 [31.50]
435.26 [17.14]
600 [23.62]
745.58 [29.35]
AC IN
Back
570.21 [22.45]
215.36 [8.48]
173.34 [6.82]
AC IN
41.8 [1.65]
AC IN
Right
Unit: mm [inch]
SCALE
1:5


980 [38.58]
800 [31.50]
24 [0.94]
620 [24.41]
248 [9.76]
2-M6
740 [29.13]
450 [17.72]
180 [7.09]
8.5 [Ø0.33]
12 [Ø0.47]
Unit: mm [inch]
SCALE
1:2

## ▪ Accessory

### ▪ Optional

| DS-D5SC4B-B | DS-D5AC13T5-8S2 | DS-D5AC13T7-16S5 | DS-D5ABKY2-B | DS-D5AC12T5-8S2 |
|---|---|---|---|---|
|  |  |  |  |  |
| **DS-D5SC3B-B** | **DS-D5ABKY2-M** | **DS-D5ABKY3-EL** | **iDS-UVC-X28** | **DS-D5AC12T7-16S5** |
|  |  |  |  |  |
| **DS-UVC-X12** | **DS-D5SC3B-W** | | | |
|  |  | | | |

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