Specification of Interactive Flat Panel

Series: Interactive flat panel

Product model: 86M6AProV2

Version: V1.4

Shenzhen Horion Intelligent Technology Co., Ltd

Special Instructions

- Due to the influence of product configuration and manufacturing process, there may be differences in the actual body size/body weight. Please refer to the actual product for the accurate information.

- The product illustrations in this specification are for reference only. The actual product effects (including but not limited to appearance, color, and size) may vary slightly. Please refer to the actual product for the accurate information.

- To ensure the accuracy of the information, we reserve the right to revise the written descriptions, pictures, and other contents without prior notice. All adjustments aim to match the actual performance and specifications of the product.

- The performance of the product may be affected by the usage environment, including but not limited to factors such as temperature, humidity, altitude, etc. It is recommended to use the product under the officially recommended environmental conditions.

- The product comes with a warranty card, which, together with the purchase receipt, shall serve as a valid basis for warranty. Free repair services can be enjoyed within the warranty period (excluding damages caused by force majeure or improper use).

1.Product features

1.1 System

- Built-in Android 14.0 system and optional with OPS computer module (Windows 11Pro). Switch freely to meet various needs.
- 8-core CPU, 16GB RAM+256GB ROM for fast running speed and large storage space.

1.2 Google Integration

- With EDLA certified, Horion Intelligent Board enables users to easily access Google applications such as Google Meet, Google Chrome, Play Store, Gmail, Google Drive, Google Files, etc.

1.3 Appearance, audio and video

- Horion unique gun-color metal aluminum frame; the surface of the frame is oxidized, which has a fine texture and excellent weather resistance.
- 4K high resolution for ultra clear display and vivid details; 85% NTSC high color gamut make colors more layered and bring an unparalleled visual experience.
- Built-in quad-camera system featuring one 48-megapixel main camera and three 8-megapixel auxiliary cameras, which support speaker tracking and an intelligent viewfinder.
- 8-array microphone, 12 meters long distance pickup, equipped with intelligent noise reduction to make remote calls more clear, quality is guaranteed.
- 60W audio units, two 20W speakers plus one 20W subwoofer for a stunning audio effect.

1.4 Whiteboard

- High precision infrared touch frame, touch accuracy up to ±1mm, support up to 30 touch. Highly sensitive touch technology and ultra-low writing delay make every stroke feel like it falls on the page.

- Support single point and multi-point writing, support writing with pen edge and change color. Comments can be made in any page.
- Ultra-low write latency, the writing delay is less than 30ms, which is infinitely close to natural writing.
- Using 3.2mm AG anti-glare tempered glass, even in strong light environment, the picture is still delicate and bright. Mohs hardness level 7 can be strong scratch resistance.

1.5 Transmission

- Built-in infrared, NFC, and light sensor modules.
- Front bi-directional Type-C port, supports bi-directional data flow, and supports 65W power ultra-fast charging.
- Wireless screen mirror, no need to install driver, computer/mobile phone can be quickly mirror to IFP.
- Enable true 4K screen sharing via the new Horion Type-C dongle. Compared with the traditional USB dongle, the picture is clearer and the delay is lower.
- Equipped with Wi-Fi 6 module, the speed is 38% faster than WiFi 5. Lower latency, lower power consumption and safer transmission.
- Dual Wi-Fi module, Wi-Fi 6 for surfing and Wi-Fi 5 for screen mirror, full speed, no interference.
- The rich port can be compatible with a variety of mainstream audio and video terminals, making remote communication simpler and multi-party collaboration more efficient.

1.6 Commercial display

- High-definition image processing engine: image motion compensation, color enhancement processing, point-to-point precision display technology.
- Image output function: output real-time images to the expansion device with high-definition, stable and low-latency.
- Customized welcome page: massive templates to meet different usage scenarios;
- More applications: Timers, vote kit and other applications are convenient to operate.

2.Main Specifications

1.1 Overview

Certified model	86M6AProV2
Display	
Size	86"
Backlight Type	D-LED
Resolution(pixels)	3840×2160(pixels)(UHD)
Brightness	470cd/m²
Contrast Ratio	5000:1
Response Time	8ms
Pixel Pitch(mm)	0.4935(H)x0.4935(V)
Refreshing Frequency	60Hz
Viewing Angle	178°(H) / 178°(V)
Color Gamut(x% NTSC)	85%NTSC
View Area(mm)	1895.04(H)x1065.96(V)
Display Colors	1.07B(10bit)
Life Time	50,000 hrs
Electrical	
OS	Android 14.0
CPU Architecture	Cortex A73+A53
CPU Working Frequency	Max 2.2GHz for big and 2.0GHz for little
CPU Core	Quad core A73 + Quad core A53
GPU	Mali G52-MP8
RAM	16GB LPDDR4X
ROM	256GB
Power Requirements	AC 100V ~ 240V, 50/60 Hz

Maximum power (Without OPS)	380W	
OPS Power	DC 18V/5A	
Standby Condition	<0.5W	
Audio Output Power	20W ×2	
Subwoofer	20W	
Sensor	Infrared, NFC, and light sensor	
Mainboard Interface		
HDMI IN	×2	Max Resolution: 3840×2160@60Hz Version: HDMI2.0
		HDMI 1 Support ARC
DP IN	×1	Max Resolution: 3840×2160@60Hz Version: DP1.2a
Type-C	×1	DFP Mode only 15W PD Max Resolution: 3840×2160@60Hz Interface: USB Type-C
VGA IN	×1	Input Impedance: 75Ω Level: 0.7±0.15 Vp-p Max Resolution: 1920×1080@60Hz Interface: DB15
AUDIO IN	×1	Input level(L/R): 0.2-2Vrms Interface: Φ3.5mm mini interface
LAN	×2	10M/100M/1000Mbps Base-T Interface: RJ-45
USB2.0	×1	Support images, music, video file playback, and firmware upgrade, android system use only. Interface: USB2.0 Type-A

USB3.0 (Public)	×2	Smart follow interface, support images, music, video file playback, can not use for firmware upgrade. Interface: USB3.0 Type-A
Touch	×3	Touch port for HDMI1/HDMI2/DP/VGA Interface: USB3.0 Type-B
MIC IN	×1	Interface: Φ3.5mm mini intercafe
SPDIF	×1	Max speed: 16Mbps Interface: Optical
RS232 IN	×1	RS232 Input Interface: DB9
AUDIO OUT	×1	Output level(L/R): 110mVrms±40mVrms(@500mVrms 1KHz, load 32Ω) Interface: Φ3.5mm mini interface
SD CARD	×1	Support TF Card Interface: Micro SD card socket Remarks: optional before delivery
HDMI OUT	×1	Max Resolution: 3840×2160@60Hz Version: HDMI2.0
		All channel can be same screen-outed by HDMI
Front Interface		
Type-C	×1	Power output: 65W(20V/3.25A) Up to 3840×2160@60Hz Support DRP mode Interface: Type-C
Public USB	×2	Version: USB3.0 Interface: Type-A
WIFI		
WiFi 6	Operating Frequency	2.4GHz/5GHz
	Wi-Fi	802.11a/b/g/n/ac/ax

	Standard	
WiFi 5	Operating Frequency	2.4GHz/5GHz
	Wi-Fi Standard	802.11a/b/g/n/ac
Bluetooth		
Bluetooth		BT 5.3
NFC		
Standard		ISO/IEC 14443 A / ISO/IEC 14443 B
Support card type		MIFARE FeliCa
Read/Write distance		<30mm
Read/Write speed		106 To 424kbps
Read/Write latency		<100ms
Camera		
Pixels		48MP+3*8MP
FOV（main camera）		H99.7°，V67.4°，D107.9°
FOV（secondary camera）		H105°，V43°
AI Camera(active open required)		Sound localization
		Intelligent framing
		Electronic gimbal
Array Mic		
Array quantity		8-mic
Pick up Area		12m(Angle: 180°)
AEC		Support
AGC		Support
Speech enhancement		Support
Output signal		USB output
Structure		
Net Weight		68.1kg±1.5kg

Gross Weight	81.2kg±1.5kg
Product Size(W×D×H)	1963mm × 88mm × 1169mm
Package Size(W×D×H)	2095mm × 185mm × 1265mm
Housing Material	Aluminum/Metal plate
Housing Color	Black&Dark pewter/Black
VESA	4 × M8 Screw Hole 800mm×600mm
Accessories	
Remote Control	×1
Touch Pen	×2
3m Power Cord	Europe Standard×1, American Standard×1,Saudi Arabia + Britain Standard×1
Qualified Certificate Label	×1
Instruction	×1
Warranty Card	×1
Wall Mount	×1
Environment	
Operating temperature	0℃ ~ +40℃
Storage temperature	-10℃ ~ +60℃
Operating humidity	20% ~ 80% RH Non-Condensing
Storage humidity	10% ~ 80% RH Non-Condensing
Operating altitude	≤5000m
The longest service time	18 Hours×7 days

3.Touch and writing system

3.1 Overview

- High precision of infrared touch frame, resolution by interpolation algorithm can be as high as 32768*32768.

- Supports up to 50 touch points.

3.2 Specifications

Sensing Type	Infrared Touch Frame
Surface Protection	3.2mm Toughened Glass
Infrared Touch Points	50 Points(max.)
Interpolation Resolution	32768×32768
Response Time	≤8ms
Output Mode	HID Standard
Theory Clicks	Unlimited
Minimum Touch Object	Single touch ≥ 1.6mm, Multiple touch ≥ 2mm
Connect Type	USB2.0 Full Speed
Voltage	DC+5V±5%

3.3 Systems and software

Support Multiple Touch	Windows 11/10/8/7, Android
Support Single Touch	Windows XP, Mac OS X, Linux, Chrome