



Specification of Interactive Flat Panel



Series: Interactive flat panel

Product model: 86K8A

Version: V1.0

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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 16.0 system and optional with OPS computer module (Windows 11Pro). Switch freely to meet various needs.
- 8-core CPU, 8GB RAM+128GB 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; 72% NTSC high color gamut make colors more layered and bring an unparalleled visual experience.
- 40W audio units, two 20W tweeter speakers for a stunning audio effect.

1.4 Whiteboard

- High precision infrared touch frame, touch accuracy up to $\pm 1\text{mm}$, support up to 20 points 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	K8A
Display	
Size	86"
Backlight Type	D-LED
Resolution(pixels)	3840×2160(pixels)(UHD)
Brightness	400cd/m ²
Contrast Ratio	5000:1
Response Time	8ms
Pixel Pitch(mm)	0.3720(H)x0.3720(V)
Refreshing Frequency	60Hz
Viewing Angle	178°(H) / 178°(V)
Color Gamut(x% NTSC)	72%NTSC
View Area(mm)	1895.04(H)x1065.96(V)
Display Colors	1.07B(10bit)
Life Time	50,000 hrs
Electrical	
OS	Android 16.0
CPU Architecture	Cortex A72+A53
CPU Working Frequency	Max 2.2GHz
CPU Core	Quad core A72 + Quad core A53
GPU	Mali G52-MC3
RAM	8GB LPDDR5
ROM	128GB
Power Requirements	AC 100V ~ 240V, 50/60 Hz

Maximum power (Without OPS)	TBD	
OPS Power	DC 18V/5A	
Standby Condition	<0.5W	
Audio Output Power	20W×2	
Sensor	Infrared, NFC, and light sensor	
Mainboard Interface		
HDMI IN	×2	Max Resolution: 3840×2160@60Hz Version: HDMI2.0
		HDMI 1 Support ARC
Type-C	×1	DFP Mode only 15W PD Max Resolution: 3840×2160@60Hz Interface: USB Type-C
LAN	×2	10M/100Mbps 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	×1	Smart follow interface, support images, music, video file playback, can not use for firmware upgrade. Interface: USB3.0 Type-A
Touch	×1	Touch interface for HDMI1、HDMI2 Interface: USB2.0 Type-B
MIC IN	×1	Interface: Φ3.5mm mini interface
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
HDMI OUT	×1	Max Resolution: 3840×2160@60Hz Version: HDMI2.0
Front Interface		
Type-C	×1	Power output: 65W Up to 3840×2160@60Hz Support DRP mode Interface: Type-C
Public USB	×2	Version: USB3.0 Interface: Type-A
WIFI		
Wi-Fi 6	Operating Frequency	2.4GHz/5GHz
	Wi-Fi Standard	802.11a/b/g/n/ac/ax
Wi-Fi 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	
Structure		
Net Weight	63.7kg±1.5kg	

Gross Weight	79.5kg±1.5kg
Product Size(W×D×H)	1963mm × 88mm × 1154mm
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°C ~ +40°C
Storage temperature	-10°C ~ +60°C
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 40 touch points.

3.2 Specifications

Sensing Type	Infrared Touch Frame
Surface Protection	3.2mm Toughened Glass
Infrared Touch points	40 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