

Specification of Interactive Flat Panel



Series: Interactive flat panel

Product model: 86K7A

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 11). Switch freely to meet various needs.
- 8-core CPU, 8GB RAM+256GB ROM for fast running speed and large storage space.

1.2 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; high HDR and 72% NTSC high color gamut make colors more layered and bring an unparalleled visual experience.
- A screen with a high brightness of 450 nits, paired with a 4K UI, provides you with an unparalleled viewing experience.
- Dual 20W speakers deliver a shocking audio experience, making you feel as if you were on the scene.

1.3 Whiteboard

- High precision infrared touch frame, touch accuracy up to $\pm 1\text{mm}$, support up to 50 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.

1.4 Transmission

- Built-in infrared, and light sensor modules.
- Front bi-directional Type-C port, supports bi-directional data flow, and supports 60W power ultra-fast charging.
- Wireless screen mirror, no need to install driver, computer/mobile phone can be quickly mirror to IFP.
- Randomly paired with the new 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.

1.5 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	K7A
Display	
Size	86"
Backlight Type	D-LED
Resolution(pixels)	3840×2160(pixels)(UHD)
Brightness	450cd/m ²
Contrast Ratio	1200:1
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)	72%NTSC
View Area(mm)	1895.04(H)x1065.96(V)
Display Colors	1.07B(10bit)
Life Time	50,000 hrs
Electrical	
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	8GB LPDDR4X
ROM	256GB

OS	Android 14.0	
Power Requirements	AC 100V ~ 240V, 50/60 Hz	
Power Consumption Without OPS	380W	
OPS Power	DC 18V/5A	
Standby Condition	<0.5W	
Audio Output Power	20W/6Ω ×2	
Sensor	Infrared 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	×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
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: 60W(20V/3A) Up to 3840×2160@60Hz Support DRP mode Interface: Type-C
Public USB	×2	Version: USB3.0 Interface: Type-A
WIFI		
Wi-Fi 6	Main Chipset	AP6275P
	Operating Frequency	2.4GHz/5GHz
	Wi-Fi Standard	802.11a/b/g/n/ac/ax
	Main Chipset	MT7663BU

Wi-Fi 5	Operating Frequency	2.4GHz/5GHz
	Wi-Fi Standard	802.11a/b/g/n/ac
Bluetooth		
Bluetooth	BT 5.3	
Structure		
Product Size(W×D×H)	1968mm × 88mm × 1160mm	
Package Size(W×D×H)	2160mm × 225mm × 1310mm	
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 Lable	×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	50 Points(max.)
Interpolation Resolution	32768×32768
Response Time	≤8ms
Touch Accuracy	±1mm
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