

# Specification of interactive flat panel



Product Categories: Interactive flat panel

Product Model: 86M5A

Date: 2021.4

## **1. Product characteristics:**

### 1.1 System properties:

- Equipped with Android 8.0 Smart OS and a unique user interface design; 3GB internal cache + 64GB internal storage, for faster operating speeds;

### 1.2 Exterior and smart touch:

- Gun-color business appearance, four-corner arc design, safe and reliable; front USB interface that can be shared by dual systems, convenient operation;
- There are 2 USB ports available in the front of board which support dual operating system, and 1 Type-C port, which is convenient to operate;
- The distance between the tempered glass and the screen is close to 0, which can effectively prevent light reflection, the display effect and the writing experience are excellent;
- High-precision infrared touch frame, touch accuracy  $\pm 1\text{mm}$ , touch height 2.0mm, support 20-point touch, high sensitivity;
- With OPS interface, it can expand dual system: Android 8.0&Windows 10; dual network port design can realize switch function;

### 1.3 Whiteboard writing: :

- Support single-point and multi-point writing, writing with a pen tip or finger, adding colored pen effects, etc., any channel and any interface can be annotated;
- Adopt 3.2mm AG anti-glare tempered glass, Mohs hardness level 7, better writing experience;

### 1.4 Conference & Training:

- Built-in 13 Megapixel camera and 8-channel array microphone, making remote meetings more convenient and efficient;
- Built-in NFC function, with smart pen, the whiteboard function can be called up at any time;
- Built-in 2.4G/5.8G dual-band dual-network card, supports simultaneous use of wireless Internet access and WIFI hotspot, and the antenna adopts a front hidden design;
- Bluetooth function, which can wirelessly connect to Bluetooth devices such as mobile phones/stereos to transmit data; and supports wireless connection with printing devices for printing;

### 1.5 Commercial Display:

- LG IPS Screen; 4K UHD resolution; Eye protection (low blue light) mode: Filtering blue light through software settings to protect eye health; High-definition image processing engine: image motion compensation, color enhancement processing, point-to-point precision display technology;

- Full-channel output function: output real-time images with high-definition, stable and low-latency to the expansion device;
- Horizon conference central management to meet the needs of different scenarios;

## 2. Main Specification Parameters:

### 2.1 Specification overview:

Display	
Certification	86M5A
Size	85.6"
Backlight type	D-LED
Resolution	3840*2160 (UHD) (RGB)
Brightness	400cd/m <sup>2</sup>
Contrast ratio	1200:1
Response time	8ms
Pixel pitch	0.4935mm*0.4935mm
Refreshing frequency	60Hz
Viewing angle	178°(H) / 178°(V)
Color gamut(x% NTSC)	72%
View area	1895.04mm*1065.96mm
Display colors	1.07B(10bit)
Life time	30,000 hrs
System	
Solution	MSD8386
Operation system	Android 8.0
CPU Architecture	ARM A73+A53
CPU Working Frequency	1.5GHz
CPU Core	Quad Core
GPU	Mali-G51
RAM	3GB DDR4
ROM	64GB Standard
Power	

Voltage	100 V ~ 240 V/AC, 50/60 Hz
Power consumption without OPS	380W
OPS Power	18V(DC)/5A
Power consumption in standby mode	<0.5W
Power (AC) input	*1
Camera	
Pixel	13M
FOV	DIAGONAL 78°
Array Size	MJPEG : 3840*2160(12fps) 4139*3104(8fps) 1280*720(30fps) 1920*1080(30fps)
Array Mic	
MIC Category	8pcs omnidirectional silicon wheat
Pick-up Distance	8M
Pick-up Angle	180°
Function	
Audio Output Power	10W * 2
WIFI	Support
NFC	Support
Bluetooth	Support
Interface	
HDMI In	*2
DP In	*1
VGA In	*1
OPS (Optional)	*1
LAN	*2
Type-c	*1
Android USB	*2
Public USB	*2

Touch-USB	*1
PC-Audio In	*1
HDMI Out	*1
S/PDIF Out	*1
Audio OUT	*1
RS232 In	*1
Environment	
Working Temperature	0°C ~ 40°C
Storage Temperature	-10°C ~ 60°C
Working Humidity	20% ~ 80%
Storage Humidity	10% ~ 80%
Image Model	Standard、Computer、Gorgeous、Bright、Soft、Nature、Exercise、Game、Automatic、Users
The longest service time(Hour*Day)	18Hours*7days
Structure	
Net Weight	68Kg±1.5Kg
Gross Weight	89Kg±1.5Kg(Heavy Carton)
Product Size (W*D*H)	1967.65mm*87.28mm*1160.15mm
Package Size (W*D*H)	2140mm*280mm*1340mm(Heavy Carton)
VESA	4-M8 Screw Hole 800mm*600mm
Housing Material (Surface Frame /Back Cover)	Aluminum/Sheet Metal
Housing Color (Surface Frame /Back Cover)	Gray(White)/Black
Accessories	
Pen	*2
Remote Control	*1
Expansion Screw	*8
USB Disk	*1
User Manual	*1
Certificate of quality/Warranty card	*1

HDMI Cable	*1
Touch Cable	*1
Power Cord	*1
USB Extension Cable	*1

2.2 The Interface Distribution:

- The right side of the back: HDMI-OUT\SPDIF\Touch-USB\USB2.0 \USB2.0 \DP\HDMI2\HDMI1;
- The right lower side of the back :LAN1\LAN2\RS232\Audio OUT\ PC-Audio\VGA;
- The left side of the front: Public-USB\Public-USB\Type-c;

**3. Touch Frame Specifications:**

3.1 Product Overview:

- High precision of infrared touch frame,resolution by interpolation algorithm can be as high as 32767 x32767;
- Support Plug and Play;
- Support 20 Points Infrared Touch;

3.2 Main specification parameters:

Touch System	Sensing Type	Infrared Touch Frame
	Surface protection	3.2mm AG Toughened glass
	Response Time	<8ms
	Touch Accuracy	More than 90% of the touch area of plus or minus 1mm
	Minimum Touch Diameter	≥1.6mm(Single-point); ≥2mm(Multipoint)
	Input Mode	Finger or Pen
	Output Form	HID Standard
	Theory Clicks	Unlimited

3.3 Electrical Specification:

Interface Type	USB2.0 at full speed
Working Voltage	DC+5V±5%
Power Consumption	≤2W

3.4 Operating system and software:

Multi-touch supported operating system	Multi-touch: Windows 7/8/10、 Android、 Linux Single-touch: Windows XP、 Mac OS X、 Chrome
--	---

## Product Model: Mobile Base for Flat-panel Display HK90



### Specifications:

Hole distance: 260*200mm	
Size of display/TV to be mounted: 86"-98"	
Max. Load bearing: 260KG	
Product Size: 1618*1300*650mm	
Package Size: 1480*711*226mm	
Net Weight: 89.5Kg±1.0Kg	
Gross Weight: 95Kg±1.0Kg	
Color: Black & Silver	
Material: High quality carbon steel & Tempered glass	
The castors are 4" with foot brake	

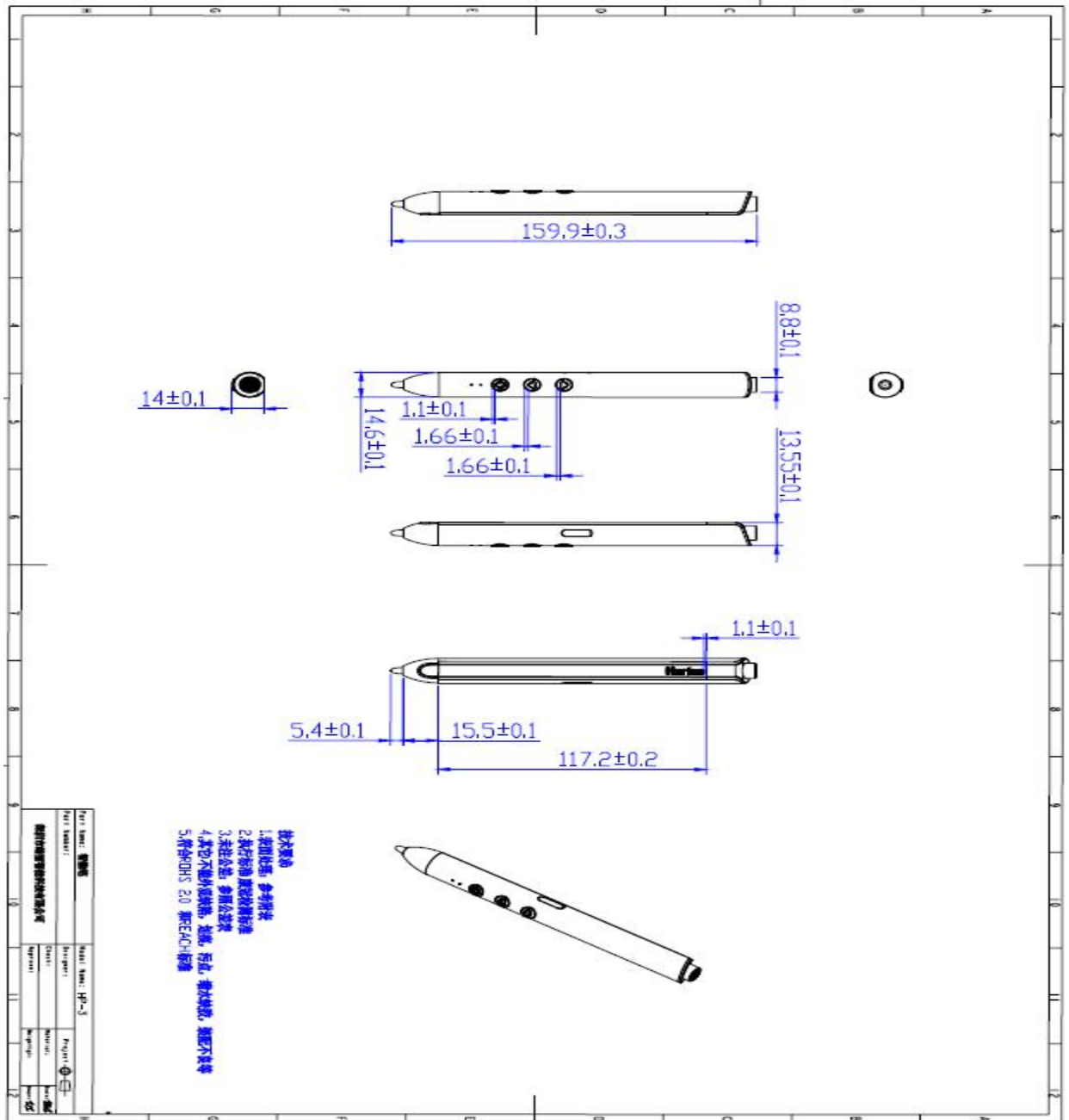
## Product Model: Smart Pen HP-3

### 1.Product Picture:

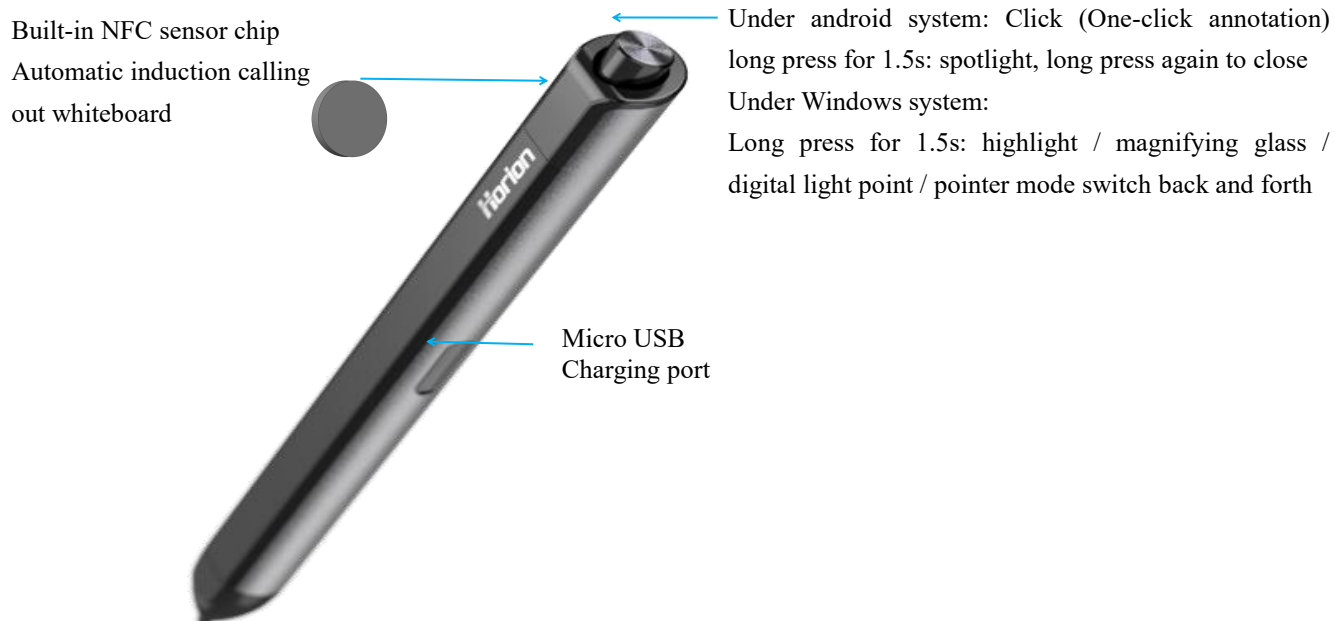
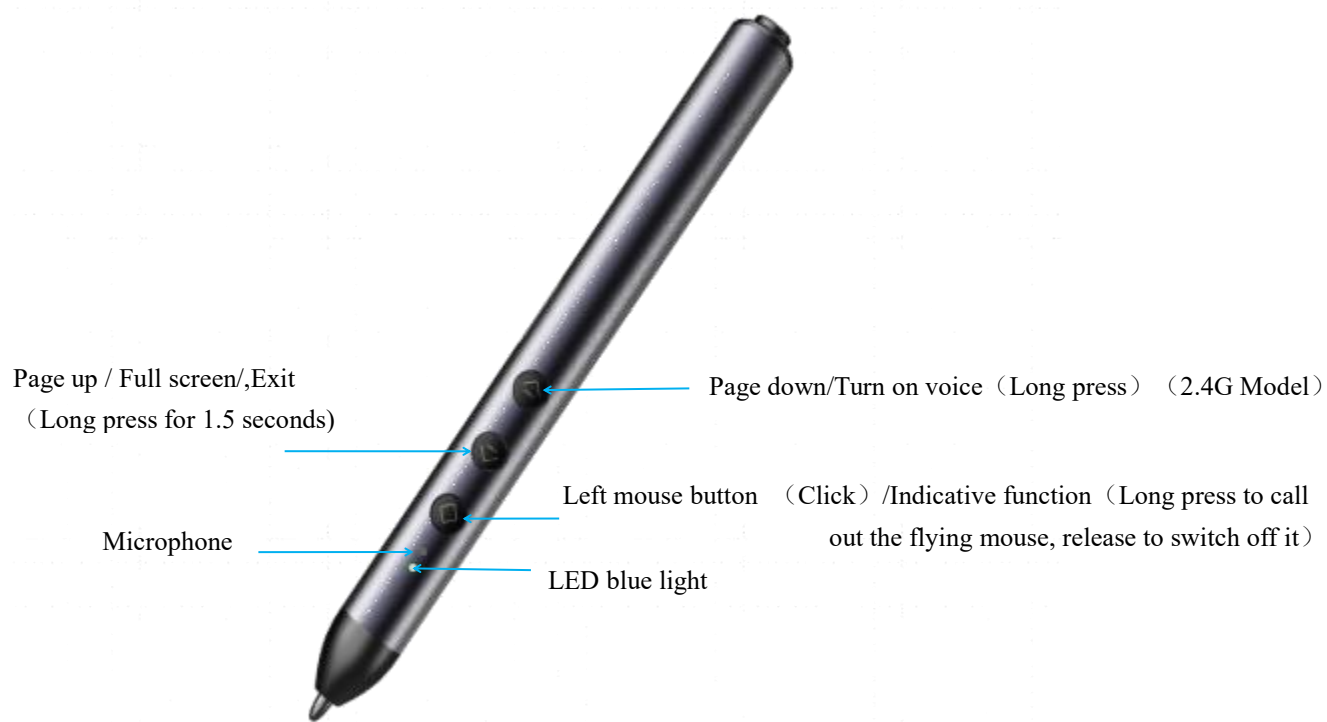




## 2.Six views of product:



### 3.Product function diagram:



Number	Work interface	Function description	
1	LED Indicator light	Color: Blue ① Working indication: press the key, LED light will be on, release it and off ; ② Low voltage indication: when battery power is low (< 3.2V), LED light flashes at high speed ; ③ Charging indicator: the light is always on when charging; the light is off when fully charged; ④ No communication connection:light flashes slowly for about 40 seconds to enter sleep;	
2	Cap of pen	Under android system: Click (One-click annotation) long press for 1.5s: spotlight, long press again to close; Under Windows system: Long press for 1.5s: highlight / magnifying glass / digital light point / pointer mode switch back and forth;	
3	Flying mouse key	Click (left mouse button), long press (flying mouse on, release flying mouse off);	
4	Up page key	Short press (one page up); long press for 1.5 seconds (full screen / exit switch back and forth);	↑Up arrow key
5	Down page key	Short press (one page down); long press (turn on voice), release to turn off it;	↓Down arrow key
6	Voice	Long press the page turning key to turn on the voice, and release to turn off;	2.4G Model
7	NFC	Pen tail near NFC sensing area of Conference Board (exhaling whiteboard);	
Electrical properties			
8	Working voltage	3.7v/working current≤21mA; standby current ≤50uA;	
9	Communication requirements	RF2.4GHZ,Remote control distance is 15m maximum in open environment; Bluetooth is 10m;	
10	Receiver	Support USB3.0 / 2.0 / 1.1 interface;	
11	Power management	Lithium battery ; Low power detection and prompt; When Vbat < = 3.2V, the remote control is in low power state;	

#### 4. Connection mode:

- Bluetooth and 2.4G mode switching;
- Press down key and pen cap key at the same time, the light flashes, indicating that the switching function is selected;
- If you release the cap key, the light will go out. When it comes on later, you will enter the 2.4G mode;
- If you don't release the pen cap key, just release the "down key", the light will go out, and then when it's on, you will enter the Bluetooth mode;

#### 5. Connection mode:

##### 5.1 Code matching (Only 2.4G)

Boot up code	Press the "up" and "down" keys at the same time, the light will flash quickly, indicating that the code matching function is selected; release the key to start the code matching, the light will flash at a high speed; then insert the receiver into the host; That is, first let the page flipper enter the code matching mode, and then insert the receiver into the host;
Code success	Code matching is successful. The blue light of the page flipper flashes at high speed and then goes out;
Code failure	The blue light continues to flash, and the code checking mode will exit automatically after a timeout of about 30 seconds;

- When the receiver is just powered on, it has 2-3s code time;
- One to one pairing, the factory flip pen and dongle are matched by default;
- When the remote control is in sleep mode, press any key to wake up;

##### 5.2 Bluetooth connection:

- Turn the smart pen to Bluetooth mode, open the Bluetooth interface of the conference tablet, search for the device name "Horion · airpen + factory number";
- Click Connect to show that the pairing is successful after the connection;

#### 6. Use scenario

- product use: intelligent touch integrated TV;
- system requirements: Windows 10 / 7 / XP, Android 4.0 or later;
- compatible interface: usb1.1/usb2.0/usb3.0/support external USB extension cable or USB hub;