

## 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; dual network port design can realize switch function;

### 1.3 Whiteboard writing: :

- Support single-point and multi-point writing, writing with a pen tip, 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:

- 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;



- Horion 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 :<br>3840*2160(12fps)<br>4139*3104(8fps)<br>1280*720(30fps)<br>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<br>(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);<br>≥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<br>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:<br>1618*1300*650mm                        |  |
| Package Size:<br>1480*711*226mm                         |  |
| Net Weight:<br>89.5Kg±1.0Kg                             |  |
| Gross Weight:<br>95Kg±1.0Kg                             |  |
| Color:<br>Black & Silver                                |  |
| Material:<br>High quality carbon steel & Tempered glass |  |
| The castors are 4" with foot brake                      |  |

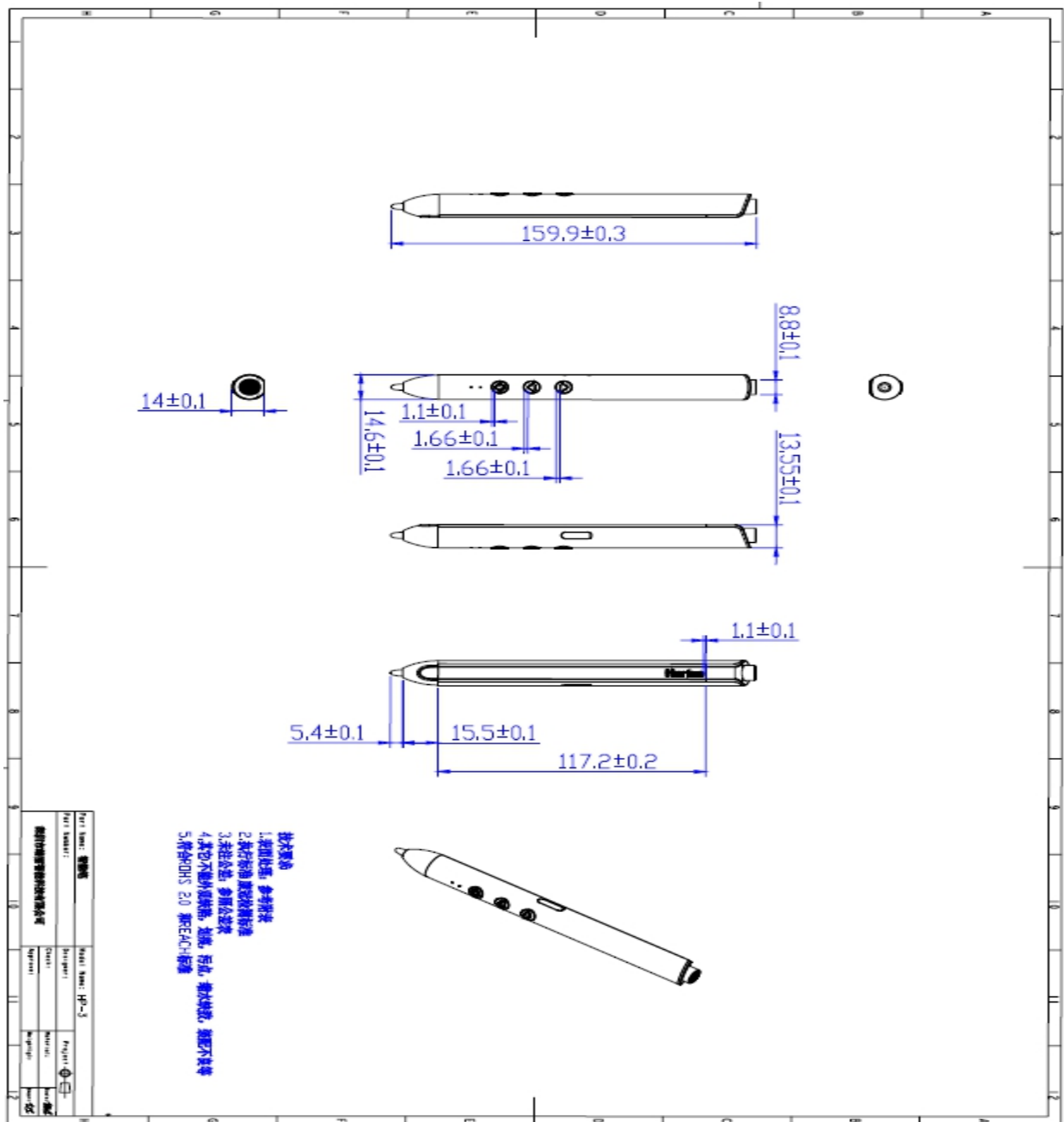
**Product Model: Smart Pen HP-3**

**1.Product Picture:**





## 2.Six views of product:



### 3.Product function diagram:



| Number                | Work interface             | Function description   |                 |
|-----------------------|----------------------------|--|-----------------|
| 1                     | LED Indicator light        | Color: Blue<br>① Working indication: press the key, LED light will be on, release it and off ;<br>② Low voltage indication: when battery power is low (< 3.2V), LED light flashes at high speed ;<br>③ Charging indicator: the light is always on when charging; the light is off when fully charged;<br>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;<br>Under Windows system:<br>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;<br>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 ;<br>Low power detection and prompt;<br>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;<br>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;