# **Specification of interactive flat panel**



Product Categories: Interactive flat panel

Product Model: 75M5A

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 ±1mm, 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;
- Horion conference central management to meet the needs of different scenarios;

# 2. Main Specification Parameters

# 2.1 Specification overview:

|                       | Display               |  |
|-----------------------|-----------------------|--|
| Certification         | 65M5A                 |  |
| Size                  | 74.5"                 |  |
| Backlight type        | D-LED                 |  |
| Resolution            | 3840*2160 (UHD) (RGB) |  |
| Brightness            | 400cd/m <sup>2</sup>  |  |
| Contrast ratio        | 1200:1                |  |
| Response time         | 8ms                   |  |
| Pixel pitch           | 0.4296mm*0.4296mm     |  |
| Refreshing frequency  | 60Hz                  |  |
| Viewing angle         | 178°(H) / 178°(V)     |  |
| Color gamut(x% NTSC)  | 72%                   |  |
| View area             | 1649.664mm*927.936mm  |  |
| Display colors        | 1.07B(8bit+FRC)       |  |
| 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     | 300W   |  |  |
| 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   |  |  |
|                                   |  |  |  |
| Туре-с                            | *1   |  |  |
| Type-c Android USB                | *1   |  |  |

| 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                                   | 50Kg±1.5Kg   |  |
| Gross Weight                                 | 70Kg±1.5Kg(Heavy Carton)   |  |
| Product Size (W*D*H)                         | 1722.41mm*87.08mm*1022.15mm  |  |
| Package Size (W*D*H)                         | 1880mm*280mm*1160mm(Heavy Carton)  |  |
| VESA   | 4-M8 Screw Hole 800mm*400mm  |  |
| 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);<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                  |

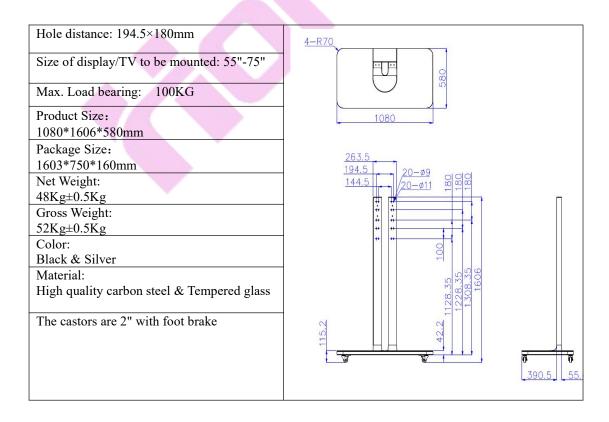
## 3.4 Operating system and software:

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

# **Product Model: Mobile Base for Flat-panel Display HK70**



# **Specifications:**

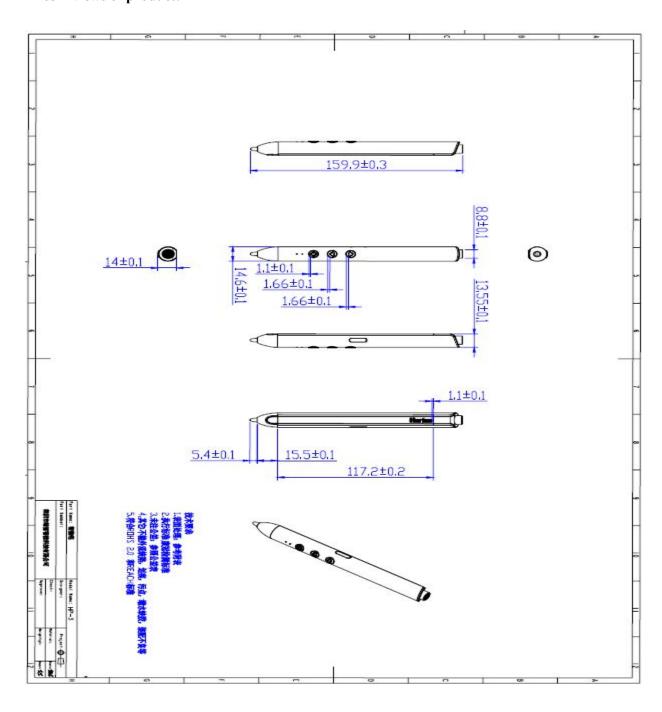


# **Product Model: Smart Pen HP-3**

# 1.Product Picture:



# **2.**Six views of product:



## 3. Product function diagram:





| Number | Work interface             | Function description   |                    |
|--------|----------------------------|--|--------------------|
| 1      | LED<br>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<br>key   |
| 5      | Down page key              | Short press (one page down); long press (turn on voice), release to turn off it;   | ↓Down<br>arrow key |
| 6      | Voice                      | Long press the page turning key to turn on the voice, and release to turn off;   | 2.4G<br>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<br>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)

|              | 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,  |
| Boot up code | 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         | Code matching is successful. The blue light of the page flipper flashes at high speed     |
| success      | 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;