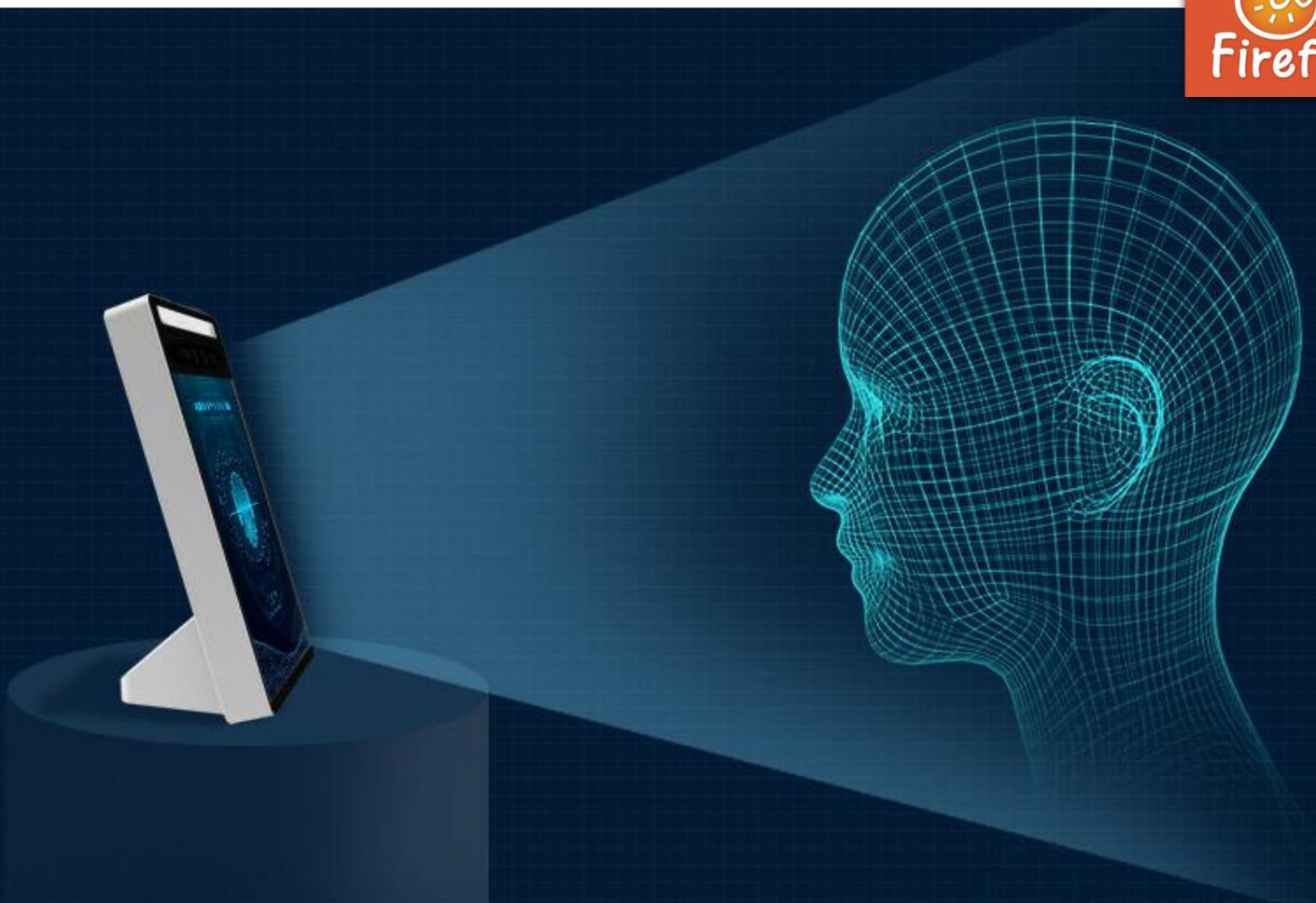


T-Chip Intelligence

## Face X2

Face Recognition All-In-One PC



T-CHIP INTELLIGENCE TECHNOLOGY CO.,LTD.

[www.t-firefly.com](http://www.t-firefly.com)

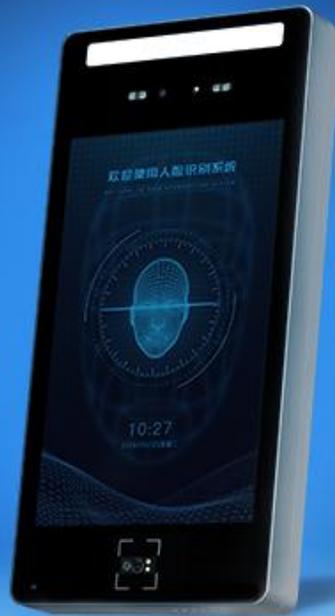


## Directory

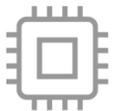
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# Face X2

Face Recognition All-In-One PC



- With high-performance hardware configurations
- Efficient face recognition algorithms
- Supports fast recognition of ID card, IC card, QR code and bar code
- Coupled with the inbuilt dual-track speaker, voice broadcast
- With a complete backstage management system



## High-performance Processor

Adopts RK3399 six-core 64-bit "server-level" processor, frequency up to 1.8 GHz, integrates quad-core Mali-T860 GPU.



## Quick Recognition, Accurate Verification

Its recognition speed is less than 200ms and recognition accuracy is more than 99.77%.



## Card-swiping Recognition

It can recognize ID card and IC card accurately, realizing ID-selfie matching, card-swiping gate access control and attendance checking



## Code-scanning Recognition

It supports the fast recognition of scanning mainstream QR codes and bar codes. It can be applied to check-stand scanning, ticket scanning and payment scanning, etc.



## Dual-track Speaker

With the inbuilt dual-track speaker, it supports TTS voice broadcast which can intelligently translate words into natural speech flows in real-time



## IPS Touch Screen

With 8-inch fully fitted IPS screen, 800x1280 resolution, full-view HD display, vivid color reproduction, clear and smooth picture. It supports multi-touch which is sensitive and stable



## Aluminum Waterproof Case

Equipped with an all-aluminum alloy case, It can run steadily 7x24 hours when aging at a high temperature of 60°C. With the dust-proof and waterproof level of IP54



## Non-contact Infrared Thermometry

It can be equipped with the infrared temperature probe to achieve the quick non-contact temperature measurement



## Flexible Backstage Management

It is equipped with the well-developed APK and PC backstage management software of face recognition and mobile phone management software (WeChat mini programs)

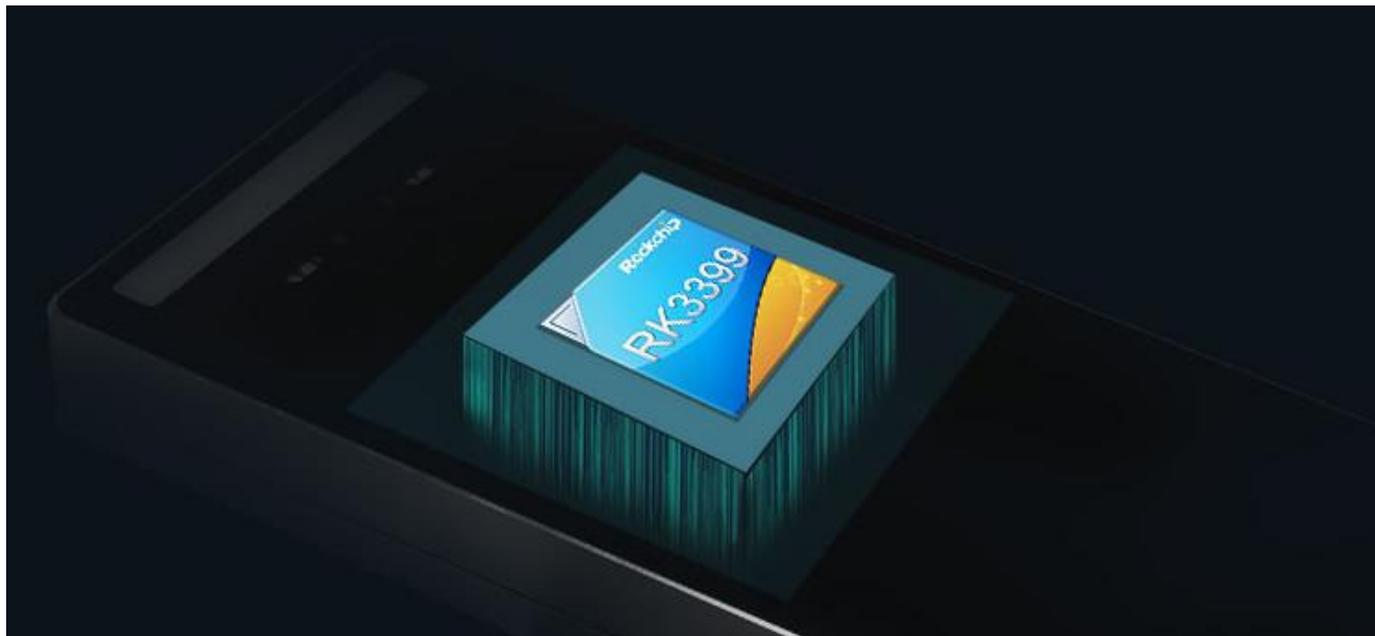


## Multiple Installation Methods

It can adopt wall-mounted, desktop-mounted or column-mounted as a way of the installation, which is simple and convenient to install and can be applied to various scenes quickly.

## 1. High-performance Processor

Adopts RK3399 six-core 64-bit "server-level" processor, frequency up to 1.8 GHz, integrates quad-core Mali-T860 GPU. It supports multi-format video coding and decoding, and has better processing performance.



## 2. Quick Recognition, Accurate Verification

It matches multiple face recognition algorithms well and has a high response and detection speed. Its recognition speed is less than 200ms and recognition accuracy is more than 99.77%.



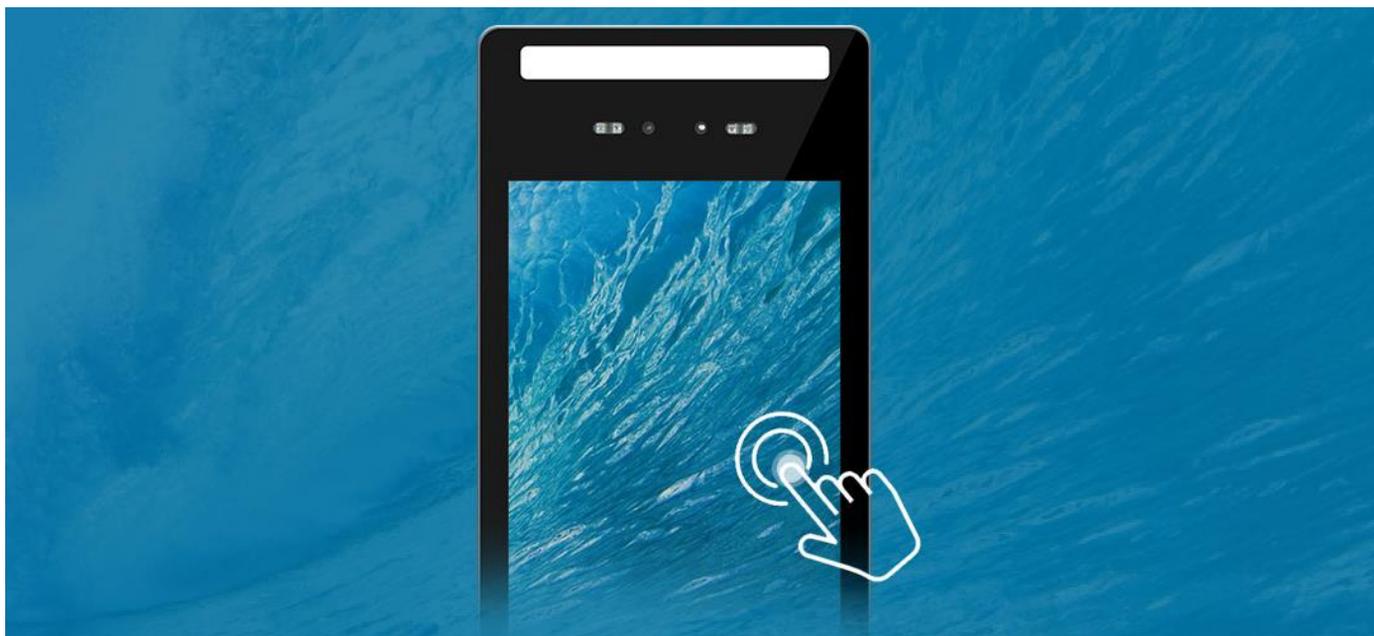
### 3. Flexible Backstage Management

It is equipped with the well-developed APK and PC backstage management software of face recognition and mobile phone management software (WeChat mini programs), which can be applied to projects directly.



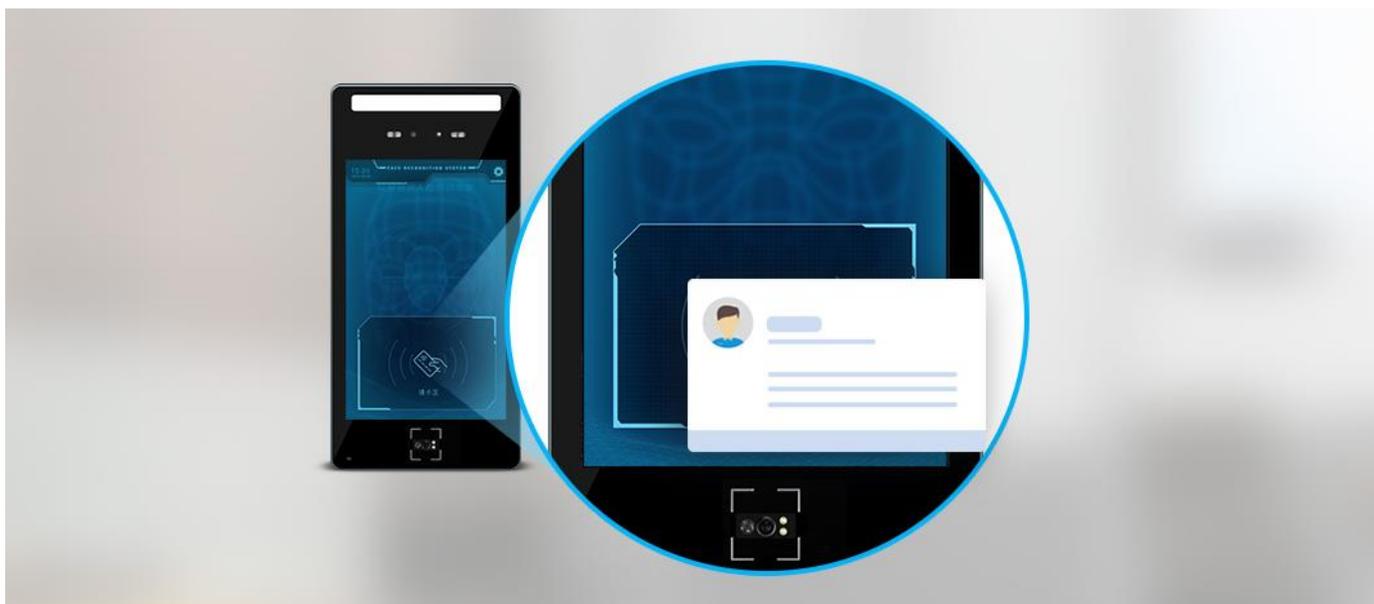
### 4. IPS Touch Screen

With 8-inch fully fitted IPS screen, 800x1280 resolution, full-view HD display, vivid color reproduction, clear and smooth picture. It supports multi-touch which is sensitive and stable.



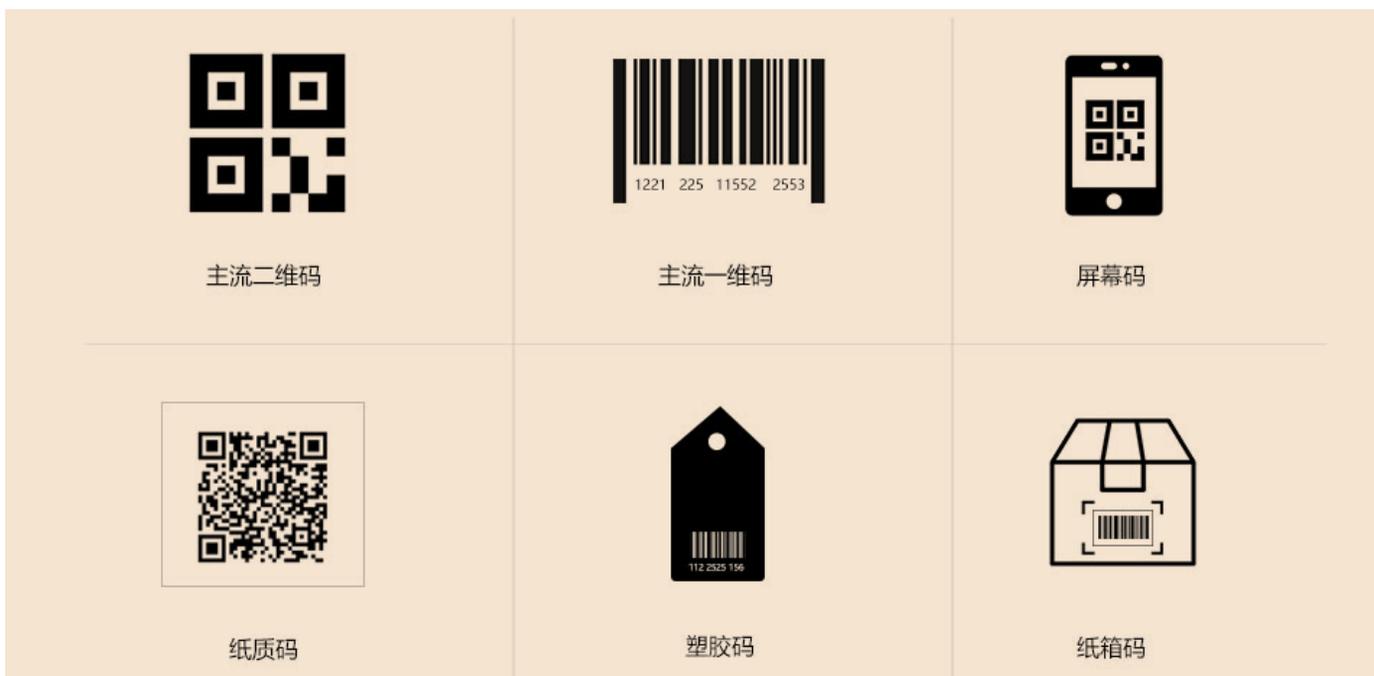
### 5. Card-swiping Recognition

It can recognize ID card and IC card accurately, realizing ID-selfie matching, card-swiping gate access control and attendance checking. It can be applied to gate access control in residential areas, check on work attendance and high-speed rail ticket check, etc.



### 6. Code-scanning Recognition

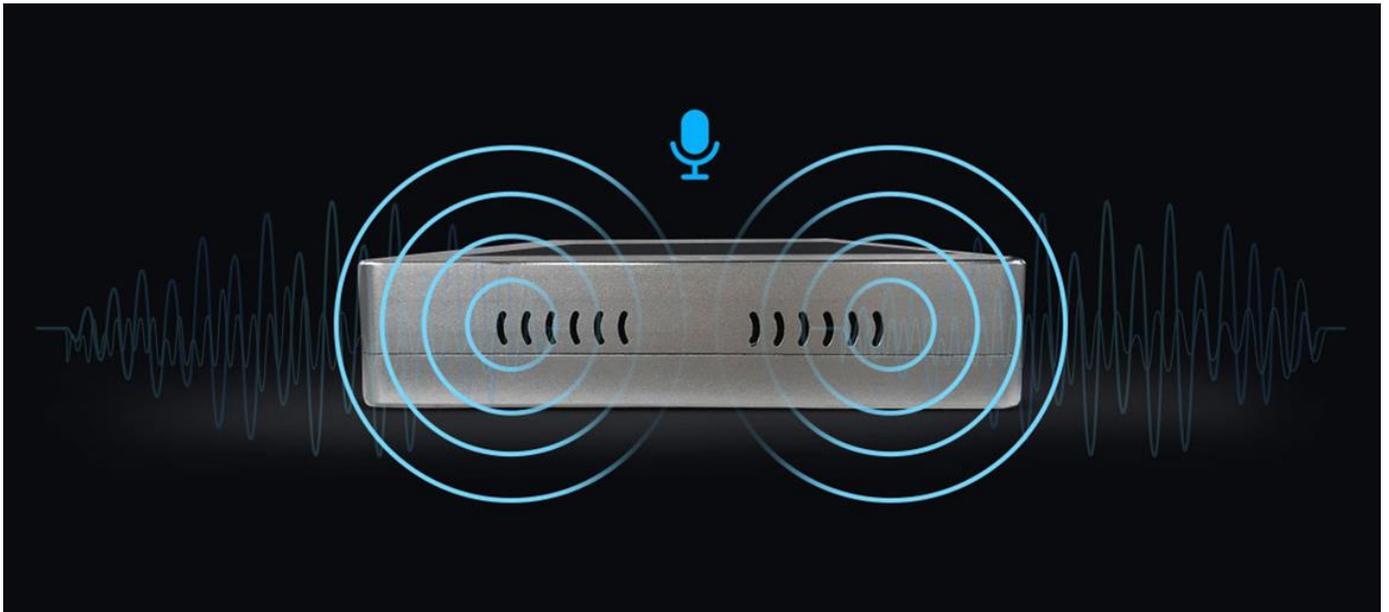
It supports the fast recognition of scanning mainstream QR codes and bar codes. It can be applied to check-stand scanning, ticket scanning and payment scanning, etc.



## Product introduction

### 7. Dual-track Speaker

With the inbuilt dual-track speaker, it supports TTS voice broadcast which can intelligently translate words into natural speech flows in real-time. It can be applied to the Human-Computer Interaction scenes like voice broadcast and voice reminder.



### 8. Non-contact Infrared Thermometry

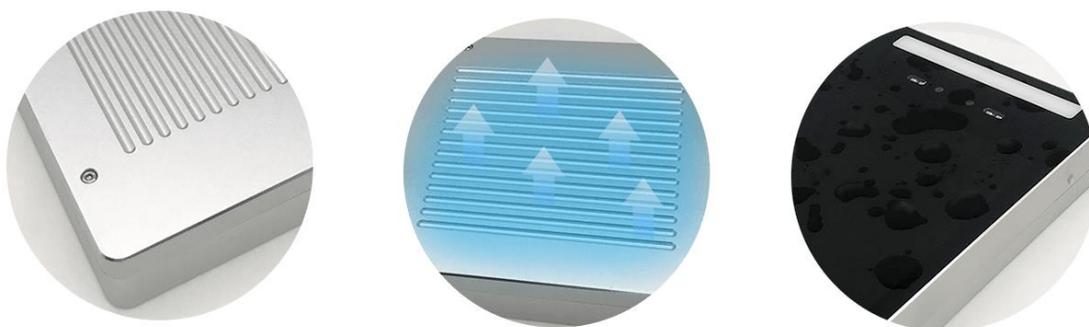
It can be equipped with the infrared temperature probe to achieve the quick non-contact temperature measurement, reduce the contact infection at close range and screen the abnormal body temperature efficiently.



## Product introduction

### 9. Aluminum Waterproof Case

Equipped with an all-aluminum alloy case which through 38 process flows and features a matte surface. The case conducts heat effectively despite its fanless design. It can run steadily 7x24 hours when aging at a high temperature of 60°C. With the dust-proof and waterproof level of IP54, it can effectively avoid the damage of the splashing water in all directions and thus meet the requirements for use of indoor and outdoor environment.



### 10. Multiple Installation Methods

It can adopt wall-mounted, desktop-mounted or column-mounted as a way of the installation, which is simple and convenient to install and can be applied to various scenes quickly.



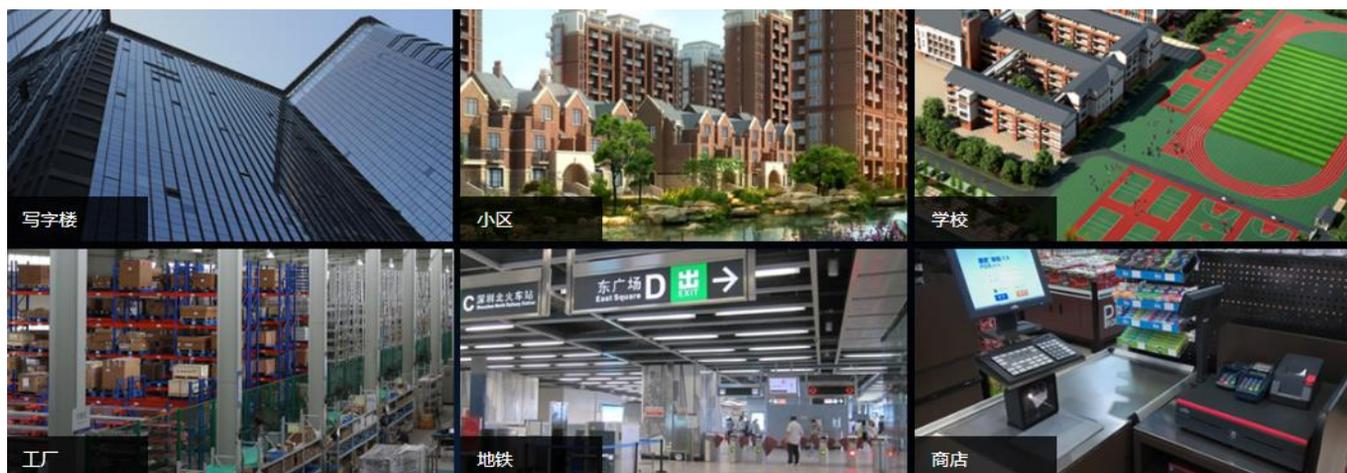
### 11. Rich Expansion Interfaces

It supports various expansion interfaces like Wiegand 26/34 input and output, RS232, RS485, relays, Ethernet, USB HOST and USB OTG.

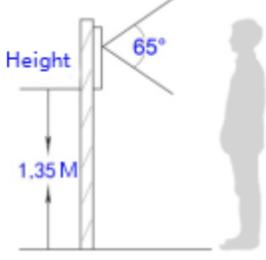
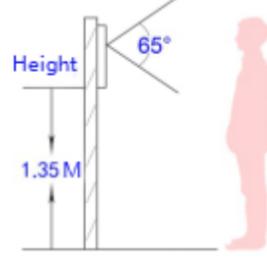
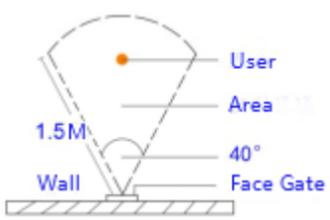
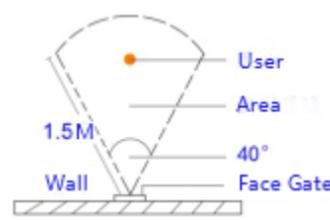


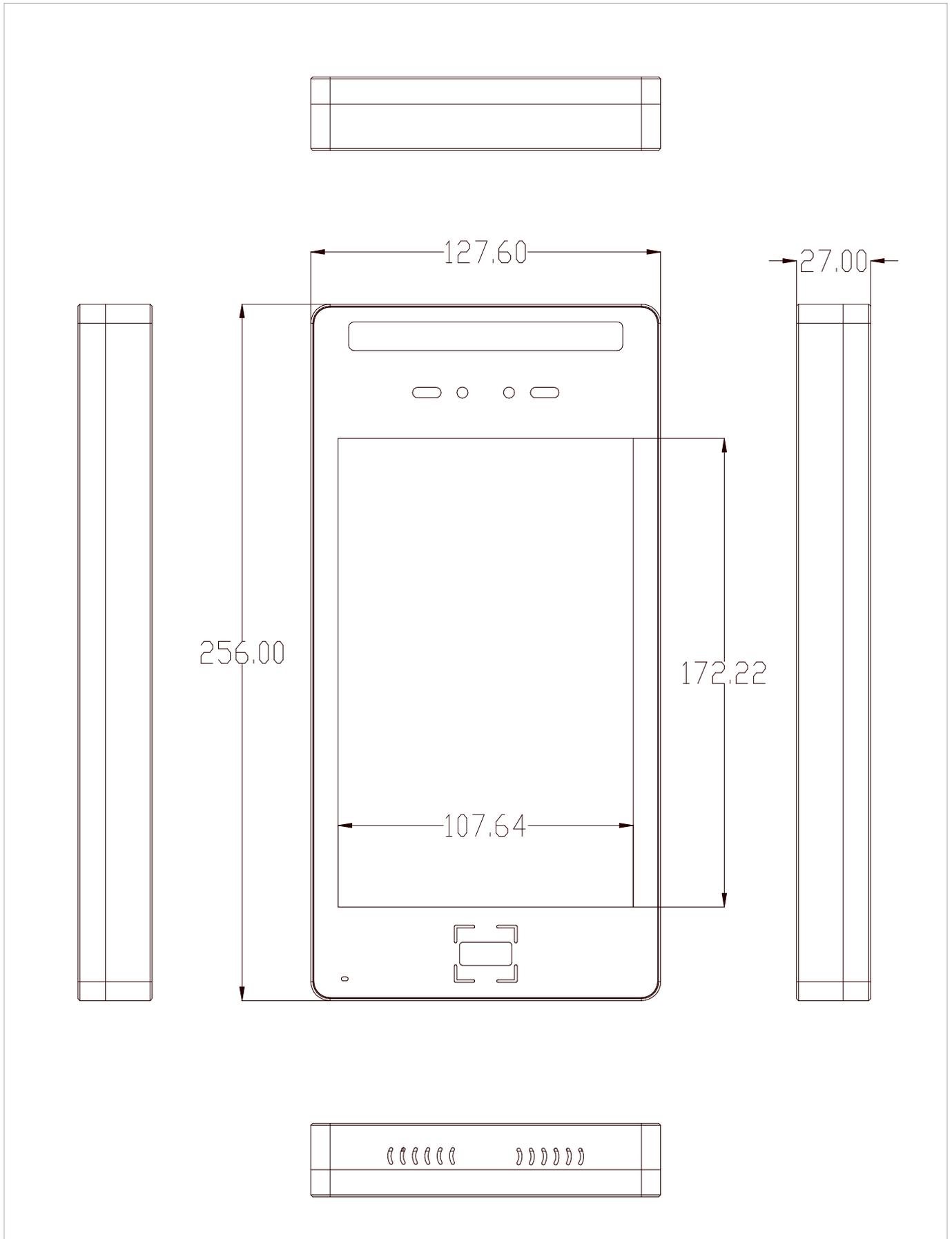
### 12. Application

Widely applicable to office buildings, residential areas, campuses, construction sites, factories and other scenes which require gate access control, attendance checking and face-scanning payment.



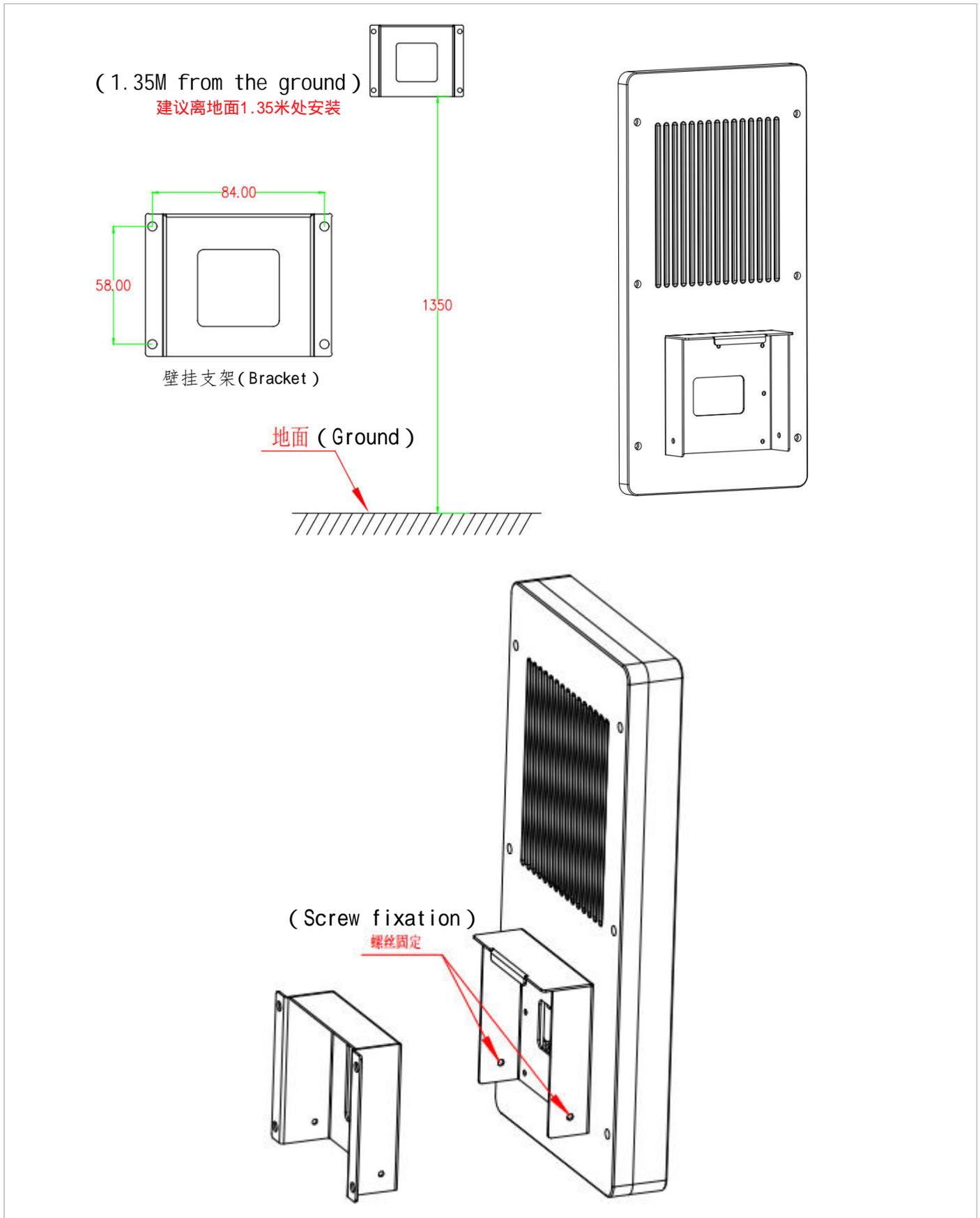
Technical parameter

|                          |                                |  |   |
|--------------------------|--------------------------------|--|---|
| Screen                   | Size                           | 8-inch, full-view, IPS LCD screen  |   |
|                          | Resolution                     | 800 × 1280   |   |
| Binocular Camera         | Type                           | RGB Camera   | IR Camera   |
|                          | Sensor                         | 1/2.7"CMOS   | 1/2.7"CMOS  |
|                          | Resolution                     | 2 million pixels (1920×1080)   | 2 million pixels (1920×1080)  |
|                          | Minimum illumination           | ≥0.1LUX at F1.8  | ≥0.1LUX at F1.8   |
|                          | Frame rate                     | 30fps  | 30fps   |
|                          | Signal-to-noise ratio          | ≥45dB  | ≥45dB   |
|                          | Output format                  | MIPI 8bit YUV422   | MIPI 8bit YUV 422   |
|                          | White balance                  | Automatic  | Automatic   |
|                          | Wide dynamic                   | ≥100dB wider dynamic range suitable for various complex light environment  | -   |
|                          | Vertical wide angle            |   |  |
|                          | Horizontal wide angle          |   |  |
| Feature                  | CPU                            | RK3399 six-core 64-bit 1.8GHZ processor (Dual-core Cortex-A72+ Quad-core Cortex-A53)   |   |
|                          | RAM                            | 2GB LPDDR4   |   |
|                          | Storage                        | 16GB eMMC, Support TF card expansion   |   |
|                          | Fill light                     | White fill light, IR fill light, Red and green indicator light   |   |
|                          | Wireless network               | 2.4GHz WiFi, support 802.11 b/g/n protocol<br>3G/4G LTE network (optional)   |   |
|                          | Wired network                  | 10 / 100M Ethernet   |   |
|                          | Distance sensing               | Radar distance sensing (sensing distance 0.2-4m)   |   |
|                          | MIC                            | Digital noise reduction audio, High-sensitive capacitor mic  |   |
|                          | Card reading (Optional)        | NFC / IC card reading function, non-contact IC card conforming to iso14443 13.56MHz type A & B   |   |
|                          | QR code recognition (Optional) | QR code/ Barcode recognition function, quickly and easily read 1D / 2D barcodes in various applications  |   |
|                          | ID card recognition (Optional) | SAM module of the Ministry of public security, which can read the second-generation resident identity card, Hong Kong, Macao and Taiwan residence permit, and Foreigner Residence permit |   |
| 4G LTE module (Optional) | Support 3G/4G LTE network      |  |   |
| Interface                | Wiegand                        | Wiegand 26 /34 input, Wiegand 26 /34 output, RS232, RS485, Relay   |   |
|                          | USB                            | USB 2.0 Host x 1, USB 2.0 OTG x 1  |   |
|                          | RJ45                           | RJ45 (10 / 100M Ethernet)  |   |
|                          | Power                          | DC 5.5mm * 2.5mm   |   |
| Software                 | Face recognition               | 1 : N recognition accuracy 99.7%   |   |
|                          | Stranger detection             | Support  |   |
|                          | Face anti-spoofing             | Support  |   |
|                          | UI interface configuration     | Support  |   |
|                          | Remote upgrade                 | Support  |   |
|                          | Deployment method              | Support LAN, public network use  |   |
| Other                    | Power                          | DC 9-16V 3A  |   |
|                          | Power consumption              | About 18w  |   |
|                          | Operating temperature          | -10°C ~ 60°C   |   |
|                          | Operating humidity             | 10% ~ 90 %RH(non-condensing)   |   |
|                          | Size                           | 256 mm × 127.6 mm × 27 mm  |   |
|                          | Protection level               | IP54 protection  |   |
|                          | Installation                   | column-mounted, wall-mounted   |   |

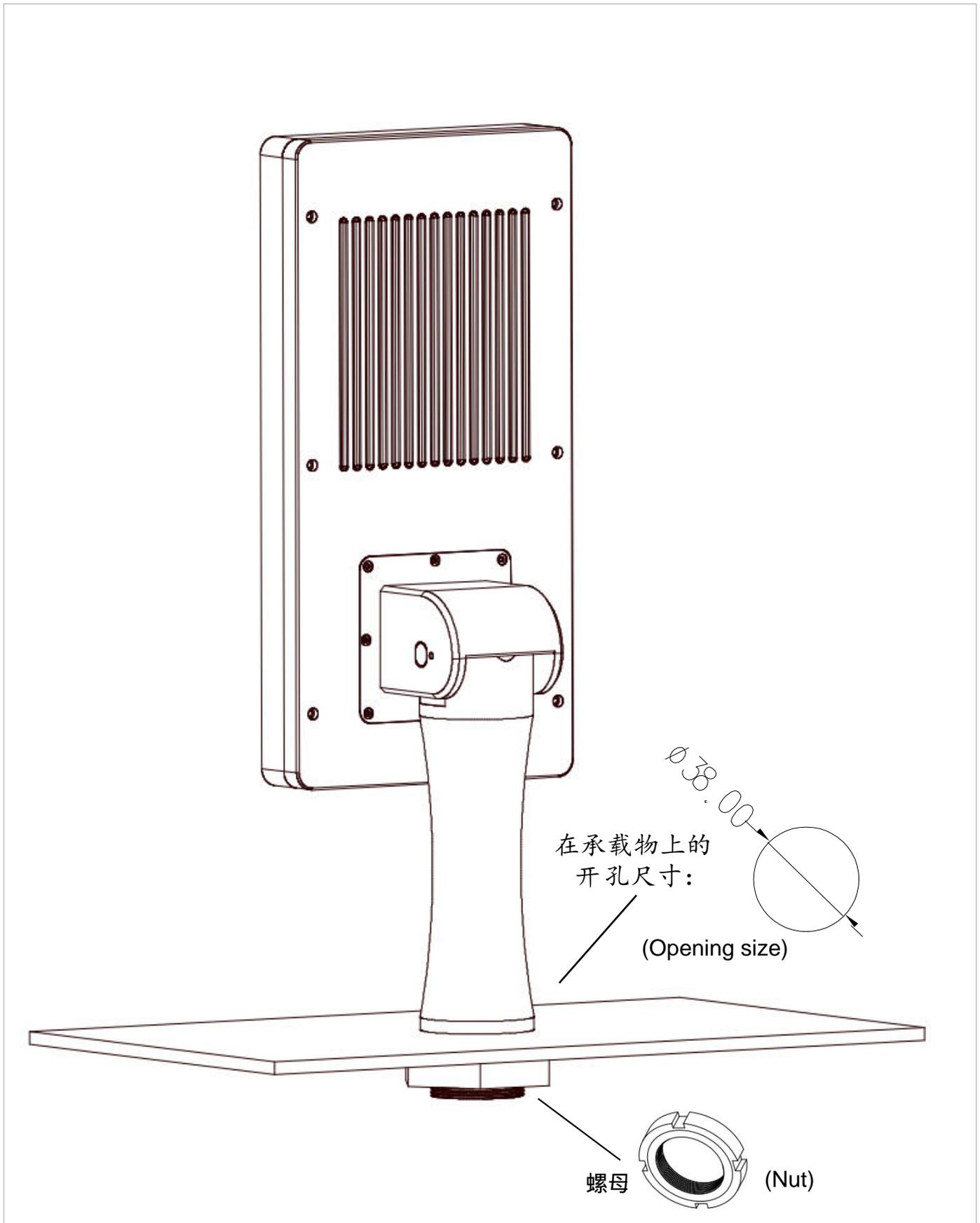




## 1. wall-mounted



## 2. column-mounted



## Infrared Thermometry

It can be equipped with the infrared temperature probe to achieve the quick non-contact temperature measurement, reduce the contact infection at close range and screen the abnormal body temperature efficiently.

### Main Features:

- 1、Adopt a high-precision probe with reliable performance
- 2、Thermometry distance: 30 ~ 50 cm
- 3、Thermometry range: 32 ~ 42.9 °C
- 4、Using compensation algorithm, accurate to  $\pm 0.3^{\circ}\text{C}$ , approach to  $\pm 0.2^{\circ}\text{C}$
- 5、Enter the measurement area for 2S, the temperature value is the measured body temperature.

### Description:

| Parameter           | Index                                    |
|---------------------|--|
| Sensor              | Infrared temperature sensor              |
| Measuring           | Non-contact measurement                  |
| Angle               | 35° * 35°                                |
| Working temperature | 15 ~ 35 °C                               |
| Humidity            | 20-80 %RH                                |
| Range               | Standard atmospheric pressure $\pm 10\%$ |





Face X2



壁挂支架×1



韦根PH2.0-5P数据线



DC5.5\*2.5电源线



12V-3A桌面式电源×1



RJ45转PH2.0-4P数据线



USB HOST PH2.0-4P数据线



USB OTG PH2.0-4P数据线

## Company introduction

T-Chip Intelligent Technology Co., Ltd. was founded in 2005. It is a national high-tech enterprise. We focus on the research and development, design, production and sales of open source intelligent hardware, internet of things and digital audio products, and provide the overall solution for intelligent hardware products meanwhile.

The open-source brand "firefly" has an open-source community and online shopping mall on the Internet. At present, it has more than 200000 users and more than 5000 enterprise users, accelerating the R & D process for many technology entrepreneurs and start-ups, and providing professional technical services.

## T-CHIP INTELLIGENCE TECHNOLOGY CO.,LTD.

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E-mail: [sales@t-firefly.com](mailto:sales@t-firefly.com)

## Shopping Mall

[store.t-firefly.com](http://store.t-firefly.com)

[t-firefly.taobao.com](http://t-firefly.taobao.com)

## WeChat

