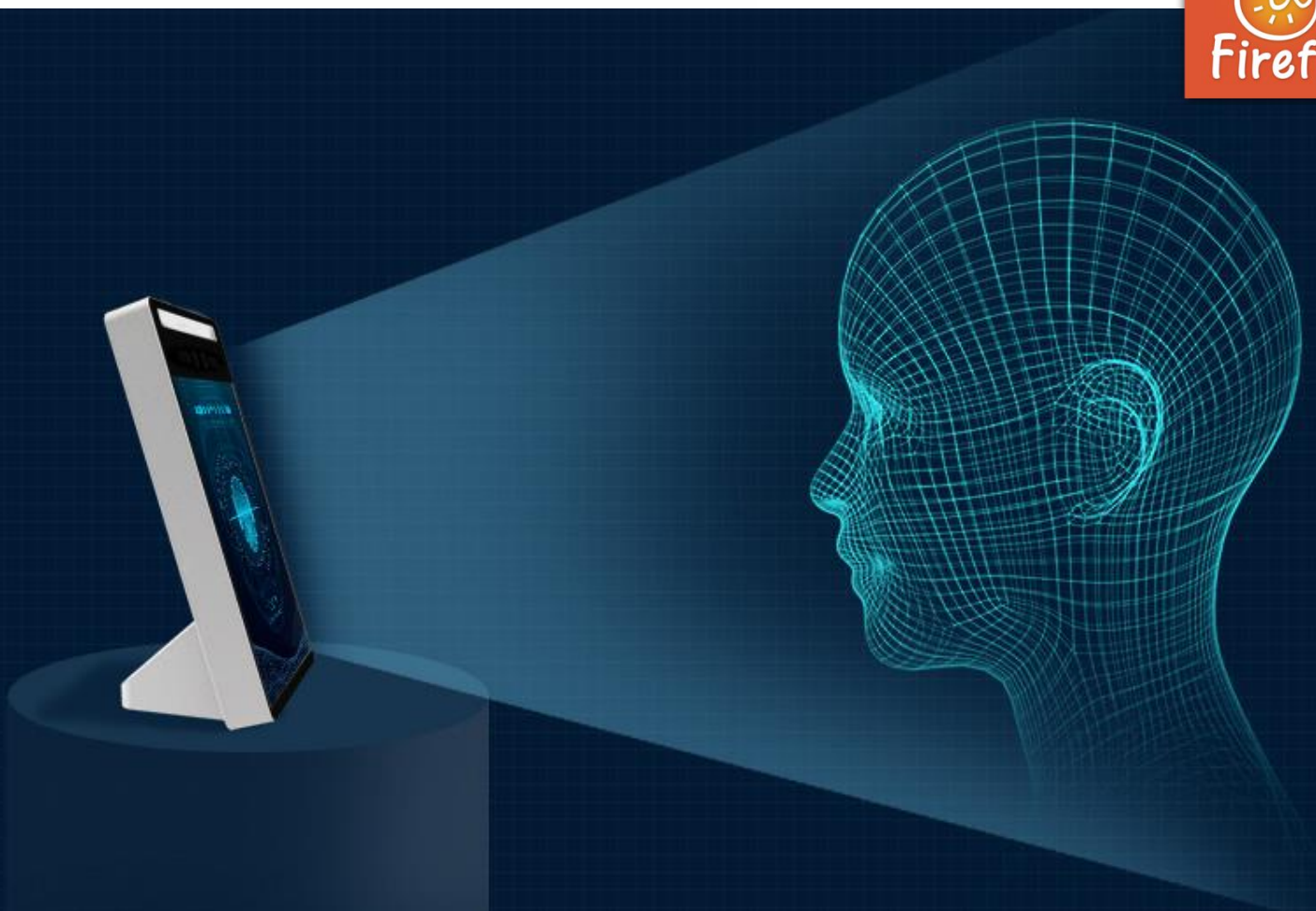


T-Chip Intelligence

## Face X2

Face Recognition All-In-One PC



T-CHIP INTELLIGENCE TECHNOLOGY CO.,LTD.

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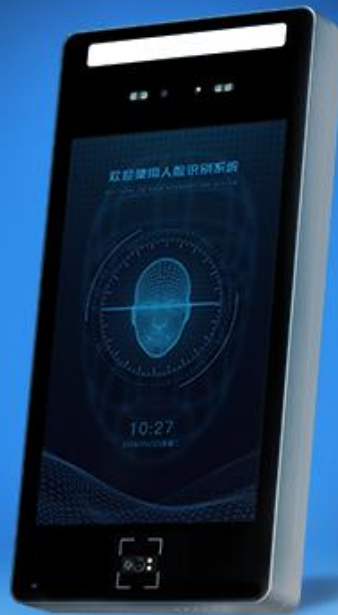


## Directory

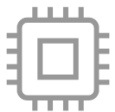
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# Face X2

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



## 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.



## 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)

## 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%.



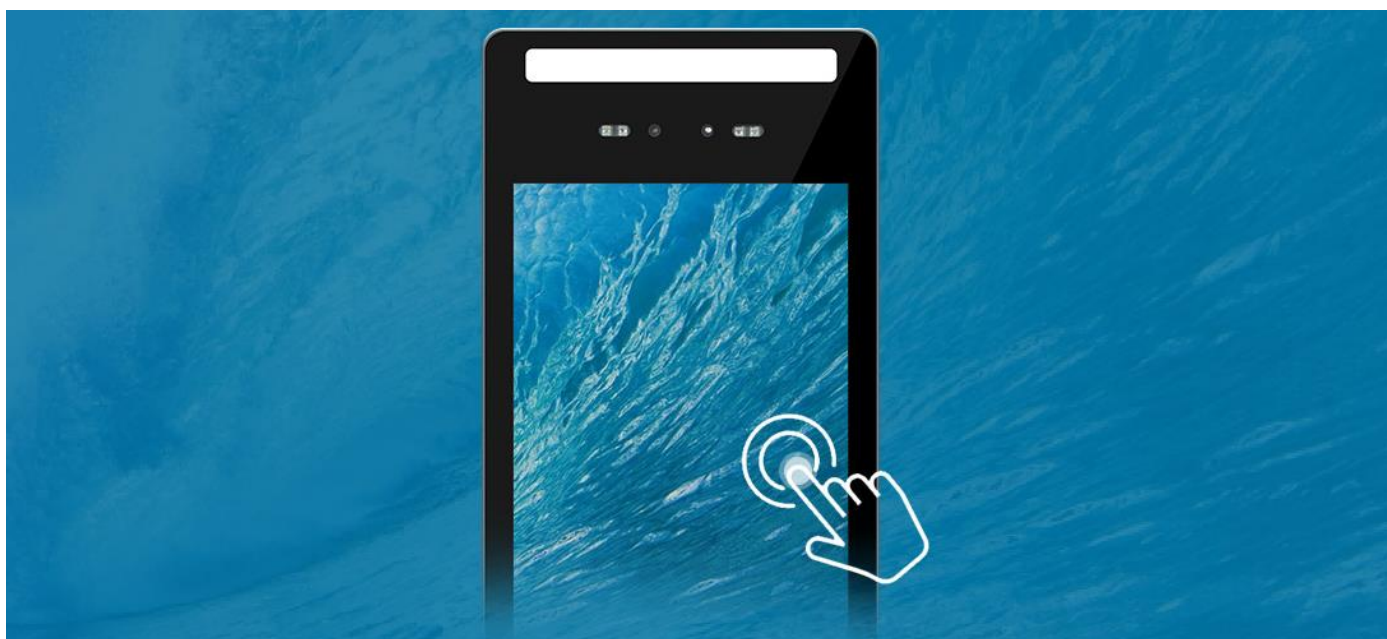
### 3. Flexible Backstage Management

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.



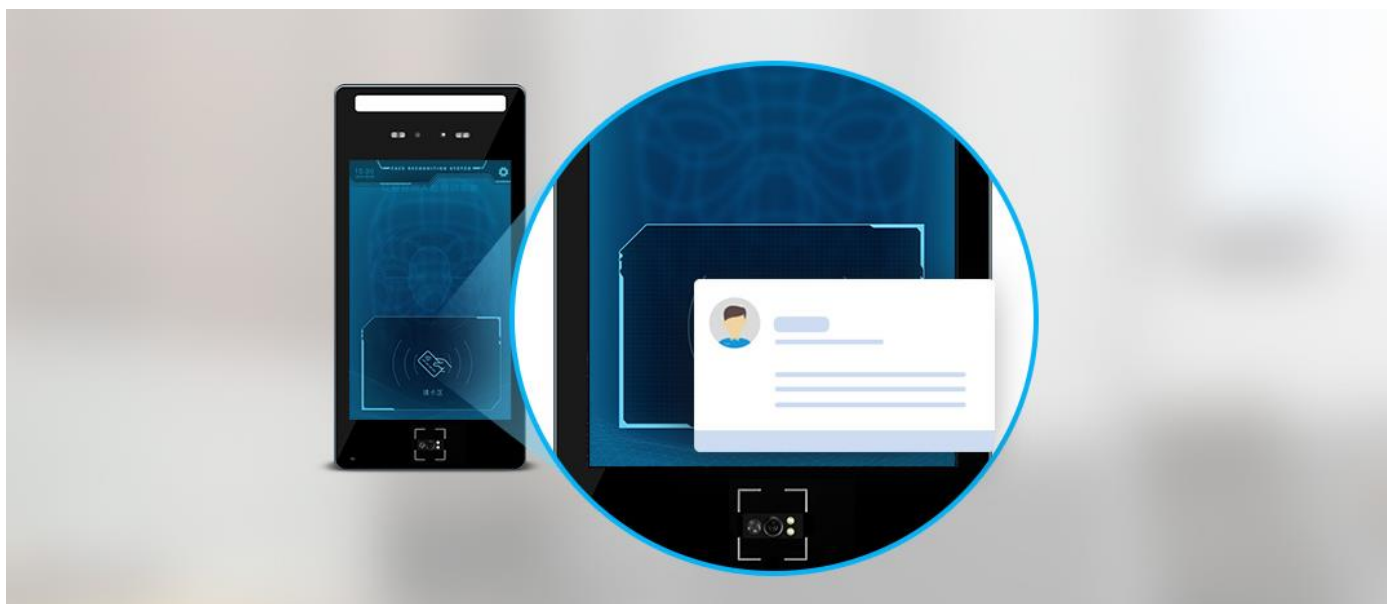
### 4. IPS Touch Screen

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.



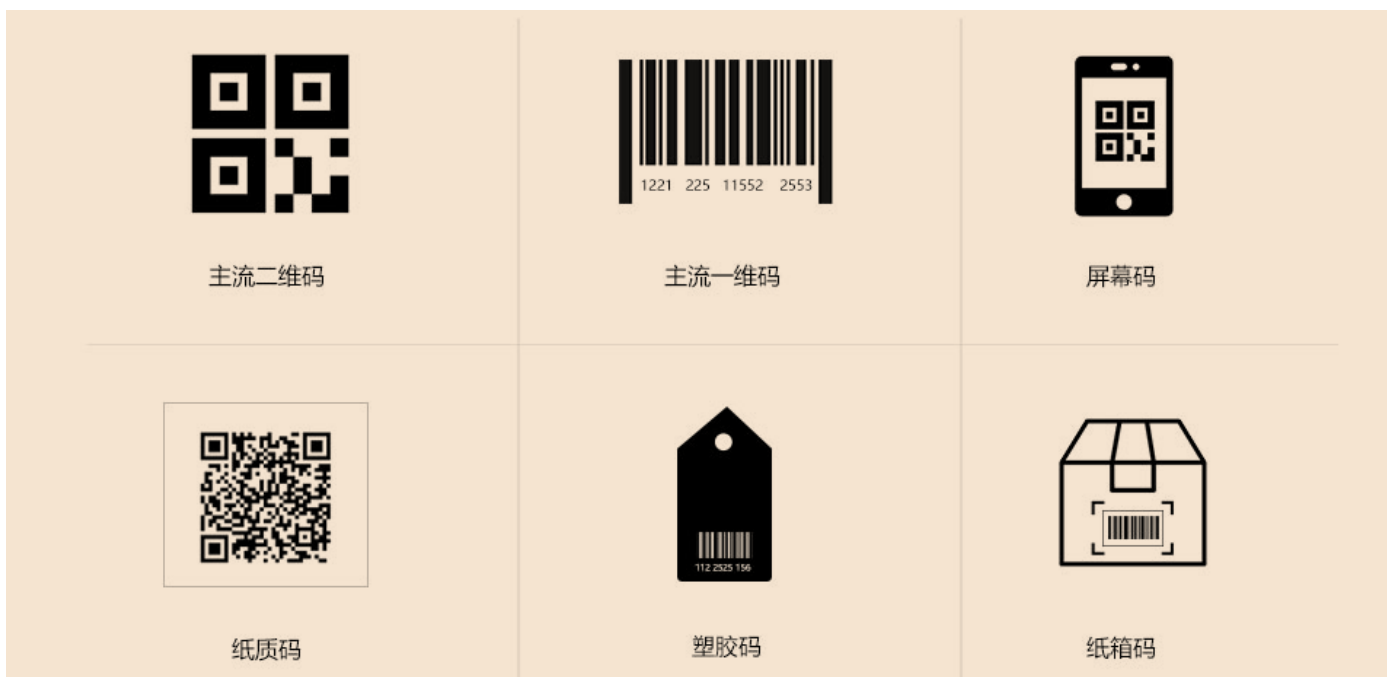
### 5. Card-swiping Recognition

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.



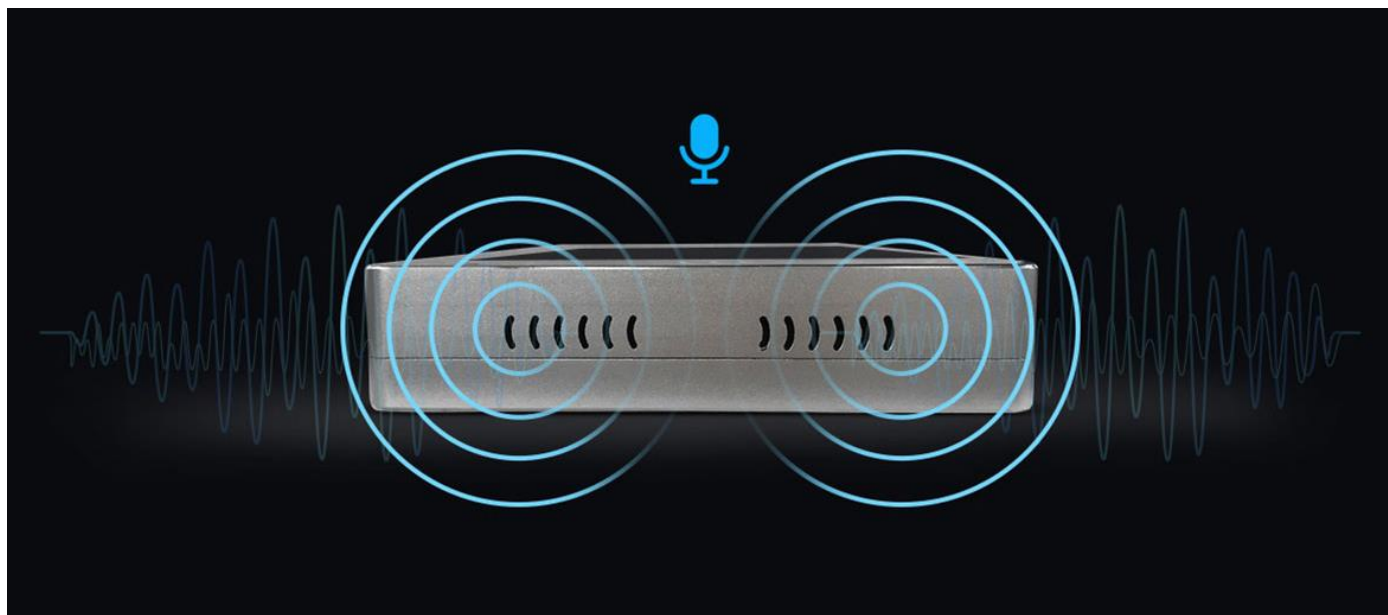
### 6. Code-scanning Recognition

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.



## 7. Dual-track Speaker

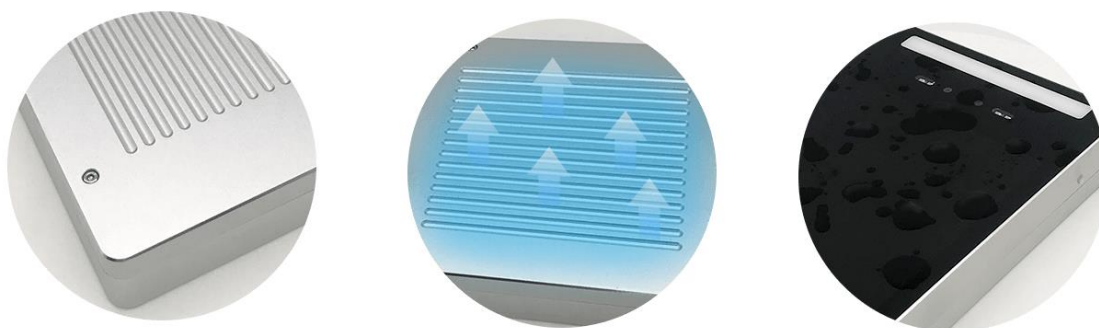
With the inbuilt dual-track speaker, it supports TTS voice broadcast which can intelligently translate words into natural speech flows in real-time. It can be applied to the Human-Computer Interaction scenes like voice broadcast and voice reminder.



## 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.

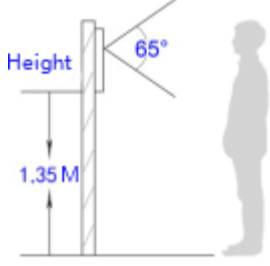
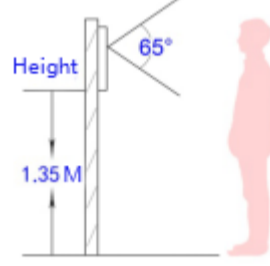
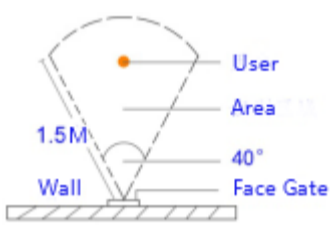


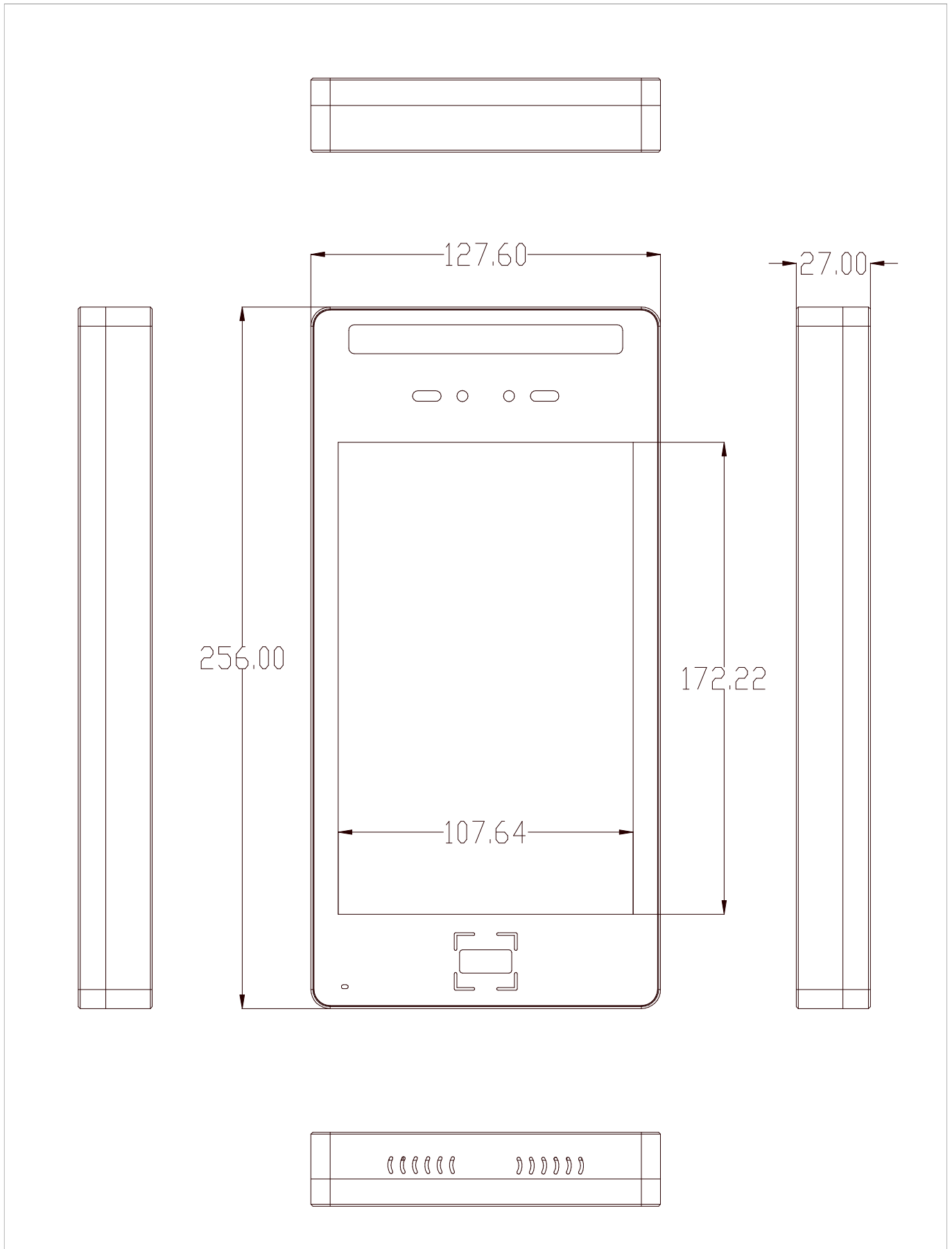
### 12. Application

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.



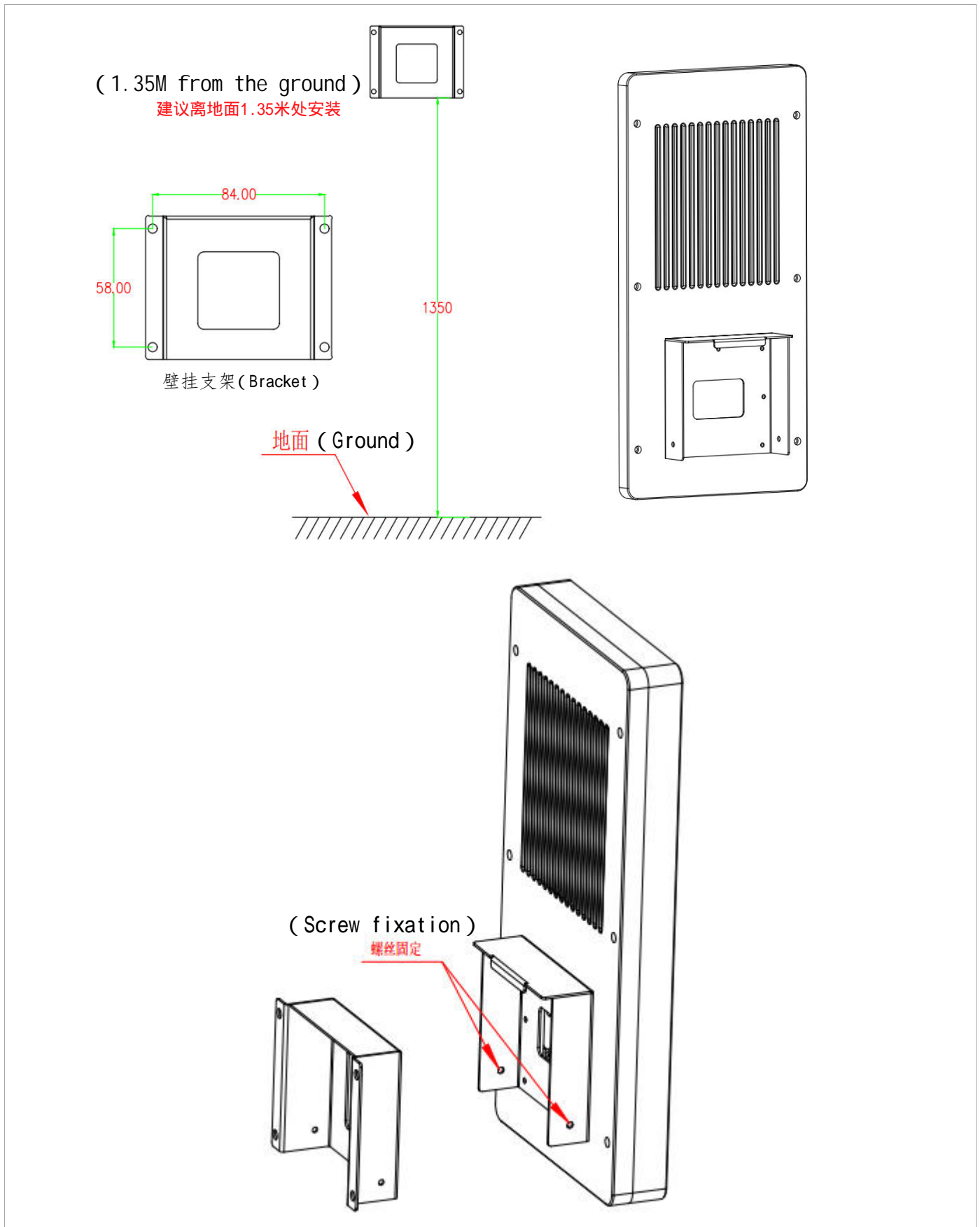
Technical parameter

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 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	
Interface	4G LTE module (Optional)	Support 3G/4G LTE network	
	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)	
Software	Power	DC 5.5mm * 2.5mm	
	Face recognition	1 : N recognition accuracy 99.7%	
	Stranger detection	Support	
	Face anti-spoofing	Support	
	UI interface configuration	Support	
	Remote upgrade	Support	
Other	Deployment method	Support LAN, public network use	
	Power	DC 12V-3A	
	Power consumption	About 18w	
	Operating temperature	-10°C ~ 60°C	
	Operating humidity	10% ~ 90 %	
	Size	256 mm × 127.6 mm × 27 mm	
	Protection level	IP54 protection	
Installation	column-mounted, wall-mounted		

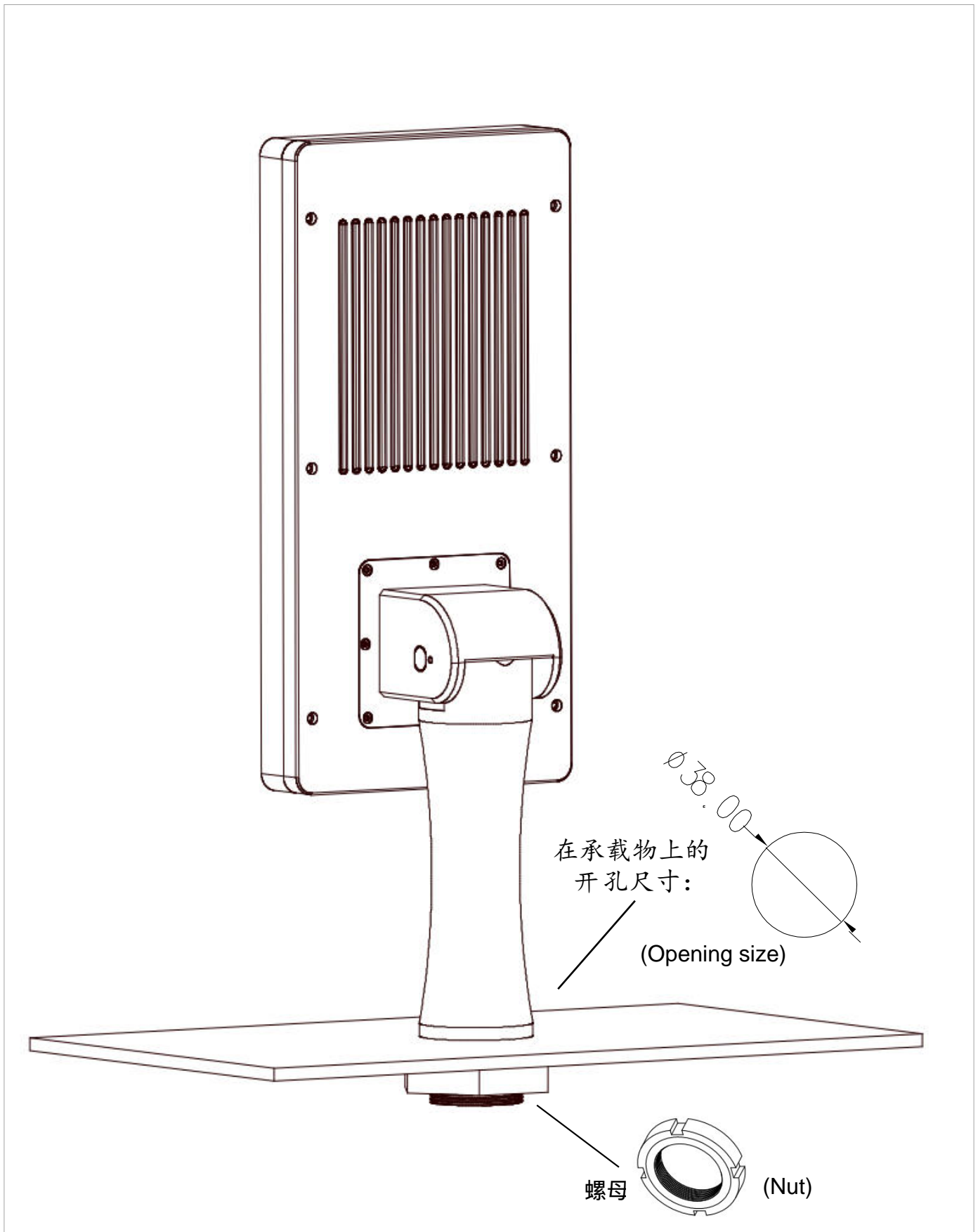




### 1. wall-mounted



## 2. column-mounted





- |                             |                    |                    |
|-----------------------------|--------------------|--------------------|
| ① Face X2 x 1               | ② USB(HOST) x 1    | ③ USB(OTG) x 1     |
| ④ RJ45 Cable x 1            | ⑤ 5Pin Wiegand x 1 | ⑥ Wall support x 1 |
| ⑦ DC5.5*2.1 Power Cable x 1 |                    |                    |

## 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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Zip Code: 528400

Addr: Room 2101, Hongyu Building, #57 Zhongshan 4Rd, East District, Zhongshan, Guangdong, China.

## Business communication

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







FCC warning:

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.