

# Face Recognition Terminal

## User manual

### Note

1. Device working temperature: 10 -40 °C. Do not Install under the vent and ensure that there is no heating source within 3 meters;
2. People entering the room from a cold outdoor environment will affect measurement accuracy. The forehead temperature test needs to be performed indoors without covering the forehead for three minutes and the temperature is stable;
3. The temperature read by the temperature measuring device is the temperature in the forehead area. When there is water, sweat, oil or thick makeup on the forehead, or the elderly have wrinkles, the read temperature will be lower than the actual temperature. Make sure there is no hair or clothing covering this area.

## 1 Product Overview

### 1.1 Introduction

The face recognition terminals are suitable for hotels, office buildings, schools, shopping centers, KTV, bars, buses and communities.

### 1.2 Product Features

- (1) Using high-precision infrared temperature detector non-contact automatic body temperature detection;
- (2) Temperature measurement range: 30-45 °C, accuracy is  $\pm 0.3$
- (3) Real-time output of identify results and voice prompts;
- (4) Auto identify people without masks and sound real-time warning;
- (5) Auto register and record information, avoid manual operation, improve efficiency and reduce missing information;
- (6) Dual sensor with living detect, face recognition distance 0.3-3M,
- (7) Face recognition within 500ms; Face library 22400 person. Total storage 100,000 recognize record;
- (8) Supporting SDK and HTTP protocols under Windows / Linux
- (9) Device vision dynamics  $\geq 80$ dB, suitable for backlight environment;
- (10) Supports fog, 3D noise reduction, strong light suppression, electronic image stabilization, multiple white balance modes.
- (11) Linux operate system more stable.

### 1.3 Packing list

#### Packing list of 7-inch column

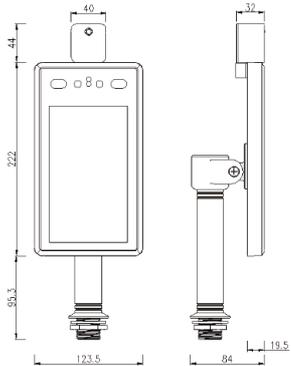
- |                                |                              |
|--------------------------------|------------------------------|
| 1. 1*Face recognition terminal | 2. 1*Power supply 12V 3A     |
| 3. 1*User manual               | 4. 1*Waterproof network head |
| 5. 6* Tie                      | 6. 1*Hex screwdriver         |

#### Packing list of 7-inch wall-mounted

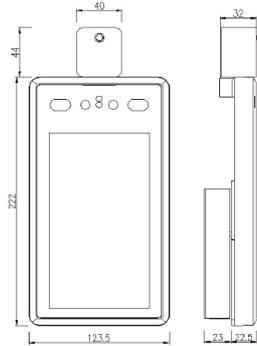
- |                                |                              |
|--------------------------------|------------------------------|
| 1. 1*Face recognition terminal | 2. 1*Power supply 12V 3A     |
| 3. 1*User manual               | 4. 1*Waterproof network head |
| 5. 1*Hex screwdriver           | 6. 1*Gimbal bracket          |
| 7. 1*wall mount bracket        | 8. 1*Screw kits              |

## 2 Specification

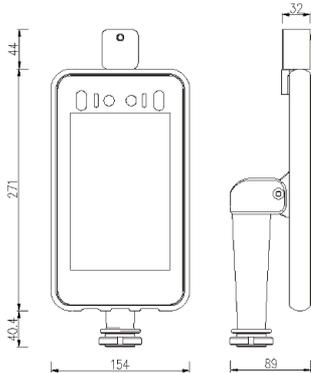
### 1. 7-inch turnstile



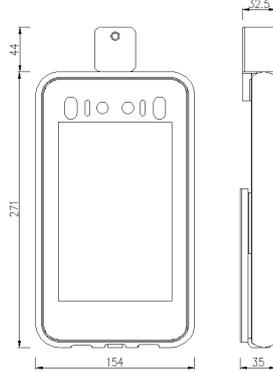
### 2. 7-inch wall-mounted



### 3. 8-inch turnstile



### 4. 8-inch wall-mounted



## 3 Appearance

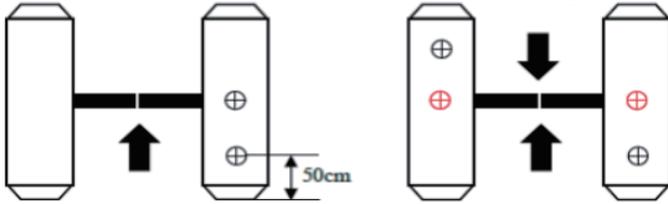


No.	Name	Description
J1	WG Out	1:D0 2:D1 3:GND
J2	WG IN	NC
J3	Alarm Out	Relay Switch
J4	USB	USB Interface
J5	RJ45	100M
J6	DC12V	12V/3A

No.	Description
J1	WG Out: Orange D0、White D1、Green GND
	WG IN: Brown and white D0、Yellow D1、Gray GND
	Alarm out: Brown Alarm+、Purple Alarm
	RS485: Orange and White 485+、Blue and White 485
	USB: Red 5V、Blue D-、Green and white D+、Black GND
J2	RJ45 100M
J3	DC 12V/3A

## 4 Installation

According to the device of the installation site, in the space position on the gate or on the front side, the opening diameter of the 7-inch turnstile is 30mm, and the opening diameter of the 8-inch turnstile is 35mm. The diagram is as follows:

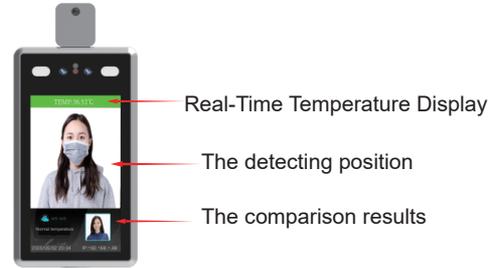


Single channel gate

Two channel gate

### 4.1 Adjust angle of temperature detector

After the temperature measurement access control is fully activated, the human face is directly facing the device. Observe the face image on the device screen. Make sure that the bare skin on the forehead is placed in the "temperature measurement area" (optimal temperature detector distance 0.5m). After that, paste the "Please stand here" detection position mark at the corresponding distance.



**Note:** Due to the height of the gate installation, it may cause the test personnel to actively cooperate during the test to ensure that the bare skin on the forehead is placed in the "temperature measurement area".

### 4.2 Temporary position



Height 1.1~1.8meters

1.0meter

0.6meter

1.2meter

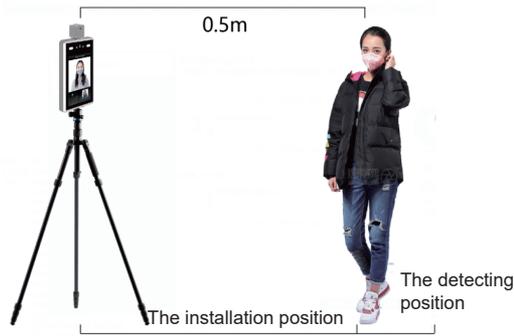
### 4.3 Wall-mounted face recognition terminal

Attach the cable tie from the "Accessory Pack" to the tripod for the temperature measurement access control on the column.

### Turnstile face recognition terminal

Mount the gimbal bracket in the "Accessory Pack" to the tripod for the wall-mounted temperature measurement access control. Connect the power supply and network cable.

#### 4.4 Adjust to best angle and detection position of the detector.



4.5 After temperature detect are confirmed , make detect position mark on the ground for accurate detection.

**Note:** There is no need to move or adjust the relevant position or height after installation is completed. Due to the height difference of the inspected person, the inspected person may need to cooperate actively to ensure the accuracy of the inspection data.

#### 5 Wall-mounted

Note: The installation height of 1.5 meters here is the recommended installation height, and users can adjust it according to their height.

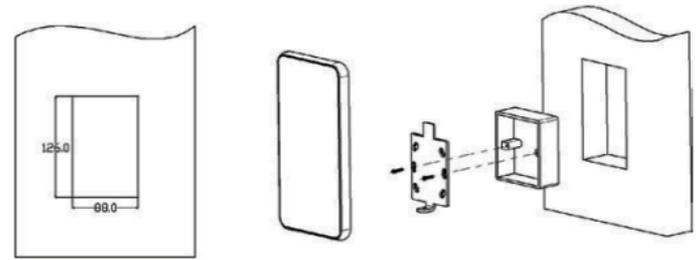
##### Installation with 86 boxes

**Step 1:** Make holes in the wall according to the mounting bracket and install 86 boxes.

**Step 2:** Use a special tamper-proof wrench to loosen the tamper-resistant fixing screws at the bottom of the device, remove the mounting plate, and the hanging plate is fixed on the 86 box as shown below.

**Step 3:** Hang the device from top to bottom on the mounting plate.

**Step 4:** Use a special tamper wrench at the bottom of the device to screw the tamper screws.



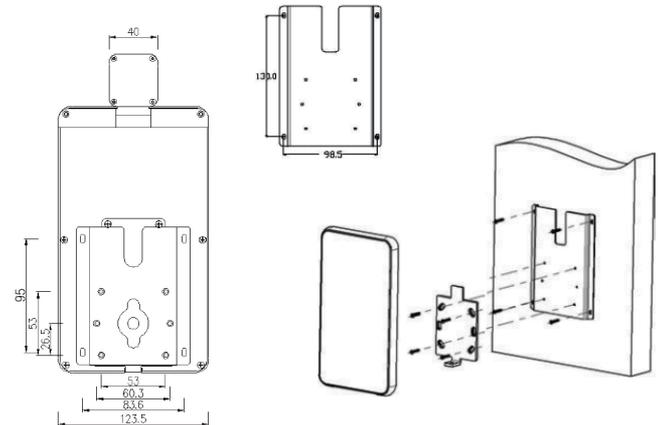
##### Installation without 86 boxes:

**Step 1:** Fix the mounting base on the mounting wall as shown in the figure below.

**Step 2:** Use a special tamper-proof wrench to loosen the tamper-resistant fixing screws at the bottom of the device, remove the mounting plate, and lock it to the mounting base plate according to the hole position.

**Step 3:** Hang the device from top to bottom on the mounting plate.

**Step 4:** Use a special tamper wrench at the bottom of the device to lock the tamper screws.



## 6 Setting & search on IE browser

### 6.1 Log in on the IE browser

After the face recognition machine is connected to the power supply and the network cable, wait for about 2 minutes and the device will finish booting. Enter 192.168.1.88 on the IE browser, please enter initial password: admin. Make sure the device and the computer are on the same LAN, and the IP of the computer is 192.168.1.xx, if not, please add an IP address of 192.168.1.xx.

http://192.168.1.88/login.asp

User name:

Password:

### 6.2 Language change

Click System info to select the language interface you want. Check the version information of the device

Face Recognize **Config** List Comparison Attendance Log out

**System parameters**

System Info User Manage System Time LAN Mobile Smart Face

FA black and Alarm setting Access control Device Information

Restore Restart Device Setting Audio Parameter

**System**

Device Name: IPC1000

VO Standard: PAL

Language: English

Device ID: 10178132

Version: 17.18.1.8

Algorithm Version: 3.5.4

Model Version: 4.12.2

WEB Version: 7.18\_1\_KD3.1.13

\* Modifying the device language, please close the browser to login.

### 6.3 Change the password of the user

Click User Manage to change the password for select user.

Validate Mode: WEB

Select User: Administrator

User Name: admin

Password: .....

Confirm Password:

Low Medium High

### 6.4 System Time

User can change the time of the device.

Date: 2020-5-2 20:55:42

NTP Server

Synchronize with Local Computer

Set the Time Manually

Time zone: 1

conversion:

RTC switch: Open

### 6.5 LAN settings

User can change the LAN setting to user connect the device.

#### LAN Setting

DHCP Enable:

IP: 192.168.1.88

Subnet Mask: 255.255.255.0

Gateway: 192.168.1.1

Preferred DNS: 202.96.134.133

Alternate DNS: 8.8.8.8

## 6.6 Face recognise parameter setting

Enable

Time 1  0 : 0 -- 23 : 59

Time 2  0 : 0 -- 23 : 59

Sensitivity  9

Snapmode  ▾

Capturetimes  ▾

EveryNthFrame  ( 1~1500 )

Face recognition maximum pixel  ( 300~500 )

Face test minimum pixels  ( 0~500 )

Min pixel  ( 30~300 )

Face scene  ▾

FaceTrack  ▾

FTPUpload  ▾

Image Type  ▾

FaceQuality  ( 1~100 )

Human  ▾

Live detection  ▾

Function First  ▾

Save

### 1. Enable

This item used to enable face recognition algorithm. Only when the open, face recognise and capture can be performed;

### 2. Arming time

The user can set the two alarm time period.

### 3. Sensitivity

The setting range is 0 ~ 10. The sensitivity is higher that captured picture will be poorer.

### 4. Snapmode

The access control device defaults is "single mode"

Single mode: used with "interval frames", the default capture: 8 times, and interval frames : 5 frames

**Note:** Trial scene access control and gate. When multiple people pass the gate, only the front one (the face pixel in the picture is the largest) will be captured. According to the set interval frames, one face photo will be captured and uploaded to the FTP server. There is only one face frame in the picture.

### 5. Maximum and minimum pixels for face recognition

① The maximum pixel setting range for face recognition: 300 ~ 500.

② Face recognition minimum pixel setting range: 30 ~ 300.

③ When the pixels of the face in the picture are less than 150 (the smallest pixels for face recognition), can't capture;

### 6. Face scene

This parameter setting is used to adopt different face exposure strategies for different application scenarios. There are two modes: Conventional scene: used in normal environment; lobby scene: suitable for backlight environment.

### 7. Face tracking

This parameter is used to overlay the face tracking .

### 8. Living detect

This parameter is used for living detect.

## 6.7 Detection settings

### 1. Recognize mode

User can choose different recognize modes according to application,  
1 Face detect 2 Temperature detect 3 Face detect+ Temperature detect;  
Please ignore other recognize modes for these four devices.

### 2. Mask detect

You can choose the close or open for mask detection.  
If the visitor does not wear a mask by if select opening, the device  
will sound a warning prompt;

### 3. Temperature threshold

The temperature threshold can be set, and the default value is 37.3 °C.  
User can be adjust.

Alarm Switch <input checked="" type="checkbox"/>	Whitelist alarm <input checked="" type="checkbox"/>	VIP List <input checked="" type="checkbox"/>	Non-White list alarm <input type="checkbox"/>
IO Output <input checked="" type="checkbox"/>	Continuous output <input type="button" value="v"/>	Alarm output <input type="text" value="1"/> S	Type <input type="button" value="NO"/> <input type="button" value="v"/> *
Recognize Mode	Single recognize mode <input type="button" value="v"/>		
Comparison similarity	<input type="text" value="75"/> (1-100)	Temperature detect <input type="button" value="v"/>	
ID similarity	<input type="text" value="60"/> (1-100)	Face detect	
Matching mode	Temperature detect <input type="button" value="v"/>	Temperature detect	
Mask detect	Open <input type="button" value="v"/>	Face detect + Temperature detect	
Temperature correction	Intelligent Algorithm <input type="button" value="v"/>	compensated temperature	<input type="text" value="0.0"/> (0°-1° )
Abnormal temperature opens the door	Close <input type="button" value="v"/>		
Temperature threshold	<input type="text" value="37.3"/> (1-100)		
Temperature unit	Celsius <input type="button" value="v"/> → 1.Celsius 2.Fahrenheit		
Time 1	<input checked="" type="checkbox"/> <input type="text" value="0"/> : <input type="text" value="0"/> -- <input type="text" value="23"/> : <input type="text" value="59"/>		
Time 2	<input checked="" type="checkbox"/> <input type="text" value="0"/> : <input type="text" value="0"/> -- <input type="text" value="23"/> : <input type="text" value="59"/>		

Save

Reply defaults

## 6.8 Access control

### 1. Weigand output

Weigand output include close, WG26, WG34.

### 2. White light control

There are 4 light control modes. always on, time control, always off,  
Turn off screen display after no one.

### 3. Screen display mode

There are 2 display modes. Always display, Turn off screen display  
after no one.

Note: The white light is controlled by motion detect.  
When there is a motion detect, the white light is on.  
After 10 seconds without alarm, the white light off and the screen off.

## 6.9 RTSP, HTTP upload, FTP

Users can connect to NVR through RTSP settings.  
Upload some information to the set HTTP address.  
User can also upload some information to the set FTP address.

Enable <input checked="" type="checkbox"/>
Enable Authentication <input type="checkbox"/>
Packet Size <input type="text" value="1460"/>
Port <input type="text" value="554"/>
Communicate <input type="button" value="v"/>
Multicast Server Address <input type="text" value="239.0.0.0"/>
Main Stream Multicast Video Port <input type="text" value="1234"/>
Main Stream Multicast Audio Port <input type="text" value="1236"/>
Sub Stream Multicast Video Port <input type="text" value="1240"/>
Sub Stream Multicast Audio Port <input type="text" value="1242"/>
Onvif PassWord Enable <input type="checkbox"/>

Save

## 6.10 List management & Attendance

1. Users can add lists or bulk import some information about employees.

The screenshot shows the top navigation bar with 'Face Recognize', 'Config', 'List', 'Comparison', and 'Attendance' tabs. The 'List' tab is active. On the left, a sidebar menu has 'List management' and 'Batch Import' (circled in red). On the right, there are buttons for 'Bulk import', 'Refresh', and 'Bulk Import' (circled in red).

2. Click <Search> to check the attendance list.

Set Time	Sunday	go to work	06:00 - 09:00	off duty	18:00 - 23:59	Advanced	
Working days setting							save default
2020- 5 - 3 - 2020- 5 - 3		Name	number	Attendance status	query type		Search
Routing Mac	name	Serial number					Detailed situation

3. Click <Search> to check the attendance list in the <Comparison>. You can view visitor information from the device, including whether the visitor is wearing a mask, body temperature, and photos.

The screenshot shows the top navigation bar with 'Face Recognize', 'Config', 'List', 'Comparison', and 'Attendance' tabs. The 'Comparison' tab is active.

### Face recognize

Condition							
2020- 5 - 2 0 :0 - 2020- 5 - 3 23 :59		owner		Name	numbe		Search
Routing Mac	name	Serial number	list	body temperature	time	IC	Detailed situation
	-	-	Guest	36.69	2020-05-03 10:23:03		Mask:Have,body temperature:Normal
	-	-	Guest	36.65	2020-05-03 10:22:36		Mask:NO ,body temperature:Normal