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# **Instruction Manual**

RS AI-321

Stock No: 202-0774

# **Face Recognition Camera**











The Face Recognition Scanner supports 3 usage modes, and is equipped with different platform software for more powerful functions. RS Pro is not the provider of any of the software. Your use of any software in conjunction with the Face Recognition Scanner will be subject to the third party software provider's end user license terms.

- 1. Access Control & Attendance for Company | Equipped with Attendance & Access Control Management Platform Software for Company.
- 2. Access Control & Attendance for School | Equipped with Attendance & Access Control Management Platform for School.
- 3. Quick Screening | Used for quick temperature screening.

#### Notice:

- During installation and use, all electrical safety regulations of the country and the region of use must be strictly observed.
- When wiring, disassembling and other operations, please be sure to disconnect the power supply, do not operate with electricity.
- If the device emits smoke, produces unusual odors, or makes noises, immediately turn off the power and unplug it, and contact the dealer or service center in time.
- If the equipment is not working properly, please contact customer service, do not disassemble or modify the equipment in any way. (The company does not assume any responsibility for problems caused by unauthorized modification or maintenance)
- Do not drop objects on the device or vibrate the device vigorously to keep the device away from magnetic interference.
- Avoid installing the device where the surface vibrates or is vulnerable to shock.
- Avoid installing the device at the air outlet of the air conditioner or in a place with large airflow fluctuations.
- Try to ensure that the equipment is installed vertically.
- Please do not use the device in high temperature, low temperature or high humidity environment.
- Please do not aim the lens of the device at strong light objects such as the sun, incandescent lamp, etc., otherwise it will cause lens damage.
- Avoid placing the device in direct sunlight, poorly ventilated locations, or heat source accessories such as heaters or heaters.
- Biometric products cannot be 100% suitable for any anti-counterfeiting environment. High security level places, please use combination authentication.



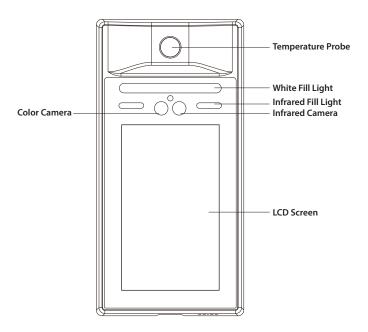


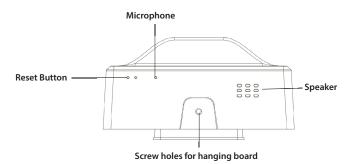
# Face Recognition Camera

- Do not touch the temperature probe with your fingers or blow the probe.
- Please make sure no hair, sweat, or hat cover your forehead before measuring temperature.
- If the forehead is cold, wait for the forehead to become warm before taking the temperature measurement. Such as: after washing the face, after applying ice, after entering the room from the outside in winter.

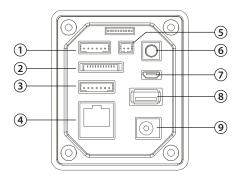
# 1. Product Appearance

2





# 2. Interface Instruction



#### 1. 6PIN Door Button, Door Sensor, Alarm Interface

1	2	3	4	5	6
5V	GND	NC	Door Button	Door Sensor	Alarm

### 2. 11PIN Reserved IO

1	2	3	4	5	6	7	8	9	10	11
	PWRON	107	GND	3.3V	106	105	104	IO3	102	101





## 3. 7PIN 12V Power Supply, Relay Interface

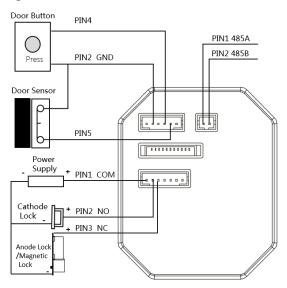
1	2	3	4	5	6	7
COM	NO	NC	GND	GND	12V	12V

- 4. Ethernet port
- 5. 2PIN 485 Interface

1	2		
485A	485B		

- 6. Tamper key
- 7. Micro USB Port
- 8. USB-A Port
- 9. 12V Power Adapter Socket

# 3. Wiring Instruction





# **4. Technical Specifications**

4. Technical Specifications					
Temperature measureme	ent module parameters				
Measuring range	32°C~45°C/ 89.6°F~113°F				
Measurement accuracy	±0.5°C/ ±0.9°F				
Measuring diatance	20~50cm				
Measure time	0.5s				
System hardware parameters					
Processor	4-core A7				
Operating system	Android 8.1				
Memory size	1GB LPDDR3				
Storage size	16G EMMC				
Cameera Parameters					
Resolution	Color 200W (1920*1080) Infrared 130W (1280*960)				
Imaging device	Color AR0230 Infrared AR0130				
Lens	2.9mm				
Recognize height	1m~2m				
Recognition distance	0.3m~1.2m				
Angle of view	Horizontal: 89° Vertical: 57° Diagonal: 98°				
Face angle	±30°				
Minimum illumination	Color ≥0.01LUX at F1.2, Infrared:≥0.01LUX at F1.2				
signal to noise ratio	Color ≥4dB, Infrared:≥44dB				
Wide dynamic range	Color ≥105dB, Infrared:≥83.5dB				
Interface parameters					
Network interface	1 RJ45 10M/ 100M adaptive Ethernet port				
USB interface	1 USB interface				
Wireless connection	WiFi+BLE4.0				
RS485 interface	1 RS485 interface				
Relay interface	1 relay interface				
Fire alarm door check button	1 fire alarm door check button				
IO reserved	1 11pin terminal				
Power supply	DC12V/ 3A				

Smart functions					
Face recognition capacity	50000 people				
Offline record	100000				
Recongition accuracy	99.83%				
Face liveness detection	Support binocular near infrared live detection				
Face recognition speed	1080P @ 25fps, support face detection tracking, optimization				
Face liveness detection speed	About 200ms				
Occlusion adaptation	About 400ms				
Basic parameters					
Screen size	7 inch				
Product size	268*135*45 (length*width*height)				
Operation humidity	10%~90%				
Operation temperature	10~40°C/ 50~140°F				

# 5. Access Control & Attendance for Company

At this mode, User need to login to the Attendance & Access Control Management Platform Software for Company to add the device ID, import employees' information and their face photos and configure this device as an attendance device for employees. After the configuration is complete, the user can use the device to synchronize data. After synchronization is complete, face recognition/temperature measurement/access control/attendance can be started.

For detailed instructions, please refer to the guidance of the Face Recognition Temperature Monitor and the instructions of the Attendance & Access Control Management Platform Software for Company.

### 6. Access Control & Attendance for School

At this mode, User need to login to the Attendance & Access Control Management Platform Software for School to add the device ID, import students and teachers' information and their face photos and configure this device as an attendance device for them. After the configuration is complete, the user can use the device to synchronize data. After synchronization is complete, face recognition/temperature measurement/ access control/attendance can be started.

For detailed instructions, please refer to the guidance of the Face Recognition Temperature Monitor and the instructions of the Attendance & Access Control Management Platform Software for School.



# 7. Quick Screening

At this mode, fast temperature screening and automatic recording of data and face photos can be performed. User need to download the Temperature Cloud APP to add the device ID. Scan the OR code as follow to download the APP. The APP software is provided to you by a third party (CEM). RS Pro is not liable for any software.

Face Recognition Camera



**Temperature Cloud APP** 

8. Scan the QR code as follow to get the guidance of Face Recognition Scanner and the instructions of the Attendance & Access Control Management Platform Software. The Attendance and Access Control Management Platform Software and the Ouick Start Guide are provided to you by a third party (CEM). RS Pro is not liable for any of these.

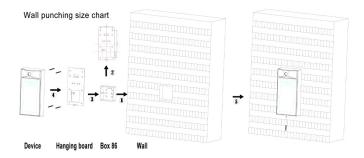




### 9. Install Instruction

Box 86 for Wall-Mounted Installation

- 1. Install stickers on the wall, and make holes in the wall according to the height and position of the stickers to install Box 86.
- 2. Align the outlet of the hanging board with the center of the Box 86, punch four mounting holes on the wall according to the punching size diagram, and insert four wall plugs.
- 3. Use four KA 4\*25 screwsto fix the hanging board to the wall. Connect the cable of the external device to the cable, arrange the cables, and determine the cable outlet method.
- 4. Hook the device from top to bottom on the mounting plate, and make sure that the upper part of the hanging plate is inserted into the groove on the back of the device.
- 5. Fix the device and the hanging plate from the bottom with a screw.





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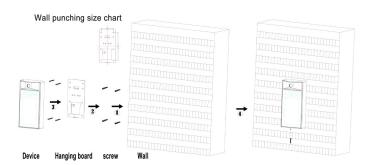
Wall punching size chart

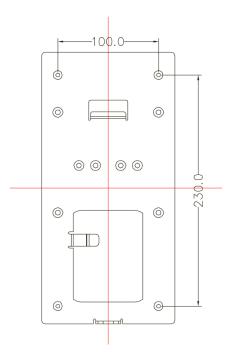


# Face Recognition Camera

### **Wall-Mounted Installation**

- 1. Attach an installation sticker to the wall, make holes in the wall according to the height and position of the sticker, insert a wall plug, and install 4 hex screws.
- 2. Fix the hanging board on the wall with four KM 4\* 10 screws.
- 3. Hook the device from top to bottom on the hanging board, and make sure that the upper part of the hanging board is inserted into the groove on the back of the device.
- 4. Use a screw to fix the device and the hanging plate from the bottom.





Wall punching size chart

