

Shenzhen Rakinda Technologies Co.,Ltd.	File No.:	Version:	
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File Name	Face Recognition Thermal Imaging Temperature Measuring Device F2-H Manual	Date	Apr., 23, 2020

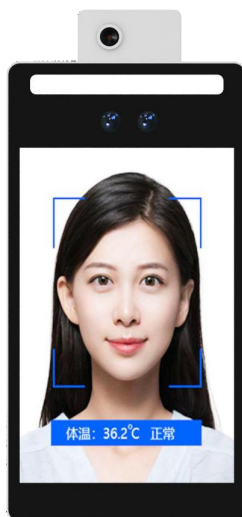
Face Recognition Thermal Imaging Temperature Measuring Device

F2-H Manual



Face Recognition Thermal Imaging Temperature Measuring Device

F2-H Manual



Application Field

F2-H is suitable for office areas, hotel, office buildings, schools, shops, communities, public services and management projects.

Features

- Dynamic detection, solve the deception of photos on various carriers
- Infrared mode at night, RGB dual fill light
- Support external access control card reader, QR code scanner, ID card reader
- Support RS232 serial port, Wiegand 26/34 output, support relay, exit switch, door magnetic output content
- Support local storage of 500,000 historical records
- Support 20,000 face library
- Support public network and local area network deployment

- Support HTTP interface connection;
- Support display configuration;
- Support identification distance configuration

Product Specification

Face Recognition Temperature Measure all-in-one Machine			
Product model		F2-H	
Characteristics	Main function	Face recognition temperature measurement	
	Use environmen	Indoor , semi-outdoor	
	Color	Silver	
Camera	Type	RGB	Infrared
	Resolution	2 million pixels	2 million pixels
	Aperture	F2.8	F2.8
	Focal length	3.18mm	3.18mm
	Software Dynamic	automatic	automatic
	Vertical wide angle	84°	84°
	Horizontal wide angle	54°	54°
	Infrared supplement light	Support	
	White supplement light	Support	
Core parameters	Android	Android7.1	
	CPU	Quad-core, 1.8GHz	
	storage capacity	RAM 2G ROM 8G	
Human-computer interaction	Monitor	8 inches, full viewing angle, 170 ° IPS LCD screen, resolution 800 * 1280	
	Touch screen	support	
	Face sensing module	support	
	Face temperature measurement module	support, Serial / I2C interface	
	Card reader	Support, Optional	
Communication	Ethernet	10/100 Ethernet	

method	WIFI	Comply with IEEE802.11b / g / n standard (2.4G)
Identification Method	Face	Support
	IC card	Support, optional
Input \ output interface	RJ45 interface	Support 10/100 Mbps
	Power supply interface	DC12V-2A
Power	Adapter	DC12V-2A
Environmental requirements	Operating temperature	-20℃~60℃
	Working humidity	20%~90% (non-condensing)
	Static protection level	IEC61000-4-2, LEVEL3
External Interface Definition		
Type	Interface	Explanation
USB	USB 2.0	Support
Ethernet port	RJ45	10/100 Ethernet
Relay	NC COM NO	Relay normal off/Common/normal on.Usually,door lock supply is positively connected to the COM port,and then according to the door lock type,relay power negatively connected NO port or NC port. Note: Maximum load of relay contact is 2A
Gate sensor	IN GND	Check door open/close status, input
Exit button	PUSH1 GND	Press the button,door opening control signal,input
Serial	RX TX	RS232
Output power	5V GND	Support device external output 5V
Wiegand	WG_D1 WG_D0 GND	Wiegand output interface, support 26bit / 34bit protocol
Input power	GND 12V+	Power input: 12V DC
Temperature measurement module	Operating temperature	0℃ ~ +55℃
	Storage temperature	-20℃ ~ +65℃

	Power consumption	< 0.3w
Basic Parameters	Pixel	32*32 Real-time temperature output
	Measurement accuracy	± 0.5°C
	Measuring distance	0.3 ~ 1.0m
	WIFI	2.4G 802.11b/g/n
	Bluetooth	BluetoothH4.0

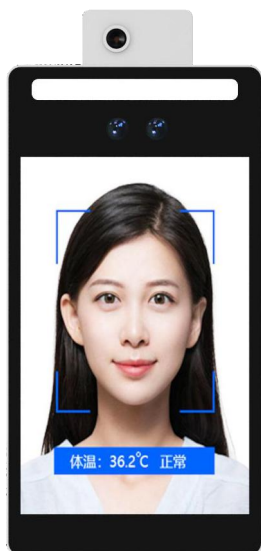
Attention:

The following only describes the serial temperature measurement module

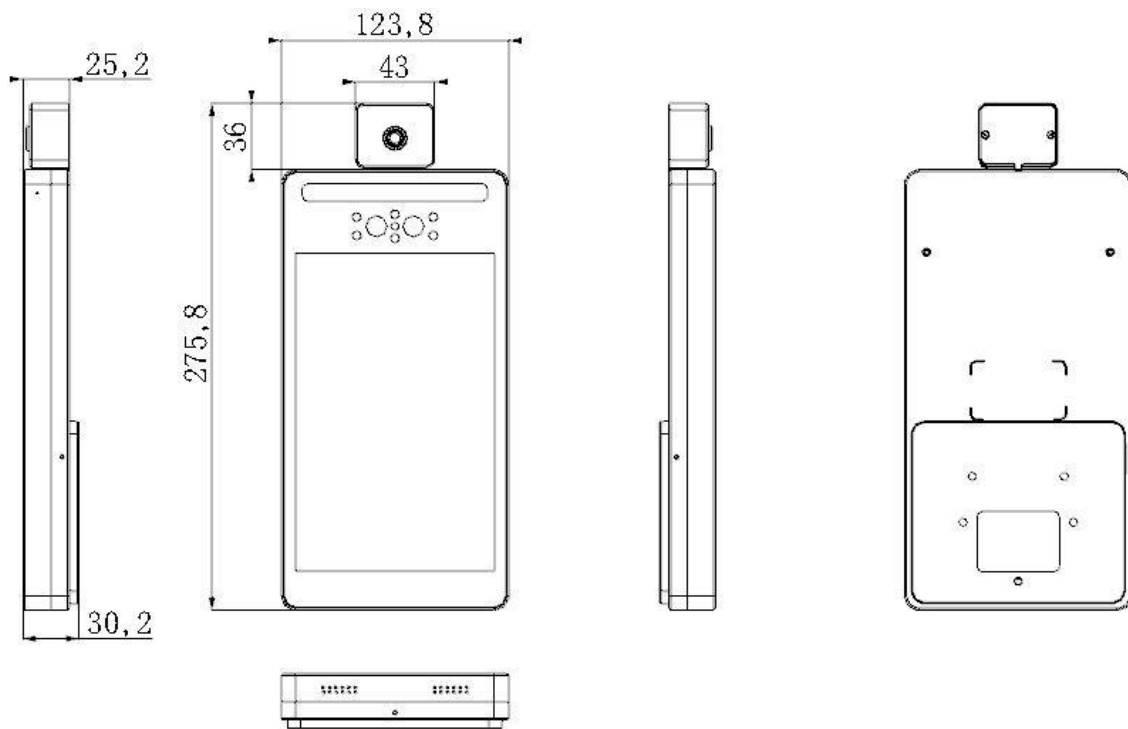
No description about I²C interface temperature measurement module, the shape is rectangular forbidden to use under strong light and direct sunlight;

Suggest indoor use, or semi-outdoor environment, outdoor temperature measurement is affected by the external environment;

Wall Mounting Type Product Picture



Wall-mounted version shape and size (275.8mm*123.8mm*30.2mm)

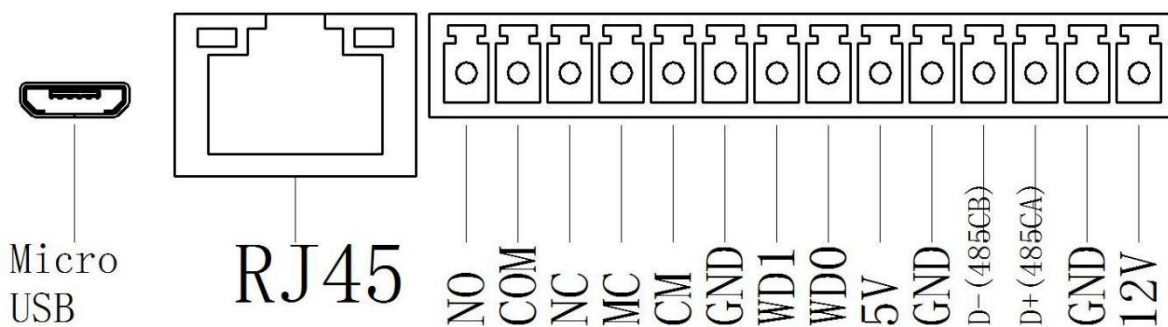


Indication of Appearance and Wiring Instructions

The front part of the access control machine



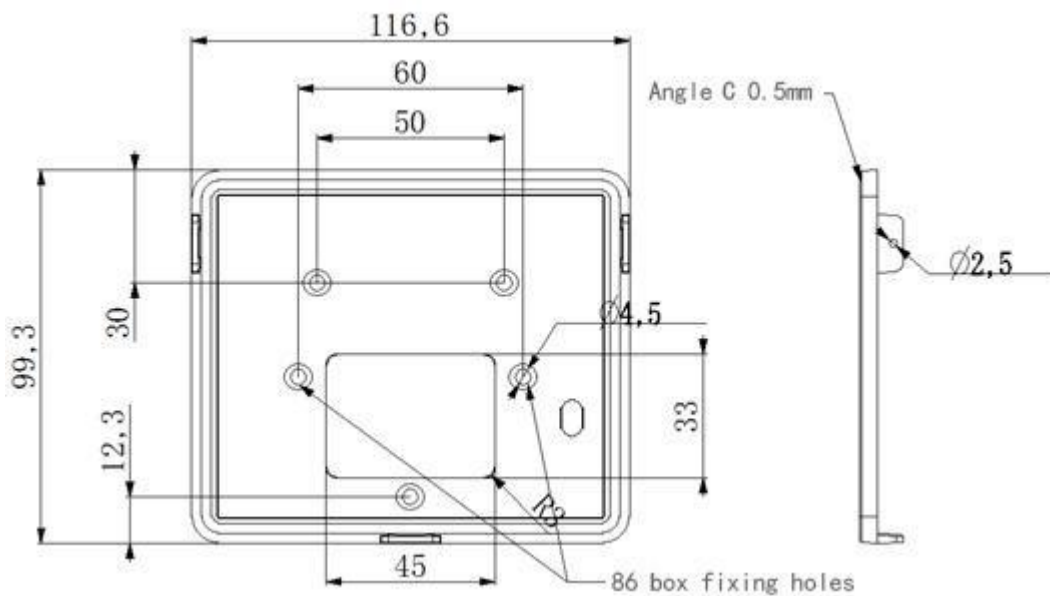
Access control wall-mounted version-wiring instructions



Installation Steps

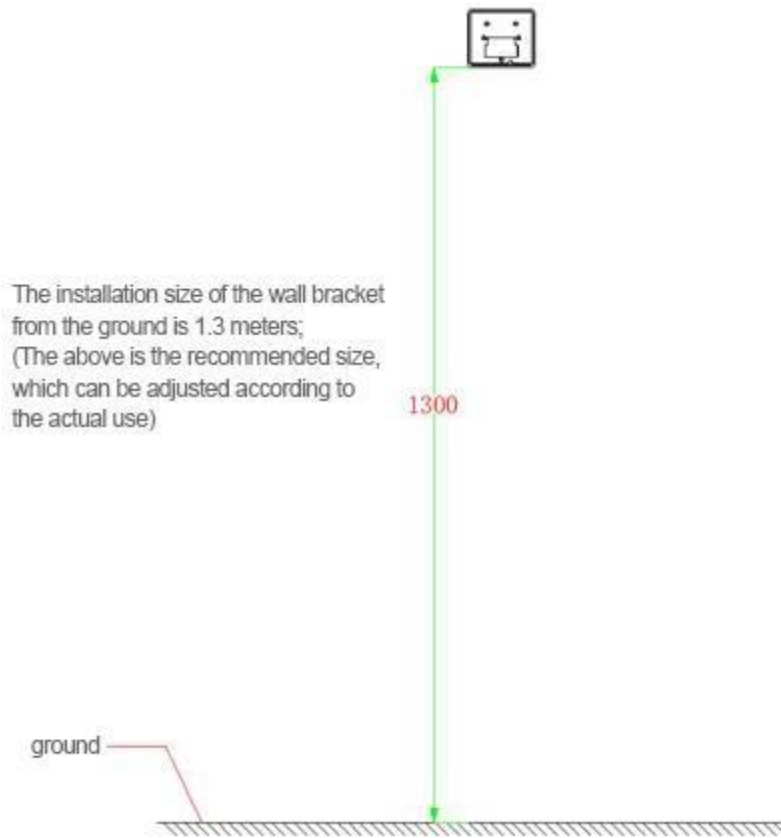
Installation of access control wall-mounted version

Description of the size of the wall bracket;

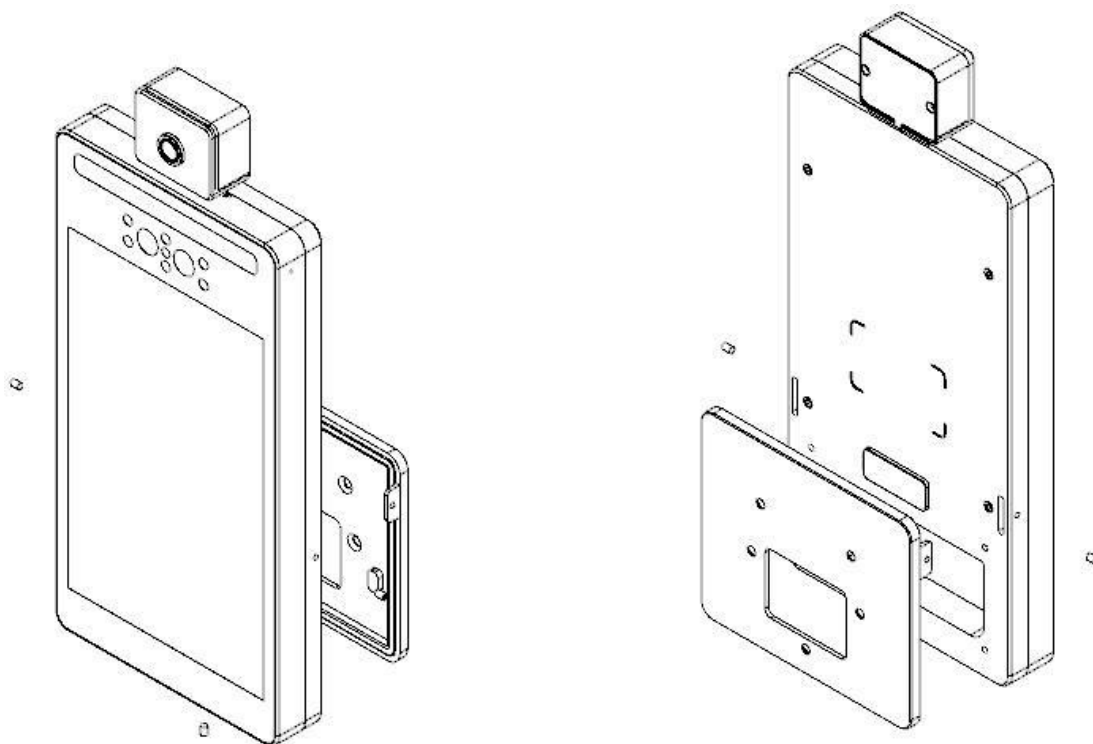


Note: The product packaging comes with 86 boxes of machine screws and plastic expansion screws;

Description of the installation location of the wall bracket;



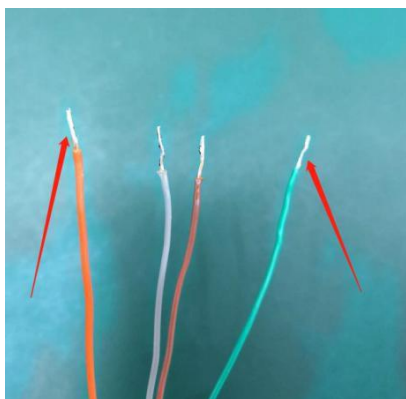
Fixing method of hanging bracket and product terminal



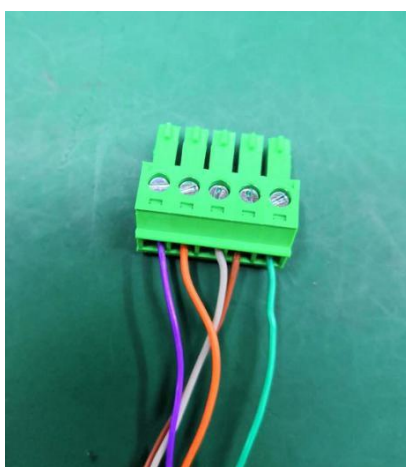
Note: Use three set screws M3 * 5 to fix the terminal. There are matching screws in the package.

Wiring operation instructions (take the turnstile wiring as an example, other wiring can take this as reference)

(1) Strip the signal wire (use a wire stripper and other tools) to expose the metal wire, about 5mm, if possible, add solder, as shown in the figure;



(2) Loosen the screws at each corresponding interface, insert the metal wire end into the hole, tighten the screws to fix, and do a tensile test after locking to ensure stability, as shown in the figure;



Packing and usage instruction

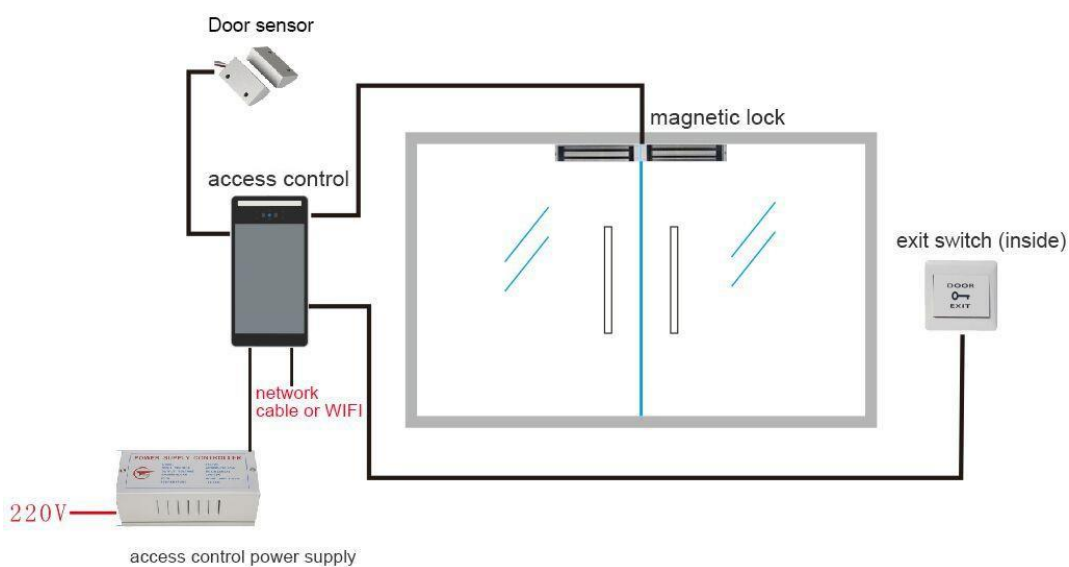
Materials and tools list

Serial number	Material / tool name	Quantity	Explanation
1	Host and its own accessories	1	Comes with accessories including: 12V adapter, wall bracket, expansion tube, self-tapping screws, allen wrench, allen screws, etc.
2	Exit switch (optional)	1	Use when exit (no need for more if it already exists)
3	Electromagnetic lock (optional)	1	Open the door after power off, and lock when power on (no need for more if it already exists)

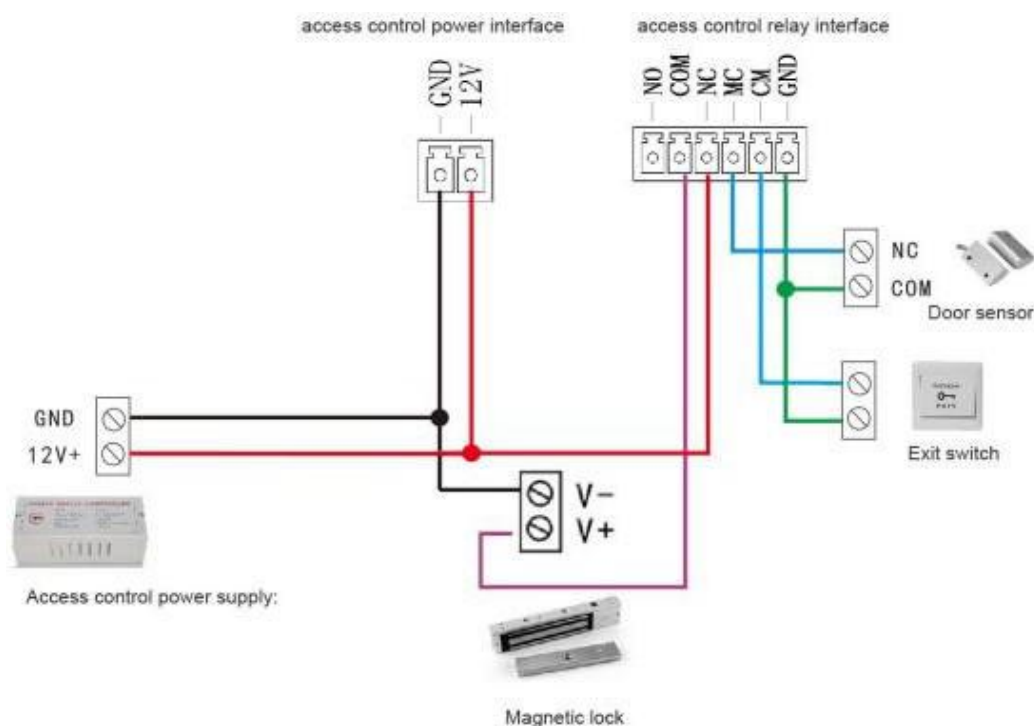
4	Magnetic lock power supply (optional)	1	Supply power to electromagnetic lock, and also can supply power to Uface host at the same time (If you already have it, you don't need more)
5	Network cable (optional)	Several	Used to arrange Ethernet and other wiring
6	Network cable pliers, network tester, diagonal pliers, electrical tape, wire buckle	Several	Used to arrange Ethernet and other wiring
7	Drilling tools	Several	Used for equipment installation and wiring

Magnetic Door Wiring

1. Schematic diagram of magnetic door system installation;

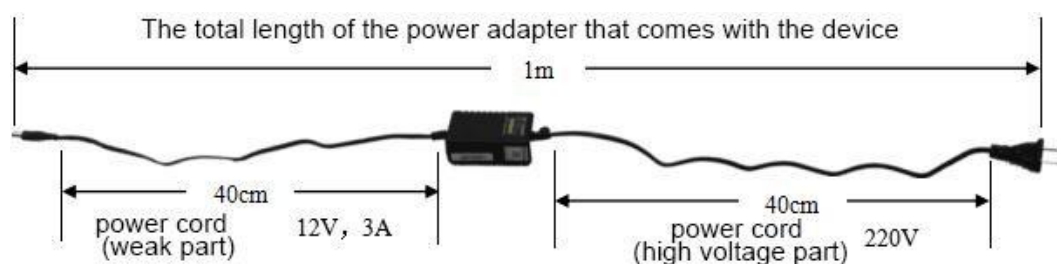


2. Schematic diagram of magnetic door system wiring:




Installation Notice:

1. During wiring, if the 12V power supply line of the host does not use the "special power supply extension line" and the distance is long, the cable equivalent resistance will be too high, then it is possible to occur: terminal insufficient voltage ($\leq 11V$), repeated restart of the host, and crash phenomenon.
2. The device has a built-in relay device. The maximum load voltage of the magnetic lock (or other access control unit) cannot exceed DC12V, and the maximum current cannot exceed 3A. If it exceeds, it will break the relay and cause the door to fail to open.
3. The device comes with a power adapter as shown in the figure, with a total length of 1 meter. Its weak current part is 40cm and the high voltage part is 40cm.



- The extension of the power cord (weak current part) should not exceed 3 meters, otherwise it will cause insufficient power supply to the host, and abnormal phenomena such as repeated restarts and crashes. If the power supply is far away from the device, the power cord (strong electric part) can be extended.。
- If you use other adapters, such as 9V and 1A, insufficient voltage and low current will cause the device to restart repeatedly.
- The cable used should not be too thin (such as a thin network cable), it is recommended to connect multiple strands of the same cable in parallel or use thick copper cables to ensure that the voltage > 11V

 Note: If using a network cable, please use 4 strands of network cable as the positive pole and 4 strands as the negative pole.

- If it is not clear how to extend, please contact the supplier to replace the "dedicated power extension cable".