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Special statement

Please take the product in kind as the criterion, the manual is for reference only.
The manual is for reference of several types of products. Each product is not listed separately. Please operate according to the actual products.
The manual will be updated regularly according to product changes. Updated content will be added to the new version of this manual without prior notice.
If the user does not follow the instructions in the manual, any loss caused thereby shall be borne by the User.

FCC Statement

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.

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

RF Exposure Statement
The distance between user and products should be no less than 20cm.

Gateway Instructions

CAUTION:

- Please use in combination with supporting accessories, such as antenna, power supply, battery, etc.
- Equipment supply voltage must meet the equipment input voltage requirements.
- The product contains batteries, please be sure to use the batteries as required, otherwise it may cause fire, explosion or combustion of the batteries. Only the same type of battery can be used when replacing the battery.
- Please conduct wiring operation in the state of power off and shutdown to avoid the risk of electric shock.Electrical wiring assemblies (power cords) recommended for use in this area must be used within their rated specifications.
  If you have any questions, please contact the after-sale service personnel in time.

The crates

When opening the outer packing box, please check the appearance of the equipment for any obvious damage and confirm the list of items.

The name of the accessories	Qty
The gateway	1
GSM / 4 g antenna	1
433 MHZ antenna	1
M8*40 expansion screw set	5

The interface is introduced

The user can observe the flashing frequency of the indicator light to know the running status of the device.

Indicator light	color	Indicator light flashing frequency	Meaning of indicator light
Running light	green	destroy	Shutdown state
		One second on and one second off	The device attempts to connect to the network
		Three seconds bright and three seconds dark	The device is connected to the network.
		On for 0.5 seconds and off for 10 seconds	The device has successfully established a connection with the server
Paired indicator light	red	Long bright	It is successfully paired with the sensor

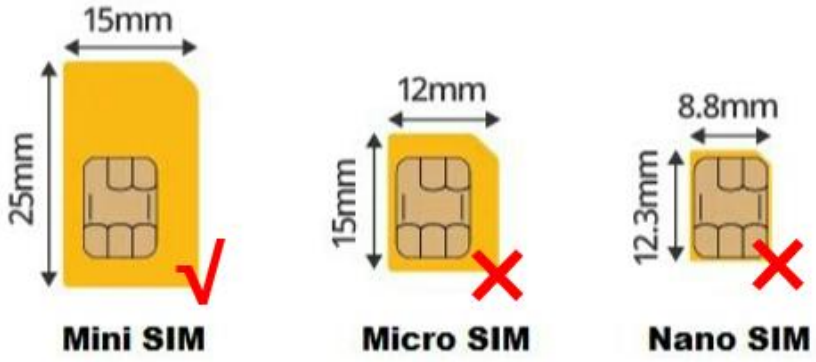
Install SIM card (optional)

The following installation schematic diagram is for reference only. Please refer to the actual product. The installation method is similar.

CAUTION:

To install THE SIM card, be sure to cut off the power supply of the gateway and confirm that the device is in the state of shutdown.

Preparation before installation

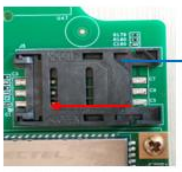
SIM Card type	 The gateway must use a Mini SIM card
SIM card flow	Not less than 100 MB/ month

Installation steps

1: Unscrew the cover

CAUTION:

The gateway must be powered off

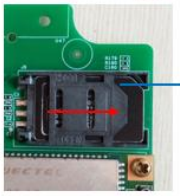


2: Push the SIM lid following the direction in the picture, and lift up to open

3: Install standard SIM card

CAUTION:

Be aware of the direction of the SIM card, the notch should be at where the red point is



4: Push back the SIM lid

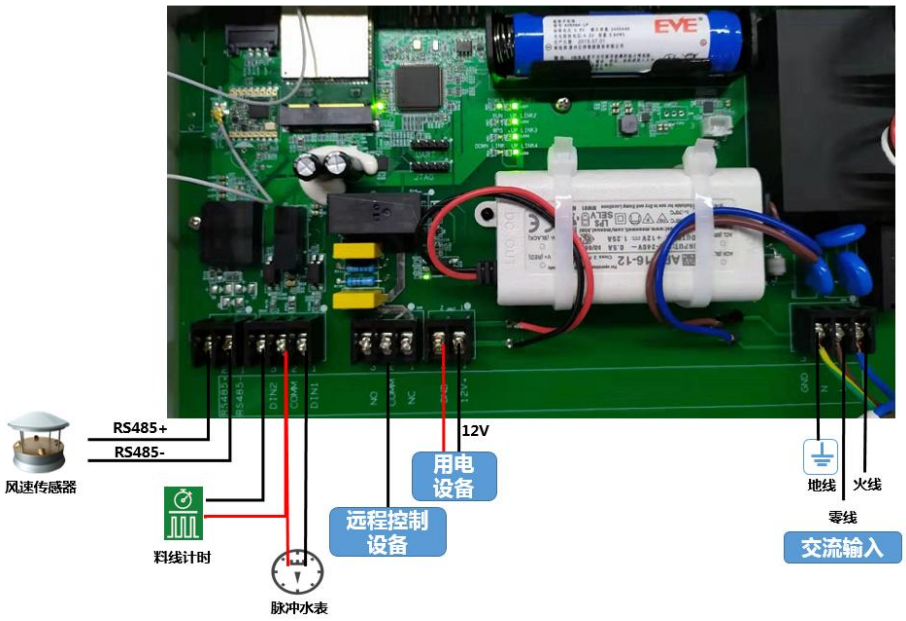
wiring

CAUTION:

- It is only operated by professionals. Unauthorized personnel are strictly prohibited to open it without permission.
- When wiring, be sure to disconnect the power supply of the gateway and confirm that the equipment is in the state of shutdown.

Step 1: Remove the six fixing screws on the gateway top cover and open the gateway top cover.

Step 2: Pass the cable through the waterproof connector and screw the phillips screwdriver on the corresponding terminal in the figure below:



Step 3: Tighten the waterproof joint.

Begin to use

CAUTION:

The gateway contains the battery, please use it for the first time or after a long period of idle before use, first connect the mains charging for 15 minutes, then start using.

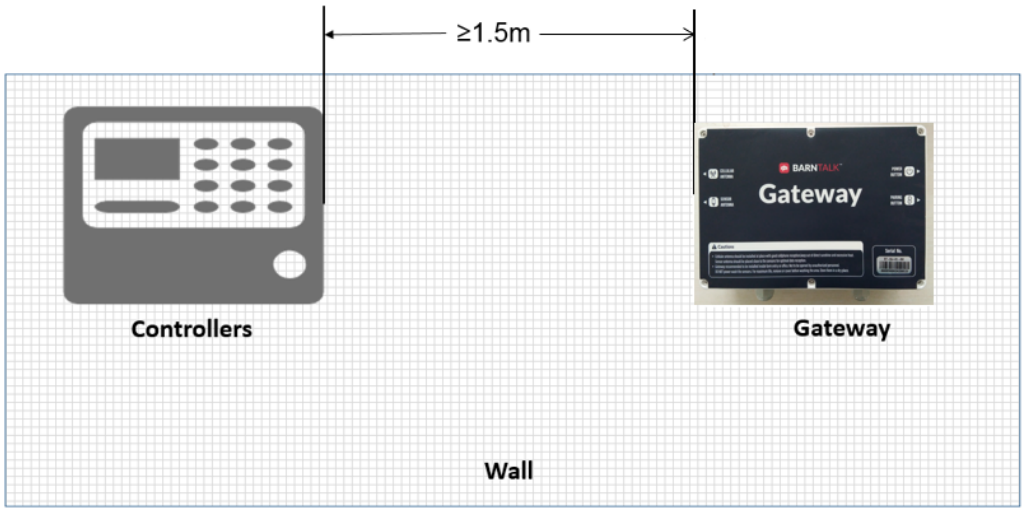
Step 1: Install the antenna and connect the power supply as follows.

Installation and fixation

It is recommended that the gateway be installed in the workroom or in the distribution room and the equipment be secured by 4 expansion screws.

CAUTION:

- Do not flush with water, and do not open it without authorization.
- Gateway should be installed in the work room or power distribution room, 4G antenna should be installed in the area with strong mobile phone signal, to avoid exposure to the sun, away from the heat source.
- To avoid signal interference, the gateway shall be installed at a distance of not less than 1.5m from any controller in the farm.



- The bottom of the antenna has magnets that can attach to metal objects.Please keep the head of the antenna away from the metal as far as possible and avoid shielding around, and keep a distance of more than 30cm between the two antennas.

Temperature sensor

Suitable for indoor temperature 1-5 and outdoor temperature sensor.

CAUTION:

- Be sure to use the battery as required or risk fire, explosion or combustion!
- Only the same type of battery can be used when replacing the battery.

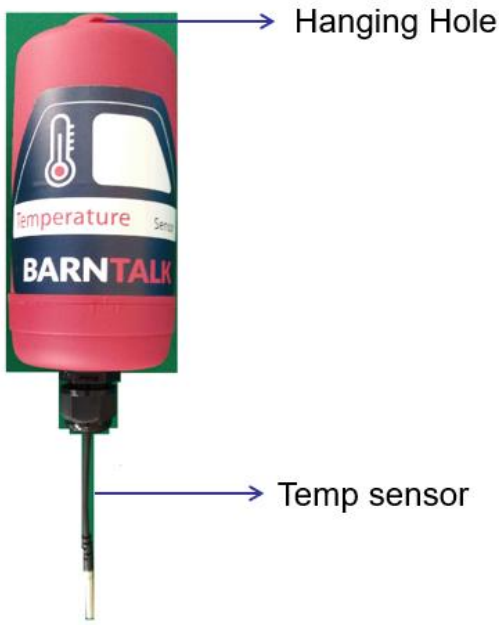
The crates

When opening the outer packing box, please check the appearance of the equipment for any obvious damage and confirm the list of items.

The name of the accessories	Qty
The sensor	1
Certificate of	1 piece

approval	

The interface is introduced



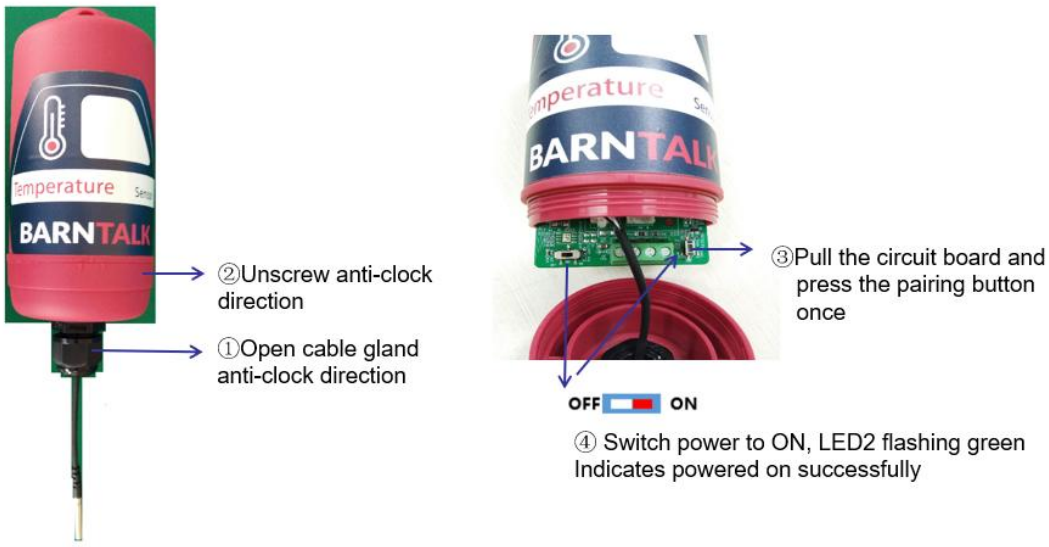
Understand the running status of the equipment by the flashing frequency of the indicator light.

Indicator light	color	Indicator light flashing frequency	Meaning of indicator light
Running light	green	destroy	Shutdown state
		flashing	The device attempts to connect to the network
Paired indicator light	red	Long bright	It is successfully paired with the sensor

Using the step

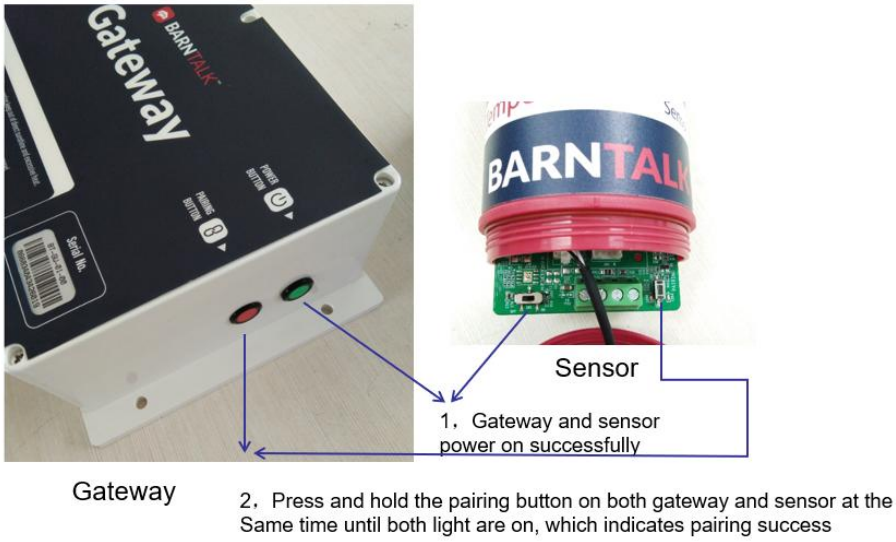
The first step is to turn on the device

According to the following diagram, turn on the power switch and the green indicator flashes once, and the boot is completed.



The second step is pairing the sensor with the gateway

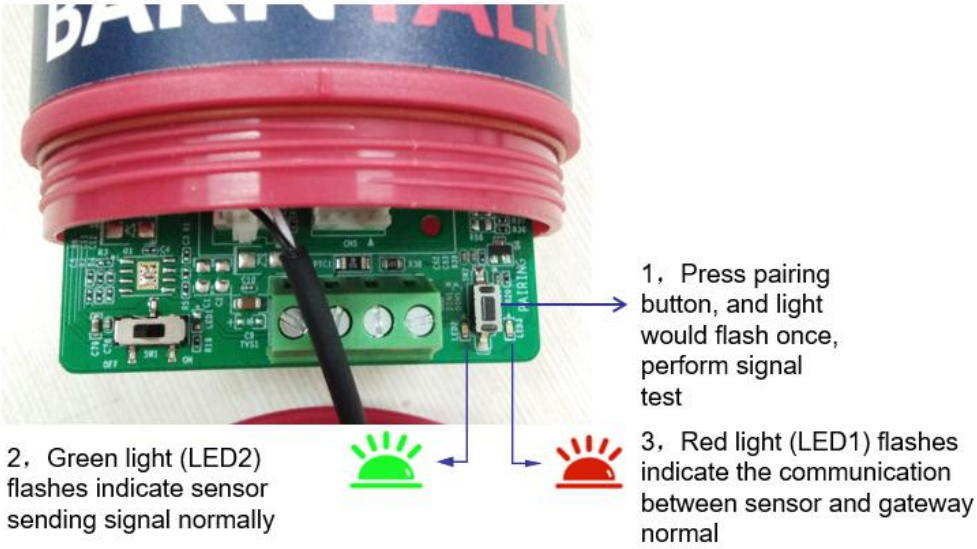
The sensor and gateway are on. Press and hold the red pairing button on the right side of the sensor and gateway at the same time. Hold the button for 10 seconds until the red pairing indicator of the two devices is on and the pairing is successful.



Step 3 Sensor and gateway communication check

Press the sensor pairing button and the green running indicator flashes once to indicate that the sensor is running normally. The red pair

indicator flashes again, indicating that the sensor and gateway communication is normal.



CAUTION：

Notes:

- Do not flush the sensor with water.
- To prevent condensation, remove the sensor after Posting and keep it properly.
- It is recommended that the sensor be disinfected by shining an ultraviolet lamp or wiping the surface of the device with alcohol.
- In order to avoid the injury of livestock and poultry to the equipment, it is recommended to install the sensor on the livestock and poultry back more than 20cm.

Humidity sensor

CAUTION：

- Be sure to use the battery as required or risk fire, explosion or combustion!
- Only the same type of battery can be used when replacing the battery.

The crates

When opening the outer packing box, please check the appearance of the equipment for any obvious damage and confirm the list of items.

The name of the accessories	The number of
The sensor	1
Certificate of approval	1 piece

The interface is introduced

Understand the running status of the equipment by the flashing frequency of the indicator light.

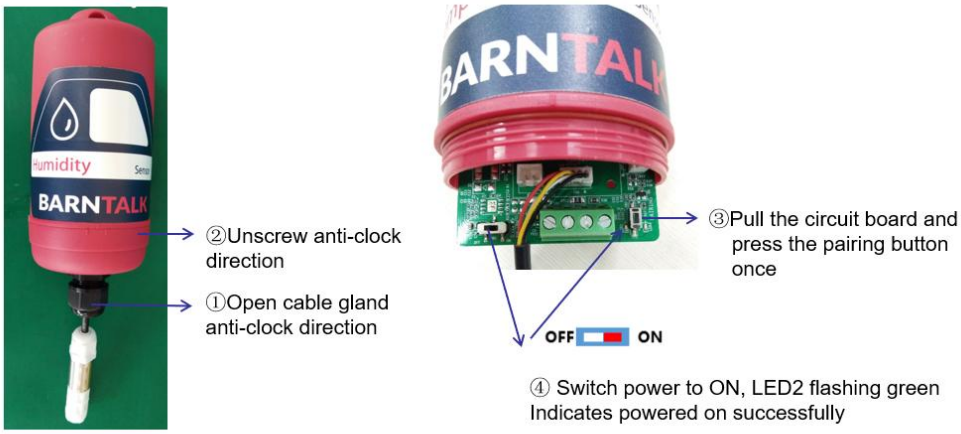
Indicator light	color	Indicator light flashing frequency	Meaning of indicator light
Running light	green	destroy	Shutdown state
		One second on and one second off	The device attempts to connect to the network
Paired indicator	red	Long bright	It is successfully paired with the sensor

light			

Begin to use

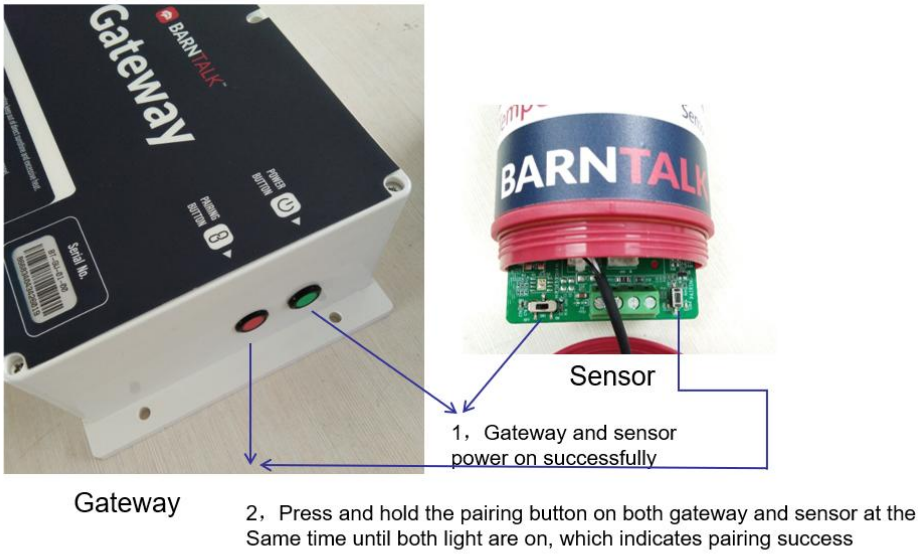
The first step is to turn on the device

According to the following diagram, turn on the power switch and the green indicator flashes once, and the boot is completed.



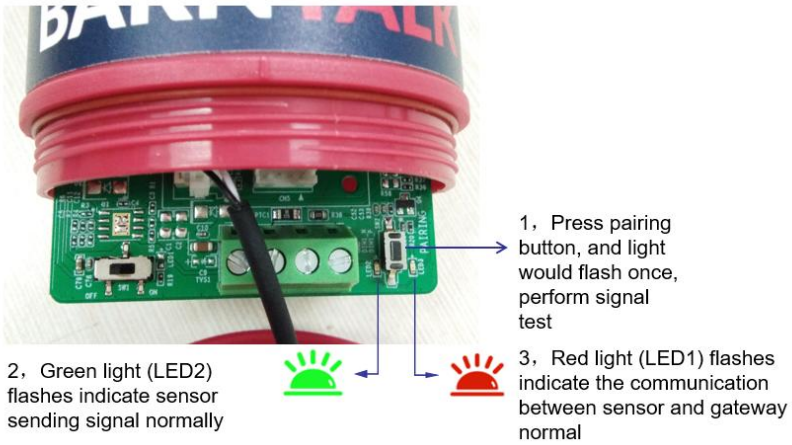
The second step is pairing the sensor with the gateway

The sensor and gateway are on. Press and hold the red pairing button on the right side of the sensor and gateway at the same time. Hold the button for 10 seconds until the red pairing indicator of the two devices is on and the pairing is successful.



Step 3 Sensor and gateway communication check

Press the sensor pairing button and the green running indicator flashes once to indicate that the sensor is running normally. Immediately after the red pair indicator flashes again, indicating that the sensor and gateway communication is normal.



CAUTION:

Notes:

- Do not flush the sensor with water.
- To prevent condensation, remove the sensor after Posting and keep it properly.
- It is recommended that the sensor be disinfected by shining an ultraviolet lamp or wiping the surface of the device with alcohol.
- In order to avoid the injury of livestock and poultry to the equipment, it is recommended to install the sensor on the livestock and poultry back more than 20cm.

Light sensor

CAUTION:

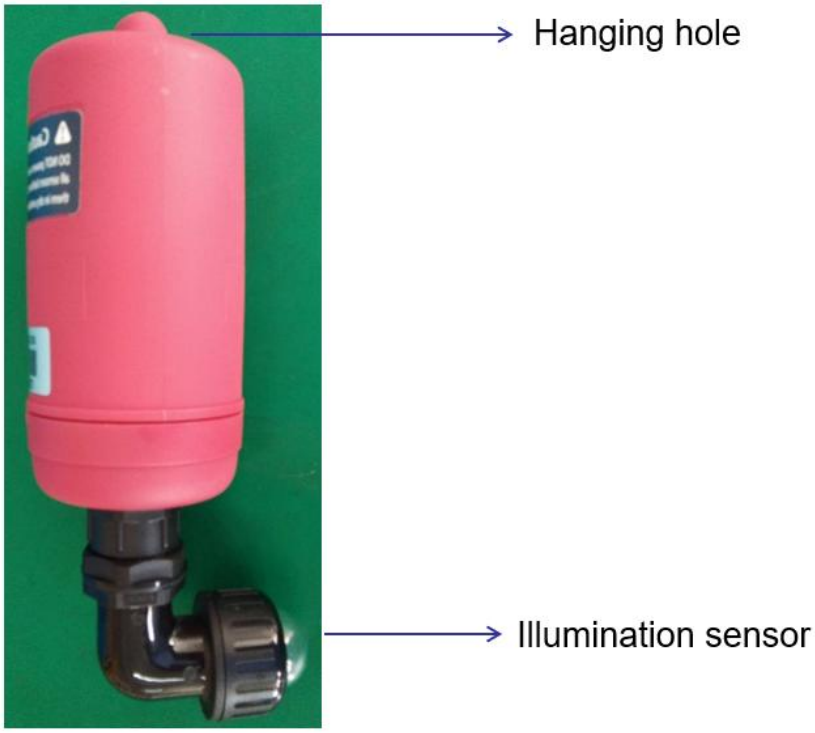
- Be sure to use the battery as required or risk fire, explosion or combustion!
- Only the same type of battery can be used when replacing the battery.

The crates

When opening the outer packing box, please check the appearance of the equipment for any obvious damage and confirm the list of items.

The name of the accessories	The number of
The sensor	1
Certificate of approval	1 piece

The interface is introduced



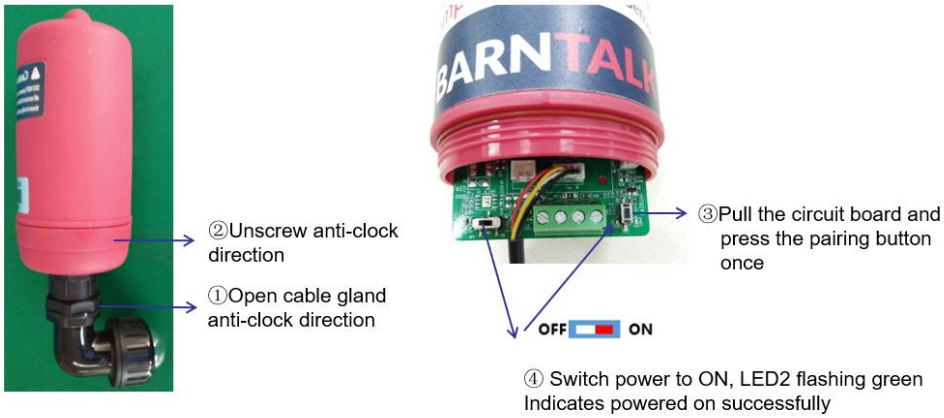
Understand the running status of the equipment by the flashing frequency of the indicator light.

Indicator light	color	Indicator light flashing frequency	Meaning of indicator light
Running light	green	destroy	Shutdown state
		One second on and one second off	The device attempts to connect to the network
Paired indicator light	red	Long bright	It is successfully paired with the sensor

How to use

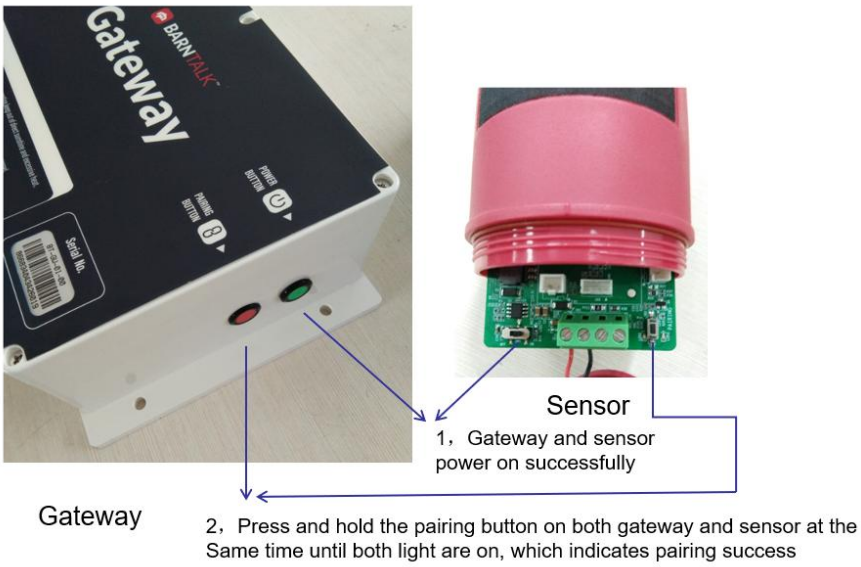
The first step is to turn on the device

According to the following diagram, turn on the power switch and the green indicator flashes once, and the boot is completed.



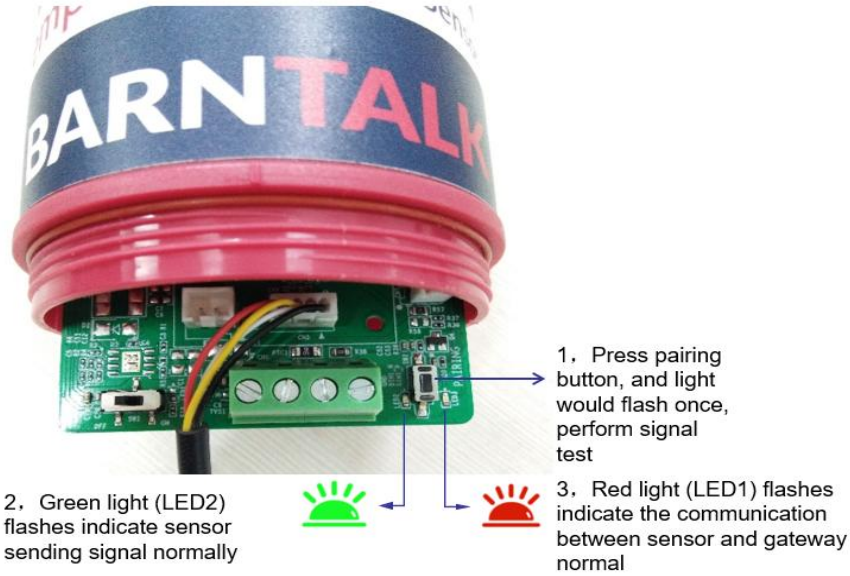
The second step is pairing the sensor with the gateway

The sensor and gateway are on. Press and hold the red pairing button on the right side of the sensor and gateway at the same time. Hold the button for 10 seconds until the red pairing indicator of the two devices is on and the pairing is successful.



Step 3 Sensor and gateway communication check

Press the sensor pairing button and the green running indicator flashes once to indicate that the sensor is running normally. Immediately after the red pair indicator flashes again, indicating that the sensor and gateway communication is normal.



CAUTION:

Notes:

- Do not flush the sensor with water.
- To prevent condensation, remove the sensor after Posting and keep it properly.
- It is recommended that the sensor be disinfected by shining an ultraviolet lamp or wiping the surface of the device with alcohol.
- In order to avoid the injury of livestock and poultry to the equipment, it is recommended to install the sensor on the livestock and poultry back more than 20cm.

Gas sensor

Suitable for carbon dioxide, ammonia and other gas sensors.

CAUTION:

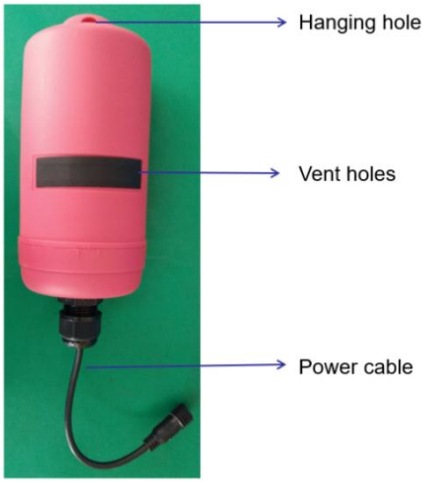
- Please use in combination with supporting accessories, such as antenna, power supply, battery, etc.
- Equipment supply voltage must meet the equipment input voltage requirements.
  Input voltage range: 12V-24V DC

The crates

When opening the outer packing box, please check the appearance of the equipment for any obvious damage and confirm the list of items.

The name of the accessories	The number of
The sensor	1
Certificate of approval	1 piece
DC waterproof joint	1

The interface is introduced



Understand the running status of the equipment by the flashing frequency of the indicator light.

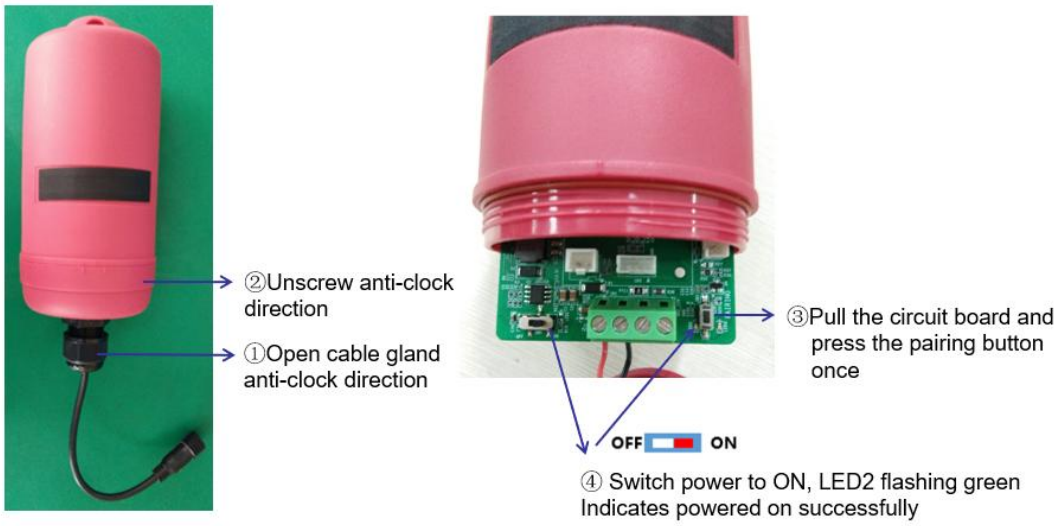
Indicator light	color	Indicator light flashing frequency	Meaning of indicator light
Running light	green	destroy	Shutdown state
		One second on and one second off	The device attempts to connect to the network
Paired indicator light	red	Long bright	It is successfully paired with the sensor

How to use

The first step is to turn on the device

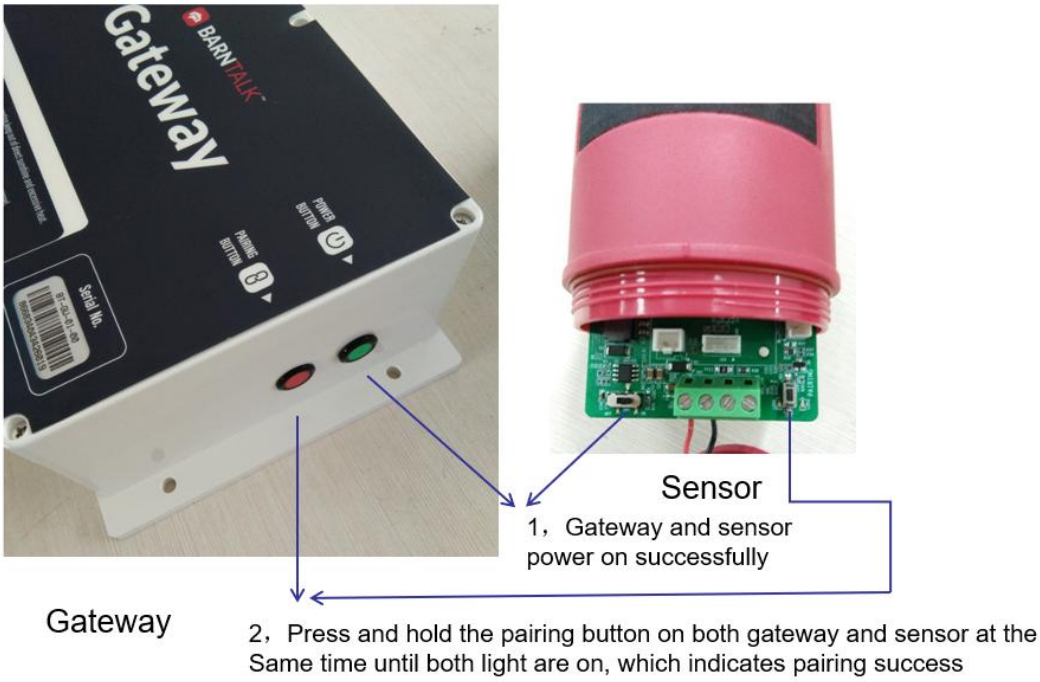
The device supports 12V-24V power supply. Connect the device to the power adapter or the internal 12V interface of the gateway:

According to the following diagram, turn on the power switch and the green indicator flashes once, and the boot is completed.



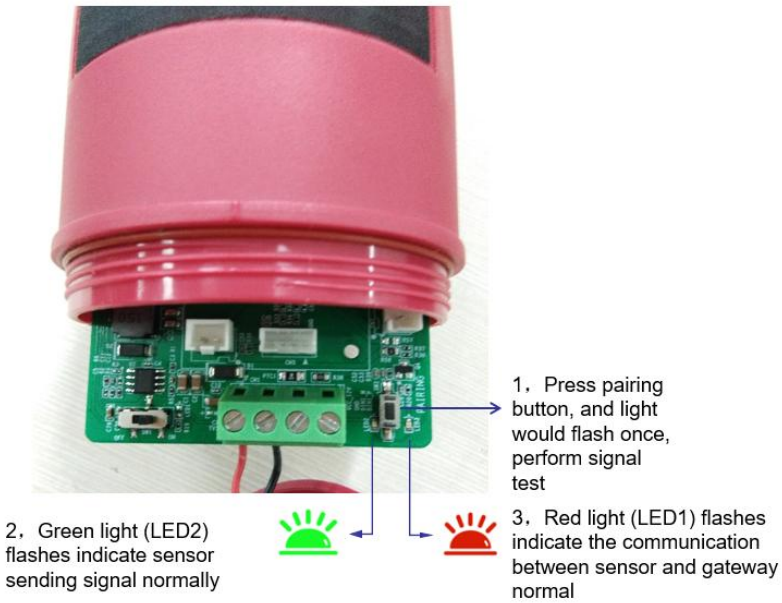
The second step is pairing the sensor with the gateway

The sensor and gateway are on. Press and hold the red pairing button on the right side of the sensor and gateway at the same time. Hold the button for 10 seconds until the red pairing indicator of the two devices is on and the pairing is successful.



Step 3 Sensor and gateway communication check

Press the sensor pairing button and the green running indicator flashes once to indicate that the sensor is running normally. Immediately after the red pair indicator flashes again, indicating that the sensor and gateway communication is normal.



CAUTION：

Notes:

- Do not flush the sensor with water.
- To prevent condensation, remove the sensor after Posting and keep it properly.
- It is recommended that the sensor be disinfected by shining an ultraviolet lamp or wiping the surface of the device with alcohol.
- In order to avoid the injury of livestock and poultry to the equipment, it is recommended to install the sensor on the livestock and poultry back more than 20cm.

Ultrasonic wind speed sensor

CAUTION：

- Please use in combination with supporting accessories, such as antenna, power supply, battery, etc.
- Equipment supply voltage must meet the equipment input voltage requirements.
  Input voltage range: 12V-24V DC

The crates

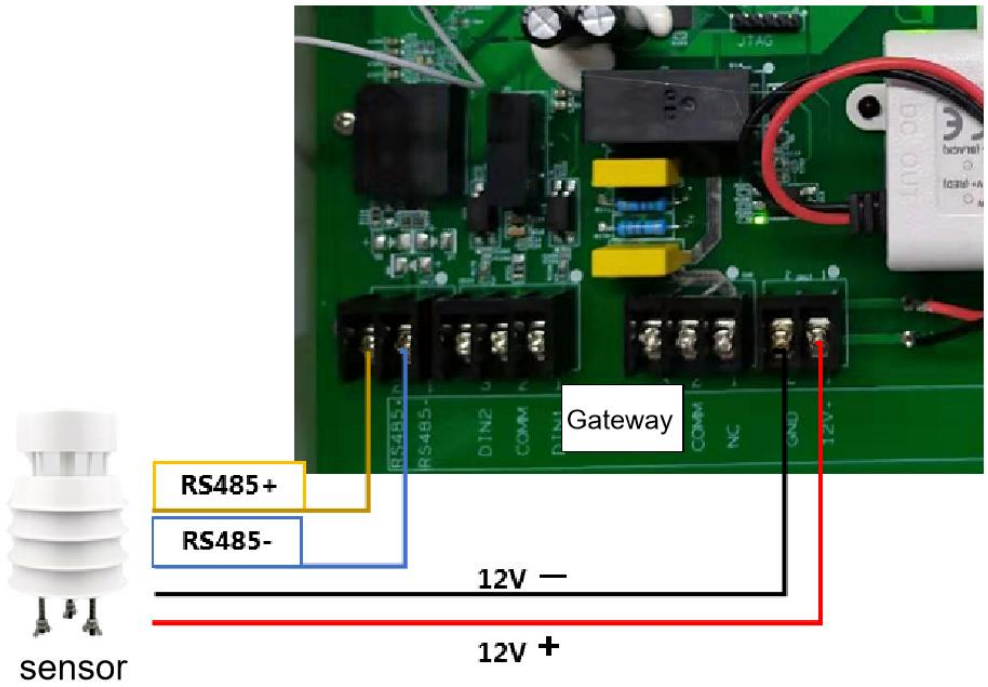
When opening the outer packing box, please check the appearance of the equipment for any obvious damage and confirm the list of items.

The name of the accessories	The number of
The sensor	1
4 core quick connector	1

How to use

The first step is equipment wiring

Refer to the figure below. Connect to the gateway by a 4-core cable sensor.The gateway opens and the sensor starts working.



The second step is to check the sensor data through the mobile APP

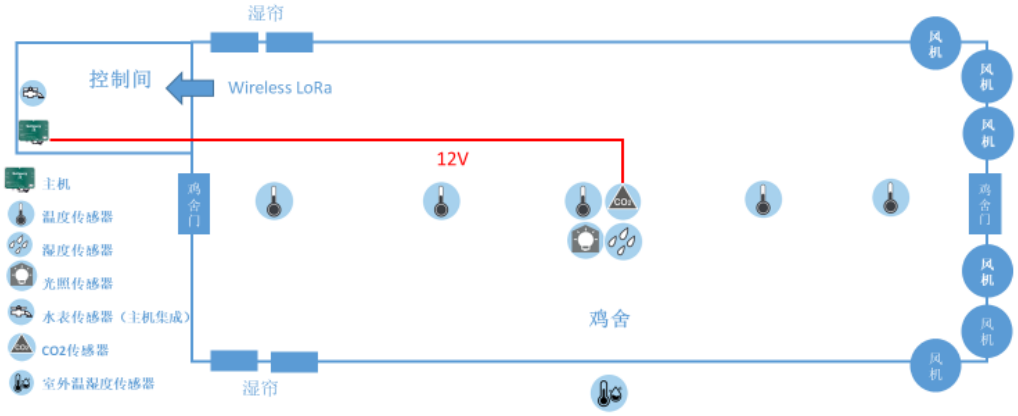
CAUTION:

Notes:

- Do not flush the sensor with water.
- To prevent condensation, remove the sensor after Posting and keep it properly.
- It is recommended that the sensor be disinfected by shining an ultraviolet lamp or wiping the surface of the device with alcohol.
- In order to avoid the injury of livestock and poultry to the equipment, it is recommended to install the sensor on the livestock and poultry back more than 20cm.

The installation

Schematic diagram of farm installation



Host gateway installation

- The gateway shall be installed in the control room of the chicken house. The installation position must be more than 1.5 meters away from the controller in the operation room.
- The ground terminals in the gateway must be reliably grounded;
- The gateway USES municipal power supply. It is suggested to share the power with the farm controller to facilitate the monitoring of the power supply status of the controller. It is not recommended to use lighting circuit to prevent the chicken house power failure alarm from being triggered.
- Gateway 4G antenna is recommended to be installed outside the building. The antenna should be placed far away from the lightning protection facilities of the building.
- When the gateway is dismantled, the power should be shut down first and then cut off to avoid triggering the power off alarm.

Sensor installation

- In order to avoid the injury of livestock and poultry to the equipment, it is recommended to install the sensor above 20cm on the back of livestock and poultry;

- The light sensor is recommended to be installed in the middle of the henhouse.The installation position is located between the two lighting fixtures in the shed lighting.In addition, the installation position must be far away from ventilation Windows, doors and other light-transmitting parts to avoid sudden changes in lighting data that may cause alarm notification.

FAQ:

How does The Q1 Gateway restart?

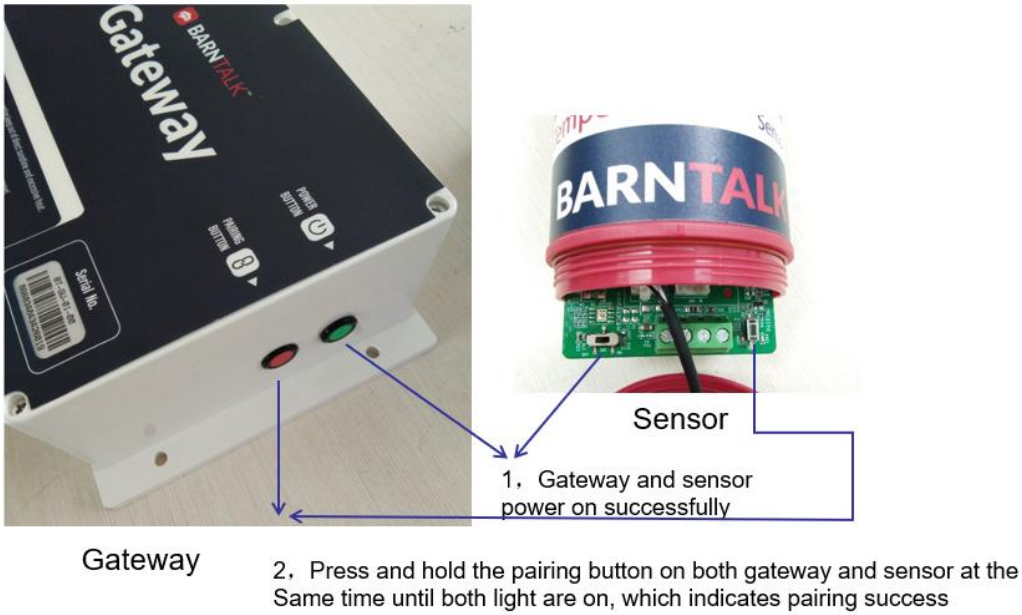
Solutions:

Press and hold the green indicator light on the right side of the gateway to switch one, release the power switch and reset the indicator. After 5 seconds, press the switch again. Look at the running indicator light, blinking indicates that the gateway has been restarted.

How is the Q2 gateway paired with the sensor?

Solutions:

- Open the gateway and sensor power switches. Wait 2 minutes after the gateway is turned on, and 30 seconds after the gateway is turned on.
- At the same time, press and hold the gateway and sensor pairing button until both sides enter the constant light, indicating successful pairing.

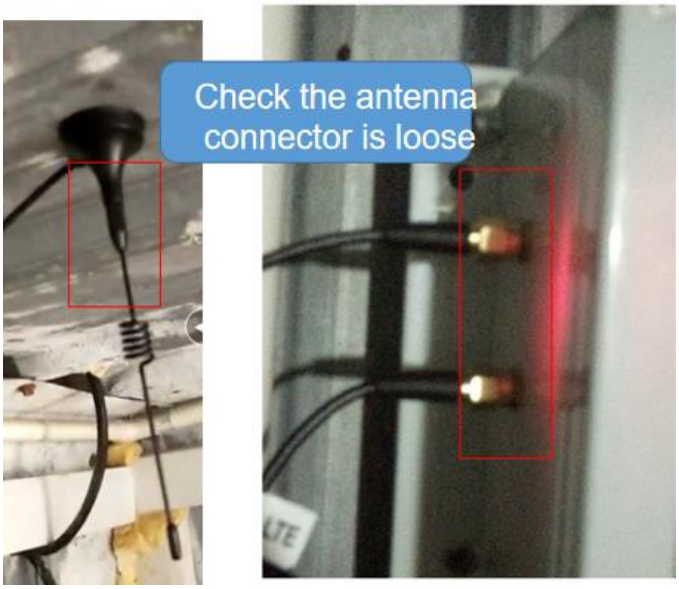


In Q3 binding device, there is no such coded device prompt. How to solve this problem?

Solutions:

- Observe whether the gateway operation indicator is flashing.If it does not flicker, contact an electrician to check the power supply at the gateway. If the indicator light flashes, the gateway power is normal.
- Open the top cover of the gateway and check if the SIM card is installed.
- Check the SIM card for traffic.
- Check that the gateway antenna is installed correctly.

- Check the antenna connector for looseness.



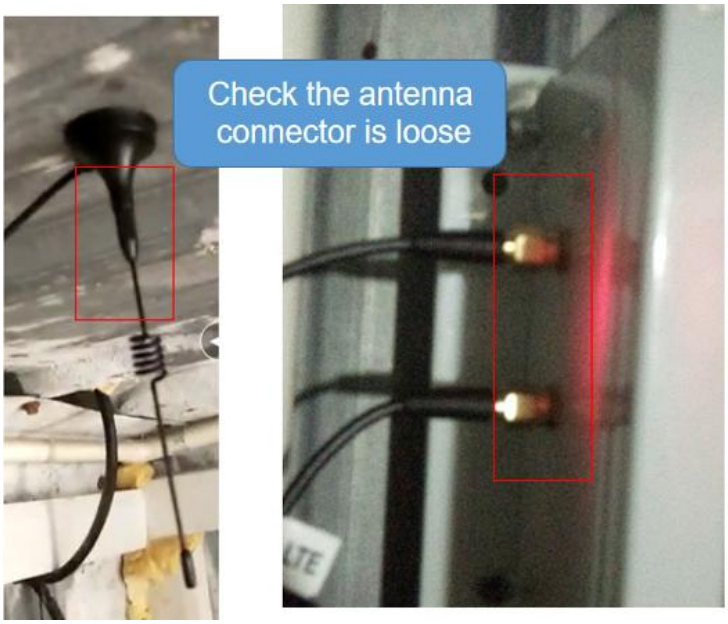
- Observe the flashing status of the working indicator light;

  If the working indicator flashes once a second, please check the installation position of 4G antenna.Considering the structure of the farm house, it is recommended that the 4G antenna be extended outside.
- Restart the device and observe the working indicator light after 2 minutes.The flicker frequency is once for 3 seconds, which means that the device is normal. You can try to bind again.
- Use WeChat to record a small video of the flashing indicator of equipment operation, and contact customer service;

Q4 APP, power offline, how to solve?

Solutions:

- Observe whether the gateway operation indicator is flashing.If it does not flicker, contact an electrician to check the power supply at the gateway.
- Indicator light flashes, indicating that the gateway power supply is normal.
- Check the SIM card for traffic.
- Check whether the antenna connector is loose:



- Restart the gateway and observe the working indicator light after 2 minutes.The flicker frequency is once for 3 seconds, which means the connection between the device and the server is normal.Observe whether the gateway is online on the APP;
- Use WeChat to record a 15-second video of the gateway running indicator flashing and send it to customer service.

How to deal with the occurrence of sensor data in Q5 APP?

In the APP, part of the sensor on the environment monitoring interface shows no data (as shown in the figure below) :

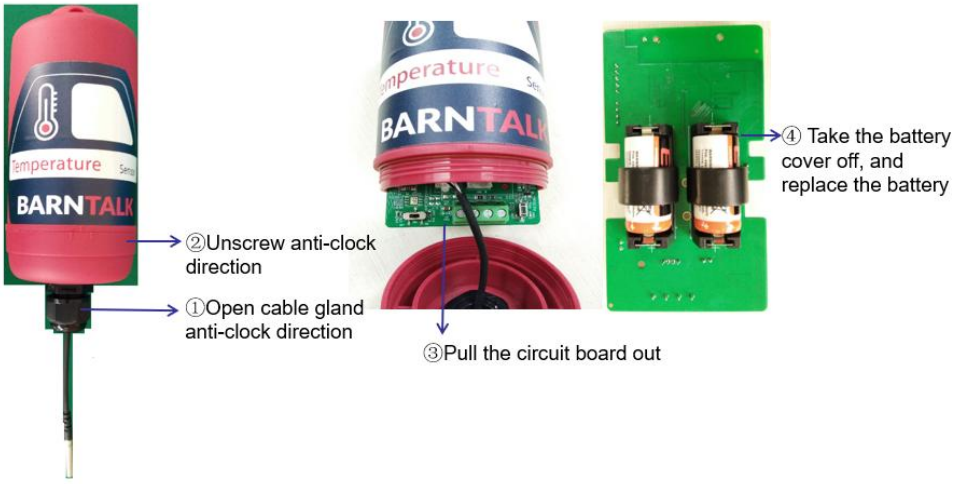
Solution: According to the instructions, the sensor signal test.

- Press the sensor pair to see if the indicator light is on.Not bright means the sensor, power supply is normal.

- Contact customer service to deal with it.

Q6 sensor how to replace the battery?

Solution: Please complete battery replacement according to the following operation manual.



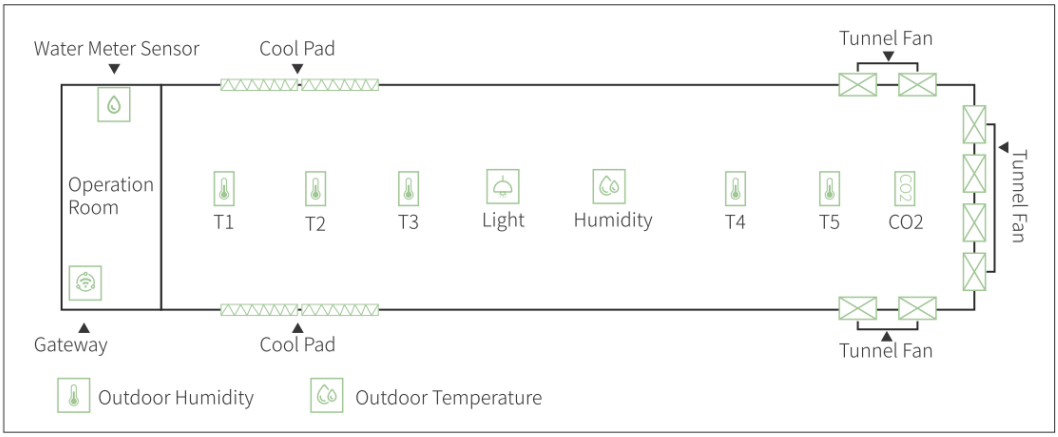
CAUTION:

- Be sure to use the battery as required or risk fire, explosion or combustion!
- Only the same type of battery can be used when replacing the battery.

How should the Q7 IOT device be arranged in the chicken coop?

Solution: Based on our experience with farms, we recommend that customers install the following layout:

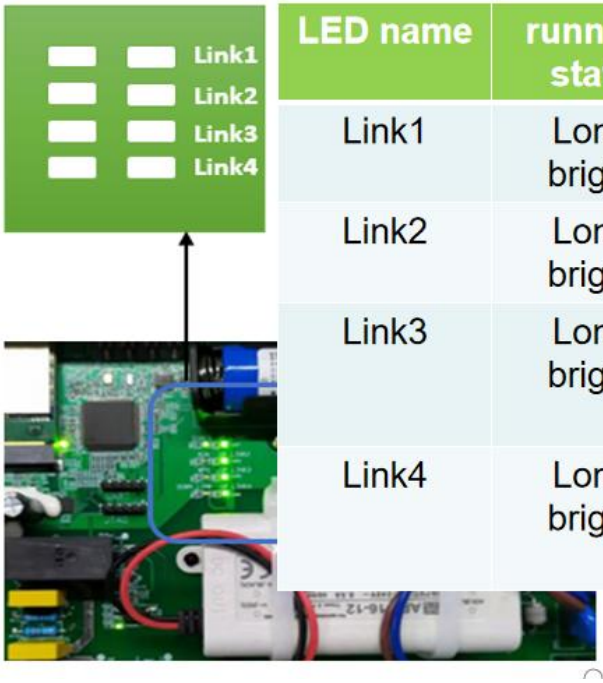
Farm Installation Layout



The above Suggestions are for reference only, users can adjust according to their own situation.

Does the Q8 gateway have an indicator light to observe the running state of the device?

Solution: During the startup process of the gateway, there is an indicator light inside the gateway, indicating the running state of the device.



LED name	running state	meaning
Link1	Long bright	2G/4G module working
Link2	Long bright	read SIM card successfully
Link3	Long bright	communication with base station successfully
Link4	Long bright	communication with the server successfully