

# **Explosion-proof Bullet Camera English Manner**

Data version: 1.01

1 Product introduction.....1

1.1 Product overview.....1

1.2 Product model composition and the meaning of the explosion-proof mark.....2

2 Boacking list.....2

3 Product Size (in mm).....3

4 Cable definition.....7

5 Installation instructions.....8

5.1 Confirmation before installation.....8

5.2 Equipment installation.....9

6 Log in and debug.....13

7 Common fault analysis.....14

8 Warranty service.....15

9 Restricted substances and qualification certificates.....16

## Safety instructions

- This is a Class A product, which can cause radio interference in living environments. In this case, users may be required to take practical measures against their interference.
- Make the equipment work within the allowable temperature and humidity range, and avoid placing it in extrusion, vibration, humidity, dust, extreme heat, extremely cold, strong electromagnetic radiation and other places.
- In general, the equipment is installed outdoor, and effective waterproof, moisture-proof and dust-proof measures should be taken at the equipment connection (especially the screws at the equipment connection must be tightened to ensure the overall tightness).
- Before disconnect the power supply for maintenance, overhaul and movement of the equipment, and be careful to move. Once the power cord is plugged in, the equipment will power on. When moving the equipment, do not carry the tail line to load, to avoid the equipment cable interface loose.
- Do not cut the tail line for connection, the exposed tail line is easy to cause a short circuit, resulting in abnormal damage to the equipment.
- External connection port, please use existing cable terminals to connect. When connecting, please make sure that the cable terminal (lock / buckle) is good and fastened in place; pull the cable during installation, maintain a certain amount to prevent poor contact or loose port due to vibration or shaking.
- In the process of turnover, transportation, the front face of the equipment needs special protection to avoid friction, scratch, pollution, etc.

- For product maintenance problems, please consult a professional, do not open the outer cover for maintenance without authorization. Only accessories specified by the manufacturer shall be used.
- Users are not allowed to disassemble this product at will. If the top cover or screws, it may cause leakage. Please operate the equipment according to the requirements in the instructions. To build and dismantle protective sheds and safety facilities, provide warning areas and special personnel.
- Please use this product in the specified atmospheric pressure, ambient temperature and humidity range.
- Be sure to use the power supply consistent with the equipment requirements, this product has internal grounding and external grounding, and all have grounding signs. The internal and external grounding shall be reliable.
- Ensure that the installation position is stable and reliable to avoid damage to the camera.
- When maintaining the equipment, pay attention to protect the explosion isolation surface; avoid metal debris or other substances from entering the equipment. Do not decompose or transform the equipment.
- If safety measures have hidden dangers, take measures to eliminate hidden dangers and stop operation if necessary.
- In case of all kinds of bad weather, all kinds of safety facilities must be checked, corrected and repaired. Ice, frost, rain, snow, etc. shall be removed.
- Install easy-to-use outage equipment for emergency power outage if necessary. This product is explosion proof product, please treat explosion proof cable.
- Check for the correct power supply before the equipment is running.

- Please protect the power cord from trampling or compression, especially at the plugs, power outlets, and connections leading out from the device.
- Avoid equipment focus on strong light (e. g. lighting, sunshine, etc.), otherwise it is easy to cause over lighting or pulling phenomenon (non-equipment failure), and will also affect the life of the photosensitive device CMOS.
- Please transport, use, and store the equipment within the allowable humidity and temperature range. Do not place the equipment in damp, extreme heat (exceeding + 60°C), extremely cold (less than -40°C), strong electromagnetic radiation, or unstable lighting conditions.
- Do not flow water and any conductive liquid into the equipment to avoid damage to the internal components.
- To avoid heat savings, do not block ventilation near the equipment.
- Prevent product damage caused by heavy pressure, severe vibration and immersion during transportation, storage and installation. When delivered, products shall be repackaged in factory packaging or of the same quality.
- The product is recommended to cooperate with the lightning protection device to achieve a better lightning protection effect.
- All kinds of products produced by the company may include components that cause environmental pollution, such as circuit boards, electronic components, plastic products, lubricating grease, etc. When equipment maintenance or scrapped, please pay attention to collect and control these pollution sources, do not discard, should be handed over to the relevant environmental protection department for treatment to avoid adverse impact on the environment.

- The housing design of the product has been fully considered that even if an explosive gas mixture invades the inner chamber, the external explosion is not caused by the operation of the inner chamber appliances. Ensure the explosion-proof performance from the shell strength and the combined surface gap, length of the shell and limit the highest surface temperature of the shell.
- All fasteners are made of stainless steel or steel rust resistant materials such as plating. The elastic sealing ring used together can withstand the heat resistance and cold resistance tests.
- When the device is not powered on, it can be moved by dragging both ends with both hands or by dragging the bottom. When the equipment is electrified, it is forbidden to open, move, knock or drag the equipment, otherwise the consequences shall be borne by the user himself.

## Notes

- The front face is not stained, light gray, please use an oil-free soft brush gently bounce or blow the ball blow down.
- When the front face is stained with grease or dust stains, wipe the oil or dust stain gently from the center with glasses cotton cloth. If not, then wipe the glasses cotton cloth in household detergent and gently wipe out from the center until it is clean.
- Organic solvents (benzene, alcohol, etc.) are prohibited to dust and clean the front face.
- After six months: 1. Please check all the fasteners; 2. Conduct a routine inspection of the cable to ensure that its protective layer is not damaged and will not interfere with other objects or parts in the rotation. Five years later: If the product is installed in harsh conditions, the rubber seal needs to be replaced. Please contact your local dealer to do this work.
- Clean the housing can be wiped with a soft dry cloth, in case of dirt is difficult to remove, please use a clean soft cloth dipped in a small amount of neutral detergent and gently wipe it and then dry. Do not use corrosive solvents, or strong, abrasive cleaners, otherwise it will damage the product surface or reduce product performance.
- It can be stored for one year in no corrosive, no strong vibration, temperature 0°C ~40°C and relative humidity not more than 90%.

## Environmental protection

- The product meets the design requirements on environmental protection. The storage, use and abandonment of the product shall be conducted in accordance with relevant national laws and regulations.

## Audience

This manual is mainly applicable to the following engineers:

- Product installer
- Field technical support and maintenance personnel

## Quality and safety assurance

Our products will provide free maintenance services during the warranty period, but will not be repaired in the following circumstances:

- Failure to operate in the instruction causes damage.
- Unauthorized disassembly of the machine causes damage.
- Thunder strikes and irresistible natural disasters.

## Special statement

- Be subject to the physical products, and the instructions are for reference only.
- Product updates in real time are subject to upgrades without notice. Some product features allow for minor differences before and after product updates.
- The integrity and accuracy of the manual have been guaranteed as far as possible, but due to the real environmental instability, the actual value of some data may be deviated from the value provided in the manual. If there is any doubt or dispute, please timely contact the supplier or the company customer service department.



## Statement

- Thank you for purchasing our product. If you encounter any problems during use, please contact our company or distributor in a timely manner.
- The product appearance diagram in this manual is for reference only, please refer to the actual product.
- This manual can serve as a guide for the use of multiple product models. It does not list the usage of each product one by one. Please refer to the actual product for comparison.
- Our company reserves the right to modify the content of this manual without any notice or reminder, but we do not guarantee that the content of the manual is completely error free.
- Due to uncertain factors such as physical environment, the actual values of some data may deviate from the reference values provided in the manual. If there are any questions or disputes, please refer to our company's final interpretation.
- During your use of the product, please follow the operating instructions in this manual. We are not responsible for any issues caused by not following the instructions. Thank you for your cooperation.
- The product may undergo repair, please keep the product packaging safe so that it can be sent back to the manufacturer for repair.

# 1 Product introduction

---

## 1.1 Product overview

This product is stainless steel, using 100 megabytes full duplex Ethernet electrical signal transmission is safe and reliable, while integrating a variety of communication protocols and communication rate, can play an important role in various types of security systems.

Explosion proof camera/thermal imaging camera is an explosion-proof and dust proof camera, with explosion-proof performance in accordance with GB/T 3836.1-2021 "Explosive Atmospheres Part 1: General Requirements for Equipment" GB/T 3836.2-2021 "Explosive Atmospheres Part 2: Equipment Protected by Explosion proof Enclosures" and "" Made in accordance with the provisions of GB/T 3836.31-2021 Explosive Atmospheres Part 31: Equipment protected by dust ignition proof enclosure "t". Explosion proof camera/thermal imaging is a mature explosion-proof monitoring equipment with advanced functions and reasonable structural design. With advanced manufacturing technology and mature quality management system, the product quality and performance are excellent.

This product is suitable for the following places (atmospheric pressure: 80-106KPa, ambient temperature: -40°C - + 60°C, relative humidity: not more than 95%RH(+ 25°C)):

- IIA, IIB, IIC flammable gas.
- The ignition temperature group is Zone 1 and 2 of T1-T6 group.
- Site of an explosive mixture of combustible gas or vapor and air.
- The ignition temperature group is zones 21 and 22 of T1-T6 group; places containing combustible dust mixture.



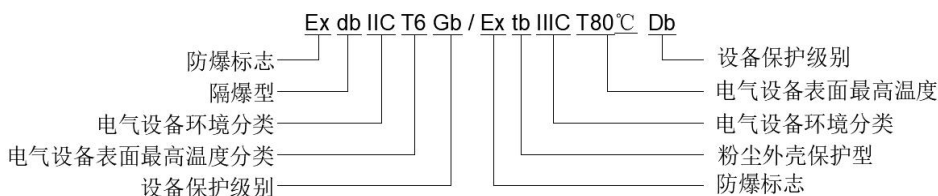
---

Note:

- The insulation resistance value between the power supply inlet terminal and the enclosure shall not be less than 50 MΩ.
  - The power supply incoming terminals shall withstand 50Hz, 1500V 1min, and the signal line terminals shall withstand 50Hz, 500V 1min, with no breakdown or flashover.
  - The working voltage, working current and power consumption of different models of products will vary. Actually, please connect accordingly according to the label instructions on the equipment power cord and adapter.
- 

## 1.2 Product model composition and the meaning of the explosion-proof mark

After National Explosion-proof Electrical Product Quality Supervision and Inspection Center [CNEX] inspection and obtained explosion-proof certificate, explosion-proof mark:  
Ex db IIC T6 Gb / Ex tb IIIC T80°C Db.



## 2 Packing list

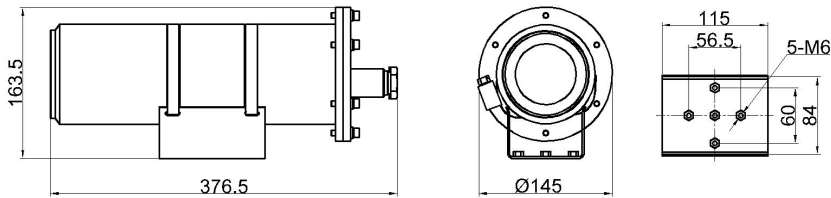
Depending on the product models, with the box accessories may change, please subject to the actual. If you find any items damaged or missing, please contact your local supplier promptly.

Project	Quantity	Unit No
Explosion-proof camera / thermal	1	Set
User information	1	Piece
Spare parts	1	Piece

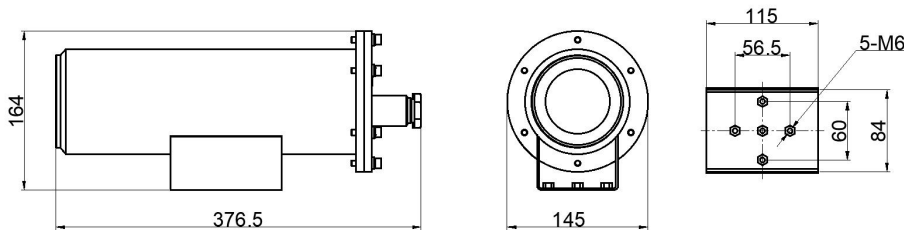
## 3 Product Size (in mm)

If there are differences in the appearance and dimensions of the different models, please take the physical object.

Model 1 Explosion-proof Camera



Model 2 Explosion-proof Camera



## 4 Cable definition

At the factory, the camera is equipped with an integrated cable. The cable color is defined in the following table. The cable is drawn from the outlet hole on the side of the camera base, no less than 1.5 meters. When in use, the integrated cable is only introduced into the control box to connect with the system bus (the actual wiring mode shall be subject to the equipment tail line standard).

Network camera tail line definition:

Name	Color	Description
100M network	Orange and white	Tx +
	Orange	Tx-
	Green and white	Rx +
	Blue	Reserved
	Blue and white	Reserved
	Green	Rx-
	Brown and white	Reserved
	Brown	Reserved
Power supply	Red	Positive pole
	Black	Negative pole
	Yellow-green	Ground

Simulation camera tail line definition:

Name	Color	Description
Video data cable	White	Positive pole
	Green	Negative pole
Power supply	Red	Positive pole
	Black	Negative pole
	Yellow-green	Ground



### Description:

Explosion-proof shield is not equipped with tail line, and the power cord of some fixed-focus equipment does not have grounding wire, so the actual product line label shall prevail.

# 5 Installation instructions

---

The installation process of all equipment is similar. The pictures are only schematic, please be subject to the physical objects.

## 5.1 Confirmation before installation

### 1. checks the equipment components

Open the product packaging box to confirm the product and accessories. If there is any missing, please contact the supplier. After opening the packaging, please pay attention to properly save the original packaging materials of the product, so that in the case of problems, the product uses the original packaging materials and sent to the supplier for handling.

### 2. installation and use considerations

Before the equipment installation, please check whether the environmental temperature, humidity, cleanliness, anti-interference and lightning resistance meet the requirements, and check whether the power supply and other equipment is safe.

- Users shall not remove the structural components of the explosion-proof equipment at will, otherwise it will affect the waterproof performance of the explosion-proof products. Please operate the equipment according to the requirements specified in the instructions.
- Be sure to use the specified power supply.
- Please always use this product in the specified atmospheric pressure, ambient temperature and humidity range.
- Due to the particularity of the explosion-proof products, it is recommended to debug the electricity first, and then install them in the field after being familiar with the local performance.
- Do not add any other additional load to the camera, otherwise the carrying capacity may exceed the equipment, resulting in failure of function or damage to the equipment.
- The products passing the inspection are not allowed to change the parts that affect the explosion-proof performance.

- The product is equipped with special internal and external grounding. The user should connect correctly and no grounding is strictly prohibited. The grounding wire resistance should be  $\leq 1 \Omega$  and the grounding electrode resistance shall be  $\leq 1 \Omega$ .

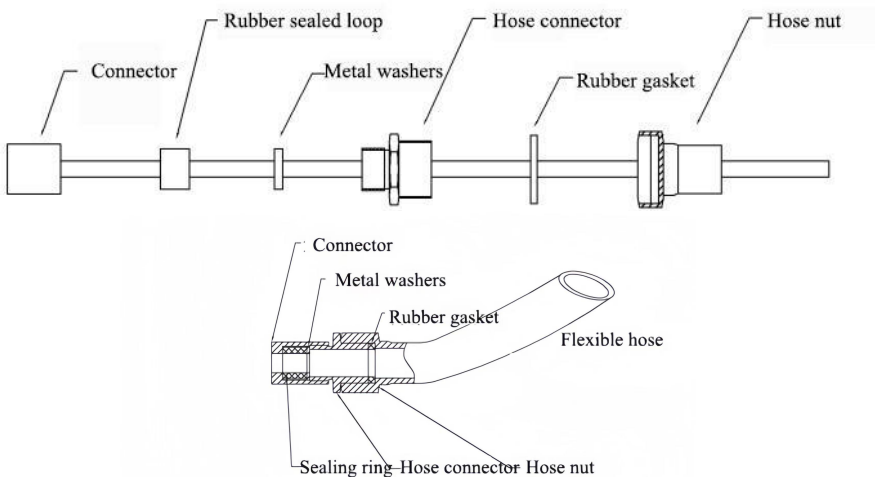
## 5.2 Equipment installation

### 5.2.1 Preparation work

- The camera has undergone a complete commissioning process before delivery, so it is only necessary to install the equipment to the required installation place.
- It is the responsibility of the user to confirm that the installation site can accommodate the product and its installation structural parts, and confirm that the wall and bracket of the explosion-proof camera can support the total weight of the camera and structural parts.
- The equipment shall be installed in an inaccessible area surrounded by no objects that may interfere with the camera when turning. Otherwise, it may cause fall and damage to the equipment, which will seriously endanger personal safety.

### 5.2.2 Installation of explosion-proof flexible pipe

Cross the equipment cable as shown (the connector is welded to the product) and tighten the components.



### 5.2.3 Bracket installation

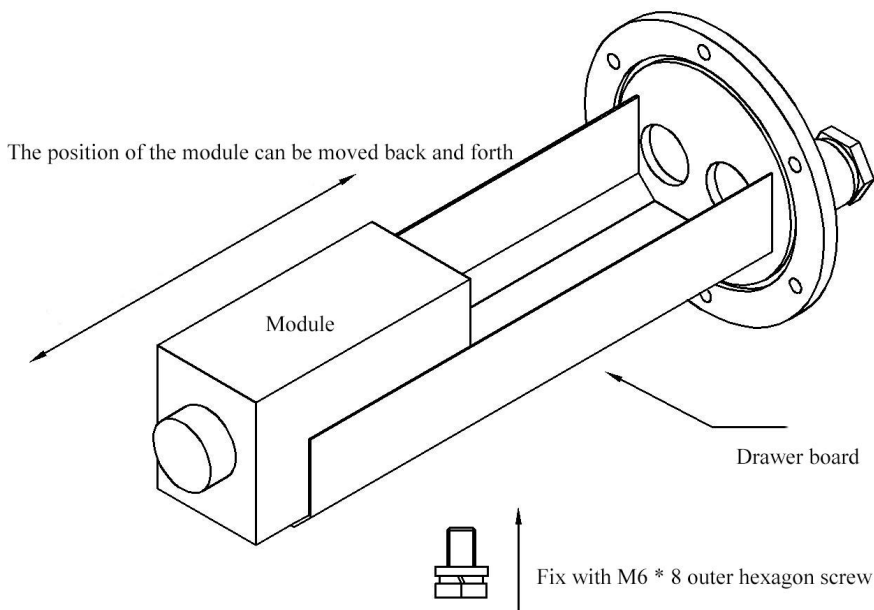
First select a suitable installation hole position for the bracket, then install the camera at the correct angle, and finally fasten the bracket with a high quality safety card anchor bolt (or expansion screw). Explosion-proof control box generally selects easy installation and maintenance positions.

#### **Description:**

When the camera cable is connected to the control box, it must be protected with an explosion-proof flexible tube (or an armoured cable). The cables connecting the control box to the control room must be protected with metal pipes or directly laid with armored cables.

### 5.2.4 Installation renderings

#### 1. Installation of the movement



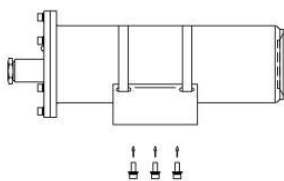


The camera is fixed to the drawer board with 2 external hexagon screws with an M6\*8 pitch of 1.25mm or 4 M2\*6 screws to adjust the position of the camera on the drawer board according to the camera size to distance the camera lens from the shell toughened glass (about 1~2mm), then load the rear end cover assembly of the movement inside the housing and lock with 6 M6x20304 stainless steel internal hexagon composite screws.

## 2. Installation of the complete machine

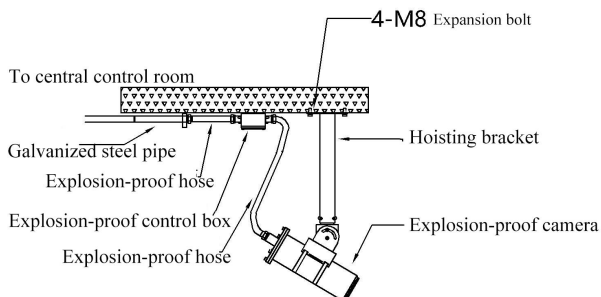
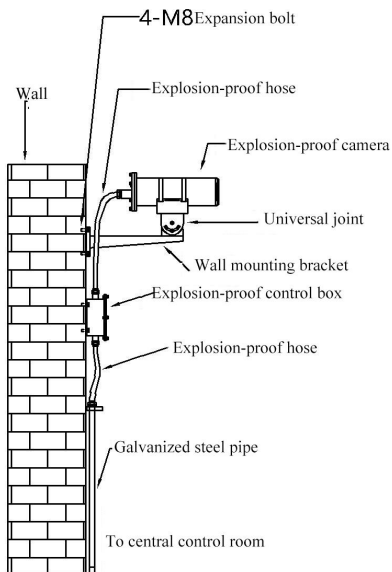
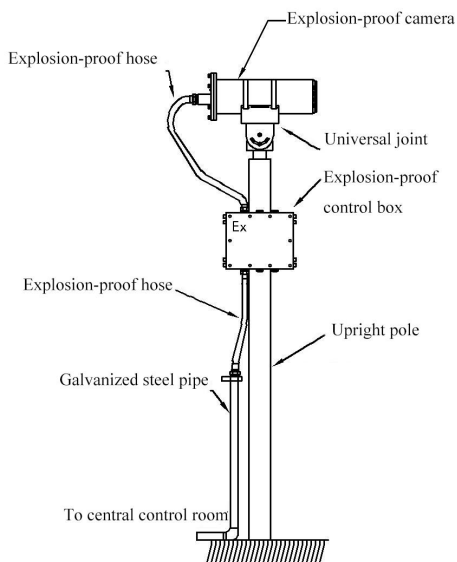
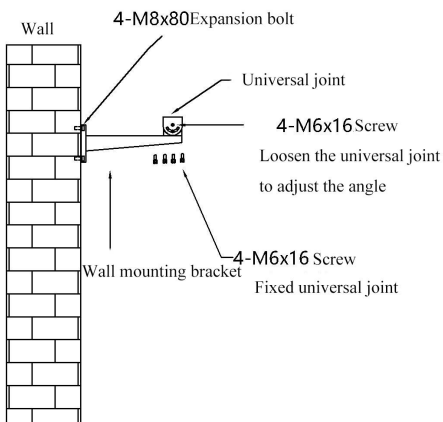
Show the explosion-proof camera column and hoisting effect respectively. Take the explosion-proof camera as an example for displaying 3 installation methods:

- (1) Connect and tighten the inner hexagon combination screws of the M6x16 through the fixing holes on the mounting plate specified on the site to the retaining nuts on the housing U bracket.
- (2) Attach the universal joint in the specified field position with the inner hexagon combination screw of M6x16, and then secure the device to the designated hole on the upper surface of the universal joint with the use of the inner hexagon combination screw (the upper and lower angle of the universal joint can be adjusted by loosening the inner hexagon combination screws on the side of the universal joint).
- (3) The wall bracket is fixed to the wall with M8x80 expansion bolts, then the wall bracket and the universal joint with the M6x16 inner hexagon combination screw, and finally the equipment to the designated hole on the upper surface of the universal joint (the upper and lower angle of the universal joint can be adjusted by loosening the inner hexagon combination screws on the side of the universal joint).



**5-M6\*16**

Hexagon socket combination screw



## 6 Log in and debug

---

Explosion-proof network camera, you can intuitively and easily manage and maintain the equipment through the Web interface.

Before logging to the Web community please confirm:

- Equipment self-inspection is completed.
  - The client computer is connected with the network of the device.
- 



### Description:

- Please log in with a static address, the default IP address is 192.168.1.64, and the subnet mask is 255.255.255.0
  - When you are prompted to install the control, you install the control and close all current browsers when installing the control, otherwise the control installation will be unsuccessful. After installing the control according to the page guidance, log back to the system.
- 

### Log in and debugging steps are as follows:

- (1) Run the IE browser on the client computer, enter the IP address of the device in the address bar, and press Enter.
- (2) Enter the user name (default **admin**) and password (default **Admin@123**) and click the <Login> button to enter the Web interface. If you have previously modified the initial IP address, log in to the explosion-proof air-conditioning HD network camera using the modified IP address.
- (3) Debug the image and adjust the zoom and zoom in the live screen to get a clear image.
- (4) Select the [Logout] menu item, the confirmation dialog box will pop up, click <OK> button, the user will exit the configuration page and go to the login page.



### Description:

Some focus devices do not support the doubling of the lens to obtain clear images, whichever is the actual product.

---

## 7 Common fault analysis

Below are some exceptions that may be encountered during use, you can refer to the form or contact us directly, and we will provide you with satisfactory technical support and service.

Failure phenomenon	Possible cause	Solution
No self-test is electricity	The Power supply is in an open circuit	Determine if the power supply is normal
	The power supply voltage does not meet the requirements	Verify that the power supply voltage meets the specifications on the product nameplate
Power-ST but can not connect to the camera	Network issues	Check whether the network is working together with it and whether the relevant network equipment is in the power-on state.
The image is sometimes absent	Poor network wire contact	Check the network cable
	The network cable is not well connected	Check that the network cable is properly connected

Failure phenomenon	Possible cause	Solution
	The communication distance is too long, causing the signal attenuation	Increase the relay device to extend the communication distance

## 8 Warranty service

---

Our product design, production, inspection and other procedures are strictly implemented in accordance with the national standard of GB/T 3836 《Electrical Equipment for Explosive Gas Atmospheres》. After all products pass the inspection and test, In the case of complete packaging, the logistics department will uniformly arrange the receipt of the goods.

Each product of our company shall provide the national explosion-proof certificate, product qualification certificate and product operation manual issued by the National Explosion-proof Electrical Quality Supervision and Inspection Center.

Our company promises that from the date of purchase by the user, the warranty period is 1 month for failures caused by the product itself, and free maintenance services will be provided within 1 year. We will undertake the transportation cost of one-way products in Chinese mainland area. Products beyond the warranty period or not within the warranty period.

For the products that need to return to the factory for maintenance, please communicate with the user's dealer in advance to avoid hardware damage to the equipment during transportation.

1. Please present the warranty card and the formal purchase invoice approved by the tax department. If you cannot issue the invoice and warranty card, the free warranty starting date of this product will be subject to the delivery date of the company.
2. The product warranty does not include installation support and does not involve accessories and consumables such as manuals, wires and cables.
3. Product failures resulting from the following conditions are not under the warranty:
  - 1) Product failure due to accident, negligence, disaster, improper operation or misoperation;
  - 2) Damage caused by impact, fire, lightning strike, flooding, human negligence, natural disasters or force majeure;
  - 3) Products not repaired by maintenance units authorized by the Company;
  - 4) Accident or failure caused by the selection and installation of products not according to relevant standards.

- The warranty card shall not be valid until being stamped under the seal of the distributor.
- The Chinese warranty card is available for Chinese mainland only.

Product Code:

Purchase date: \_\_\_\_\_, \_\_\_\_\_ day, \_\_\_\_\_

User name: \_\_\_\_\_

Dealer: \_\_\_\_\_

Detailed address: \_\_\_\_\_

Service Tel.: \_\_\_\_\_

Distributor: (Seal)

## 9 Restricted substances and qualification certificates

Part name	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Limit matter or elements		
				Hexavalent	Polybromine	Polybromine
				Chromium	Biphenyl Benzene	Diphenyl Ether
				(Cr (VI))	(PBB)	(PBDE)
Metal parts	×	○	○	○	○	○
Plastic parts	○	○	○	○	○	○
Print the circuit board	×	○	○	○	○	○
Connections / fasteners /	×	○	○	○	○	○

Part name	Limit matter or elements					
	Lead (Pb)	Mercury (Hg)	Cadmium (Cd)	Hexavalent Chromium (Cr (VI))	Polybromine Biphenyl Benzene (PBB)	Polybromine Diphenyl Ether (PBDE)
heat sink						
Power supply / adapter (if any)	×	○	○	○	○	○
Cable / wire material	×	○	○	○	○	○
Annex	×	○	○	○	○	○

This form is prepared in accordance with the SJ/T 11364 provisions.

○: Indicates that the content of the restricted material in all homogeneous materials of the component is below the limit requirements specified in GB/T 26572

×: Indicates that the content of the restricted substance in at least one homogeneous material of the component exceeds the limit requirements specified in GB/T 26572

(Note: Different products differ in limiting substances or elements. ).

合格证

QUALIFICATION CARD

检验员(Qc): 合格/PASS