

485 Infrared Sensor Operating instruction

Product overview

GS-RS485 Ceiling mounted infrared is a kind of human body sensor with high stability, It has the advantages of high sensitivity, good stability, convenient installation, concealment and high cost performance. It is widely used in security, hotels and indoor public places, Used to detect whether there are moving objects.

Functional features:

The sensor adopts the new PIR intelligent sensor with good stability and anti-interference

Using SMT process to ensure consistency

LED indicator is convenient for debugging

Working voltage input: 9-24V

Technical parameter:

Quiescent current: $\leq 10\text{mA}$

Detection diameter: 6M-8M (height 3M)

Detection angle: 360°

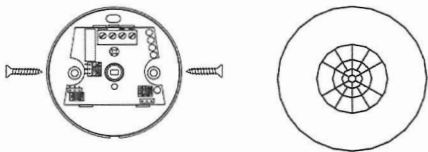
Use environment: -10°C - 50°C

Use ambient humidity: $\leq 95\% \text{RH}$ does not dew

Mounting height: 2-5M proposal 3M

Output mode: RS485 bus has a maximum of 400 nodes. See Protocol for output protocol.

Product installation method



1. Unscrew the front cover of the detector and open the detector
2. Install the rear cover at an appropriate height
3. Secure the rear cover with screws
4. Connect the wiring terminals-

Feature set

Feature set

1. J4 LED Jumper: used to control LED indicator light, does not affect the normal work of the detector

OFF: LED OFF ON: LED ON

2. V+: The power supply+; GND: The power supply -; A RS485+; B RS485 -.

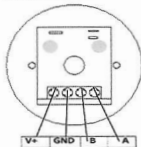
3. ID set

3.1 default ID is 1

3.2 If you want to change ID Changan S1 for 2 seconds, the LED light flashing frequency is 5 times/second.

3.3 Use the standard serial port assistant to set the desired ID number according to the Communication Protocol Infrared Receive ID Settings. At the same time, the LED light stops flashing.

Schematic diagram of wiring terminal:



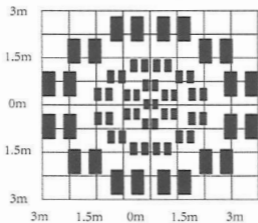
V+: The power supply +

GND: The power supply -

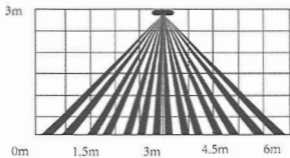
A: RS485+

B: RS485-

Detection range map



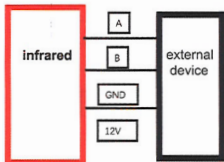
Vertical view



The strokes

Infrared communication protocol

Communication protocol diagram:



(一)、Data format:

1. Wired RS485 communication mode: baud rate 9600, 8 data bits, 1 start bit, 1 stop bit, no parity bit in total 10 bits.

(二)、Communication protocol

1、Infrared sensor gives control instructions

DATA0: 0X01 ID

DATA1: 0X06 command code

DATA2: 0x00 Register address height

Infrared communication protocol

DATA3: 0x02 Register address low
DATA4: 0x00 Sensing human data is high
DATA5: 0x01 Sensing human data is low (01 someone; 00
No one)
DATA6: CRCL
DATA7: CRCH
Calibration algorithm: MODBUS/CRC-16 $x_{16}+x_{15}+x_{2+1}$

2 Infrared receiver ID

DATA0: B4 frame header
DATA1: C4 frame header
DATA2: number of data 05
DATA3: Set the infrared ID high
DATA4: Set the infrared ID to low
DATA5: Set the infrared ID high
DATA6: Set the infrared ID to low
DATA7: 0x55

Matters needing attention:

1. Please read the instructions carefully before use, and install or use the probe correctly according to the instructions. Do not touch the surface of the probe, so as not to affect the sensitivity.
2. This product can reduce the occurrence of accidents, but it can not guarantee that everything is not lost, it is recommended to test regularly, if there is abnormal, please replace in time.
3. If you have special application, you can contact the salesman of the company.

