

# **C4i** **communication**

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## **C4I-H300T**

**Temperature measurement security gate  
outdoor use door frame metal detector gate  
with body temperature detection system**



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# INTRODUCTION



The temperature test security gate adopts a high-precision infrared temperature sensor with a sensing distance of 0.5-1 meters. It has high precision and high resolution and is immune to the environment and sunlight.

The measurement error at room temperature is 0.5 °C, and the resolution is 0.02 °C. The initial temperature setting is 37.3 °C (adjustable). The actual body temperature of the human body is displayed when the detection door is in operation.

When the temperature exceeds 37.3 °C, the ambient temperature of the venue is displayed when the alarm is passed. (Note: When the ambient temperature exceeds 37.3 °C, the temperature security door cannot work normally.)

The infrared temperature security door adopts a vertical structure. One infrared temperature probe is arranged vertically. Each probe is a fan-shaped test area to ensure 1.2-1.9 meters. It can be accurately detected within the height range.

**Operation way :** Simple version: infrared remote control, remote computer network operation network version (customized)

**Detection area :** According to the basic structure of the human body, the detection gate is divided into multiple overlapping detection areas, a mesh detection method and a single frequency excitation technology are used to eliminate the weak and blind areas in the detection area, with higher sensitivity and more stable performance.

**Alarm Way :** Audible and visual alarms, the speed of the sound can distinguish the size of metal objects, a variety of alarm volume modes are suitable for the choice of different occasions, the super bright LED alarm lights on the left and right of the doorpost can accurately display the prohibited items hidden at the corresponding height of the body.

**Temperature measurement alarm :** The real person sounds an alarm to indicate abnormal body temperature;



**Area sensitivity** : The highest sensitivity can detect metal content objects the size of paper clips, which can be adjusted between 0 and 255 levels of sensitivity. Each position adjuster can be adjusted to the appropriate sensitivity according to the detection requirements, and the overall sensitivity can be adjusted separately. Pre-set the weight, volume, size, and location of metal items, and exclude false alarms such as keys, jewelry, and belt buckles.

**Techniques** : Made of PVC synthetic material and special technology, waterproof and moisture-proof, luxurious and beautiful appearance, more suitable for large high-level places.

**Intelligent statistics** : Intelligent passenger flow and alarm counting function can automatically count the number of people passing and the number of alarms.

Strong anti-interference ability: adopt digital, analog and left-right balance technology to prevent false alarms and missed reports, greatly improving anti-interference ability  
Security protection: Double password protection, only authorized personnel are allowed to operate, passwords can be modified as needed, and password loss recovery settings are provided for higher security; parameter settings are automatically stored without the need for uninterruptible power supply protection, which is more secure and convenient .  
Electromagnetic radiation: It conforms to EMC electromagnetic radiation standards and uses weak magnetic field technology, which is harmless to pacemaker wearers, pregnant women, floppy disks, film, video tapes, etc.

Installation and debugging: The human body temperature and security inspection gate adopts an integrated design, which can be installed or disassembled in only 20 minutes, and is equipped with installation and commissioning operation instructions.

Application fields: airports, various conference venues, large-scale events, stations, terminals, entertainment venues, prisons, courts, important government departments, factories, test rooms, shopping malls, community access temperature measurement security inspections and prohibited items inspection areas.





## Specifications :

- Power : <35W
- Distance Rate : 13 : 1
- Response time : 2 seconds
- Weight : About 70kg
- Working Temp : -20°C~+45°C
- Basic accuracy : ±0.5~2.0°C
- Infrared temperature measurement resolution : 0.1°C/°F
- power supply : AC90V-250V 50HZ-60HZ
- Out of range prompt : Digital display temperature value, audible alarm
- Relative humidity : 10-95%RH
- Appearance color: black, iron gray or other customized colors
- Dimensions : 2200mm (H) \*800mm (L) \*500mm (W)
- Channel size : 2010mm (H) \*700mm (L) \*500mm (W)
- Standard : GB15210-2003 《General technical specifications for pass-through metal detectors》 national standard





## 1- The normal temperature range of the human body

In a healthy state, if the diet is normal and the clothing is appropriate, the body temperature of the human body is generally relatively constant, usually maintained at about 37 ° C (approximately between 34.8 ° C and 37.8 ° C); the following are the reference values of normal

body temperature:

Mouth temperature : 35.5°C ~ 37.4°C

Anal temperature : 36.6°C ~ 37.7°C

Axillary temperature : 35.1°C ~ 37.0°C

Ear temperature : 35.8°C ~ 37.8°C

Forehead temperature : 34.5°C ~ 36.5°C

However, because the temperature of the human body varies with age and environment, the above values are not exact values, they are just reference values.

## 2- Fever determination criteria for temperature of different parts of the human body

Mouth temperature : It takes five minutes to measure, and a fever above 37.4 ° C is considered a fever.

Anal temperature : It takes five minutes to measure, and a fever above 37.7° C is considered a fever.

Axillary temperature : It takes 10 minutes to measure, and a fever above 37° C is considered a fever.

Ear temperature : It takes a few seconds for the ear thermometer to measure the ear. A fever above 37.8 ° C is considered a fever.

Forehead temperature : It takes a few milliseconds for the thermal imager to measure the temperature on the forehead, and the fever is above 36.5 ° C (emissivity set to 0.98).





## Notes for temperature screening with infrared thermography :

(1) The exposed skin temperature of the human body is easily affected by the ambient temperature. When the person to be measured comes from a place with a large difference in

ambient temperature, the person to be measured should be kept in the room temperature environment for a long enough time. For example, at the airport in winter, measurements should be taken 5 to 10 minutes after the passenger arrives indoors. At this time, the external heat transfer conditions of the passenger's forehead have basically reached a steady state.

(2) When the device is taken out from the place where the temperature difference between the tested environment is large, the instrument should be placed in the tested environment for at least 20 minutes before use.

(3) The measurement place should be indoors, and avoid direct sunlight on the infrared camera and the surface of the person's forehead.

(4) The best temperature measurement point for human body temperature screening is the forehead. The optimal test distance should be kept at a distance of 5-10cm. When measuring the skin surface temperature of the forehead, make sure that the forehead area of the person under test is not blocked. If the measured area is covered by hair or other objects, it will affect the measurement result.

(5) Adult forehead temperature is generally 1 ~ 3 °C lower than underarm temperature. At this time, the criteria of fever underarm temperature should be converted to forehead temperature. The recommended standard is that an adult's forehead temperature above 36.5 °C is considered a fever.

