1. Product introduction

The close-range body temperature detector adopts a high-precision infrared temperature sensor to detect the body temperature of the human body by measuring the temperature of the palm, wrist, or forehead of the human body. The equipment has built-in distance and temperature dual sensors, adopting non-contact temperature measurement method. Through the cross temperature algorithm of distance sensor and temperature sensor, human body can complete body temperature detection without touching the equipment.

The equipment has high accuracy, the temperature measurement error is less than 0.2 ℃, and the single temperature measurement speed is less than 0.5 seconds, which is very suitable for rapid temperature measurement and raise in large flow areas or places, without the need for security guards or medical staff to hold temperature measuring guns to measure temperature, it can effectively improve the efficiency of temperature measurement, improve the passing rate of the channel, reduce the number of medical staff, reduce the cost of personnel and so on. Compared with the thermometer gun, it has a wider range of applicability and application advantages.

The short-range body temperature detector can be used as a stand-alone machine, and can also be used as a matching equipment for face recognition access control machine, access gate, security door, etc. The equipment can use Micro-usb power supply or DC12V power supply, provide I/O interface or RS485 interface output, which can be easily connected to all kinds of access control equipment and output the detected body temperature data to all kinds of access control equipment. In addition, the short-range temperature detector can also be equipped with various intelligent terminals to upload the temperature measurement data to the cloud platform (or other software platforms) through the network to record the temperature data, which is convenient for subsequent inquiry.

2. Product function features

(1)   The product consists of three parts: digital display screen, distance sensor and temperature sensor;

(2)   The short-range body temperature detector adopts double sensors, laser distance sensor + infrared temperature sensor, and detects human body temperature through the cross temperature measurement algorithm of temperature and distance.

(3)   The detection distance is about 2-8cm and there is no need to contact the equipment. Support Palm, wrist, or other body parts for temperature measurement.

(4)   The single temperature measurement speed of the equipment is less than 0.5 seconds.

(5)   The temperature measurement resolution of the equipment is 0.01 ℃, and the temperature measurement error is ± 0.2 ℃.

(6)   After each temperature measurement is completed, the buzzer will have a "drop" sound, and the temperature value will be displayed for 1 second.

(7)   Equipment the default alarm temperature is 37.3 °c (99.14 °f), namely detection temperature more than this temperature, equipment will issue alarm the "Didi......" Sound for 5 seconds, temperature value displayed for 5 seconds.

(8)   The device supports upgrading the device through Micro USB.

(9)   The equipment provides RS485 interface and I/O interface.

(10)   The equipment adopts double rotating bracket, which supports multi-angle adjustment. The installation method can be installed by wall hanging, or placed on the desktop, or fixed to the channel gate and security door, which is convenient and flexible and suitable for various scenarios.

3. Specification

Item	Note
Testing way	Single-point temperature measurement
Temperature sensor	Melexis MLX90614DCC
Infrared distance sensor	ST VL53L1X

Testing speed	0.5-0.8 second
Max testing view angle	5°
Temperature measurement resolution	0.02℃
Accuracy	±0.2℃
Testing distance	2-8cm
Buzzer	Built in buzzer
Available temperature range	-10℃~100℃
Device working environment temperature	15℃~40℃
Device interface	RS485*1 Micro USB*1
Supply Voltage	DC12V 或 DC5V（Micro USB）
Working current	0.2A
Device Weight(pcs)	0.3kg
Package Size	177*120*60mm
Device Weight(pcs)	0.5kg