Infrared thermal imaging body temperature screening system

Product Picture

2,Features

- Network type, 384 * 288 thermal imager+2.0MP HD visible Optical camera.
- IR thermal imager adopts local front-end temperature measurement technology, and front-end hd webcam infrared temperature superposition to avoid the problem of network transmission delay and ensure the real-time temperature response.
- Real-time dynamic thermal imaging, Multi-target automatic measurement.
- Long distance non-contact measurement, rapid and safe.
- Intelligent temperature measurement, body inside and surface temperature automatic calibration.
- Automatic calibration without manual interference, built-in reference blackbody and high-precision temperature sensor, completely eliminate temperature drift, can work stably and reliably for many years, and is not affected by factors such as ambient temperature.
- Support ONVIF, RTSP video protocol remote transmission, video superimposed temperature display.

3, System Principle

3.1 Body temperature monitoring points

Each monitoring point is an imaging component. It consists of a SCCIRN400 network infrared camera and a visible light camera. It outputs the infrared and visible light images of the monitored crowd for analysis and processing by the monitoring post and the monitoring center computer. The field of view of the visible light camera can be adjusted to the infrared thermal imager. Each infrared and visible camera can output two video signals at the same time, and connect to the computer using the network port.
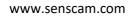
3.2 Body temperature monitoring post

An industrial control computer is installed in the temperature monitoring post to receive infrared and visible light images from the temperature monitoring point and perform necessary control. Receive real-time analysis of the temperature data and infrared and visible light video data of the front-end SCCIRN400 network infrared thermal imager. If there is an alarm, an audible and visual alarm can be issued. Each host can manage multiple temperature monitoring points. Each temperature monitoring post is connected to the monitoring center through an optical fiber network, and the back end realizes centralized storage and management.

SCCIRN400 network high-definition equipment can be transmitted to the back-end computer for operation by a separate network. The front-end host supports multiple computers to access and observe at the same time. The

temperature measurement machine has the ONVIF protocol remote transmission function, with image temperature overlay, and can be connected to the existing command and control platform monitoring center for remote unified browsing.

4, Technical Parameters

Item		Description
IR Detector Features	Detector type	uncooled focal plane
	Spectral range	8 - 14 μm
	Resolution	384×288
	NETD	≤60mk
IR Lens Features	FOV	25°×°19
	Focal length	18mm
Function	Temperature measurement range	20℃～50℃
	Measurement Accuracy	≤±0.3℃
	Alarm response time	＜1s
	Color Marked line	11
	Measurement correction	Fully automatic temperature correction via built-in and external blackbody
Visible optical camera	Resolution	1920*1080
	Sensor	2.0MP 1 / 1.8 '' CMOS starlight ultra-low-light camera
	Function	Supports wide dynamic, strong light suppression
	FOV	25°×19°
Environmental adaptability	Operating temperature	0℃- +40℃
	Storage temperature	-40℃- +60℃

Other Features	Operating Voltage	DC 12V
	Power consumption	≤15W
	Network Interface	RJ45
	Product Weight	<5KG
	Size	345×189×154mm（camera）

5, System Software Functions

1. Full screen temperature measurement, real-time automatic tracking of the highest temperature, multi-target over-temperature simultaneous alarm.

2. With multi-screen display function, that is, a set of software can be connected to multiple on-site hosts, preview and management functions at the same time; the main interface screen split display can be clicked to switch, can be divided into 1, 4, 9, 16 screen split display.

3. A variety of pseudo-color palettes, users can adjust it according to their needs and comfort.

4. Intelligent temperature measurement

The system automatically corrects the body inside and surface temperature and make it meets the body's temperature measurement requirements.

5.Intelligent alarm function

☐ Alarm combination conditions such as alarm temperature range and minimum alarm area can be set to achieve multi-point alarm and tracking; meanwhile, it can avoid the interference of high temperature objects such as cigarette butts and hot water;

☐ Can set section temperature alarm, can set multiple alarm areas; effectively avoid interference from light boxes and lamps;

☐ Temperature alarm delay, temperature point and alarm sensitivity can be set;

☐ The alarm temperature value display size can be set and displayed in different eye-catching colors;

☐ The over-temperature alarm target is displayed in a striking red, and an audible and visual alarm signal is issued, which can trigger a voice alarm function;

6. The alarm image or video can be saved when the workstation alarms, and the infrared image or picture recorded by the system can be later inquired, analyzed and recorded, and the recording file is full. At the same time, the alarm video is automatically reported to the information center, field workstation and information center Realize alarm network linkage;

7. Temperature measurement emissivity, distance, ambient temperature and relative humidity can

be adjusted;

8. The remote information center can connect to the field station through TCP / IP protocol and receive the infrared and visible optical video digital signals of each field station in real time;

9. The field of view angle of the infrared camera and the CCD visible optical camera are basically the same, and the infrared and visible light images can be accurately positioned and the temperature analysis results can be superimposed.

6, Product Configuration List

Each set of equipment contains:

1. Infrared host (including infrared camera, visible optical camera, 12V power adapter, video cable) 1 set

2. Computer 1 set (including computer host, monitor, mouse, keyboard) (optional)

3. Blackbody 1 pcs

4. Client-side (infrared body temperature screening system software) 1 set

5. Tripod 2 pcs (optional)

7, Application

It is suitable for public places where people, such as airports, exit / entry ports, docks, stations, hospitals, schools, enterprises and institutions, etc., can perform rapid non-contact measurement of human temperature.