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LEADING THE WAY IN THERMAL IMAGING

Fever Screening System

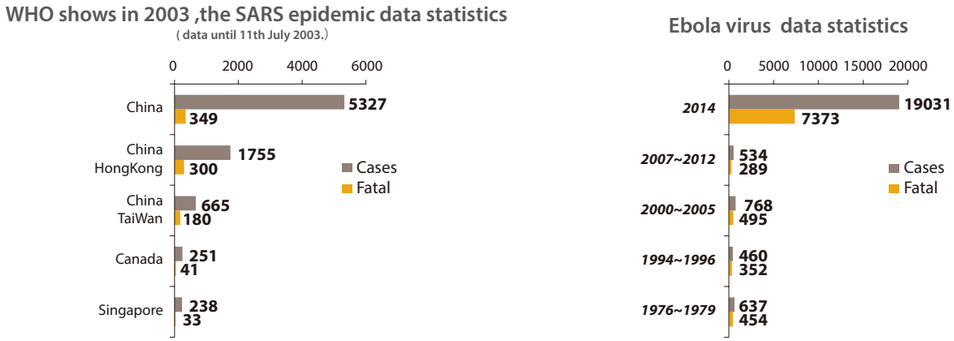
CK350-F

www.satir.com

SATIR

Industry Background

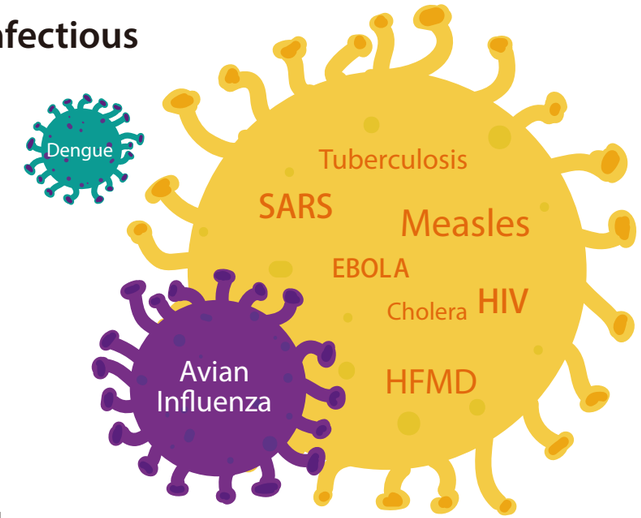
Infectious Diseases Serious Events



Close Connection between Infectious Diseases and Fever

According to clinical manifestations, among the 39 legal infectious diseases in China, 28 have premature fever symptoms

Body temperature measurement is an important method for infection control



Principles for Preventing and Controlling Infectious Diseases

Temperature Measurement and Face Recognition System

Intelligent Facial Recognition

- Deep learning
- Quickly Targets high or abnormal temperatures

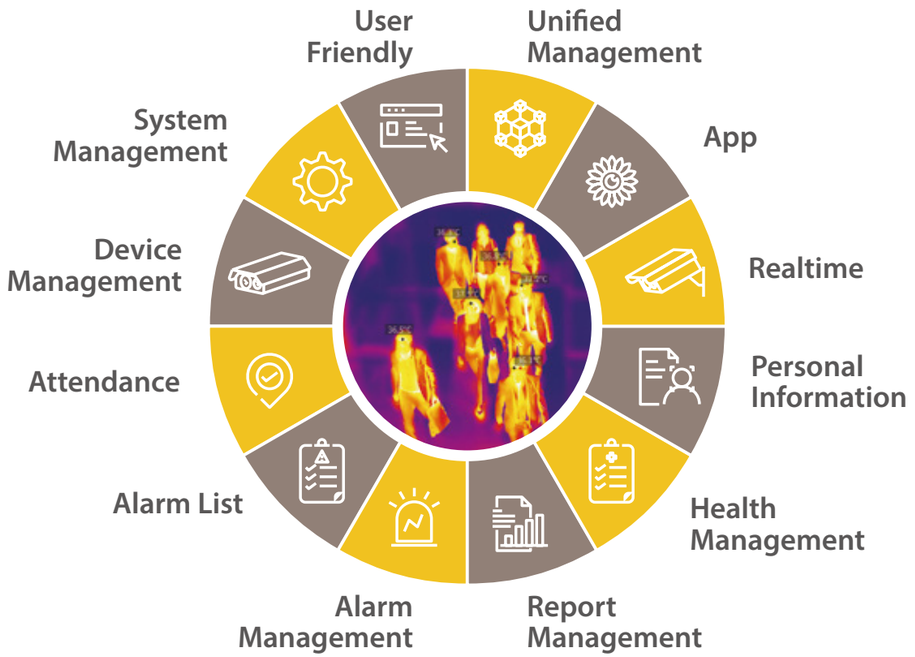
Thermal Temperature Measurement

- No-contact temperature measurement
- Quickly measures multiple targets at a time

Big Data Analysis

- Health data
- Statistics report
- Analysis of epidemic trend

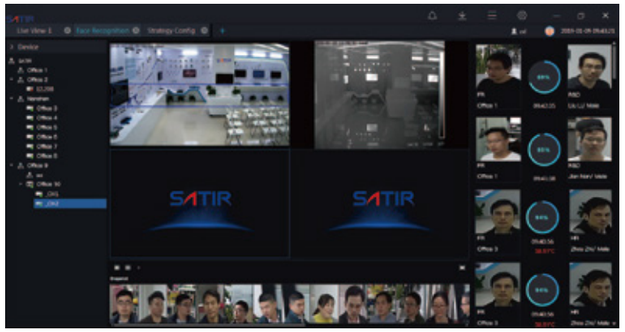
System Formations



System Functions

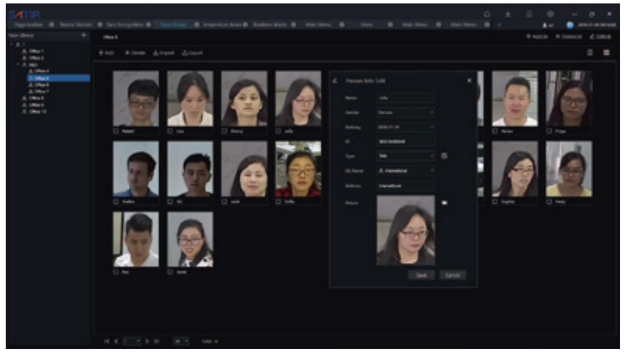
Online monitoring for rapid temperature measurement

- Simultaneous detection of up to 16 targets, at 20 fps
- Efficient temperature measurement



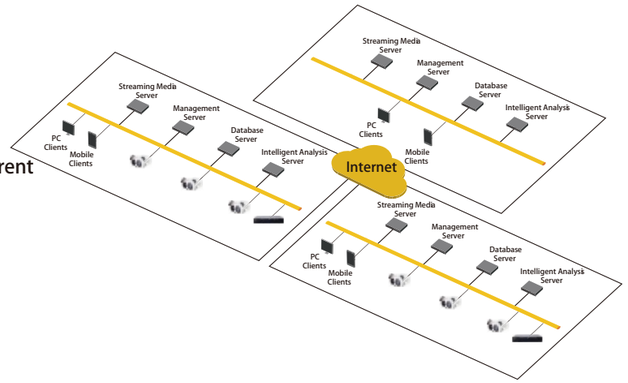
Archives Management

- Data management
- Batch import/export
- Self-learning algorithm, face library regular update



Multilevel Distribution Architecture

- 3 levels distribution deployment
- Servers and Clients management based on different project scale

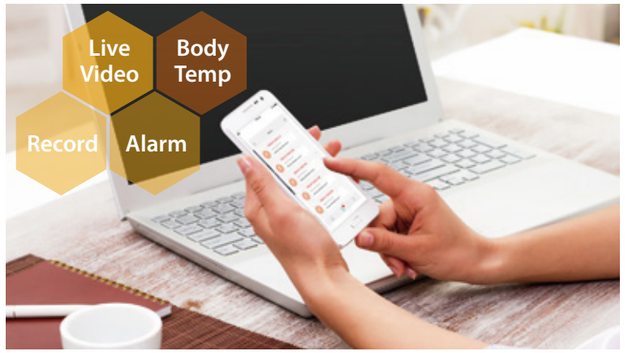


Health Archives Management

- Temperature data
- Data structuring
- Health archives
- Health status
- Tips

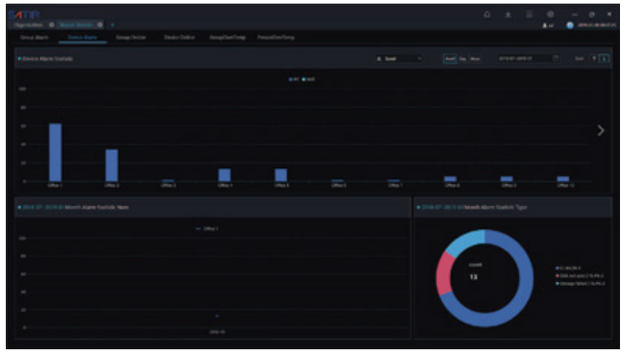
Mobile APP

- Real-time health data monitoring
- Health data statistics ,user receives health report



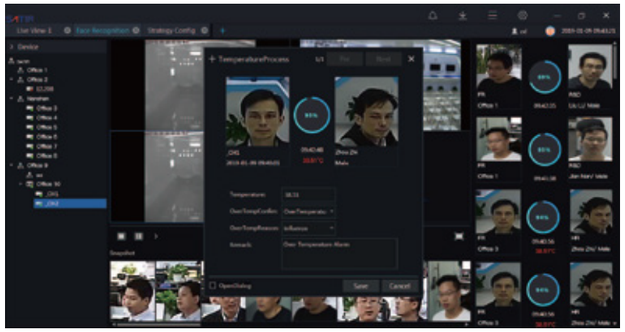
Data Statistics Report

Statistic reports and analysis according to Age/Gender/ Time/Type and illness/Location



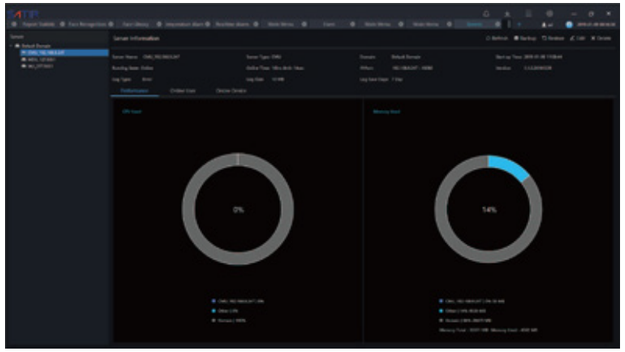
Pre Warning Management

- Face recognition intelligent technology works in combination with temperature measurement technology, it provides the location of the over-temperature target solving a problem when over-temperature target information cannot be confirmed immediately, at the same time camera provides materials for a further supervision and sends a report
- Audio support



System Management

System status monitoring, system configuration, operation log, abnormal log, debug information etc.



Applications

School

Airport

Custom

Hospital

Solution -Education

Dormitory

Library

Teaching Building

System Diagram

Camera

Wall bracket

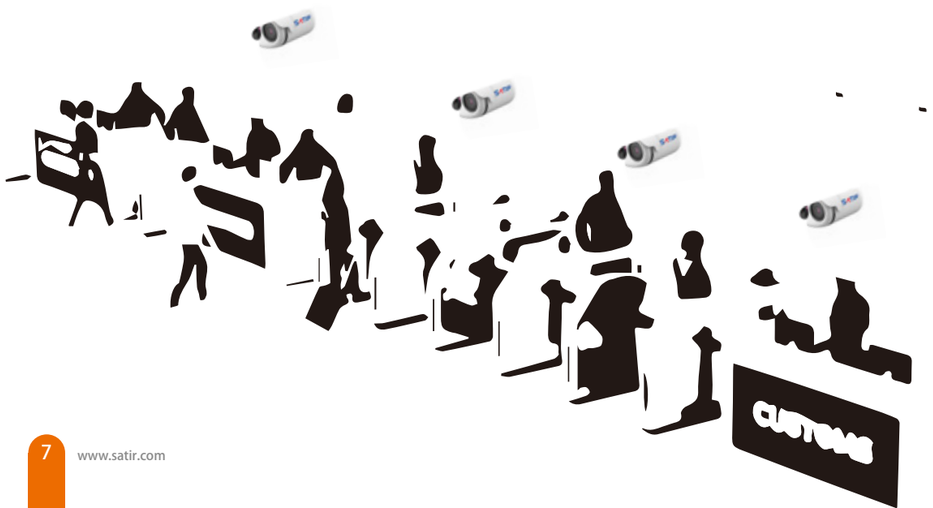
Ceiling Bracket

Blackbody for real-time temperature calibration

1 to 5 meters

Tripod

Network cable connect to PC/Laptop

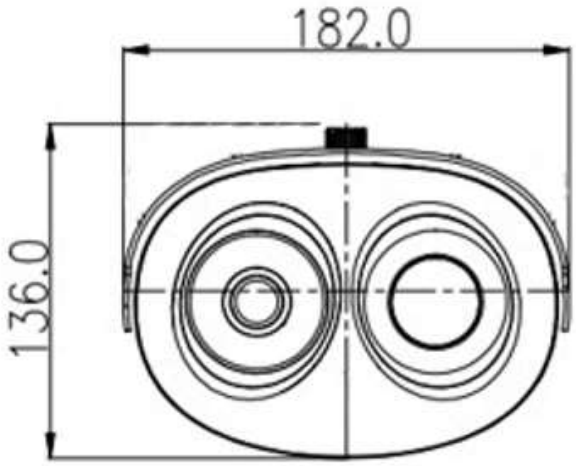


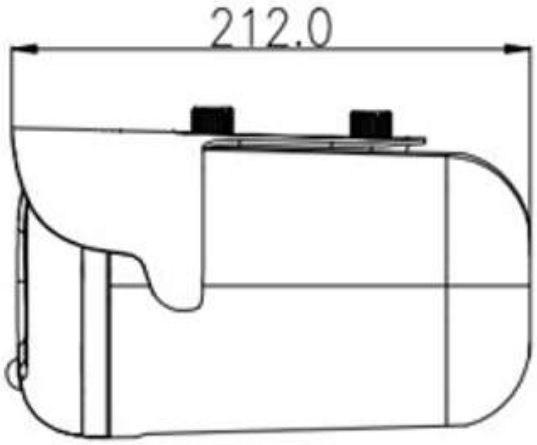
Specification

Thermal Camera	
Detector Type	Uncooled IRFPA Microbolometer
Effective Pixels	384(H) ×288(V)
Pixel Size	17μm
Thermal Sensitivity (NETD)	50mK @F1.0, 300K
Spectral Range	8~14μm
Image Setting	Polarity LUT/ DVE/ Mirror/ FCC/ /3D DNR Brightness/Contrast/ ROI
Color Palettes	Black-Heat /White-Heat/Rainbow/Iron-Red up to 17 modes
Thermal Lens	
Lens Type	Fixed
Focus Control	Manual Focus
Focal Length	8mm
F No.	F1.0
Angle of View	H: 46°, V:35.3°
Visible Camera	
Image Sensor	1/1.9" Sony CMOS
Effective Resolution	1920(H)×1080(V)
Shutter Speed	1/50 ~ 1/64,000s
Wide Dynamic Range	True WDR 120dB
Min. Illumination	Color: 0.01Lux @(F1.2, AGC ON) B/W: 0.001Lux @(F1.2, AGC ON)
S/N Ratio	More than 55dB
Focal Length	2.7 ~ 12mm
Max Aperture	F1.6~ F2.9
Angle of View	105°~ 32°
Focus Control	Motorized
Video and Audio	
Compression	H.265, H.264, MJPEG
Frame Rate	Main Stream: Thermal: D1 @25/30fps Visible: 1920×1080/1280×720 @25/30fps Sub Stream: Thermal: CIF @25/30fps Visible: D1/VGA/640×360/CIF/QCIF/QVGA @25/30fps
Bit Rate Control	CBR/VBR
Bit Rate	Thermal: 100Kbps~6Mbps Visible: main stream: 500Kbps~10Mbps; sub stream: 100Kbps~6Kbps
Region of Interest	Off / On (8 Zone, Rectangle)
Digital Zoom	16x
Mirror	Support
Defog	Support
Motion Detection	Support
Privacy Masking	Off / On (4 Area, Rectangle)
DVE Image Enhance	Support
Audio Compression	G.711, AMR, RAW_PCM (Optional)

Intelligence	
Intelligent Functions	Motion detection, Disk alarm, I/O alarm, Temperature alarm
IVS	Smart Body Detection, Perimeter ,Single Virtual Fences ,Double Virtual Fences ,Object Left ,Object Removed
Temperature Detection	
Detection Mode	Body temperature monitoring
Detection Preset	Max 16 goals
Temperature Alarm	Over temperature alarm, Temperature difference alarm
Accuracy	≤ 0.3 ℃ (Emission rate, distance, ambient temperature, etc.)
Response Time	≤30ms
Theory of temperature measurement range	-20 °C ~ 60 °C (-4°F ~ 140°F)
Temperature display mode	Temperature target ＞5℃, Display absolute temperature value; Temperature target ≤5℃, Display relative temperature value (temperature difference DEV = highest value - average)
Network	
Ethernet	RJ-45 (10/100Base-T)
Protocols:	IPv4/IPv6 ,HTTP,RTSP/RTP/RTCP, TCP/UDP, DHCP, DNS, PPPOE, SMTP, SIP ,802.1x
Interoperability	ONVIF, CGI, SDK
Streaming Method	Unicast
Max. User Access	10 Users
Edge Storage	NAS Local PC for instant recording Micro SD card 128GB
Web Viewer	<IE11, Chrome, Firefox
Web Language	English, Chinese, Polish, Italian, Portuguese, Spanish. Russian, French, Czech, Hungarian
Interface	
Ethernet	1 Ethernet (10/100 Base-T) RJ-45 Connector
Audio Interface	1ch Audio In,1ch Audio Out
Alarm	2ch Alarm In,2ch Alarm Out
RS485	Support
BNC Output	N/A
Reset Button	Support (Built-in)
General	
Power Supply	DC12V/POE (IEEE 802.3af)
Power Consumption	Max 10W
Operating Temperature	-30°C~60°C(-22°F~140°F)
Storage Conditions	0~ 90% RH
Certifications	CE /FCC
Ingress Protection	IP66
Casing	Metal
Dimensions	212×182×136mm
Net Weight	2Kg

Dimensions(mm)





Accessories

Wall bracket（Included）

Ceiling Bracket (Optional)

Tripod (Optional)

CK350-F

Ceiling Bracket

Features

- Aesthetic design
- Material: Alloy
- Ceiling mount bracket
- Adjustable length

Specifications

Ceiling bracket for camera	
Supported Models	CK350-F Camera
Material	Alloy
Color	White
Product Dimensions	**φ140mm×700mm~φ140mm×120mm**
Product Weight	1020g
Max. Load Bearing	5Kg

Ceiling bracket for blackbody	
Supported Models	BB350-F (Black body)
Material	Alloy
Color	White
Product Dimensions	**φ130mm×700mm~φ130mm×120mm**
Product Weight	820g
Max. Load Bearing	5Kg

Blackbody Specification

Temperature Range	40℃ (Ambient temp. +5.0℃ to 50℃)
Emissive Area	70mm x 70mm
Temperature Resolution	0.1℃
Accuracy	±0.2℃(@40℃)
Stability	±(0.1~0.2) ℃/30min
Emissivity	0.97±0.02
Power Supply	220V AC 50Hz 50W
Dimension/Weight	W110mm x H120mm x D180mm, 1.8kg
Operating ambient temp.	0℃~40℃ / ≦80%RH
Option	RS485 communication

Note:

Product features: The application of these sources are calibrations of IR thermometers, IR sensors and thermal imagers which are used for human body temperature measurement.

A black body or blackbody is an idealized physical body that absorbs all incident electromagnetic radiation, regardless of frequency or angle of incidence.

It does not only absorb radiation but can also emit radiation. The name "black body" is given because it absorbs radiation in all frequencies, not because it only absorbs.

Blackbody radiation is radiation produced by heated objects, particularly from a blackbody.
A blackbody is an object that absorbs all radiation (visible light, infrared light, ultraviolet light, etc.) that falls on it.

This also means that it will also radiate at all frequencies that heat energy produces in it.