

THERMAL IMAGING SYSTEM



YSAR+ Joint-Stock Company is the leading Russian developer and integrator of IT systems in the field of healthcare. The company have been working in the IT market has been for over 20.

Our partners from regions of Russia, CIS, Asia, the Middle East and Europe trust us.

The priority of **YSAR+** is the development, implementation and service maintenance of the newest IT systems in the sphere of healthcare.

YSAR+ – is the developer of software systems for the automation of screening programs: breast cancer, lung cancer, cervical cancer.

System-based approach, collaboration of highly qualified analysts, consultants and programmers under the leadership of experienced managers allow for implementation of projects of all difficulty levels, meeting the highest demands of customers.



Offer

«Teplovisor» Mobile Complex «Pro_JEMYS.2020» - thermal imaging system with the function of identifying persons with elevated body temperature.

Product Overview

Mobile Complex Teplovisor «Pro_JEMYS.2020» is an innovation solution to identify people who have a fever. These devices quickly scan all the people who passed by for elevated temperature and make a report when a person with fever is detected. These devices are mostly used in airports, metro, medical and educational institutions, Railways, shopping and entertainment complexes, military facilities, etc., to scan the population to prevent outbreaks such as SARS, Bird Flu, Ebola and other recent out-break such as Coronavirus also known as the Wuhan virus.

Thermal Fever Detection Camera

Thermal Fever Detection Camera equipped with an integrated GPU that supports a smart behavioral analysis algorithm, can perform high-precision VCA detection and real-time warning. Not only it is a fever detection, it also applied to indoor fire prevention purposes, such as engine room, ATM, conference room, factory, museum, train station, gem, power station, etc. The pre-alarm system helps you quickly discover unwanted accidents and protect your assets.

Functions

- Image processing technology;
- Temperature exception alarm function;
- Bi-spectrum image fusion, picture in picture preview;
- Strobe light and audio alarm;
- High sensitivity sensor;
- 3D DNR, 15 palettes of color adjustable, image detail enhancement and contrast adjustment;
- Mirror image, digital zoom.



Optical Module	
Max. Image Resolution	2688 x 1520
Image Sensor	1/2.7" Progressive Scan CMOS
Min. illumination	Color: 0.0089 Lux @ (F1.6, AGC ON), B/W: 0.0018 Lux @ (F1.6, AGC ON)
Shutter Speed	1s to 1/100,000s
Lens (Focal Length)	4mm
Field of View	84° x 44.8° (H x V)
WDR	120 dB
Day & Night	IR cut filter with auto switch
Image Function	
Bi-spectrum Image Fusion	Fusion view of thermal view and overlaid details of the optical channel
Picture in Picture	Combines details of thermal and optical image PIP, overlay thermal image on optical image
Smart Function	
Temperature Measurement	3 temperature measurement rule types, 21 rules (10 points, 10 areas, and 1 line)
Temperature Range	-30°C to + 45°C
Temperature Accuracy	± up to 0.3°C
Fire detection	Dynamic fire point detection, up to 10 fire points detectable

Infrared	
IR Distance	Up to 15m
IR Intensity and Angle	Automatically adjusted
Network	
Main Stream	Visible Light: S0H2: 25fps (2688 x 1520), 25fps (1920 x 1080), 25fps (1280 x 720) Visible Light: 60Hz: 30fps (2688 x 1520), 30fps (1920 x 1080), 30fps (1280 x 720) Thermal: 1280 x 720, 704 x 576, 640 x 480, 352 x 288, 320 x 240
Sub-Stream	Visible Light: 50Hz: 25fps (704 x 576), 25fps (352 x 288), 25fps (176 x 144) Visible Light: 60Hz: 30fps (704 x 480), 30fps (352 x 240), 30fps (176 x 120) Thermal: 704 x 576, 352 x 288, 320 x 240
Video Compression	H.265/H.264/MJPEG
Audio Compression	G.711u/G.711a/6.722.1/MP2L2/6.726/PCM
Protocols	TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, RTCP, PPPoE, NTP, UPnP, SMTP, SNMP, IGMP, 802.1X, QoS, IPv6, UDP, Bonjour
Simultaneous Live View	Up to 20
User/Host Level	Up to 32 users, 3 levels: Administrator, Operator, User
Security Measures	User authentication (ID and PW), MAC address binding, HTTPS encryption, IEEE 802.1x access control, IP address filtering

How it works?

The system is integrated with IMP (Intelligent Management Platform) which automatically sends a re-port when the device is triggered and alert designated personnel. The system also has the ability to enter and print out a QR code of a person's details who is detected with fever for easy identification and organization.

The camera will monitor and scan all the people who will pass by and it will detect people with fever. When someone with fever is detected, the alarm will go off to call for attention. An incident report will be generated. Email and SMS will be sent to notify designated personnel.

Specification

Thermal Module	
Image Sensor	Vanadium Oxide Uncooled Focal Plane Arrays
Max. Resolution	160 x 120 (the resolution of output image is 320 x 240)
Pixel Interval	17 μ m
Response Waveband	8 μ m to 14 μ m
NETD	Less than 40 mK (25°C), F# = 1.1
Lens (Focal Length)	3.1 mm
I FOV	5.48 mrad
Field of View	50° x 37.2" (H x V)
Min. Focusing Distance	0.2m
Aperture	F1.1

Mobile Complex «Pro_JEMYS.2020.Lite» - thermal imaging system with the function of identifying persons with elevated body temperature.

Functional features -

facial recognition to measure the temperature

It is based on infrared thermal imaging technology, using imported infrared sensor and 2-megapixel binocular live wide dynamic camera, face recognition within a distance of 0.2m-0.8m while collecting body temperature. It works even if you wear a mask on your face, better prevent cross-infection.

Epidemic prevention and control –

Fever alert

Product prevention set a high temperature warning threshold, when a person's temperature is detected to exceed the warning threshold, immediately start the voice alarm mechanism, indicating the risk of infection, effectively protect the health of personnel, and effectively prevent and control the epidemic.

Product Function

Intelligent Temperature Measuring Kiosk

Thermal imaging temperature monitoring
Non-contact efficient management
Prevent and control the epidemic with precision

36.5°C
Current temperature 36.5°C
Identify successfully
Verified
Intelligent Temperature Measuring Kiosk

Infrared thermal imaging technology
Millimeter response rate
Precision ratio $\pm 0.5^{\circ}\text{C}$
Abnormal temperature alarm
Self-service easy installation

Management platform – Data query

The product supports the data network upload function, which can form the temperature detection data into a table, and capture the portrait real-time upload background and push the SMS to the designated management personnel for tracking inquiry.

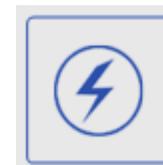


Product Feature



Cutting-edge infrared thermal imaging technology

It is implanted with a thermal imaging camera, which can measure the user's temperature through infrared induction, which is convenient and quick.



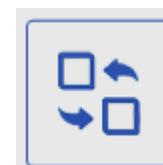
Millisecond response speed

1: N comparison time/person, face verification accuracy, efficient epidemic prevention.



8"HD touch screen

It can simultaneously present the human portrait, the human body thermal imaging image and the temperature measurement data, the detection result is more intuitive.



Multimode operation

When not connected to the Internet, the function of brushing face temperature measurement also runs, no requirements for the environment, can be quickly put into use.



The precise definition of temperature

Temperature monitoring error no more than $\pm 0.3^{\circ}\text{C}$, accurate prevention and control of the epidemic, to avoid the risk of infection..



Simple self-installation

Products do not need professional installation, power can run; Desktop, wall hanging, bracket multiple modes, flexible placement.

Function expansion

The intelligent temperature measuring machine can be connected to the access control system to realize the function of facial recognition+temperature measurement and opening the door.

The pre-recorded portrait is identified by comparison and the body temperature is detected normally.

The access control or road gate can be automatically opened to increase the epidemic prevention coefficient and improve security.

Product Parameter

Operating System	Android Standard
Thermal resolution	32*32/12um
Field of View	33°*33°
Max Infrared Image Size	≥320*240.0.5m, Error of ±0.3°
Camera Resolution	2 million hardware wide dynamic
Face Verification Accuracy	>99%
Face Recognition Distance	0.2m~0.8m
Storage Capacity	20000 cards, 10W event records
Measuring Range	30°C~45°C
Display Screen	8" IPS
Chip	Quad core RK3288, ARM-A17 1.8GH, GPU: Mail-T764
RAM	2G
ROM	4GB
Ports	DC*1, RJ45*1, USB*2 (OTG*1), HDMI*1, TF SD slot*1/audio*1
Communication Mode	Wired/wireless network
Input Power	AC 220V
Working Temperature	10°C~30°C
Working Humidity	<90%RH
Work Environment	Indoor

Teplovisor «K3» - thermal imaging system with the function of identifying persons with elevated body temperature.

Product Overview

Teplovisor «K3» is an solution to identify people who have a fever. These devices are mostly used in small kiosk, Malls, airports, medical and educational institutions, shopping and entertainment complexes, etc., to scan the population to prevent outbreaks such as SARS, Bird Flu, Ebola and other recent outbreak such as Coronavirus also known as the Wuhan virus.



Introduction



Application

Can be used in a variety of places:

- Support-office,
- Subway,
- Home,
- Supermall shop,
- Community,
- Entrance,
- Etc.



Parameters



Accuracy

High Accuracy: $\pm 0,2$ Degrees



Energy saving

One week standby. Designed for continuous, long-term use



Warning

High temperature alarm/Abnormal temperature:
Flashing red lights and alarm «Di-Di»



Speed

0,1 s quick measurement non-contact,
avoid cross-infection

Specification

Accuracy	±0,2 degrees (34°C~45°C, place it in the operating environment for 30 minutes before use)
Abnormal automatic alarm	Flashing + «Di-Di» sound
Automatic measurement	Measuring distance 5cm - 10cm
Screen	Digital display
Charging method	USB charging or battery (18650 Li-ion)
Install method	Nail hook, double-sided adhesive sticking, bracket fixing
Environment temperature	10°C~40°C (Recommended 15°C~35°C)
Infrared measuring range	0°C~50°C
Response time	0.58
Input	DC 5V
Weight	350 g
Dimensions	170 x 115 x 140 (mm)

Thank you for your attention!



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