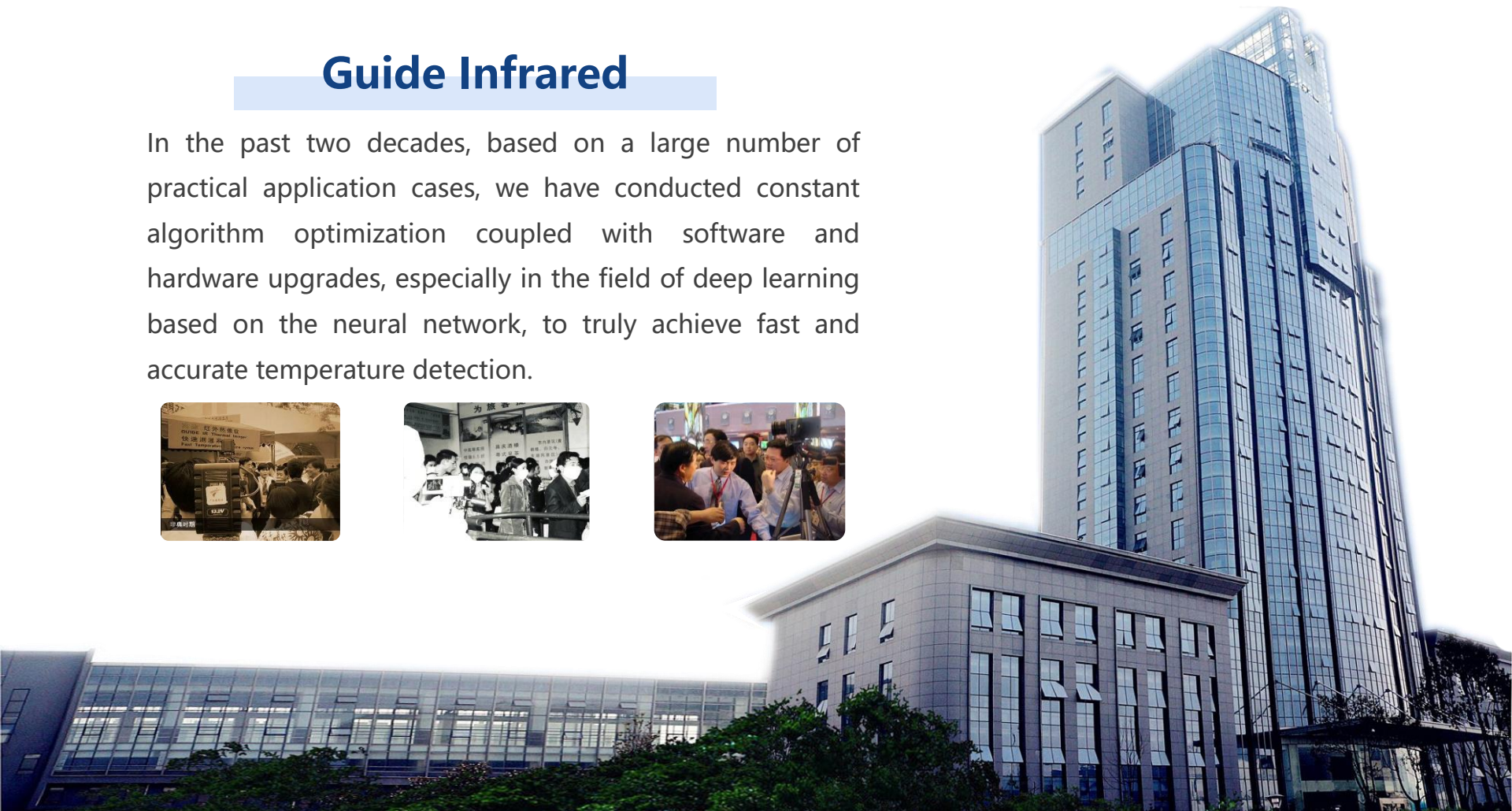




**IR236 IR FEVER
WARNING SYSTEM**

Guide Infrared

In the past two decades, based on a large number of practical application cases, we have conducted constant algorithm optimization coupled with software and hardware upgrades, especially in the field of deep learning based on the neural network, to truly achieve fast and accurate temperature detection.





Technical Principle

Q: What is infrared radiation?

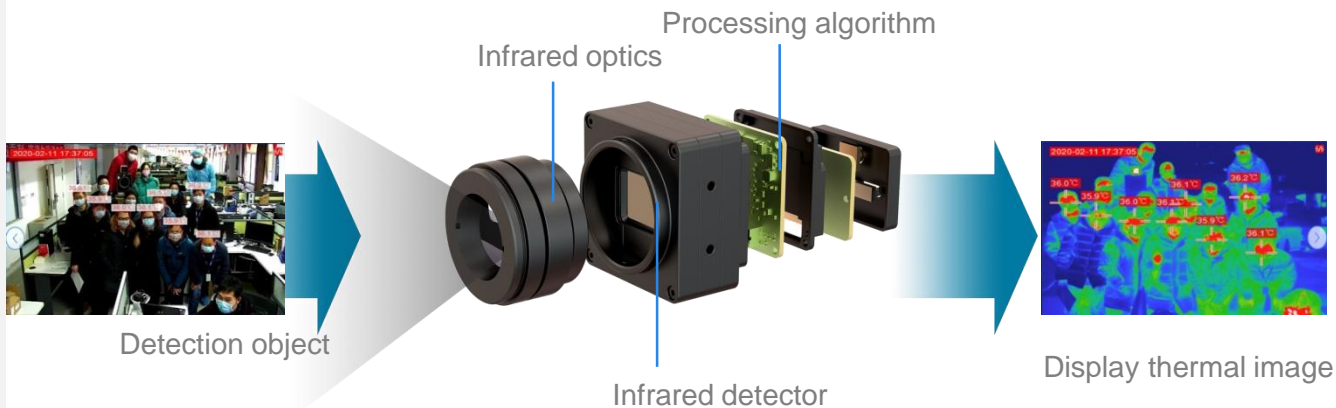
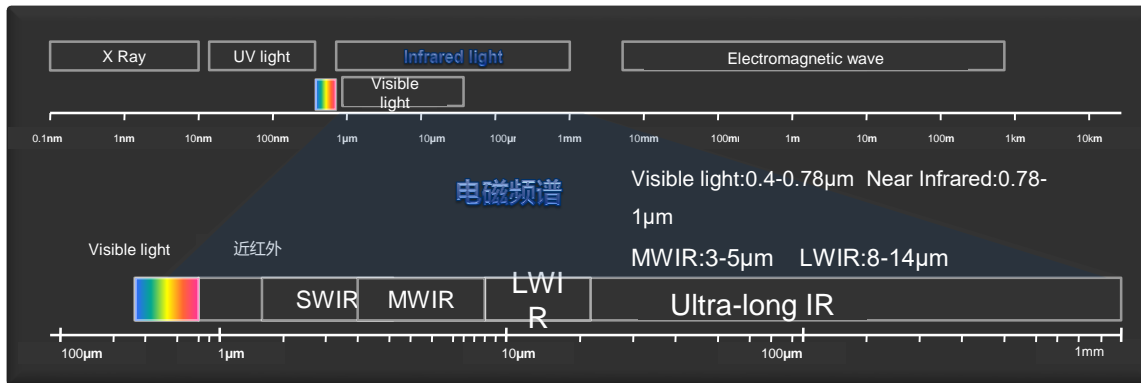
In the natural world, all objects whose temperature is higher than absolute zero (-273.15 ° C) can radiate infrared energy. The physical nature of infrared radiation is thermal radiation, which is also an electromagnetic wave.

Q: What is an infrared thermal camera?

The infrared thermal camera converts infrared thermal radiation into corresponding electrical signals, and then magnifies and video processes to form a video image that can be viewed by the naked eye. Generally speaking, it is to change the invisible infrared radiation into a visible thermal image, and it can reflect the temperature distribution of the target surface.

Q: What are the advantages of a infrared thermal imaging camera?

Infrared thermal imaging camera can realize the fast temperature detection of multiple targets at the same time from several meters away and identify the elevated temperature instantly, avoiding the close contact required by traditional thermometer and reducing the risk of infection.



Temperature measuring device	Mercury thermometer	Ear temp gun	Forehead temp gun	Thermal imaging system (IR Fever Warning System)
Measuring way	Axillary temperature	Ear inside temperature	Forehead	Temp detection from several meters away
Contact or not	contact	contact	Non-contact	Non-contact
Distance	0	0	1-3cm	Up to 800cm
measuring time for one person	3-5mins	3-5seconds	3-5 seconds	10 people per second
Efficiency	1 people/3mins	12 people /min	12 people/min	500 people/min
Display	Temp scale	Digital	Digital	Thermal Image & temp value

Safe

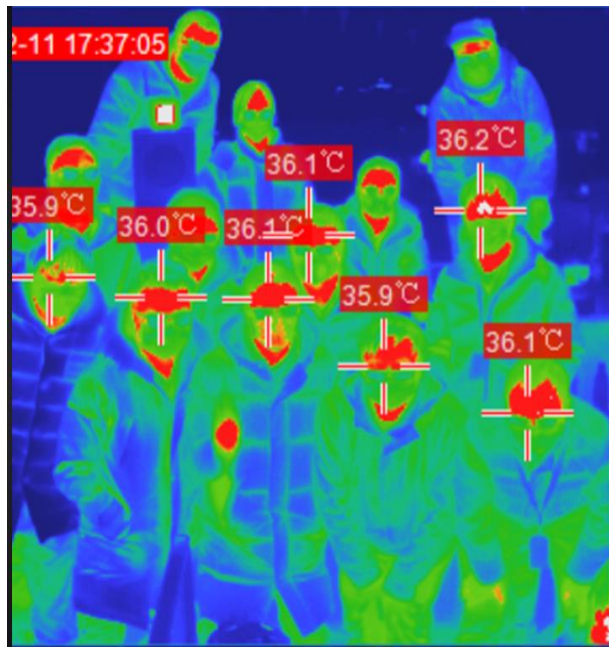
Non-contact long-distance temperature screening, reducing the risk of infection

Reliable

Professional testing and certification from multiple certification agencies at home and abroad,
AI algorithm, false alarm and missing alarm rate < 1‰;

Efficient

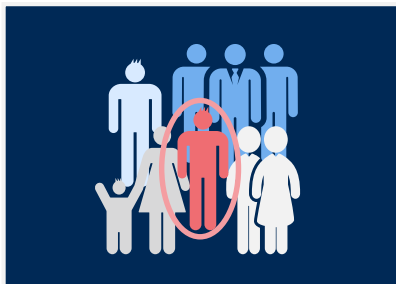
Non-inductive passage,
Monitor the temperature of many people at the same time,
save time and effort



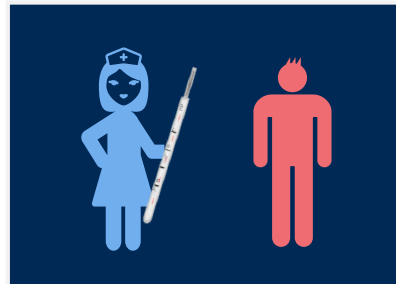
1 Fast temperature screening by IR Fever Warning System



2 Alarm when someone shows an "out of norm" temperature



3 Further measurement (by mercurial thermometer or ear temp gun)



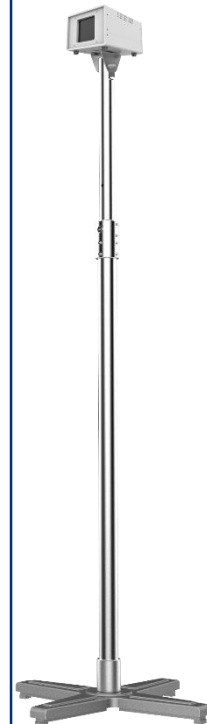
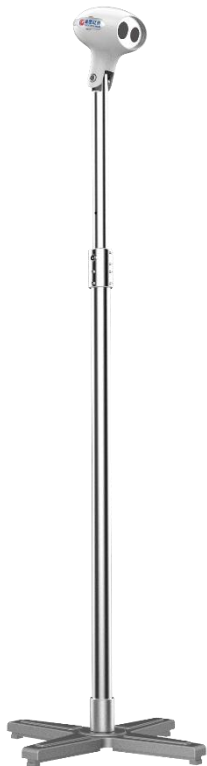


IR236 Introduction

From the SARS pandemic in 2003, the H1N1 Influenza pandemic in 2009 and the Ebola epidemic in 2014, to the COVID-19 outbreak in 2020, Guide Infrared has a proven track record of supporting global public health crisis, standing with the world in the prevention of diseases.

GUIDE IR236 IR Fever Warning System can be applied to mass fever screening in crowded public places, which help to detect people with a potential fever and may contain or limit the spread of the Coronavirus through identification of infected individuals showing fever symptoms. GUIDE IR236 combines advanced technology such as thermography human temperature detection algorithm and AI intelligent face tracking to make the equipment accurate and easy to use.

IR236 equipped with various powerful functions. Multi-target tracking can ensure that no targets are missed. Custom warning zones and high-temperature shielding settings can avoid interference from other high-temperature objects. When detect the febrile people, it supports automatic warning, tracking and photo taking for storage. Support video recording. Convenient to query and classify management. GUIDE IR236 is the ideal equipment for epidemic prevention in public places such as airports, stations, factories, schools, commercial centers and more.



- IR resolution: 400x300
- Temperature range: 20°C~50°C
- Accuracy: $\leq \pm 0.3^{\circ}\text{C}$
- Visible light: 2 million pixels

- Number of detection: temperature measurement in full screen, no upper limit.
- Number of people showing temperature : 10 at most
- Number of alarm: 10 at most

- Applicable environment: indoors/no wind
- Measurable distance: 2 m - 10 m
- Measuring width: 3m - 5 m
- Measuring efficiency: up to 500 people/min

- ✓ With blackbody, higher accuracy
- ✓ High resolution, dual light camera
- ✓ High efficiency, 500 people/min
- ✓ 8m safe detection distance
- ✓ AI algorithm, alarm failure < 1‰
- ✓ Super intelligent, only detect face position.
- ✓ Fully automatic detection and alarm

- The blackbody is a calibration device, which is a standard temperature source (accuracy $\pm 0.1^{\circ}\text{C}$).
- The thermal camera is equipped with blackbody for real-time calibration, for keeping the temperature measurement accuracy at a high level of $\pm 0.3^{\circ}\text{C}$.



Thermal camera



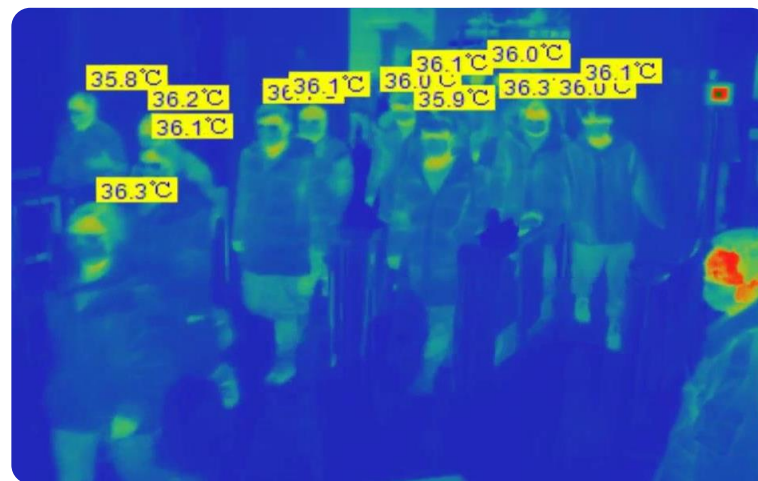
Blackbody

Advantages

High resolution dual light camera, high efficiency, 500 people/min



- The high resolution dual light camera can measure the temperature for multiple people at the same time.
- No need to stop, more than 500 people can be measured per minute.



- Can be used to measure temperature at a distance of up to 10 meters without risk of infection from close contact.



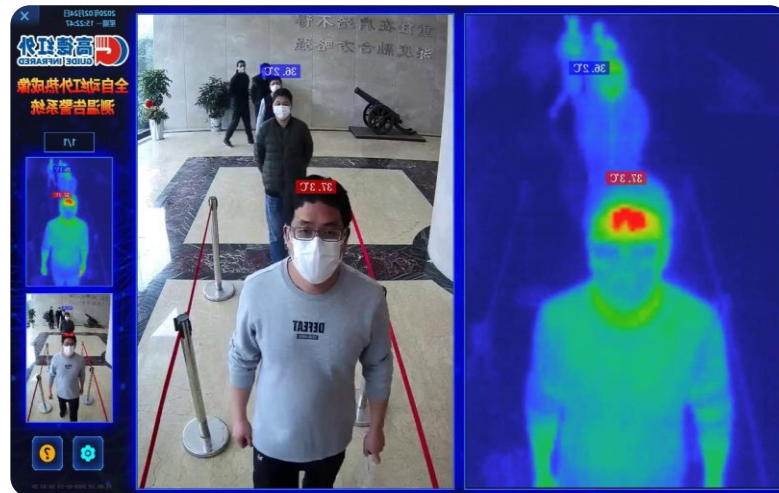
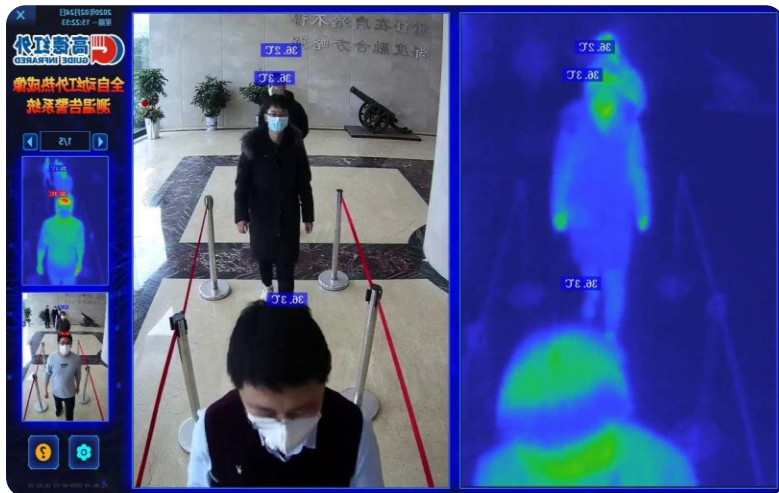
Temperature measurement at close range, with risk of infection



Non-contact temperature measurement, no risk of infection



- Based on the deep learning algorithm of neural and practical application of big data in recent 20 years, it can ensure accurate temperature measurement and misreport < 1‰ .
- Artificial intelligence face detection algorithm, even wearing a mask can also recognize the face, not influenced by other hot objects.



- Support multi-point high temperature automatic tracking alarm, automatic detection, alarm and photo retention, support video recording, greatly reduce the workload of the operator



Real-time image

Alarm picture



Standard

Camera head + stand

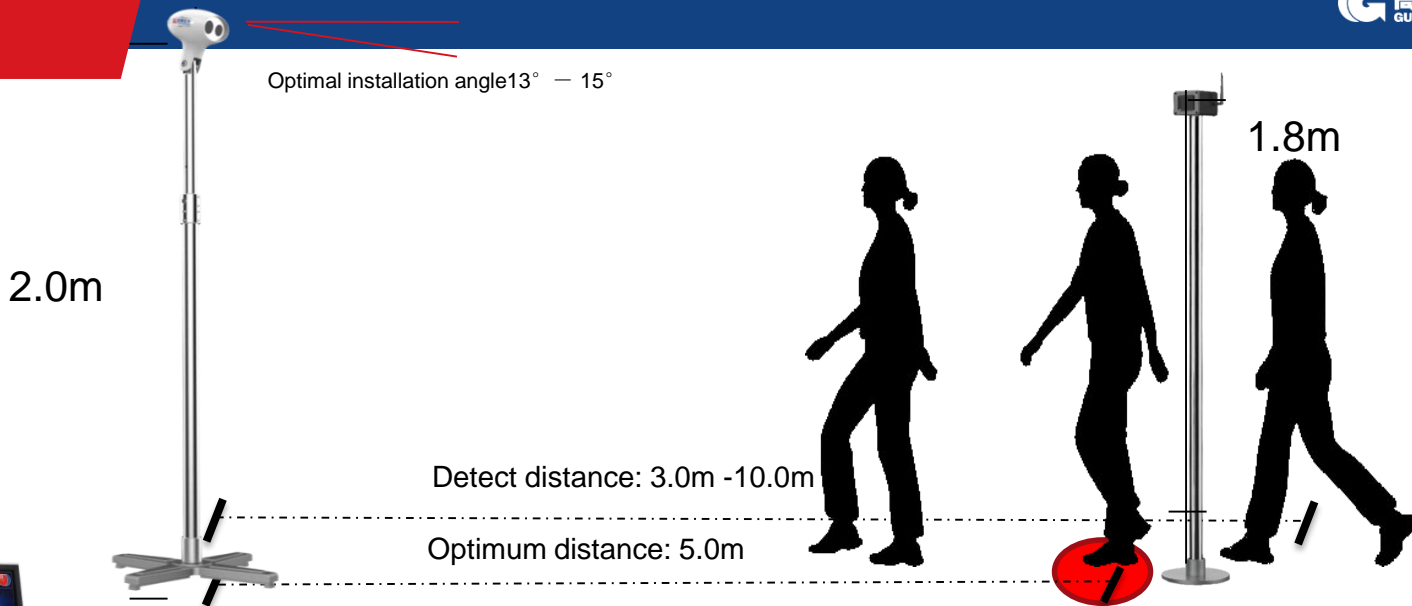
Black body + stand

Switch

PC Kit



Deployment



Distance(m)	Horizontal observation range(m)
3	2.02
5	3.36
8	5.38

Optimum location

Recommended phone "Level" APP to adjust camera Installation angle



If the installation height of the camera is restricted by the site, the installation height can be adjusted appropriately. It is recommended that the installation height of the camera is not lower than 2.0 meters, and the height of the black body is not lower than 1.8 meters.

Specifications

Category	Item	Specification
IR detector	IR resolution	400×300
	Pixel size	17μm
	NETD	≤40mK
	Focal Length	9.7mm
	FOV	38°*28°
Visible Camera	Frame Rate	25Hz
	Resolution	2 million pixels
Temperature Measurement	Frame Rate	25Hz
	Range	-10°C~50°C
Accuracy	Accuracy	± 0.3 °C (ambient temperature 16 ~ 32 °C)
	Calibration	Built-in shutter and external black body, automatic calibration after selecting mode
Software functions	Parameter settings	Warning switch and warning threshold value, number of warning targets, warning photos automatic clearing, shielding fixed high temperature objects
	Face tracking	Intelligent face tracking, Supported from V1.0.9.0
	Real-time preview	Real-time preview of visible and thermal image
	Real-time spot temperature detection	Real-time temperature monitoring at any point in the field of view
	Automatic tracking	Support automatic tracking for elevated temperatures
	Automatic warning	Automatic tracking, warning and photo capturing for storage when people with fevers are identified; Warning while the Black Body is blocked.
	Historical records	Support query, classification and deletion of historical warning screenshots
	Video recording	Support. The software needs to be upgraded to V1.1.0.9, and equipped with NVR (NVR standard 4T hard disk), support GB28181 protocol to access third-party platforms
	Network communication protocol	HTTP、RTSP

Category	Item	Specification
Environmental adaptability	Work Temperature	-10 ~ 50 °C (ambient temperature 16 ~ 32 °C)
	Storage Temperature	-20 °C ~ 60 °C
	Work Humidity	<90% (non-condensing)
	Shock	30g 11ms, IEC60068-2-27
	Vibration	10HZ ~ 150Hz ~ 10Hz 0.15mm, IEC60068-2-6
Black body	Blackbody target surface uniformity	≤0.1 °C
	Temperature stability accuracy	≤ ± 0.2 °C (single point)
Camera head interface	Network interface	Two-way, visible light 100M, infrared 1000M
Camera head power	Input voltage	DC 12V
	input power	≤12W
Packaging specifications	Camera head size	173mm×184mm×212mm
	Total height (incl. stand)	2200mm
	Camera head package	510mm× 440mm × 270mm (subject to actual delivery)
	Total weight	≤45kg (subject to actual delivery)

*Note: The temperature measurement accuracy is a typical value under the specified mode and application conditions. The final interpretation right belongs to our company.



Epidemic Prevention Cases

- In **2003**, Guide equipment was widely used in hospitals, transportation and other key areas, successfully helped to contain the spread of the **SARS**.



- In **2016** (12th Feb.), the first case of **Zika** virus infection at the Chinese port has been detected in Guangzhou Baiyun International Airport, through Guide fever warning system.



- In **2019** (25th Sep.), Beijing Daxing International Airport was officially put into operation, 55 sets of Guide fever warning system has been installed in the entry and exit port.





Beijing Daxing Airport



Railway Station



Bank



CNOOC Group



Leishenshan Hospital



Tencent Group



HUAWEI



Wuhan Airport



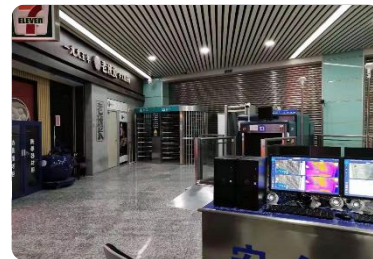
Hospital



Supermarket



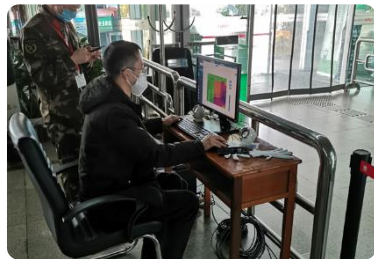
Airport



Railway Station



Airport



Authority



Changjiang Daily



University



CCTV



CGTN



Shenzhen New



Shangdong TV



China Electronics News



Hubei Daily



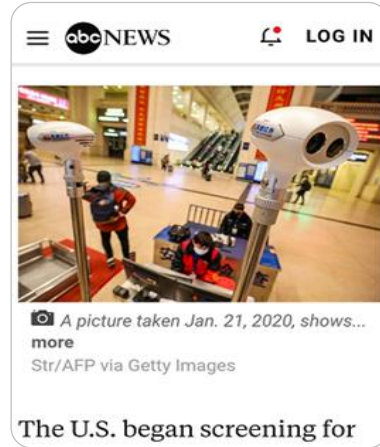
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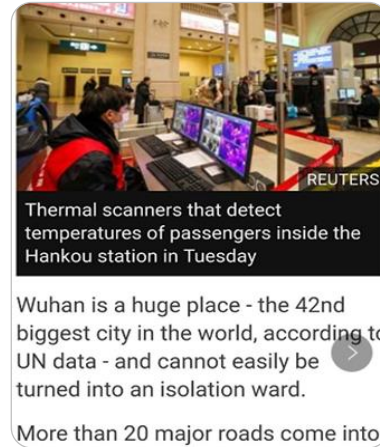
Changjiang Daily



SKY NEWS



ABC



BBC



FORBES



Transportation Junction



Institution



Hospital



Shopping mall & Supermarket



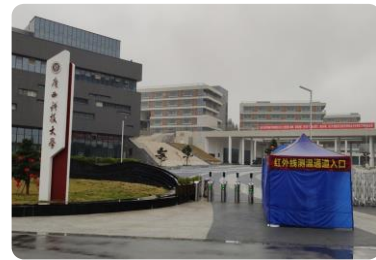
Bank



Factory park



Office building



School



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