

EXPEC 1810



**What You Need to Know
About IR Thermography**



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Radiation is a form of heat loss through infrared rays involving the transfer of heat from one object to another without physical contact. Skin emissivity is an important factor in determining the true skin temperature, and through the assessment of surface temperature it is possible to acquire knowledge regarding physical and healthy status of humans and other living creatures. (Chiu et al 2005; Cook et al 2006; Bouzida et al 2009; Alsaood et al 2014) Infrared thermography (IRT) is a non-destructive testing technology that can be used to determine the superficial temperature of objects. Thermal cameras collect infrared radiation emitted by the surface, convert it into electrical signals and create a thermal image showing the body's superficial temperature distribution (Incropera and DeWitt 2007).

Intelligent infrared body temperature monitoring systems can perform large-area detection when an epidemic situation occurs and quickly find out those with higher body temperature, effectively raising awareness and controlling the spread of the epidemic. The system is simple and convenient to operate. It can set the alarm temperature range, realize multi-point alarm and tracking, ensure that no targets are missed, and avoid interference from other high-temperature objects. Infrared and visible video images are transmitted to the monitoring centre for analysis and processing in real time. With concealed design and smooth operation, the safety of the crowd is always guarded.

This large-scale body temperature screening can be exercised in airports, stations, schools, hotels, properties, and hospitals.

EXPEC IR Thermography Fever Warning System

Non-contact and fast mass screening system

Application field: Thermography, Inspection and quarantine, Medical Diagnosis

IR Thermography Fever Warning Systems are 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 virus through identification of infected individuals showing fever symptoms. EXPEC Thermography combines advanced technology such as human body temperature measurement algorithm and AI intelligent face recognition to make the equipment accurate and easy to use.

The EXPEC Thermography Imager is 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 detecting febrile people, it supports automatic warning, tracking and photo taking for storage which is convenient to query and classify management. The EXPEC Thermography Imager is the ideal equipment for epidemic prevention in public places such as airports, stations, factories, schools, and commercial centres.

