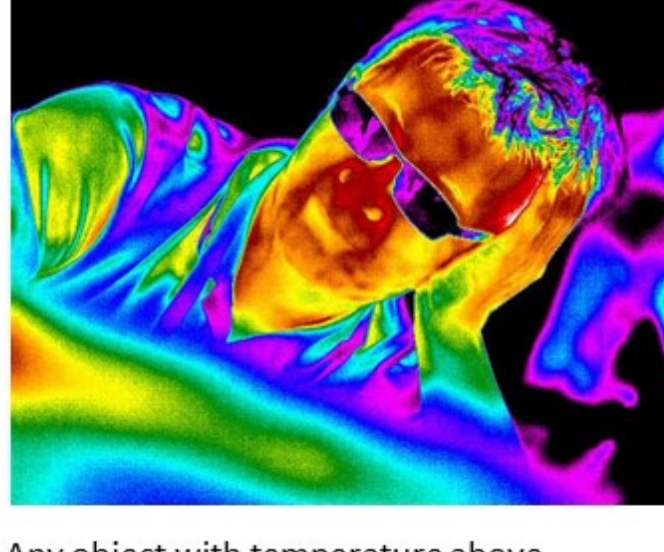


Hikvision Fever Screening Thermal Camera

Thermal Principle

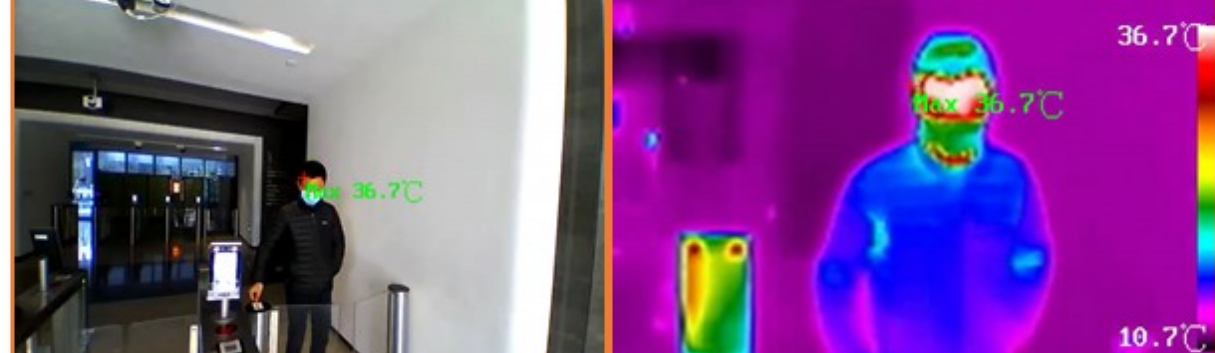


Any object with temperature above absolute zero emits a detectable amount of radiations.
A thermal camera can sense IR radiations

(8-14μm) and produce thermal images. Thermal camera converts IR radiations into gray value, and establishes the accurate corresponding relation between gray value and temperature through the temperature measurement algorithm model. The model (Temperature Gray Level Curve) is obtained by black-body calibration.

Based on Hikvision's own advanced detector and algorithm, Hikvision Fever Screening Thermography Series can realize up to $\pm 0.3^{\circ}\text{C}$ accuracy (with black body).

How can a thermal camera do in contagious diseases?



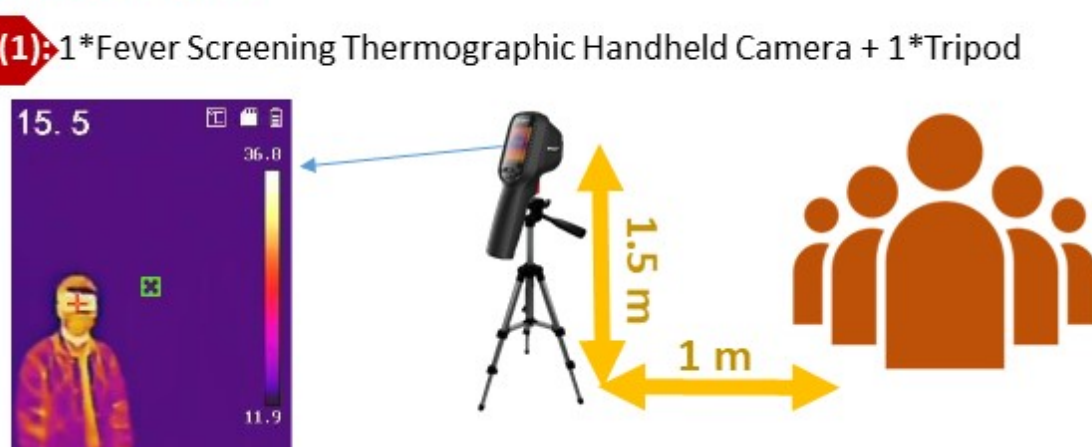
Application: It is well-known that one major symptom of virus infections is fever. Therefore, thermal camera with high temperature accuracy can detect the elevated body temperature to make the fever screening. For this application, thermal cameras are advisable to be installed at the places with long queues such as passport control.

Advantages:

- High Efficiency:** It takes only one second that thermal camera can detect temperature of each person. Thus, no congestion will be made when passing through the site where temperature needs to check.
- Safety:** Thermal camera supports non-contact temperature measurement which can achieve accurately measuring temperature around 1 meter away. That reduces the risk of infection coming from physical contact.

Hikvision's Solutions

Solution (1): 1*Fever Screening Thermographic Handheld Camera + 1*Tripod



Fever Screening Thermographic Handheld Camera can realize accuracy $\pm 0.5^{\circ}\text{C}$. By watching the screen of thermographic handheld camera, inspectors can easily check the temperature of all persons who lined up in front of the camera. Once fever patients pass by, inspectors can take necessary actions.

Solution (2): 1*Thermographic Turret or 1*Thermographic Bullet + 1*Tripod or 1*Bracket + iVMS-4200 + 1*laptop



Fever Screening Thermographic Turret or Fever Screening Thermographic Bullet can realize accuracy $\pm 0.5^{\circ}\text{C}$. Both turret and bullet support AI Face Detection and audio alarm, so when fever patients pass by, inspectors will easily find and record the suspected patient.

Tips for Installation



Real Time VMS Monitor

Application Effect



Solution (3): 1*Thermographic Turret or 1*Thermographic Bullet + 1*Black Body + iVMS-4200 + 1*laptop



Compared with solution (2), solution (3) adds black body to improve the temperature measurement accuracy from $\pm 0.5^{\circ}\text{C}$ to $\pm 0.3^{\circ}\text{C}$.



Note: Black body is recommended to be installed 1.2 meter in front of the thermal camera.

Why choose Hikvision's solutions?

- AI Face Detection:** Hikvision Fever Screening Thermographic Bullet/Turret provide AI Face Detection. That enables to locate human face, thus, reduces false alarm caused by other heat sources.
- Onboard Audio Alarm** With built-in audio module, Hikvision Fever Screening Thermographic Bullet/Turret can trigger alarm to notice inspector immediately fever patients pass by.
- Hikvision's Own Temperature Measurement Algorithm** Benefitting from Hikvision's own temperature measurement algorithm and big data obtained by lots of cases, Hikvision is capable to ensure the accuracy of temperature measurement.
- One-stop Solution** As a world's leading security solution provider, Hikvision offers one-stop solution include thermographic camera, NVR, switches, etc., which is more convenient for customers to set up a professional solution.

Products Showcase

Fever Screening Thermal Products:

DS-2TD1217B/PA	DS-2TD2617B/PA	DS-2TP31B-3AUF
<ul style="list-style-type: none"> 160*120 thermal resolution NETD <= 40mK 3/6mm thermal lens 4/6mm optical lens Support thermal and optical image fusion Temperature measurement range: 30-45°C Temperature accuracy: $\pm 0.3^{\circ}\text{C}$ with black body $\pm 0.5^{\circ}\text{C}$ without black body Support AI face detection Support audio alarm 	<ul style="list-style-type: none"> 160*120 thermal resolution NETD <= 40mK 3/6mm thermal lens 4/6mm optical lens Support thermal and optical image fusion Temperature measurement range: 30-45°C Temperature accuracy: $\pm 0.3^{\circ}\text{C}$ with black body $\pm 0.5^{\circ}\text{C}$ without black body Support AI face detection Support audio alarm 	<ul style="list-style-type: none"> 160*120 thermal resolution NETD <= 40mK 3 thermal lens Temperature measurement range: 30-45°C Temperature accuracy: $\pm 0.5^{\circ}\text{C}$