



Total Solutions for Security Professionals

**Body Temperature Screening  
Thermal Solutions and Products**

# Thermal Camera for Body Temperature Screening



## Principle

Any object with temperature above **absolute zero** emits a detectable amount of radiations. 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.

## Application

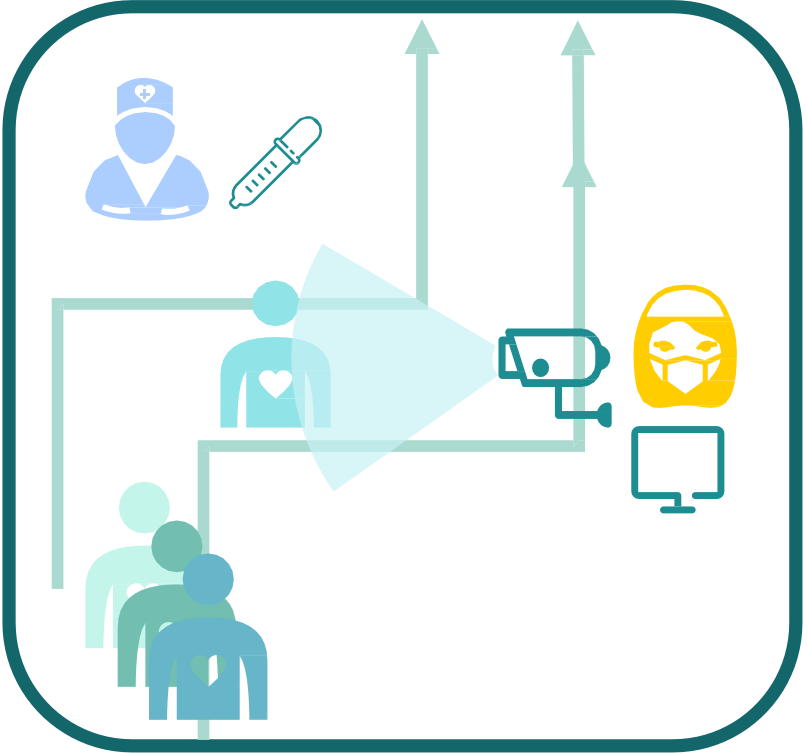
It is well-known that one major symptom of virus infections is fever. Therefore, thermal camera with **high temperature accuracy** can **detect the elevated body temperature to make the preliminary screening**. Thermal cameras are advisable to be installed at the places with long queues such as passport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

## Advantages

1. **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.
2. **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.



# Body Temperature Screening Process



## 1. Set up a pedestrian path

Set up a quick path [in the indoor space](#) to separate space into few parts.



## 2. Thermal camera quick screening

Using thermal fever screening solutions to do quick screening of moving crowd and ensure the efficiency



## 3. Thermometer secondary check

Use a [thermometer](#) to do [secondary check](#) for people who are suspicious of fever



# Features of Solutions

## Advanced Algorithms

Achieve highly reliable accuracy with Hikvision's proprietary temperature measurement algorithms

## Bi-Spectrum Monitoring

Provide both thermal and optical image channels apart from temperature measurement

## Embedded Audio Alarm

Trigger alarms to notify operators immediately when an abnormal temperature is detected

## One-Stop Solution




Offer an extensive product portfolio including thermal cameras, NVRs, switches, etc.



**High Efficiency**  
One second  
to detect temperature

**Increased Safety**  
Non-contact  
measurement  
from a distance

# Turret/Bullet Thermal Cameras

	Camera Only Solution		
Brand	LTS		
Image			
Model	DS-2TD1217B-3/PA	DS-2TD2617B-6/PA	DS-2TD2636B-13/P
Face Detection	30 at a time	30 at a time	30 at a time
Thermal Resolution	160 x 120	160 x 120	384 x 288
Thermal Lens	3mm	6mm	13mm
Optical Resolution	4MP	4MP	4MP
Accuracy	±0.5 °C (0.9°F) w/o Black Body	±0.5 °C (0.9°F) w/o Black Body	±0.5 °C (0.9°F) w/o Black Body
NETD	<=40mK@ 25°C, f/1.1	<=40mK@ 25°C, f/1.1	<=35mK@ 25°C, f/1.0
Local Storage	128GB microSD	128GB microSD	128GB microSD
NVR Integration	Yes	Yes	Yes
Price	<b>\$5,599</b>	<b>\$5,599</b>	<b>\$7,699</b>
Lead Time	1-2 Weeks	1-2 Weeks	1-2 Weeks

## Compatible LTS NVRs



NVR Model
LTN8608-P8
LTN8616-P16
LTN8916H
LTN8916H-P16
LTN8932H
LTN8932H-P16
LTN8932H-P24
LTN8932-8
LTN8964-8
LTN8932-R
LTN8964-R

## Accessories



**standard 1/4"-20 Tripod DS-2907ZJ** (sold separately)

- standard 1/4"-20 (Can be purchase elsewhere)



**Turret Tripod adapter DS-2908ZJ** (Free of Charge)

- Connection between 1/4"-20 tripod and turret camera



**Bullet Tripod adapter DS-2909ZJ** (Free of Charge)

- Connection between 1/4"-20 tripod and Bullet camera

# Long-Range Application

## Solution Composition:

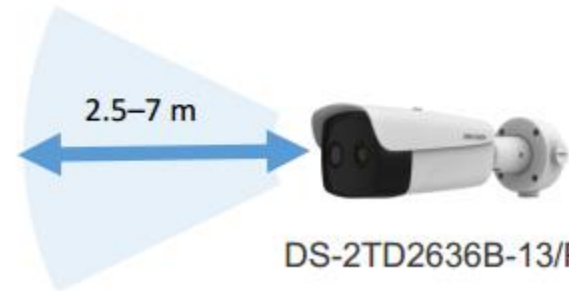
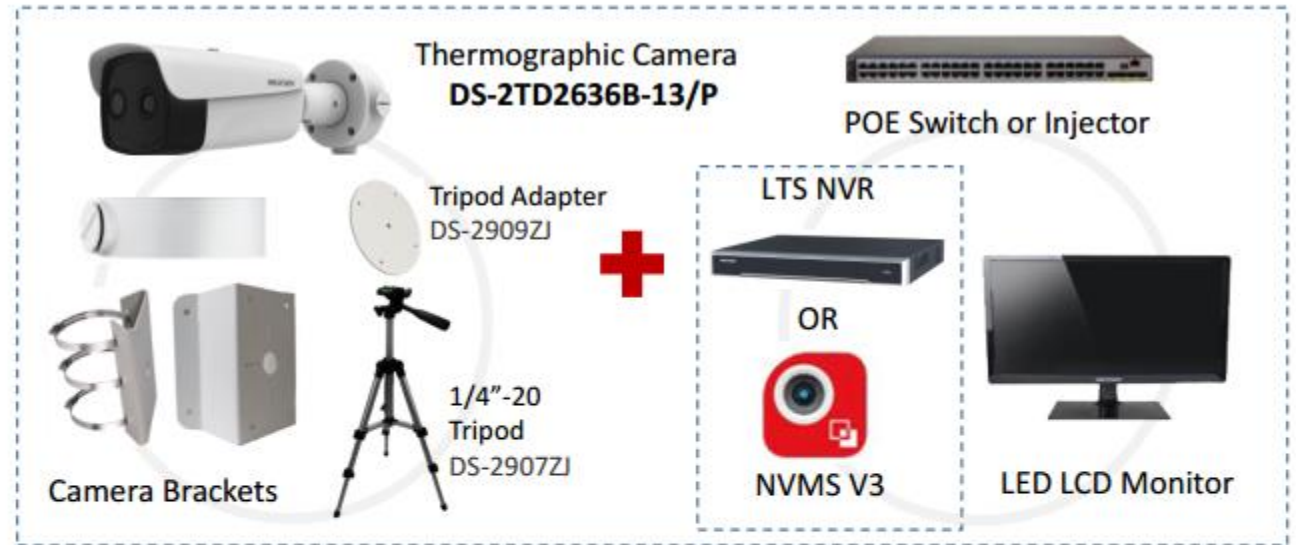
384x288 resolution thermographic camera + mounting bracket(s) + NVR or NVMS V3 + PoE switch + monitor

## Solution Advantages:

- Thermal resolution of 384x288 provides more temperature points and farther/wider detection area
- Measure objects at distances of 2.5 to 7 meters.
- Mountable on tripod/pole or building structure for temporary or long-term use
- Accuracy of  $\pm 0.5^{\circ}\text{C}$  ( $\pm 0.9^{\circ}\text{F}$ )
- Integrated 4 MP optical camera satisfies normal monitoring requirement

## Set Up Tips:

- Set up the solution in a stable indoor environment without wind or direct sunlight
- Power on for 30 minutes before measuring



Thermographic camera detection distance

# Short/Mid-Range Application

## Solution Composition:

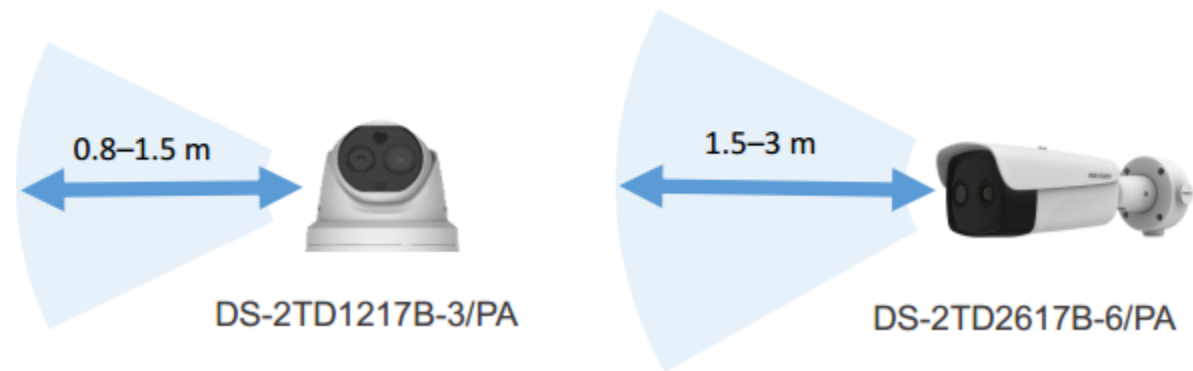
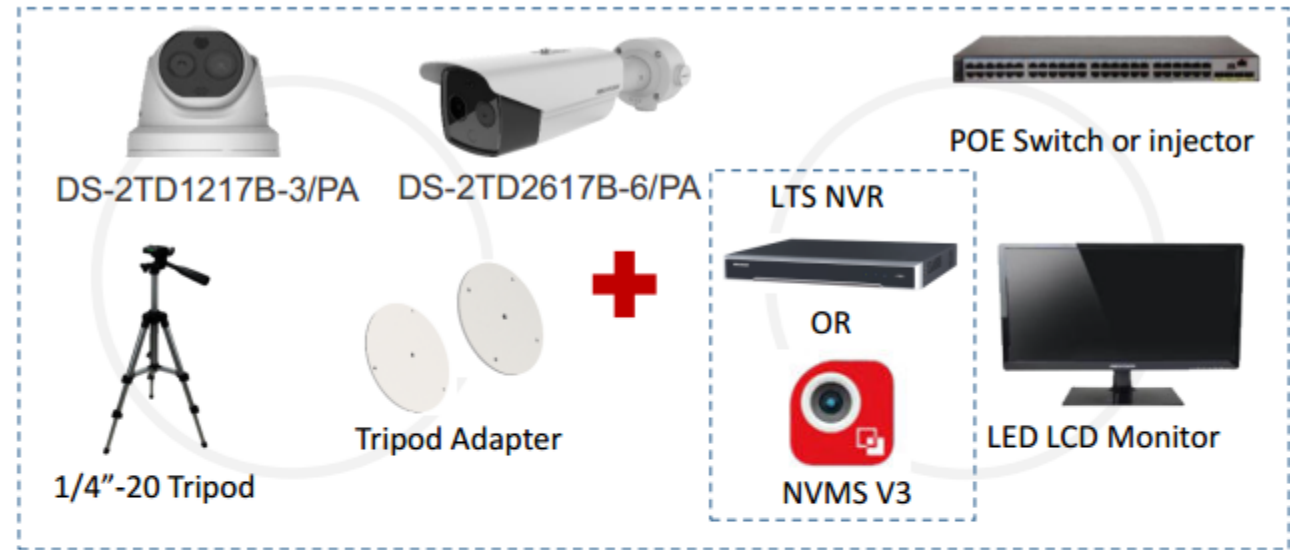
160x120 resolution thermographic camera + tripod + tripod adaptor  
+ NVR or NVMS V3 + PoE switch + monitor

## Solution Advantages:

- **Embedded audio alarm** can immediately notify operators of high temperature
- Mountable on tripod/pole or building structure for **temporary or long-term use**
- Accuracy of  $\pm 0.5^{\circ}\text{C}$  ( $\pm 0.9^{\circ}\text{F}$ )
- **Integrated 4 MP optical camera** satisfies normal monitoring requirement

## Setup Tips:

- Set up the solution in a stable **indoor** environment without wind or direct sunlight
- Power on for 30 minutes before measuring



Thermographic camera detection distance

# Body Temperature Screening Thermal Solutions

## Solution-Turret/Bullet Thermal Camera





# Body Temperature Screening Thermal Solutions

## Applications



# Body Temperature Screening Thermal Solutions

## Advantages

### AI Face detection

Hikvision thermographic fever screening **Bullet/Turret cameras** provide AI Face Detection function, locate multi faces intelligently and measure the faces only , to **reduce false alarm** from other heat sources.

### Onboard Audio Alarm

Hikvision thermographic fever screening **Bullet/Turret cameras** are able to do onboard audio alarm, notice the operator without the requirement of other sirens , **reduce the complexity** of whole solution.



### Unique Self-developed Algorithm

Hikvision thermographic fever screening products are embedded with **self-developed algorithm**, which specially optimized for temperature measurement thermography.

Combined **constant temperature/dust-free automated manufacturing process with big data**, Hikvision could **ensure the accuracy** of thermal cameras

### Full solution

As the world's leading security solution provider , Hikvision are able to provide **full one-stop solution** include thermography , NVR , barriers, detector door , switch. More convenient for customer and user

# Body Temperature Screening Thermal Solutions

## FAQ

**Q:Can the thermographic fever screening camera be installed outdoors?**

**A: NO, Outdoor wind and sun can easily affect the body surface temperature** and the working status of the camera, which results in a deviation between the measured body surface temperature and the actual body temperature. From the perspective of ensure the accuracy, we strongly recommended the solutions used indoors.

**Q:Does the camera recognize the face for temperature measurement**

**A:** The camera recognizes faces when screening. It supports up to 30 faces. But still we recommended to carry out temperature measurement one by one.

**Q:How long can I use the fever screening function after the camera is turned on?**

**A: 5 minutes** after the handheld camera is turned on, **30 minutes** after the bullet / turret camera is turned on.

**Q:Will other heat sources (such as tea cups, kettles, etc.) cause false alarms?**

**A:** The cameras are able to use face detection technology, so other heat sources **will not cause false alarms.**