



# North Cal Security

People Say Yes, to NCS

**Hikvision  
Fever Screening  
Thermal Solutions**

03-09-2020 Mon 16:34:57

SAFER, FASTER, SMARTER  
Hikvision Temperature Screening Thermal Solutions  
Check Individual.

Solution 1

Maintenance and Management Main View

09-03-2020 11:57:03

09-03-2020 11:57:04

Index	Event Source	Event Type	Event Time	Priority	Event Details	Status
					No Data	

Solution 1

09-03-2020 11:56:59

No alarm triggered, although the man's holding a cup of hot tea

Solution 1

## **WHY WE ARE HERE:**

- To provide you with a device that efficiently screens people to reduce the spread of the virus
- To help you maintain a Healthier and Safer environment for everyone
- Reduce your overall Liability and Risk due to Covid 19
- Increase your organizations productivity

## **WHAT WE DO:**

- Provide Quality Products, Services, and Competitive Pricing
- Professional Installation
- Provide Staff Development for all systems installed
- Provide Scheduled Inspection, Testing, and Maintenance

# ADVANTAGES:

- Cost Effective from a Liability Standpoint
- Device that can Detect, Alarm, Speak, Remind, and Record
- Retrievable data available for internal use
- Mitigates Risk Factors for all users
- Encourages Economic Growth
- Operational Cost Savings
- Prevents Reduction in Productivity
- Advocated by the Food and Drug Administration (FDA)

# **SPECIAL FEATURES :**

- Can Screen up to 30 persons at once
- Faster screening (up to 5 people screened in roughly 12 seconds)
- Less Invasive
- Reduced User Exposure
- Devices are 4x more accurate than the competition
- Exclusive Advanced Thermographic Technology \*

# TECHNICAL CONSIDERATIONS:

- Electronic (UPS)
- Less Effective Devices on the market
- Finding an Optimal Location for Device
- Daily Warm Up Time/Calibration (30 min w/calibrating device vs. 90 mins. manually)
- Optional Mounting Platforms

## **DISCLAIMER:**

- **Temperature Screening Tool only**
- **Should be used in conjunction with secondary virus follow up**
- **Not a Medical Device**
- **Does not treat or diagnose disease**
- **Not guaranteed to prevent exposure**












# **High Accuracy Thermographic Cameras**

**What does the solution look like?**



# Advantages of Hikvision Solution

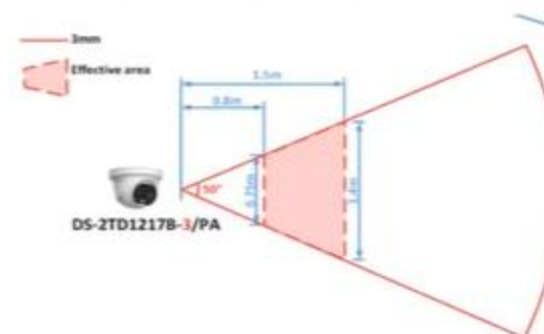
## Thermographic Technology vs. Thermopile

	Other Solutions Thermopile
 <p>Full screen measurement</p>	<p>Fixed limited area measurement</p> 
 <p>Measurement by AI tracking can be accurate</p>	<p>Measurement in the limited fixed area can be wrong or missed</p> 
 <p>Measurement distance: 0.5 m~1.5 m</p>	<p>Measurement distance: 0.3 m~0.5 m</p> 
 <p>Efficiency: 1 s/person</p>	<p>Efficiency: 5 s/person</p> 

EP-DTS1 单点测温模块识别角度θ: 5°  
EP-DTE32 阵列测温模块识别角度θ: 33°



Thermopile module:  
Only 5° for overseas model, and best distance is 0.3m  
Thermographic module:  
Hikvision is 60°, distance range 0.3-2m



# New Product Showcase

## Common Features

- All Bi-spectrum (Thermal & Optical)
- Accuracy:  $\pm 0.5^{\circ}\text{C}$  ( $0.9^{\circ}\text{F}$ ) w/o blackbody  
 $\pm 0.3^{\circ}\text{C}$  ( $0.5^{\circ}\text{F}$ ) w blackbody
- Bi-spectrum thermal-optical image fusion
- Automatic image capture and upload
- Stable indoor and windless environment use only (Working Temperature  $59^{\circ}$  to  $95^{\circ}$  F)

## Blackbody Calibration Source DS-2TE127-G4A



- Temperature resolution:  $0.1^{\circ}\text{C}$
- Temperature stability:  $\pm 0.1^{\circ}\text{C/h}$
- Effective emissivity:  $0.97 \pm 0.02$
- Operating temperature: 0 to  $30^{\circ}\text{C}$



DS-2TP21B-6AVF/W

- Thermal Resolution:  $160 \times 120$
- 8 MP Optical Camera
- Bluetooth, Wi-Fi
- Touchscreen
- Measurement Range:
  - 6 mm Lens: 1.0–2.0 m
- Tripod ready
- Color Highlight Alarm and Audio Alarm



DS-2TD2617B-6/PA

- Thermal Resolution:  $160 \times 120$
- 4 MP Optical Camera
- Measurement Range:
  - 6 mm Lens: 4.92 ft. to 9.84 ft.
- Tripod Adapter: DS-2909ZJ (not included)
- Audio Alarm



DS-2TD2636B-13/P

- Thermal Resolution:  $384 \times 288$
- 4 MP Optical Camera
- Measurement Range:
  - 13 mm Lens: 2.62 ft. to 4.92 ft.
- Tripod Adapter: DS-2909ZJ (not included)



DS-2TD1217B-3/PA

- Thermal Resolution:  $160 \times 120$
- 4 MP Optical Camera
- Measurement Range:
  - 3 mm Lens: 2.62 ft. to 4.92 ft.
- Tripod Adapter: DS-2908ZJ (not included)

Audio Alarm

## Accessories



- standard 1/4"-20 Tripod DS-2907ZJ (sold separately)
- Standard 1/4"-20 thread (can be purchase elsewhere)



- Turret Tripod adapter DS-2908ZJ (sold separately)
- Connection between 1/4"-20 tripod and turret camera



- Bullet Tripod adapter DS-2909ZJ (sold separately)
- Connection between 1/4"-20 tripod and Bullet camera

DEEPINMIND NVR

# High Accuracy Thermographic Cameras

## Factors in Camera Choice

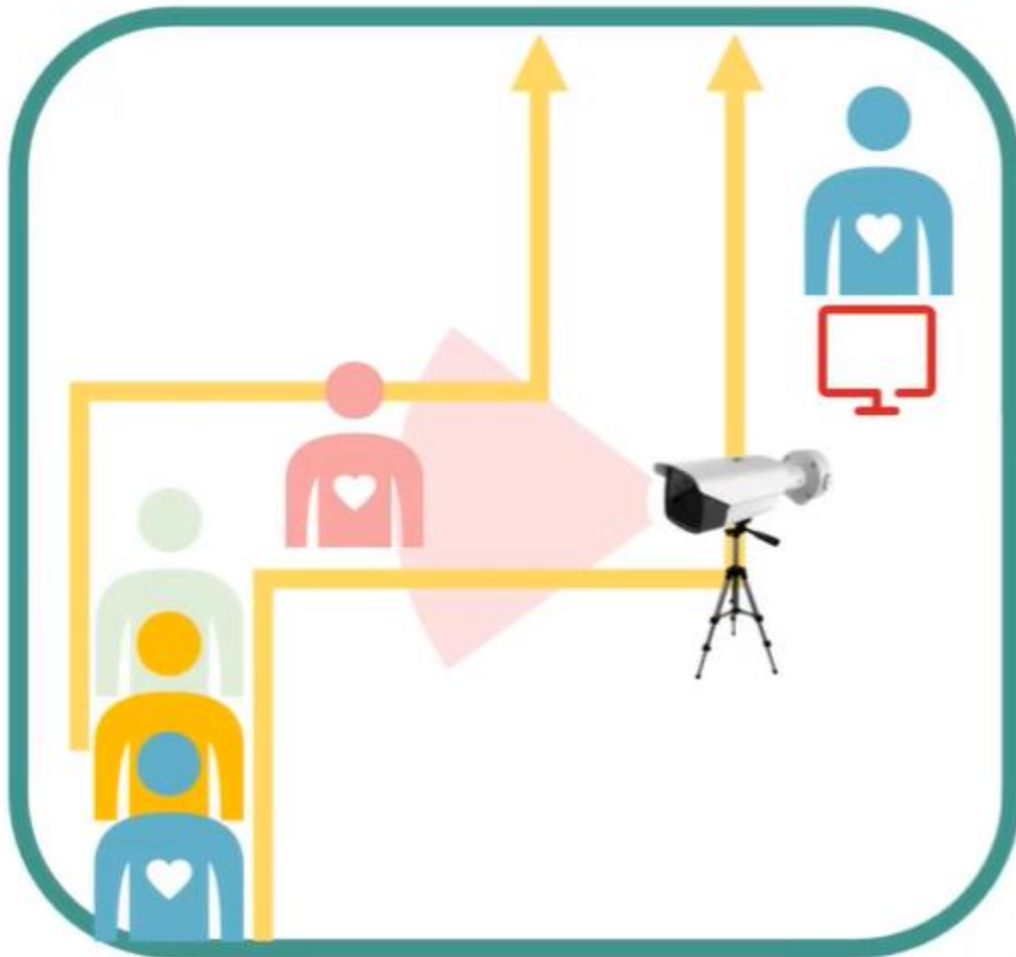
- Detection Distance or range is primary factor
- Distance between front of camera and subject
- Handheld or mountable is a secondary factor
- Price may drive the decision towards a shorter Detection Distance. Longer Detection Distance cameras are more expensive.

# INSTALLATION LOCATION:

- Install in a windowless indoor environment
- Ensure that the faces in the crowd don't overlap, and are within the camera's view
- Follow the guidance of the required distance and height for temperature measurement

Professional Installation Provided (Highly Recommended)

# Elevated Temperature Detection Process



**1. Set up a screening check point**  
inside an entrance



**2. Perform preliminary screening**  
using thermal camera to quickly detect  
elevated temperatures



**3. Perform secondary check**  
using qualified personnel with  
approved devices



# High Accuracy Thermographic Cameras

DS-2TD1217B-3/PA

- 160 x 120 Thermal Resolution (Upscaled to 320 x 240)
- Temperature Accuracy:  $\pm 0.9^{\circ}\text{F}$  ( $\pm 0.5^{\circ}\text{C}$ ) at **2.62 ft to 4.92 ft** (0.8 m to 1.5 m)
- Reliable Temperature Exception Alarm Function
- 3D DNR, Image Detail Enhancement
- White Light and Audio Alarm
- 4 MP Optical Sensor, 0.0089 lux
- PoE (802.3af, class 3)
- Uses two channels on an I-Series NVR
- Optional PC140 Pendant Cap

**DEEPINMIND NVR**

I Series NVR



OR



IVMS-4200(PC)



# High Accuracy Thermographic Cameras

DS-2TD2617B-6/PA

- 160 × 120 Resolution in Thermal Channel, High Sensitivity Sensor
- Accuracy:  $\pm 0.9^{\circ}$  F ( $\pm 0.5^{\circ}$  C) at 4.92 ft to 9.84 ft (1.5 m to 3 m)
- Reliable Temperature Exception Alarm Function
- 3D DNR, Image Detail Enhancement
- White Light and Audio Alarm
- 4 MP Optical Sensor, 0.0089 lux
- PoE (802.3af, class 3)
- Uses two channels on an I-Series NVR

DEEPINMIND NVR

I Series NVR



OR



IVMS-4200(PC)



# High Accuracy Thermographic Cameras

DS-2TD2636B-13/PA

- 384 × 288 High Resolution Thermal Channel, High Sensitivity Sensor
- Accuracy:  $\pm 0.9^{\circ}$  F ( $\pm 0.5^{\circ}$  C) at 8.2 feet to 22.0 feet (2.5 m to 7 m)
- Reliable Temperature Exception Alarm Function
- 3D DNR, Image Detail Enhancement
- 4 MP Optical Sensor, 0.0089 lux
- PoE (802.3af, class 3)
- Uses two channels on an I-Series NVR

DEEPINMIND NVR

I Series NVR



OR



IVMS-4200(PC)





# Mobile Temperature Screening Thermal Solution with DeepinMind NVR



Tripod  
\*tripod adaptor  
is needed

Thermal Cameras

Black body  
(optional)

DeepinMind NVR

Monitor

Accuracy:  $\pm 0.5^{\circ}\text{C}$  ( $\pm 0.3^{\circ}\text{C}$  with black body)

# Long-Range Solution — Setup



Temporary Setup

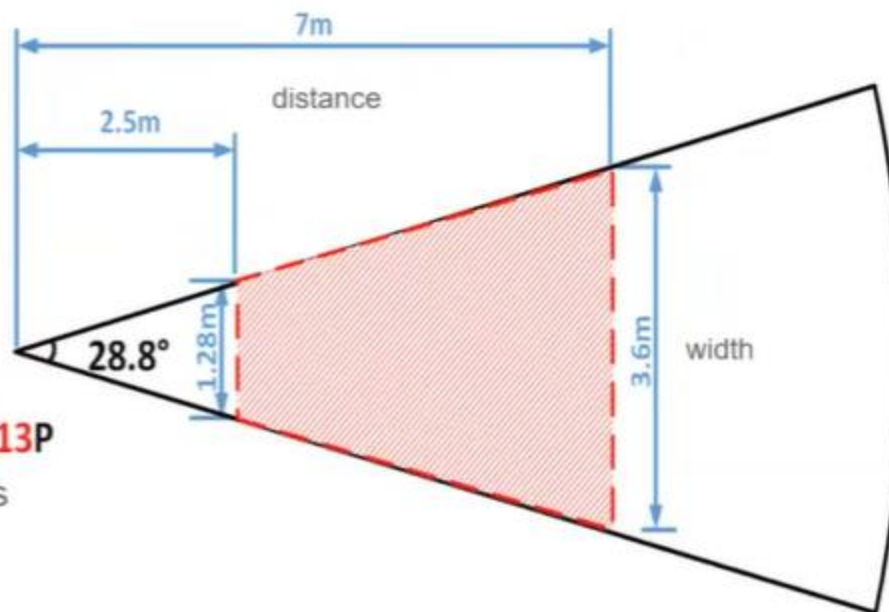


Effective Detection Area



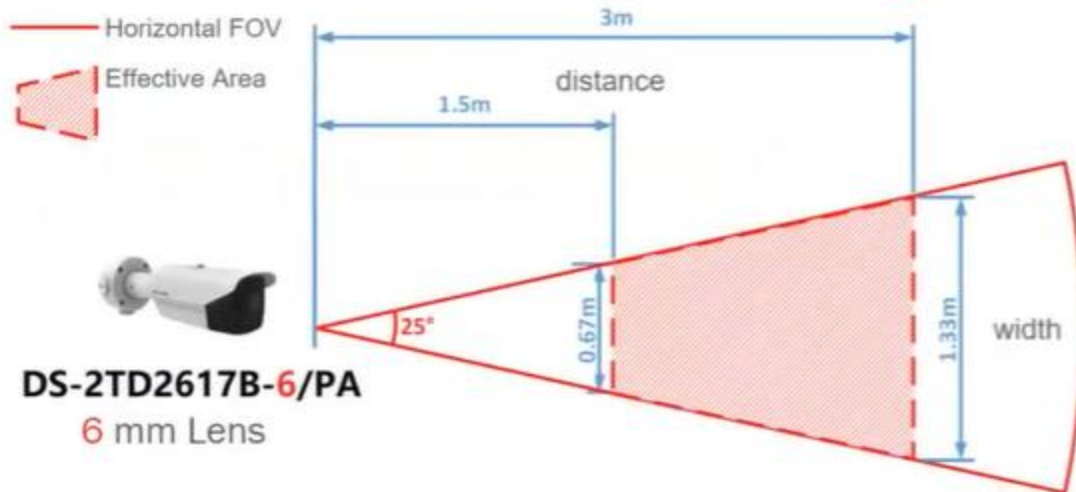
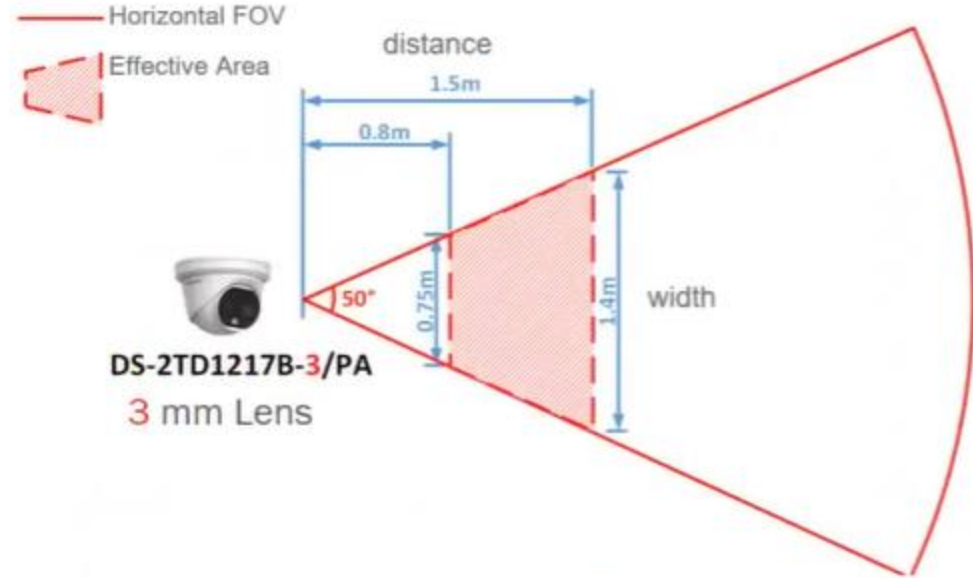
DS-2TD2636B-13P

13 mm Lens



Or permanently mount on the wall at a height of 5.6 to 8.2 ft (1.7 to 2.5 m)

# Short/Mid-Range Solutions — Setup



# High Accuracy Thermographic Cameras (With DeepInMind NVR with facial detection)



Solution  
2

# Temperature Screening Metal Detector


Comparison between metal detection alarm and temperature alarm

## Metal Detection Alarm



## Temperature Detection Alarm



- 
- A blackbody calibrator is mounted on a black tripod. The device is a rectangular, light-colored box with a black square on the front face, which is the blackbody target. It is positioned in the center-left of the slide. The background is a blurred interior with a large, geometric skylight structure.
- Calibrator is strongly recommended if calibration is going to be performed in house
  - Benefits are that detection is improved by  $0.9* F$

Blackbody Calibrator

# Detects up to 30 People at ONCE



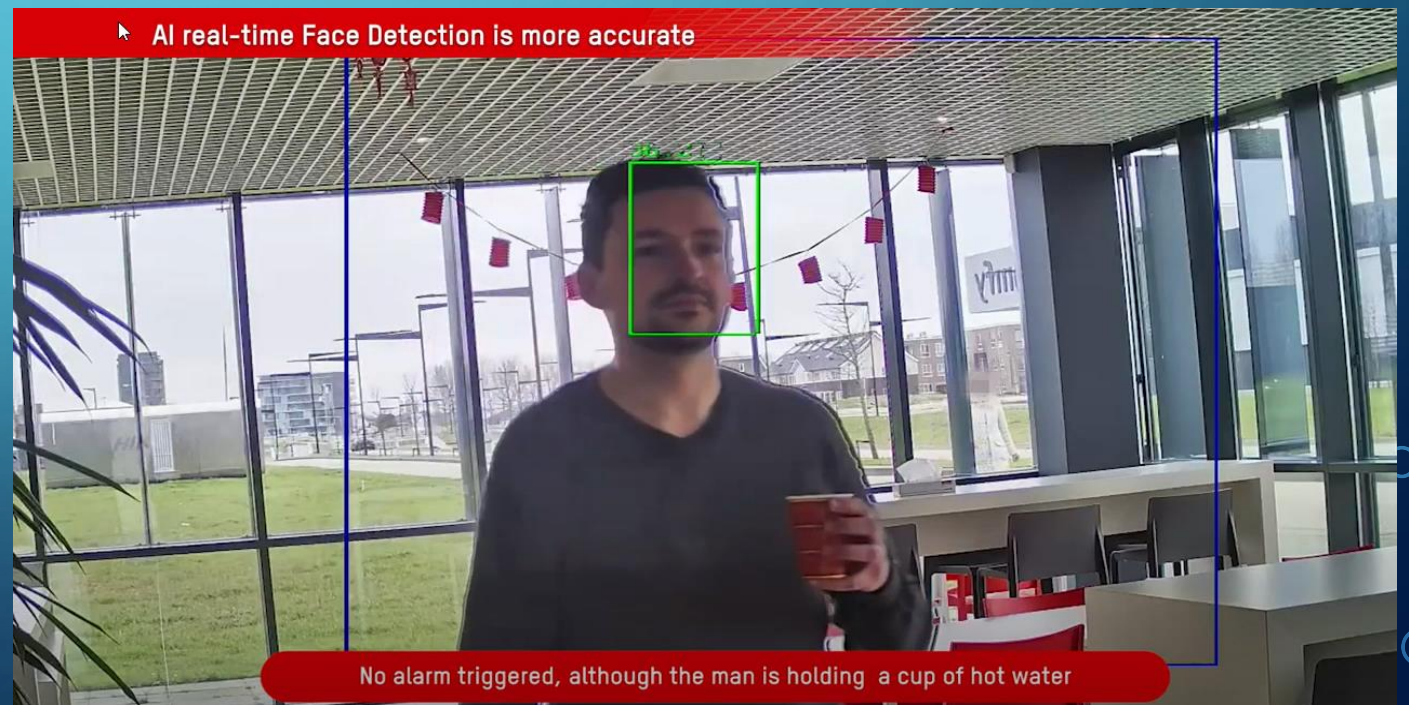
## High Accuracy Thermographic Cameras (With DeepInMind NVR with facial detection)



## High Accuracy Thermographic Cameras (With DeepInMind NVR with facial detection)



## AI real-time Face Detection is more accurate







The background is a blue gradient with white circuit-like lines in the corners. The lines consist of straight paths that branch out and terminate in small circles, resembling a printed circuit board layout.

**REFERENCE MATERIAL:**

Effective Long Term Screening Tool



Fever Screening Thermographic Bullet Camera

# Product Highlights

## Temperature Screening Metal Detector

### Statistics

People counting, metal alarm counting, abnormal temperature count, etc.



### Metal detector

Detect metals up to small paper clips.



### Multi-zone alarm

18 independent detection zones.



ISD-SMG318LT-F



### High reliability & quality

Modular design of door body.



### Dedicated for temperature screening

Temperature range: 86 °F to 113 °F.



### High accuracy

Temperature accuracy: : ±0.9 °F.

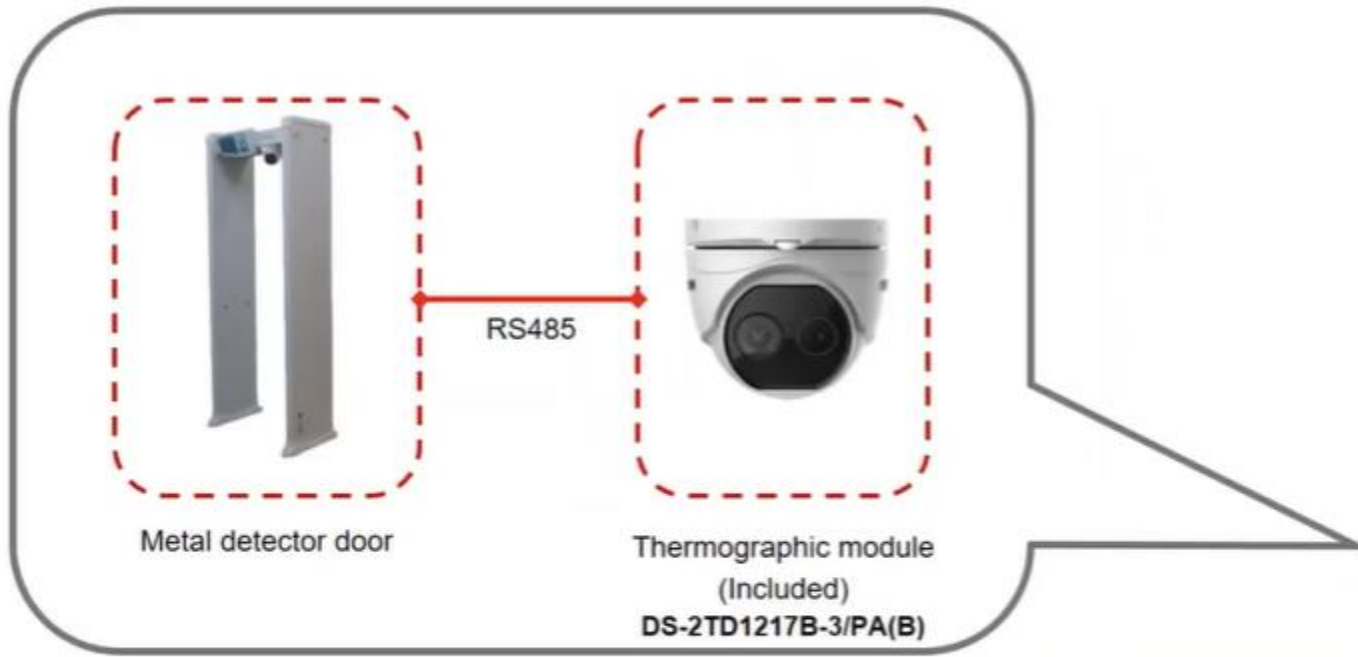


### LCD display

Real-time display of statistics and skin-surface temperature.

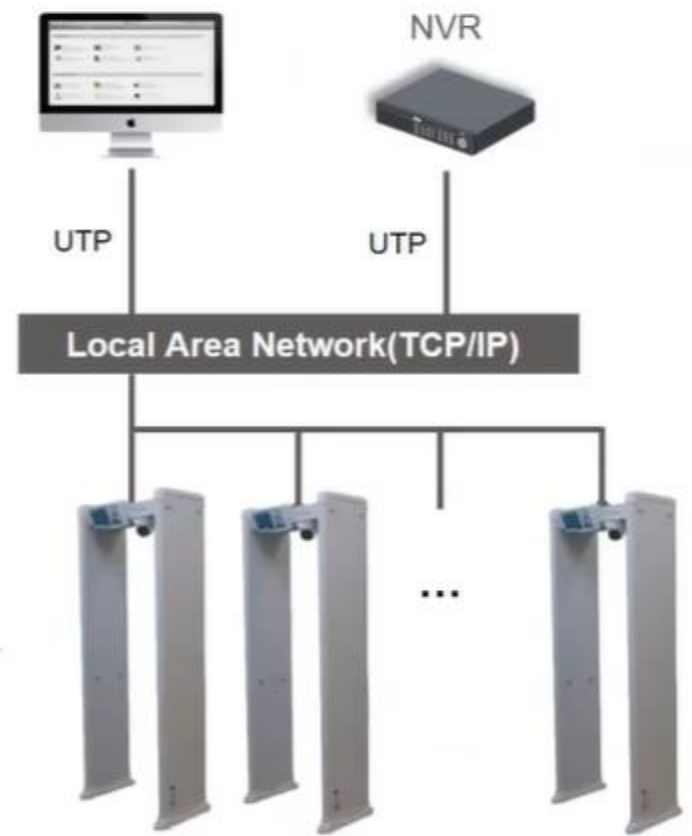
# Solution Introduction

## Solution topology diagram






ISD-SMG318LT-F

### Management Center



Temperature screening metal detector door solution

# Comparison

Brand	HIKVISION	ZKTeco	UNV
Model	ISD-SMG318LT-F	ZK-D3180S	USS-SC100A-TM-O
Image			
Temperature Measurement Technology	Thermal Imaging Technology	Thermopile Technology	Thermopile Technology
Temperature range	30-45°C <b>86°F to 113°F</b>	30-45°C	35°C-42°C
Temperature accuracy	No black body: ±0.5°C With black body: ±0.3°C	±0.5°C	±0.5°C
Temperature Alarm	Alarm triggered when the temperature is over the threshold	Alarm will trigger over 37.3°C	Alarm will trigger when the detected temperature over the set value
Linkage alarm	Light alarm and audio alarm	Synchronous sound & LED alarm	Light alarm and audio alarm
Display	7 inch LCD Touch Screen	5.7" LCD display	White & Black Display
Display content	Number of people passed through Number of Metal alarm triggered Real-time skin-surface temperature Number of abnormal temperature alarm triggered	People counting Body Temperature	Number of Alarm Temperature display
Metal detection zones	18	18	18
Metal detection sensitivity	255 sensitivity level	255 sensitivity levels	200 levels (0-200)
Detection distance	0.5 to 1.5 m <b>1 ft. to 4 ft.</b>	2-5 cm	2-5 cm
Detection Speed	1s/person	5s/person	5s/person

Able to detect even while wearing a mask and glasses or even a hat

## High Accuracy Thermographic Cameras



# Bottom Line is it's the Best Product on the Current Market!

## Product Comparison

Brand	Hikvision			Dahua		WatchNet / Invid
Picture						
Model	DS-2TD2636B-13/P	DS-2TD2617B-6/PA	DS-2TD1217B-3/P	DH-TPC-BF5421-T	DH-TPC-BF3221-T	TNC-20-BDC/ AR-BODYTEMPCAM1
Face Detection	Yes (30 at a time)			No (requires NVR)	No (requires NVR)	Yes (16 at a time)
Accuracy	± 0.5°C (0.9°F) w/o BR			± 1°C (1.8°F) w/o BR ± 0.3°C (0.6°F) w/ BR	± 1°C (1.8°F) w/o BR ± 0.3°C (0.6°F) w/ BR	± 0.3°C (0.6°F) w/ BR
Thermal Resolution	384x288	160x120 (upscale to 320x240)		300x400	256x192	400x300
Thermal Lens	13 mm	6 mm	3 mm	13 mm	3.6/7.1 mm	8 mm
Thermal FOV	37.5°x28.5°	25°x18.7°	50°x37.2°	50.6°x37.8° / 30°x22.6	50.6°x37.8° / 24°x18°	46°x35.3°
NETD	≤ 35 mK @ 25°C, f/1.0	≤ 40 mK @ 25°C, f/1.1		≤ 40 mK @ 25°C, f/1.1	≤ 50 mK @ 25°C, f/1.1	40 mK @ 26.85°C, f/1.0
Optical resolution	4MP (2688x1520)			2 MP (1920x1080)	2 MP (1920x1080)	2 MP (1920x1080)
Interface	RJ45 10/100 Mbps Ethernet			RJ45 10/100 Mbps Ethernet	RJ45 10/100 Mbps Ethernet	RJ45 10/100 Mbps Ethernet
Local Storage	Supports 128 GB Micro SD			Supports 256 GB Micro SD	Supports 128 GB Micro SD	None
Tripod Mount	DS-2909ZJ		DS-2908ZJ	None	None	None
Power	12 VDC/24 VAC/PoE, ≤ 9.5 W	12 VDC/PoE, ≤ 8 W	12 VDC/PoE, ≤ 6.5 W	12 VDC/PoE, ≤ 12 W	12 VDC/PoE, ≤ 12 W	12 VDC/PoE, ≤ 10 W
Dimensions	14.10"x4.47"x4.53"	14.10"x4.47"x4.53"	5.45"x5.45"x4.85"	11.02"x4.09"x3.77"	11.02"x4.09"x3.77"	8.34"x7.16"x5.35"
Weight	4.01 lb	3.88 lb	2.07 lb	3.09 lb	3.09 lb	4.4 lb

**Not limited to the markets below / providing communities a safer environment**



Retail



Education



Healthcare



Manufacturing



Transportation



Gaming



Smart Building



City Surveillance



Hospitality



Banking



# Case Studies

## Disneyland Shanghai

