

# Thermal Human Temperature Measurement Solution

High Accuracy

Non-Contact

Avaiden System SDN BHD

For More Information:

HP : Steve Chea @ 012 338 1490

HP : Chirs Chea @ 016 660 1480

E-mail : [steve@avaidensystem.com](mailto:steve@avaidensystem.com)  
[chris.chea@avaidensystem.com](mailto:chris.chea@avaidensystem.com)

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- 02** Economical Solution
- 03** Wide Area Solution
- 04** Success Case

# Background

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At the end of 2019, a new coronavirus outbreak broke out in Wuhan, China, which is characterized by human-to-human transmission, medical staff infection and community transmission. The disease has spread to China and around the world.



# Application Scenarios

**Airport**



**Railway Station**



**Bus Station**



**Ferry**



**Hospital**



**School**



**Manufacture**



**Retail Store**



## Human Temperature Measurement



### Key Function ▶

### Preliminary Screening

### Temperature Record

### Current Status ▶

- Low efficiency of thermometer and infrared detection gun
- Manual temperature measurement workload, high risk

- Manual recording is inefficient
- Personnel information collection is difficult

### Requirement ▶

- Non-contact automatic temperature measurement
- Accurate, fast and multi-person detection

- Record abnormal temperature information automatically
- Collect abnormal personnel portrait automatically

# Highlights



## Accurate

- $\pm 0.3^{\circ}\text{C}$  (with blackbody)
- Applied to small scenes such as entrances and exits
- Large scenes such as airports and railway stations with dense personnel



## Efficient

- Non - contact temperature detection, quick screening
- Wide coverage and multiple person detection
- Easy to use and deploy
- Real-time fever alarm



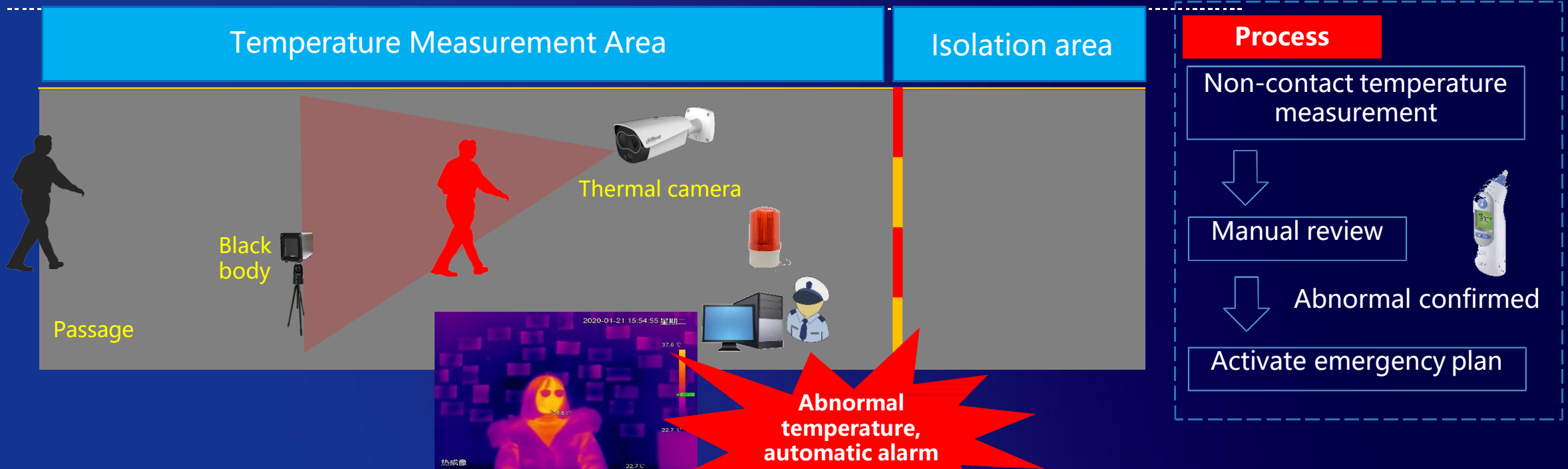
## Manageable

- Automatic early warning mechanism, reduce labor cost and risk of cross-infection
- Realize the historical data backtracking, data analysis and so on

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# Solution and Progress



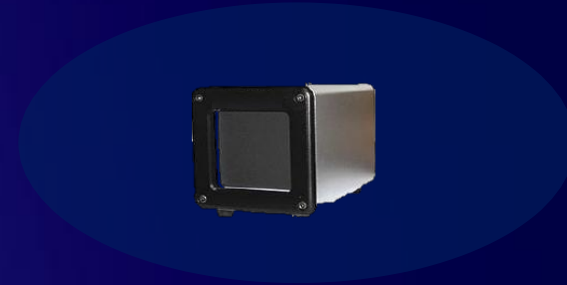


# Main Products



Thermal Network Value Hybrid Bullet Camera(Lite series)  
DH-TPC-BF3221-T

Vox uncooled focal plane detector  
Resolution: 256\*192  
Spectral Range: 8 $\mu$ m~14 $\mu$ m  
Thermal lens: 3.5mm/7mm (optional)  
NETD: <50 mK  
Visible: 1/2.8 "CMOS, 1080P  
Visible lens: 4mm/8mm(optional)  
Alarm: Built-in white light warning light,  
horn  
Temperature measurement range: 30°C ~  
45°C,  
Temperature measurement accuracy :  
 **$\pm 0.3^{\circ}\text{C}$ , with blackbody**  
 $\pm 1^{\circ}\text{C}$ , without blackbody



Blackbody  
JQ-D70Z

Working temperature : 40.0°C ( environment  
temperature +5.0°C~ 50.0°C)  
Temperature resolution : 0.1°C  
Temperature measurement accuracy :  $\pm 0.2^{\circ}\text{C}$   
(Single point)  
Temperature stability :  $\pm (0.1 \sim 0.2)^{\circ}\text{C}/30\text{min}$   
Effective emissivity :  $0.97 \pm 0.02$   
Power: 220VAC 50Hz  
Ambient temperature and humidity : 0~40°C/  
 $\leq 80\% \text{RH}$

# Product Selection



## Thermal

DH-TPC-BF3221-T

Resolution: 256\*192  
Spectral Range: 8 $\mu$ m~14 $\mu$ m  
Thermal lens: 3.5mm/7mm (optional)  
NETD: <50 mK  
Alarm: Built-in white light warning light, horn  
Temperature measurement range: 30 $^{\circ}$ C~45 $^{\circ}$ C,  
Temperature measurement accuracy :  $\pm 0.3^{\circ}$ C, with blackbody  
 $\pm 1^{\circ}$ C, without blackbody

## Black Body

JQ-D70Z

Working temperature : 40.0 $^{\circ}$ C ( environment temperature +5.0 $^{\circ}$ C~ 50.0 $^{\circ}$ C)  
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Effective emissivity : 0.97 $\pm$ 0.02

## IVS Server

IVSS7008-11

Max 400Mbps incoming bandwidth  
Up to 8-channel face recognition with normal IPC  
> Up to 20-channel face recognition with face detection IPC  
> Up to 50 face databases with 300,000 face pictures in total

## Platform

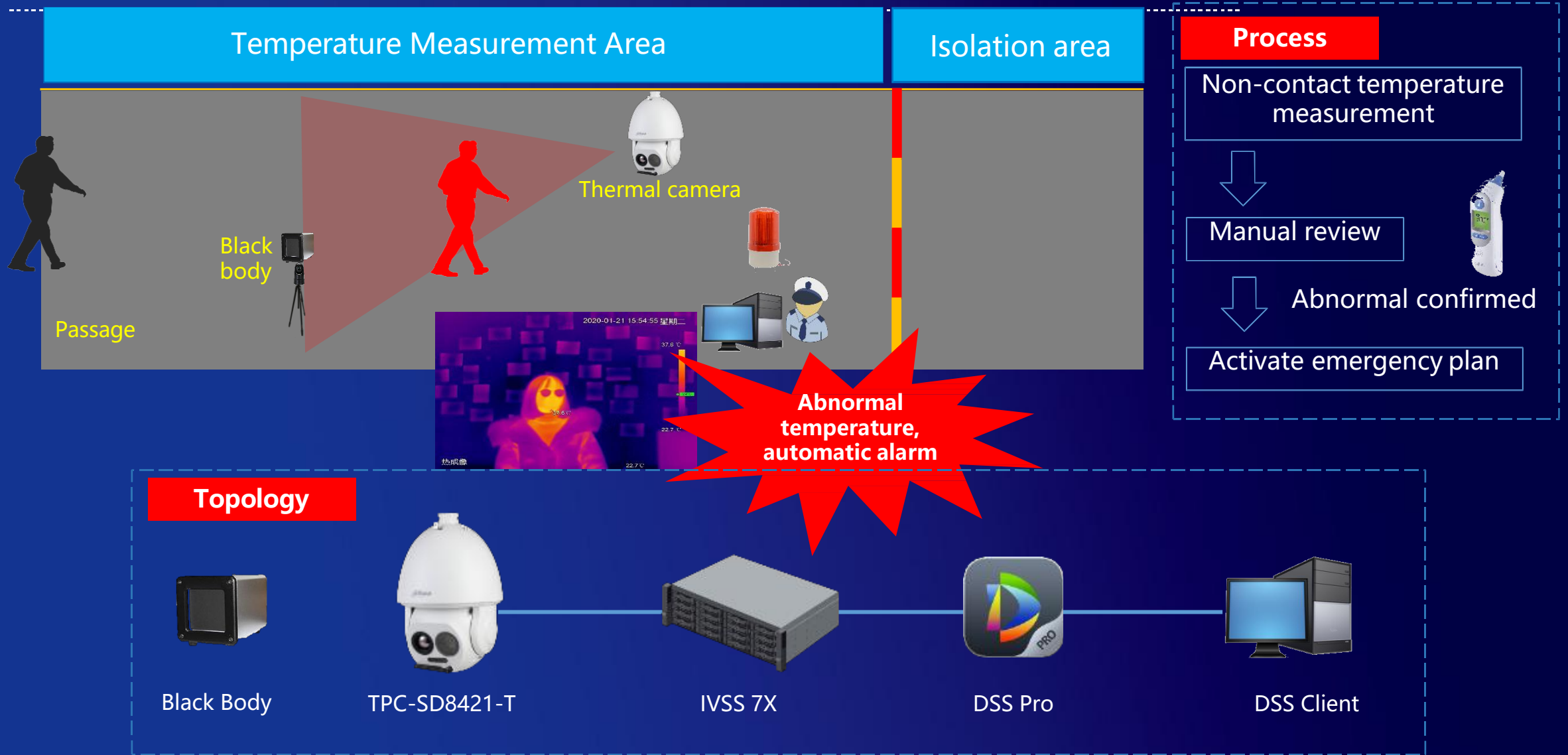
DSS Pro

Live video monitoring  
AI Search: Searching by event, or face pictures  
User friendly interfaces  
Easy to use and deploy  
Temperature alarm pop up automatically

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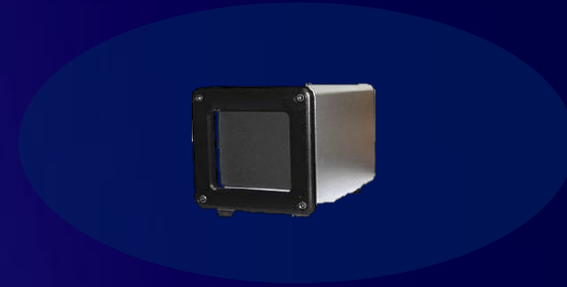
# Solution





Thermal Network Hybrid Speed Dome Camera  
DH-TPC-SD8421-T

Vox uncooled focal plane detector  
Resolution : 400\*300  
Spectral Range : 8~14  $\mu\text{m}$   
Thermal lens : 7.5mm/13mm  
NETD : <40 mK  
Visible : 1/2.8 "CMOS, 1080P  
Visible lens : 4.95~198mm, 40X  
IR distance: 100m  
Temperature measurement range : 30°C ~ 45°C,  
Temperature measurement accuracy :  
 **$\pm 0.3^\circ\text{C}$ , with blackbody**



Blackbody  
JQ-D70Z

Working temperature : 40.0°C ( environment  
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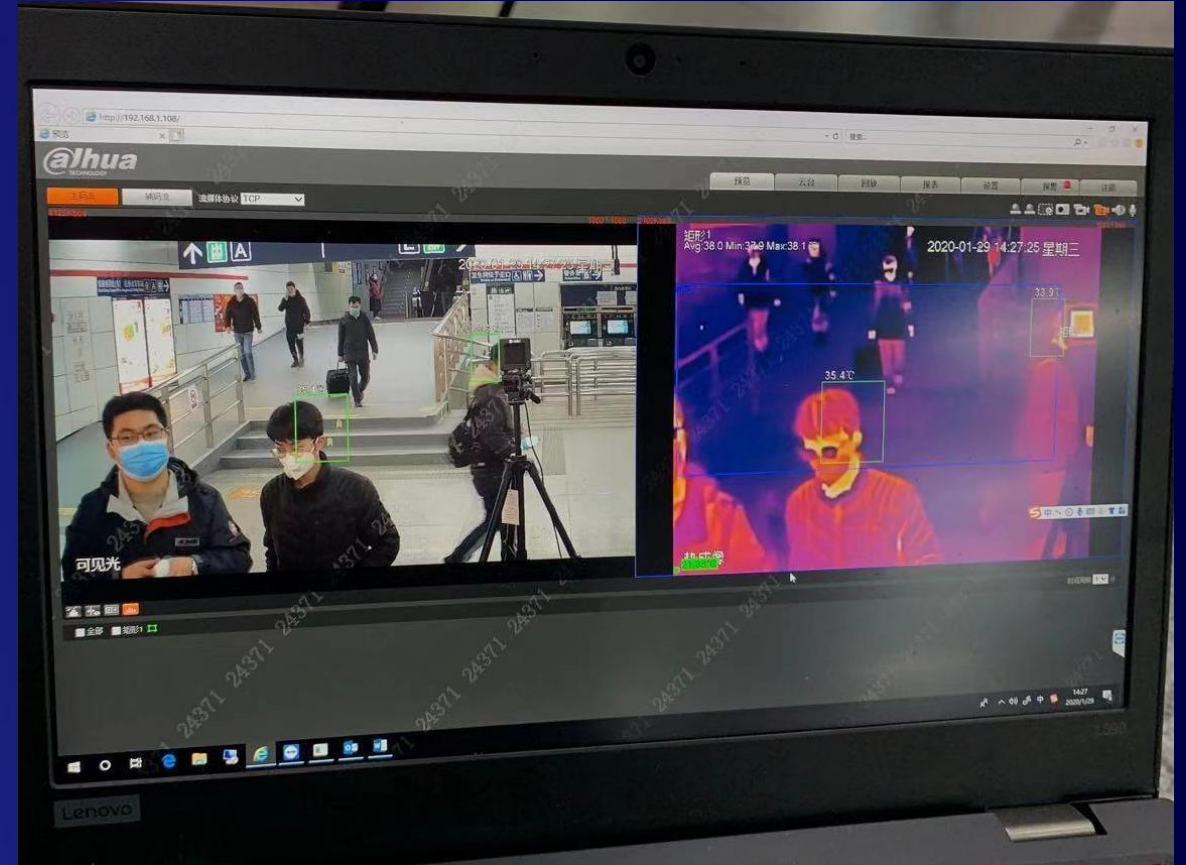
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# Success Case | Hangzhou Metro



**Hangzhou Metro**



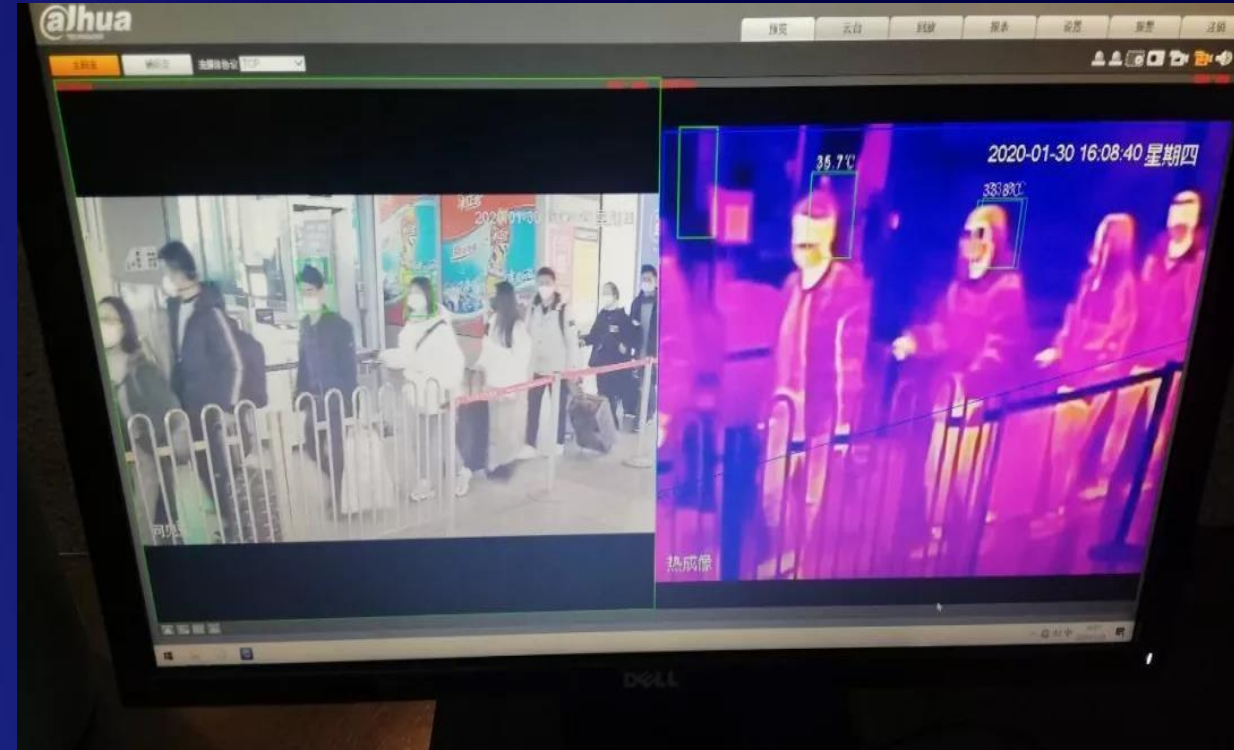
Hangzhou metro line 1 adopts Dahua thermal human temperature measurement solution at Hangzhou east railway station, one of the largest transportation hubs in Asia, realizing remote non-contact temperature measurement with high temperature measurement accuracy ( $\pm 0.3^\circ$ ).



# Success Case | Shanghai Railway Station



**Shanghai Railway Station**



Dahua thermal human temperature measurement solution helps Shanghai railway station, one of the busiest railway station in the world, to realize rapid human body temperature measurement with dense crowds and find people with abnormal body temperature timely.



# VAIDEN SYSTEM

ENABLING A SAFER SOCIETY AND SMART LIVING

Avaiden System SDN BHD

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