

# Body Temperature Detection System



Accurate, fast and reliable mass temperature detection system

The power behind your mission

Johnson  
Controls 

# INTRODUCTION

The Concept Pro Body Temperature Detection System can accurately detect facial temperatures of up to 40 people at once with an accuracy of  $\pm 0.3^{\circ}\text{C}$ , this is ideal for monitoring body temperatures at entrances to events, transport hubs and buildings.

This system comprises of the camera, an NVR, a temperature calibrating device as well as all the necessary brackets for installation.

Using advanced facial recognition, the system uses the face temperature for a more accurate measurement. This also stops any false readings, such as a person carrying a hot drink. With astonishingly fast response time and being able to measure up to 40 people at once, the system will reduce the need for single file detection, aiding in the speed of people passing through the detection area.

## BENEFITS

### Concept Pro's Leading Technology



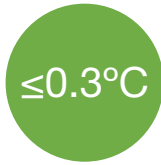
Accurate face tracking in real time.  
A face recognition algorithm is used to accurately measure the temperature of a persons face.



Bi-spectrum, dual channel  
All-weather real-time monitoring  
Visible light is all that is required to capture the human face, allowing the thermal imaging to monitor body temperature in a variety of conditions

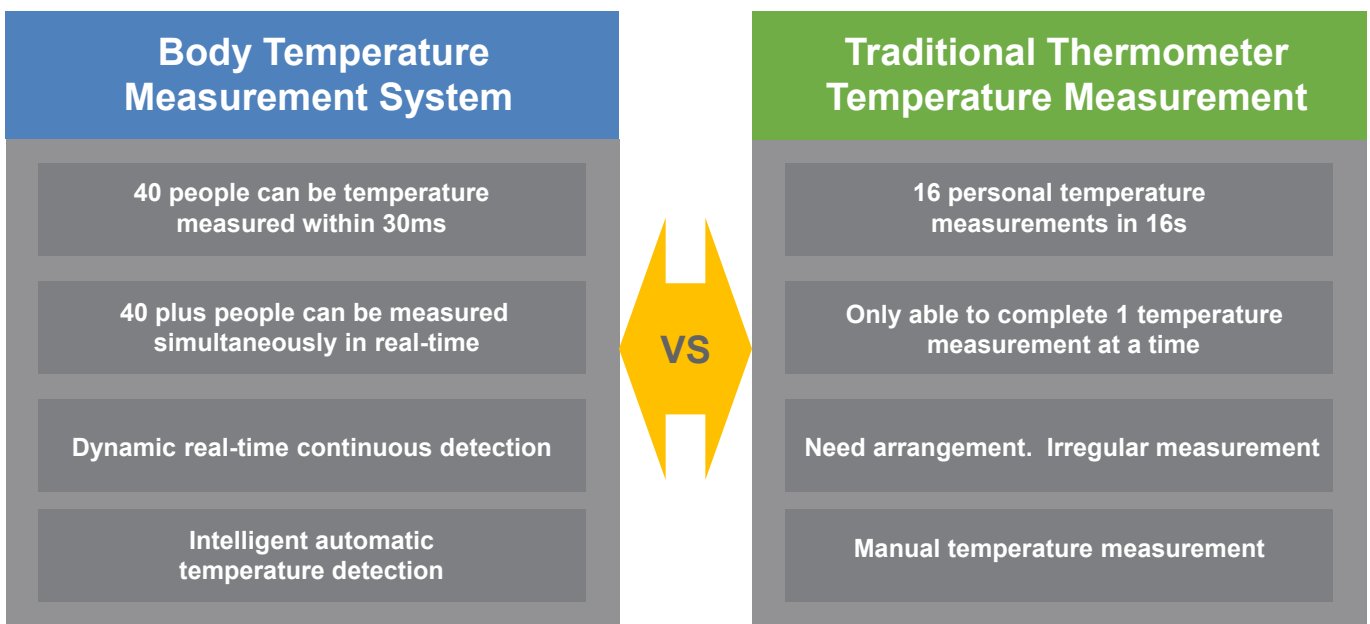


Multiple detections at once.  
Up to 40 target temperatures measured at once at a distance of 3-5 meters



Highly accurate temperature detection.  
Modified  $\leq 0.3^{\circ}\text{C}$  (emissivity, distance, ambient temperature, etc.)

## ADVANTAGES COMPARED TO TRADITIONAL SYSTEMS



### CONCEPT PRO BODY TEMPERATURE MEASUREMENT SYSTEM

- 40 plus people can be measured simultaneously in real-time.
- Dynamic real-time continuous detection, aiding in a continuous flow of people through the system rather than a stop and start.
- Facial detection technology means that temperatures are logged from an accurate location on the body, eliminating misreads from things like heavy coats or hot drinks.

### TRADITIONAL THERMOMETER TEMPERATURE MEASUREMENT

- Complete 16 people's temperature measurements in 16s
- Can only log 1 person's temperature at a time.
- A more stop and start process including stopping 1 person at a time.
- Manual temperature measurements with increased need and risk for physical contact for staff.

# KIT COMPONENTS

## THERMAL CAMERA



- Temperature measurement accuracy  $\leq 0.3^{\circ}\text{C}$ .
- Supports up to 40 targets at the same time.
- Temperature measurement response time  $\leq 30\text{ms}$ .
- Best distance for measurement: 3-4m.

## BLACKBODY



- Blackbody is a standard temperature source used for temperature calibration
- When taking temperature measurements, results can be greatly affected by environmental factors, this product allows the system to continually calibrate in real time through the blackbody.

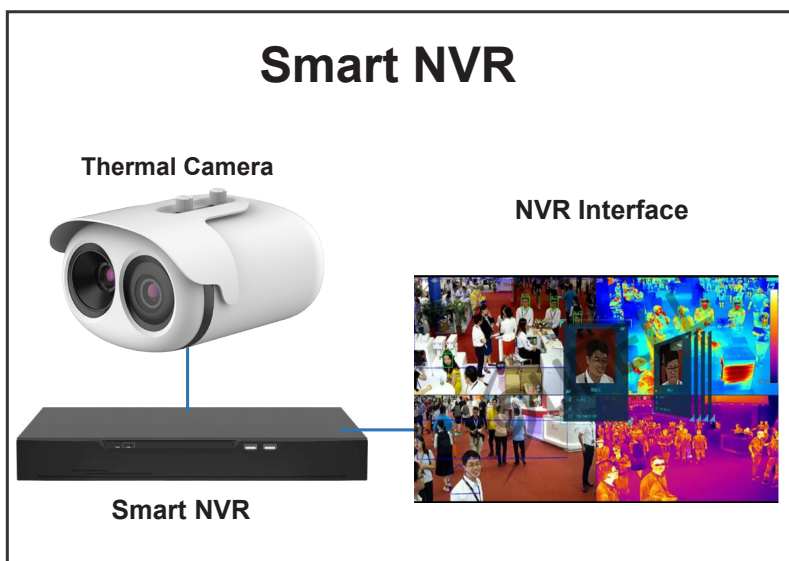
## SMART NVR



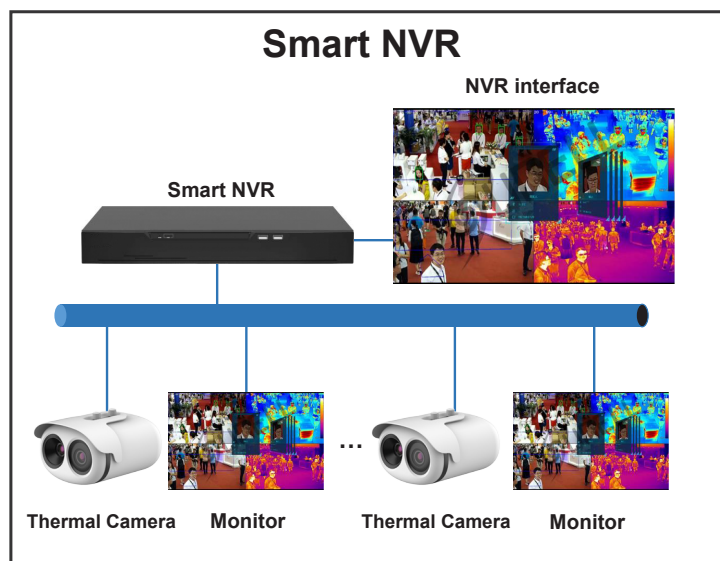
- Integrated with face detection.
- Suitable for single-point emergency deployment and small or medium- sized project selection.

# APPLICATION EXAMPLES

## SINGLE POINT APPLICATION



## MULTI POINT APPLICATION

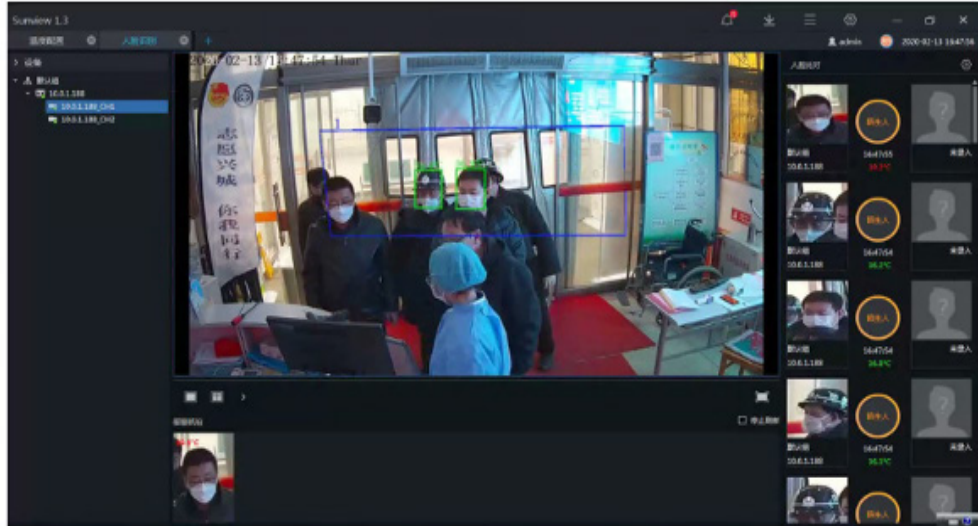




## Case study

# Beijing Chai Hospital

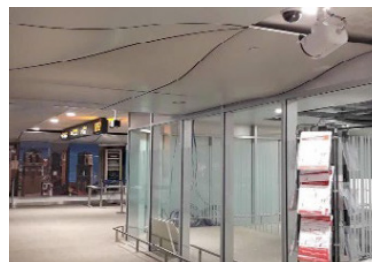
## Thermal detection system



50 kits were deployed into one hospital to help staff reduce the amount of physical contact with potentially infectious patients. Multiple installations around a location also allows for more casual monitoring rather than forcing people through checkpoints.



## Venice International Airport



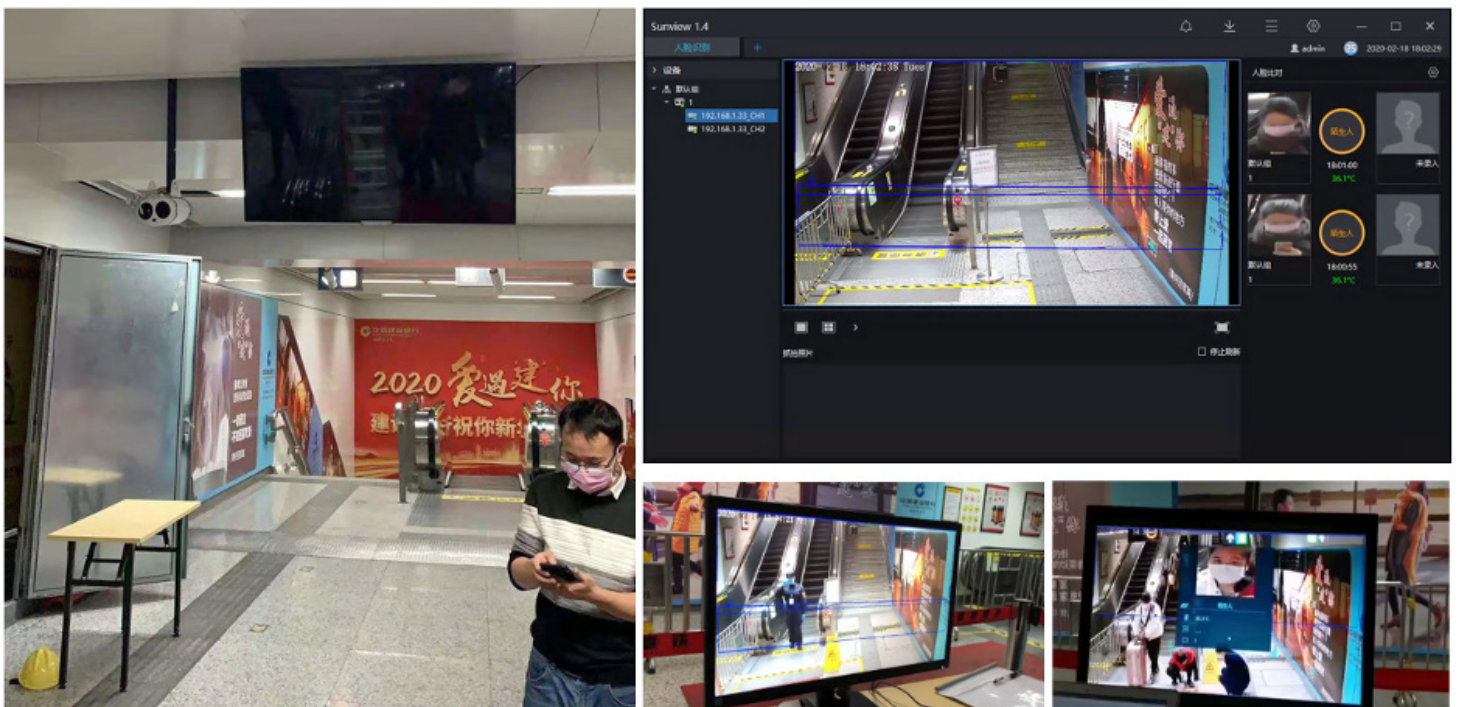
15 kits installed have been installed in Venice Airport to monitor a high influx of people coming from a variety of countries.

# Italian Insurance Company



6 kits were installed to monitor the temperature of the people walking into a large commercial building.

# Fuzhon Subway Station



In the deployment, 200 kits were implemented into a subway system to detect body temperatures under areas of intensive, fast moving traffic.

### About Johnson Controls

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