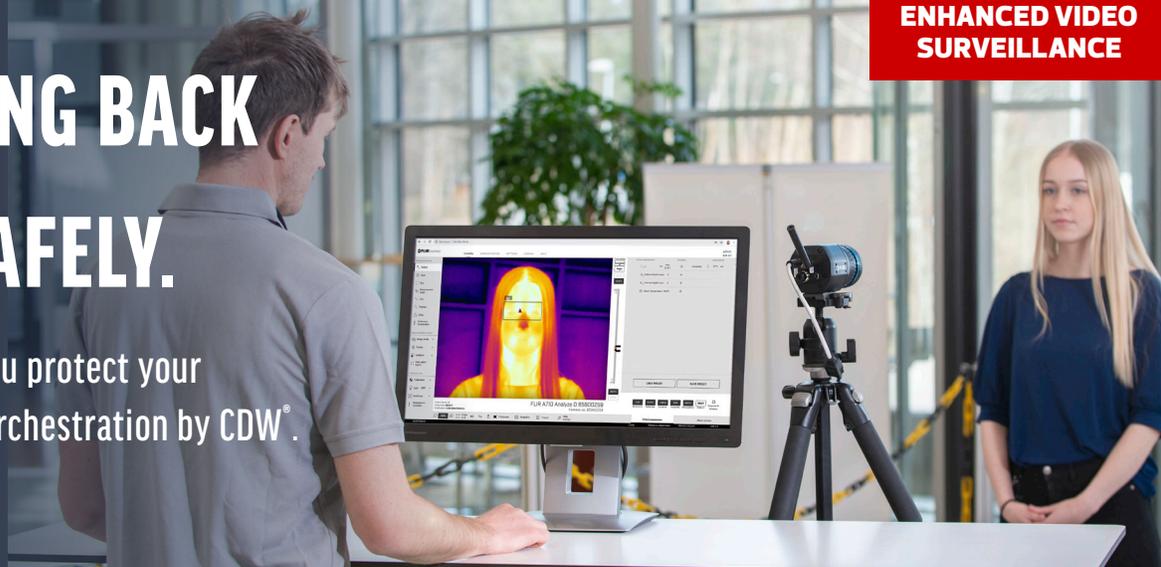


# WE GET GOING BACK TO WORK SAFELY.

For solutions that help you protect your employees, you need IT Orchestration by CDW®.



## THERMAL SCREENING SOLUTIONS

### RESUME OPERATIONS SAFELY AND WITH CONFIDENCE

Facing the continued threat of COVID-19, employers and other institutions are implementing plans to resume operations while mitigating the risk of exposure and transmission of the coronavirus. The CDC recommends<sup>1</sup> health and temperature checks be performed on all individuals upon arrival before entry. The only tool that can precisely measure internal body temperature and diagnose a fever during checks is a medical-grade thermometer.

However, this may be too slow for screening a large volume of people at peak times of entry. Thermal imaging cameras offer the promise of increasing the rate of screening but cannot be used alone to diagnose fever<sup>2</sup>. It can be an effective means to quickly screen individuals showing normal temperatures and alert on those showing elevated temperatures for additional screening with a thermometer.

### HAVE YOU CONSIDERED?

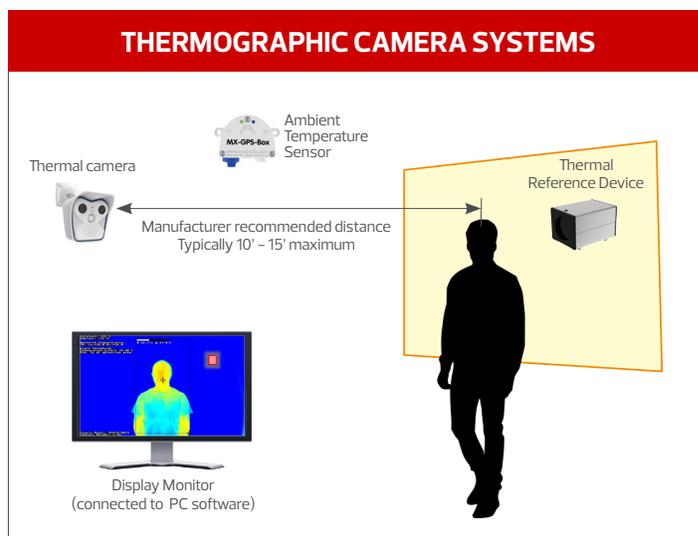
- What is your temperature screening policy?
- What is the volume of people you need to screen and over what period?
- Where will you perform temperature checks?
- Do you need to integrate thermal with existing video surveillance or access control systems?

### THE CDW SOLUTION: THERMAL SCREENING

Thermographic (or thermal) cameras measure infrared radiation emission, which is perceived as heat. These devices cannot measure internal body temperature but instead measure the heat emitted from the surface of the skin. Thermal camera systems use this measurement to estimate body temperature under ideal conditions.

CDW offers thermal screening solutions that:

- Feature thermal sensors with accuracy  $\pm 0.5^{\circ}$  F to  $\pm 0.9^{\circ}$  F (may require use of ambient temperature sensors or thermal reference devices)
- May be permanently mounted (wall/ceiling), mobile (tripod/cart), or use a kiosk form factor
- Can be used as a stand-alone solution or integrated into video management systems



Sources: <sup>1</sup>CDC: Interim Guidance for Businesses and Employers Responding to Coronavirus Disease 2019 (COVID-19), May 2020

<sup>2</sup>FDA: Enforcement Policy for Telethermographic Systems During the Coronavirus Disease 2019 (COVID-19) Public Health Emergency, April 2020

## THERMAL SCREENING SOLUTION – CONTINUED

### CHOOSING THE RIGHT SOLUTION

There are several types of thermal screening solutions available. CDW can help you select the right mix of methods that fit your policies and facilities while considering the volume and rate of people requiring screening.

### COMPARING TEMPERATURE SCAN TYPES

|  | DEVICE TYPE                             | METHOD                                   | DISTANCE                 | SPEED                             | THROUGHPUT                      | ACCURACY   | PRICE RANGE                  |
|--|---|--|--------------------------|-----------------------------------|---------------------------------|--|------------------------------|
|   | <b>Non-contact Infrared Thermometer</b> | Manual                                   | Very close<br>1-2 inches | Slow<br>5-10 persons per min.     | 1 person at a time              | Best <sup>3</sup><br>(medical grade)   | Low<br>\$250 - \$400         |
|   | <b>Handheld Thermographic Camera</b>    | Manual                                   | Close<br>2-6 feet        | Faster<br>10-12 persons per min.  | 1 person at a time              | Good<br>±0.9° F<br><br>Typically measures hottest spot found in field of view.               | Medium<br>\$1,000 - \$3,000  |
|   | <b>Kiosk with Thermal Scanner</b>       | Automated <sup>4</sup><br>(self-service) | Close<br>1-3 feet        | Faster<br>10-12 persons per min.  | 1 person at a time              | Good<br>±0.9° F<br><br>Typically measures hottest spot found in field of view.               | Medium<br>\$2,500 - \$5,000  |
|  | <b>Mounted Thermographic Camera</b>     | Automated <sup>4</sup>                   | Distant<br>5-20 feet     | Fastest<br>20-30 persons per min. | 1 person at a time <sup>5</sup> | Better <sup>6</sup><br>±0.5° F<br><br>Some can target face, forehead or inner canthus areas. | Higher<br>\$5,000 - \$20,000 |

<sup>3</sup>Only true body temperature measurement <sup>4</sup>Requires someone to monitor /attend screening process <sup>5</sup>Many products claim multiple persons, FDA guidance is to scan one at a time <sup>6</sup>Supports thermal reference devices and/or ambient temp sensors

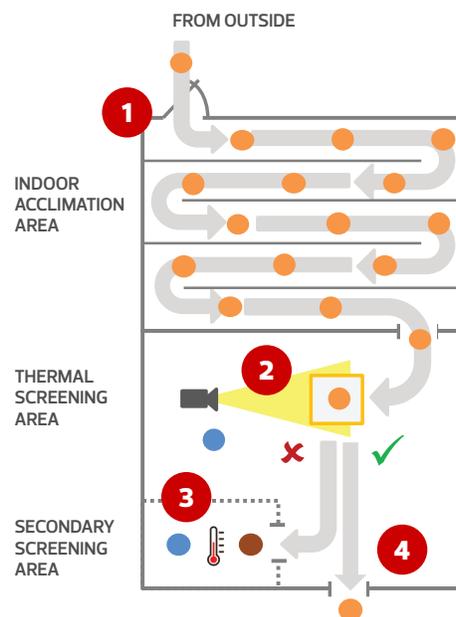
### BEST PRACTICES FOR THERMAL SCREENING

- Implement the screening process to measure only one person at a time per thermal camera
- The screening location should be in an indoor area with a consistent ambient temperature away from any doors, windows, or HVAC blower vents
- Allow adequate time for persons to acclimate to indoor temperatures and normal heart rate, removing any head coverings, masks, glasses or other face obstructions before thermal screening
- Position thermal camera at a height close to parallel to the subject's face and at the manufacturer's recommended operating distance, usually within 10-15 feet of target
- Use an ambient temperature sensor and/or thermal reference device when recommended by the manufacturer, especially if environmental conditions are not well controlled
- The thermal reference device should be in frame at the same distance as the person to be screened
- Thermal camera systems may require regular calibration on a daily to weekly basis, according to manufacturer recommendations

**THERMAL SCREENING SOLUTION – CONTINUED**

**EXAMPLE THERMAL SCREENING PROCESS**

- 1** For accurate readings, individuals should be allowed to acclimate to indoor temperatures before thermal screening. Queuing should be configured to maintain social distancing.
- 2** Individuals step up to thermal camera screening area, one at a time optimally. Employer has someone monitoring process.
- 3** Persons who register an elevated temperature by thermal camera are pulled aside for secondary screening by medical-grade thermometer to confirm fever.
- 4** Individuals that register "normal" temperature proceed into building.



**YOU SHOULD KNOW**

- Thermal screening solutions do not accurately measure internal body temperature, and thus cannot diagnose fever or any illness such as COVID-19.
- The most accurate way to measure body temperature is using a medical-grade thermometer. All positive readings of a thermal screening process should be verified using a non-contact thermometer.
- Skin temperature readings can be influenced by strenuous activity, perspiration, makeup or lotions, whether the individual is coming in from a hot or cold environment, fluctuation in ambient temperatures, or how close/far the individual is from the sensor.

**CDW also offers installation and support services to aid in the deployment and maintenance of thermal screening systems.**

**To learn more about CDW's thermal screening solutions, call your account manager at 800.800.4239 or visit [CDW.com/WFH](https://www.cdw.com/WFH)**