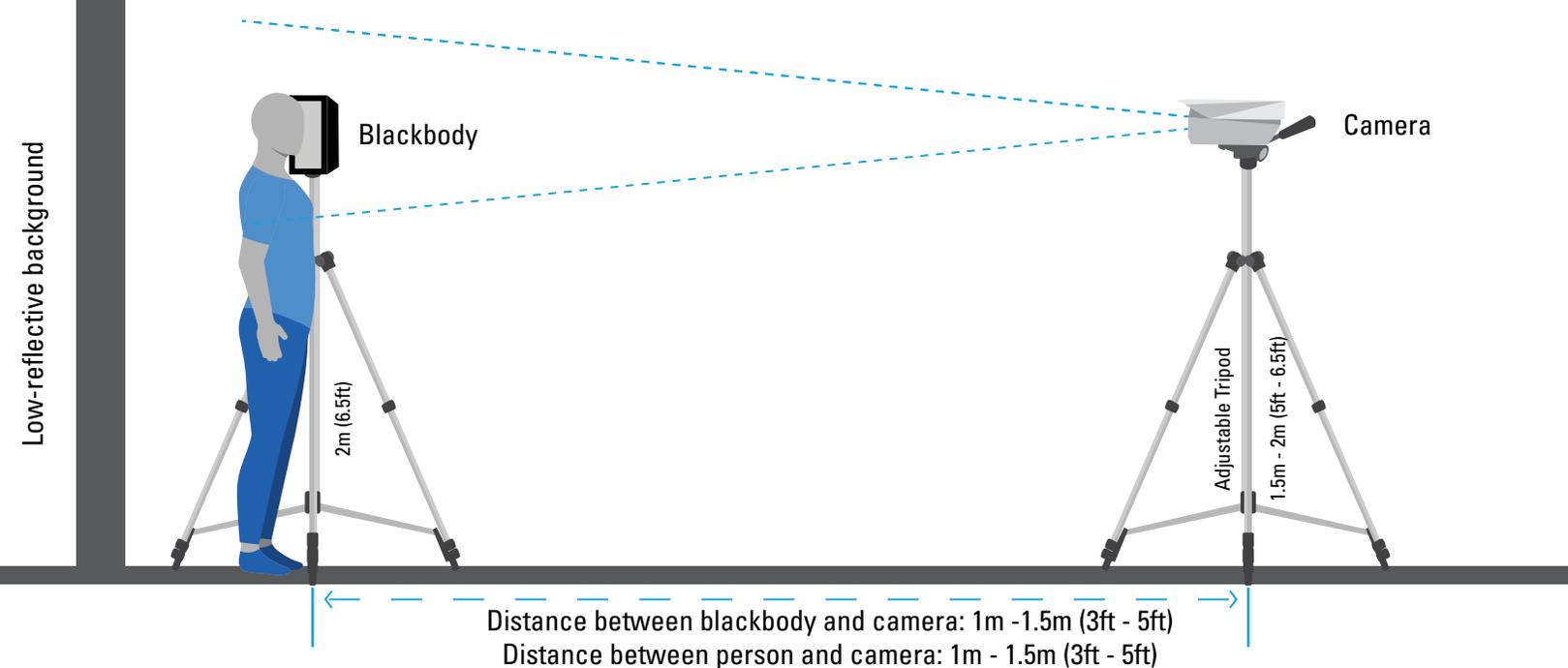




DETECT ELEVATED SKIN TEMPERATURE WITH THERMAL SECURITY TECHNOLOGY

KEEP PEOPLE AND YOUR FACILITY SAFE WITH HIGH-THROUGHPUT
THERMAL SCREENING TECHNOLOGY





CHALLENGE

As COVID-19 restrictions lift and facilities reopen, there remain public and health safety guidelines that need to be followed in order to keep employees, customers and visitors safe. Upon reopening, facilities need to be agile in quickly identifying individuals who may be exhibiting symptoms of COVID-19, and preparing response plans to limit the spread that could threaten to overwhelm healthcare institutions across the nation.

SOLUTION

Motorola Solutions is committed to innovating mission-critical technologies to protect people and communities, including supporting facility reopening plans by offering technologies to proactively detect potential symptoms and curb the spread of COVID-19.

Facilities can deploy efficient thermal screening measures at access points to proactively detect people with elevated skin temperatures entering a facility.

Motorola Solutions' [Avigilon H4 Thermal Elevated Temperature Detection \(ETD\)](#)¹ camera leverages edge-based video analytics to intelligently detect an elevated skin temperature reading from a subject's face, ignoring other irrelevant temperature readings surrounding the individual. This helps to provide a more accurate estimate of a person's body temperature.²

The H4 Thermal ETD solution combines a thermal camera with a blackbody device to provide a low friction, contactless alternative to traditional screening methods. The blackbody is a uniform temperature source that acts as an absolute temperature reference point for the thermal camera. When the thermal camera detects an individual's skin temperature to be higher than a set threshold, the individual can be sidelined for additional screening with a secondary approved method, such as using medical-grade devices (e.g. thermometer) and enlisting medical professional opinion (e.g. on-site nurse).

The H4 Thermal ETD solution enables a high-throughput and non-invasive method of pre-screening people at entry points to detect elevated skin temperatures – helping to keep facilities and their people safe. To setup the solution, the thermal camera should be positioned at a height of 1.5 to 2 meters (or 5 to 6.5 feet) with the individual and the blackbody within the same field of view. The distance between the thermal camera and the individual should be 1 to 1.5 meters (or 3 to 5 feet). For best results, the thermal camera should be directed towards a non-reflective background behind the individual being screened, and deployed in indoor environments with a stable ambient temperature of 65 to 80°F (or 18 to 25°C).

To prepare individuals for screening, each individual should line up in a single line formation as they proceed through an entry point. Before stepping in front of the thermal camera, each individual should remove items that obscure their eye area (e.g. glasses, hat, etc.). Once in front of the thermal camera, there must be a clear view of the individual's inner canthus (tear duct) region and the individual must look straight into the camera for 2 to 5 seconds.

Built to work seamlessly with [Avigilon Control Center \(ACC™\) 7](#) video management software, elevated skin temperature events from the H4 Thermal ETD camera can easily be configured in the software along with end-to-end workflows for monitoring, assigning and acknowledging elevated temperature alarms. This helps to ensure individuals entering a facility with an elevated skin temperature do not go unnoticed. Operators can also quickly search through recorded video in ACC for elevated temperature events – providing greater context to the operator for a more informed response.

¹ The Avigilon H4 Thermal Elevated Temperature Detection (ETD) solution is currently only available in the US, UK, EU and select countries in the Middle East.

² A secondary approved method must be used to confirm a fever.



APPLICATIONS

Public or retail facilities where security-grade cameras can be stationed at access points can leverage the H4 Thermal ETD solution for high-throughput pre-screening of people with elevated skin temperatures.

For example, a pharmacy can deploy the H4 Thermal ETD solution to safeguard its employees and customers, as it can be presumed that many individuals visiting a pharmacy are ill. The pharmacy configures an alert so that they are notified on ACC when an individual's skin temperature exceeds 100°F (or 37.8°C). Later, the thermal camera detects an individual entering the pharmacy with an elevated skin temperature of 101°F (or 38.3°C), which exceeds the set threshold temperature. Pharmacy staff are alerted of the individual's presence and separates the individual from the other customers for assistance.

At airports, the H4 Thermal ETD solution can be deployed at the security or immigration screening areas. The solution can help expedite the pre-screening of people, in single line formation, and flag individuals requiring further evaluation when an elevated skin temperature is detected. Airport staff at the security screening area can be alerted and respond in real-time to flag individuals and transfer them to a secondary screening area or possibly quarantine. This also streamlines the physical screening efforts required by airport officials since they would only need to sideline individuals that have been identified as having an elevated skin temperature.

As COVID-19 continues to be a global health risk, facilities need to roll out new health and safety measures to protect employees, customers and visitors. Thermal screening technology can support facilities in reopening and operating safely, as well as provide a proactive way to detect and pre-screen individuals who may be exhibiting symptoms of COVID-19. The automation of this detection step expedites health screening efforts for facilities looking to avoid impeding the flow of traffic into their facilities without compromising safety. In these uncertain times, a layered approach is the best strategy. Combining solutions for thermal screening with technologies for [occupancy counting](#), [social distancing](#) and [no face mask detection](#) efforts are essential for a depth in defense approach to limit the spread of COVID-19.

Motorola Solutions proudly manufactures and deploys the sophisticated, cutting-edge communications, software, video security and analytics technologies that keep communities and nations safe. We have been on the frontlines with federal, state and local governments, including in times of crisis, for over 90 years. Today, our 17,000 innovators, engineers and manufacturing specialists are eager to help address critical gaps in the availability of medical and health management technology needed to fight the COVID-19 pandemic. We are applying these innovations to our fixed video security and analytics solutions to deliver greater intelligence and stronger detection capabilities to help curb the spread of this virus.

Motorola Solutions stands ready to serve in this moment that matters.

Learn more at: www.avigilon.com/products/cameras-sensors/h4-thermal-etc



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