



Rapid Screening Tool for Stand-Off Fever Detection

The Leidos Rapid Screening Tool (RST) helps detect febrile persons entering facilities using an infrared, body heat detecting camera. RST is an easily installed and largely automated solution that can lower the risk of infected individuals entering areas in which they might infect others.

APPLICATIONS

The RST can be placed in entrances or corridors, or anywhere people are moving in roughly single-file fashion, so that all passers-by briefly present directly in front of the camera. Ideally, individuals can be asked to momentarily remove glasses and stand still in front of the camera. Individuals with fever detected can then be diverted and more thoroughly screened for infection. Possible locations for RST placement include:

- ▶ Facility entrances
- ▶ Campus or base access control points
- ▶ Registration desks
- ▶ Key foot traffic corridors and hubs inside facilities
- ▶ Door or hallway entrances to specific wards and units in clinics and hospitals
- ▶ Entrances to sensitive rooms, SCIFs and labs
- ▶ CBP primary inspection lanes and TSA travel document check (TDC) podiums

BENEFITS

- ▶ High repeatability in screening for fever to a fraction of a degree, even among a steady stream of passers-by
- ▶ Low or no imposition on those being screened
- ▶ No need for contact or even close proximity between screening personnel and the individuals being screened
- ▶ Avoids time-consuming manual screenings at checkpoints that can cause dangerous back-ups and crowding
- ▶ Fast, simple installation and largely automated operation requiring only brief training

COMPONENTS

RST's two main components are an infrared, body heat detecting camera, and a separate touchscreen monitor for displaying individual scans as a colored heat map, with an integrated processor that interprets the image and alarms when a temperature above 100.4 degrees Fahrenheit or 38 degrees Celsius is indicated. Several different camera resolution and lens field-of-view options are available, depending on how close individuals will typically be standing to the camera at the time of scanning, and the width of the space being scanned. In addition, other form factors are available, including single component integrated camera/computer/display options for manual/mobile use.

INSTALLATION

The RST is plug and play, requiring only a camera mount in a location with a clear and proximate view of the subjects, a power-over-Ethernet (POE) connection to the camera (providing both power and signal back to the display/computer), and power and network connections for the integrated display/computer.

OPERATION

RST requires initial set-up of operating parameters, including the alarm temperature threshold above normal and periodic setting of the normal baseline temperature, which simply involves presenting an individual known to have a normal body temperature to the camera, and pushing a button to set the baseline. Typically, reestablishing the baseline periodically during a shift is required due to thermal drift, but exact requirements depend on the operating environment.

NOTE

Individuals may exhibit fever temperatures for reasons unrelated to COVID-19, making a secondary screening advisable for those flagged by the RST. Fever is the most common symptom of COVID-19, but is not always present in infected individuals. Because the RST's fever determination is best based on temperature at the inside corner of eyes (the medial canthus), accuracy tends to be lower in individuals wearing glasses, and signage requesting that those passing in front of the camera remove glasses is advisable. The medial canthus has been shown to be the most representative externally observable indicator of the core body temperature. The system can spot high temperatures even in moving individuals, though less effectively.

ABOUT LEIDOS

Leidos is a Fortune 500® information technology, engineering, and science solutions and services leader working to solve the world's toughest challenges in the defense, intelligence, homeland security, civil, and health markets. The company's 36,000 employees support vital missions for government and commercial customers. Headquartered in Reston, Virginia, Leidos reported annual revenues of approximately \$11.09 billion for the fiscal year ended January 3, 2020. For more information, visit www.leidos.com.

FOR MORE INFORMATION

leidos.com/ldhs

©2020 Leidos. All rights reserved. The information in this document is proprietary to Leidos. It may not be used, reproduced, disclosed, or exported without the written approval of Leidos. 20-LEIDOS-0408-21545 | Leidos Creative:20-142350

