Non-Contact Body Temperature Scanner

Frequently Asked Questions:

Q1: What range of temperatures can the scanner detect?

A1: *The scanner is designed to detect temperatures from 95.9 °F to 107.6 °F (35.5 °C to 42 °C). By default, the scanner will display a 'Temperature Too Low' warning for any temperature reading below 95.9°F. (This threshold as well as the upper bound threshold may be adjusted as noted in FAQ Q11).*

Q2: At what temperature does the scanner generate an alarm?

A2: *By default, the scanner reports a high-temperature alarm at 99.7 °F. Any temperature reading at or above 99.68 °F will trigger the high temperature alarm. Any temperature reading between 95.9 °F and 99. 7 °F will be reported as normal. (This threshold as well as the upper bound threshold may be adjusted as noted in FAQ Q11).*

Q3: What is the accuracy of the measuring result?

A3: *Within its operating temperature zone, the accuracy of the reported temperature is ±0.5 °F.*

Q4: How do I verify that the device can detect fever?

A4: *You can verify the thermal scanner's capability by simulating a 'fever' condition. Place a heat pad or a hot towel (~110 °F) on your forehead for 30 seconds and make sure the forehead is fully covered. Remove the towel and take the measurement using the thermal scanner right away.*

The temperature readings the scanner generates is an average over the entire forehead. Simulations using other hot objects (such as a cup of hot water) in front of the camera will not generate proper readings of temperature.

Q5: How do I clean the device?

A5: *Always keep the lenses clean. Use a gentle lens cleaning solution and wipe around the lenses and sensor areas with a soft cloth. Dust or other foreign matter on camera lenses and thermal sensor may decrease accuracy or overall performance of the device.*

Q6: How do I calibrate the device?

A6: *There are two methods of calibration:*

1. *Factory calibration by Turing Video: All Turing Temperature Scanners are calibrated using a Blackbody radiation source before shipping. Turing suggests that all the temperature scanners be calibrated at factory once a year and provides annual calibration service to existing customers.*
2. *Manual calibration by the customer: users may perform a quick manual calibration from the Turing software interface, using an accurate FDA approved hand-held thermometer as reference. Detailed procedures are provided in the service manual.*

Q7: What are the requirements on the environment where this device is used?

A7: *The surface temperature of any object can be affected by the ambient temperature of its surroundings. In order to provide an accurate body temperature measurement from a subject's forehead, it is recommended that the ambient temperature in which the thermal scanner operates remains within the range of 60°F to 104°F (16°C to 40°C). During use, maintain at least 3 feet of clearance around the scanner from any heating or cooling sources such as heating ducts, radiators, air conditioning vents, heating registers, incandescent or halogen lighting or similar elements that may increase or decrease the temperature of the thermal scanner outside of its recommended range. Likewise, keep the device away from airflows whose temperature may elevate or lower the device outside its* recommended operating range.

Q8: Anything I should pay attention to when using the device in cold/hot weather?

A8: *If the scanner will be in an outdoor environment where the daily temperature difference is larger than 5°F, the scanner needs to be set as in the outdoor mode. Forehead surface temperature can be affected by ambient temperature. After some duration in a cold environment, the temperature of exposed skin could be lower than the low limit of the temperature scanner (95.9 °F). In such an instance, the scanner will report 'Temperature too low'. As with any reading of a body surface temperature beyond normal range from the thermal scanner, however, if a subject's actual temperature is suspected to be lowered as a result of cold surroundings, the actual temperature should be confirmed with a clinical grade thermometer.*

The scanner and its cameras should not be exposed to direct sunlight. Also avoid direct sunlight on the measuring target, as the infrared in the sunlight will interfere with the temperature measurement. If the temperature measurements are taken outdoors, place the scanner in a shaded area protected from weather and elements as much as possible, and keep the person(s) being scanned or queuing/in line to be scanned under a shade area as well. If a person being measured was in an abnormally warm environment, their surface body temperature may be high enough to trigger a high temperature alarm. As with any reading of an elevated body surface temperature beyond normal range from the thermal scanner, if a subject's actual temperature is suspected to be elevated as a result of sun exposure or similar source of external heat, the actual temperature should be confirmed with a clinical grade thermometer.

Q9: How do I find a good location to place the scanner?

A9: Please avoid the following situations when placing the scanner:

1. Avoid direct sunlight on the scanner lenses and sensors as well as on any subject being scanned or waiting to be scanned.
2. Avoid strong light sources in the background of the viewing field as it may interfere with the scanner functions.
3. Avoid condensation, fog or any water droplets on the thermal sensor lens (located in the housing at the top of the scanner).
4. Always keep the scanner sheltered any potentially detrimental natural elements or environmental interference (e.g., wind, sun, rain, etc.).

Q10: What information does the scanner store onboard?

A10: *No information is stored on the scanning device.*

Q11: Can the Thermal Scanner settings be adjusted?

A11: Users who subscribed to the Turing Scanner Data Access Package alongside purchase of the scanner can adjust the following:

1. Volume of alert
2. Temperature alert thresholds.
3. Temperature reporting units (Fahrenheit or Celsius)