THERMAL IMAGING OVERVIEW

HARDWARE - THERMAL SENSOR

Heimann Sensor

A. 32x32 infrared array sensor with a resolution of 32x32 pixels
B. Ambient Temperature Range (2 to 40°C) (35.6 to 104°F)
C. Maximum sensing area of 90° x 90°

KIOSK START UP AND POSITIONING

1. When the kiosk first starts up it does a scan of the ambient temperature of the room. During this process, it is best not to have anyone in the sensor’s field of view. This will take around 10-20 seconds.
2. Wait for more than 10 minutes to get temperature readings from the device. This allows the device to properly acclimate to the ambient temperature of the location.
3. Do not let the sensor face glass or any other high temperature objects.
4. Do not move the floor position of the kiosk after it is powered on.

CALIBRATION

Meridian

A. Your kiosk arrives in a calibrated state from the factory using a blackbody device as a reference temperature source.

Customer

A. We suggest that once you receive your kiosk and set it up in the location you will be using, to verify the readings of the kiosk based on an FDA approved thermal forehead thermometer.
B. Once you have that reading, go into the application under the heading of Temperature Detection Settings > Compensation Temperature and adjust the readings based on the measurement from your thermal forehead thermometer ± 1°C (convert °F to °C).
C. We suggest calibrating your device once per month or more frequently if you have fluctuations in your ambient temperature of more than 2.0°C (5.6°F).
ACCURACY

Measurement

A. Face Measurement

I. The Personnel Management Kiosk uses the thermal image of a person’s face to accurately determine their surface body temperature.

1. The thermal image results are taken from the data in the thermal array, and the average temperature is displayed based on the temperature readings.
2. These readings also consider the compensation setting in the application.

II. The Personnel Management Kiosk measures skin surface temperature and does not measure internal core body temperatures.

B. Location

I. The ideal distance for measuring the temperature of the individual and most accurate results are at 20 inches. The device will measure individual’s temperature up to 3 feet from the device.

II. Ambient Temperature

1. The kiosk needs to be in an ambient temperature range of 15–26°C (59–79°F)

C. Obstructions

I. Items that will affect temperature readings compared to internal body temperature

1. Glasses
2. Hair covering forehead
3. Hats or other head coverings
4. Direct sunlight
5. Outdoor use

Temperature

A. The kiosk out of the box is accurate to ± 0.5°C (± 0.9°F).

B. Normal temperature range for the forehead is 35.8 to 37.8°C (96.44 to 100.04°F).

Component specifications subject to change without notice. Revision Date: June 15, 2020

Legal Disclaimer: This is not a medical device. Statements regarding this temperature device have not been evaluated by the FDA. This temperature device should not be solely or primarily relied upon to diagnose or exclude a diagnosis of COVID-19, or any other disease or health condition. Elevated body temperature in the context of use should be confirmed with secondary evaluation methods.