2M ENGINEERING

CIR-100

CONTACTLESS INFRARED TEMPERATURE SENSOR

INTENDED USE

CIR-100 is a Contactless Infrared Temperature Sensor which measures the temperature of a person at a distance of 25 - 70 cm, without coming in contact with them. It measures the temperature of the forehead and provides the forehead temperature and the translated oral temperature in the range of 34°C - 43°C (93.2°F - 109.4°F).

The device should be used to measure only one subject's temperature at a time.

The device is intended to identify persons suspected of having a fever to prevent them from entering a specific location.

CIR-100 provides a temperature measurement of a person. Public health officials, through their experience with the device in the particular environment of use, should determine the significance of any fever or elevated temperature based on the measurement.

When the device indicates an elevated body temperature, a secondary screening with a clinical thermometer should be performed.

The measurement should not be solely or primarily relied upon to diagnose or exclude a diagnosis of COVID-19, or any other disease.

This intended use is subject to the FDA enforcement policy for telethermographic systems during the Coronavirus Disease (COVID-19) public health emergency. This device is not FDA cleared or approved.

FEATURES

Core body temperature
The CIR-100 measures the temperature of the forehead and provides the forehead temperature and the translated oral temperature in the range of 34°C - 43°C (93.2°F - 109.4°F).

Accuracy
The CIR-100 laboratory accuracy is ±0.5°C over the full measurement range from 25-75cm when used indoors.

Fast measurement
Temperature measurements are completed within 5 seconds.

Fully calibrated
The CIR-100 is calibrated by the manufacturer and does not need recallibration over its lifetime.

Smart algorithms
The camera uses smart algorithms to deliver an accurate temperature reading under specified use conditions. All processing is done within in the CIR-100.

OEM/ODM
The CIR-100 can be integrated into larger systems. Customizations and extra features are possible on request.

Connectivity
The CIR-100 is powered via the USB interface on the back of the unit. This USB interface is also used for serial communication with the device. Extensive API documentation is available to make integration easy.

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CONTENT

- CIR-100 Temperature Sensor
- USB 2.0 cable mini USB to type A, 0.3 m length
- Product Manual

TECHNICAL SPECIFICATIONS

- CIR temperature output: Celcius (˚C)
- Oral temperature range: 34˚C - 43˚C (93.2°F - 109.4°F)
- Laboratory accuracy: ±0.5˚C over the full measurement range from 25-70cm
- Measurement duration: 5 seconds
- Dimensions [L x H x D]: 111 x 60 x 54mm
- Weight: 350gr
- Power: 5Vdc, < 90mA (USB power)
- Connectivity: USB 2.0 Virtual COM Port, 115200 baud, 8 bit, 1 stop, no parity, RTS/CTS flow control

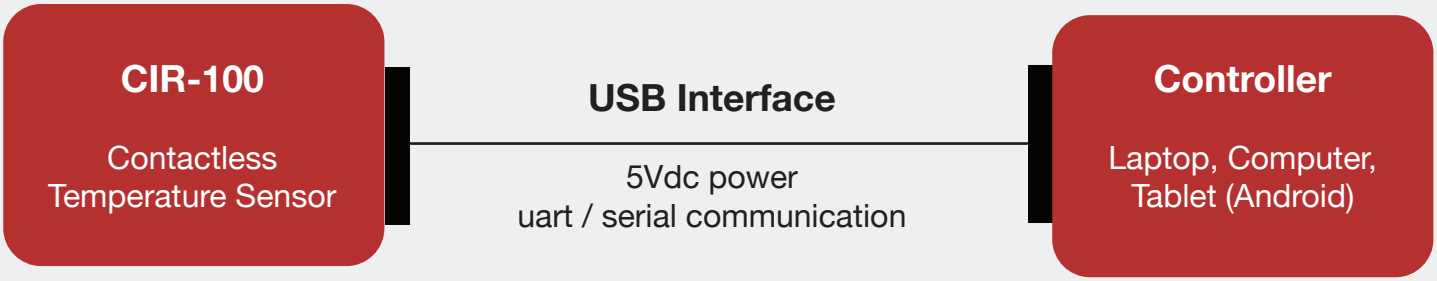
Oral temperature validation pending

- Environment temperature : 15 - 31.5˚C
- Storage temperature 0°C to 45°C
- Relative Humidity 80% RH, non condensing

The CIR-100 complies with EMC directive: EN IEC 61326-1:2013, EN IEC 600601-1-2:2007/AC1:2010. FCC complies with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules.

Please follow the guidelines for human febrile temperature screening given in: ISO/TR 13154:2017 Medical electrical equipment — Deployment, implementation and operational guidelines for identifying febrile humans using a screening thermograph.

BLOCK DIAGRAM



2M ENGINEERING
EXPERTS IN SENSOR PRODUCT DEVELOPMENT

John F Kennedylaan 3
5555 XC Valkenswaard
The Netherlands

+31 (0)40-8080230
info@2mel.nl
www.2mel.nl