2M ENGINEERING

CIR-100

CONTACTLESS INFRARED TEMPERATURE SENSOR

25-75cm

Infrared Temperature Sensor

INTENDED USE

The CIR-100 contactless infrared temperature sensor measures core body temperature quickly and accurately over a distance of 25-75cm.

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

FEATURES

Core body temperature

The CIR-100 measures core body temperature in the range 34℃ - 43℃ without coming in contact with the user.

Accuracy

The CIR-100 accuracy is ±0.5℃* 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 recalibration 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.
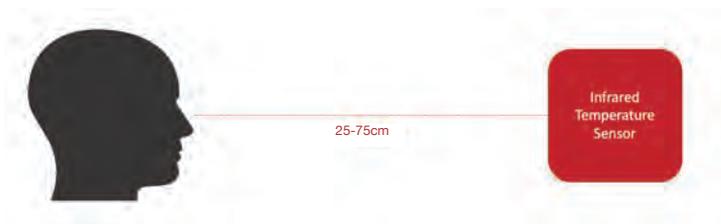
OEM/ODM

The CIR-100 can also 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.

* Validation for accuracy of ±0.3℃ pending

**NOTE: Preliminary specifications. Subject to change without notice.
Tested for indoor use only!**

CONTACTLESS INFRARED TEMPERATURE SENSOR
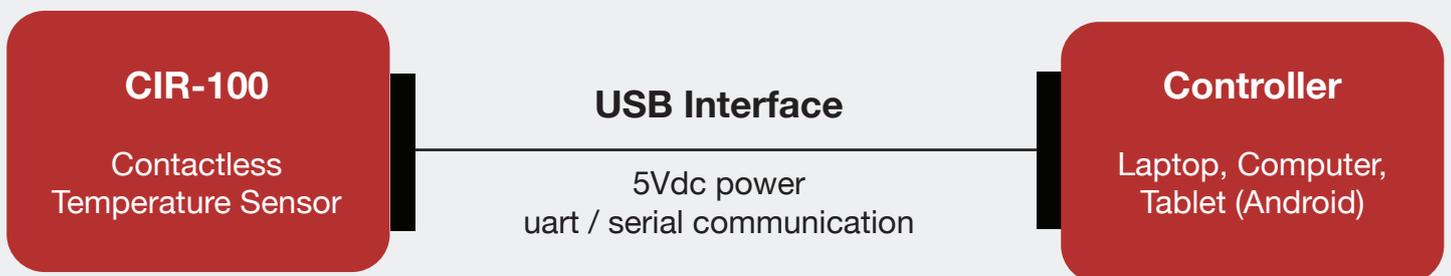

CONTENT

- CIR-100 Temperature Sensor
- USB cable 0.3 or 0.8meter
  (USB2 Standard Type A plug to Mini-B plug)
- Product Manual

TECHNCIAL SPECIFICATIONS

- CIR temperature output: Celcius (°C) or Fahrenheit (°F)
- Sensor temperature range: 34°C - 43°C (95°F - 109.4°F)
- Accuracy: ±0.5°C over the full measurement range
  from 25-75cm
- 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

- Environment temperature : 15 - 35°C
- Storage temperature 0°C to 45°C
- Relative Humidity 80% RH, non condensing

*Be aware that temperature measurements done when a person moves
from an outdoor to an indoor enviroment can be influenced by the the*

BLOCK DIAGRAM

CIR-100	USB Interface	Controller
Contactless Temperature Sensor	5Vdc power uart / serial communication	Laptop, Computer, Tablet (Android)

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Tested for indoor use only! This is not a medical device.**