

IOTTEMP®

IoT Temperature Sensor



User Guide



User Guide for IOT Temperature Sensor

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Revision History:

| Revision | Date | Description |
|----------|------------|-----------------|
| A | 08/14/2020 | Initial Release |

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FCC / ISED Declaration of Conformity

This device contains license-exempt transmitters(s) / receiver(s) that comply with Innovation, Science, and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.



Caution: Unauthorized modifications or changes not expressly approved by Saucon Technologies, Inc. could void compliance with regulatory rules, and thereby your authority to use this equipment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the manufacturer's instructions, may cause interference harmful to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer, or an experienced radio / TV technician for help.

FCC / ISED Déclaration de Conformité

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1. L'appareil ne doit pas produire de brouillage;
2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.



Attention: des modifications non autorisées ou des changements non expressément approuvés par Saucon Technologies, Inc. peuvent annuler la conformité aux règles réglementaires et, par conséquent, votre autorisation d'utiliser cet équipement.

Cet équipement génère, utilise et peut émettre de l'énergie radiofréquence et, s'il n'est pas installé et utilisé conformément aux instructions du fabricant, il peut provoquer des interférences nuisibles aux communications radio.

Cependant, il n'y a aucune garantie que des interférences ne se produiront pas dans une installation particulière. Si cet équipement cause des interférences nuisibles à la réception de la radio ou de la télévision, ce qui peut être déterminé en éteignant et en rallumant l'équipement, l'utilisateur est encouragé à essayer de corriger les interférences par une ou plusieurs des mesures suivantes:

- Réorientez ou déplacez l'antenne de réception.
- Augmenter la distance entre l'équipement et le récepteur.
- Connectez l'équipement à une prise sur un circuit différent de celui sur lequel le récepteur est connecté.
- Consultez le revendeur ou un technicien radio / TV expérimenté pour obtenir de l'aide.

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Chapter 1: Product Description and Specifications

Product Description

The IoT Temperature Sensor measures ambient environmental temperature through the use of a thermistor and advertises the reading over Bluetooth Low Energy (BLE) at a predetermined interval. The device is self-contained in its enclosure and does not require any outside connections for operation. It does not have any exterior visual indication that it is operating. On the back of the board there is an LED that blinks to indicate operation. Included within the enclosure is a battery that powers the device.

Package Contents

IOTTEMP

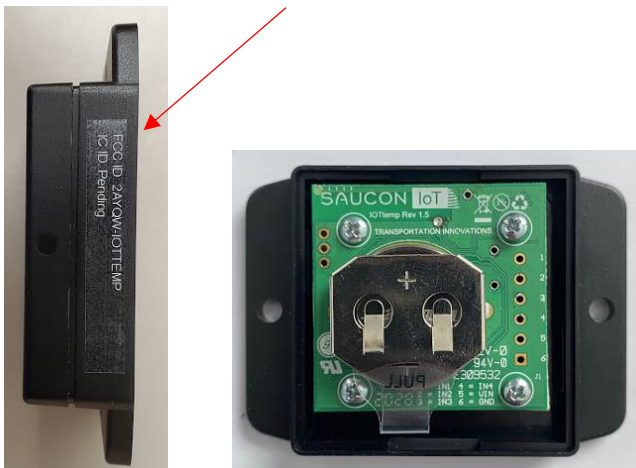
Mounting Screws

CR2450X - Battery

Battery Pull Tab

Installation Screws

Side view of the IOTTEMP sensor displaying the FCC ID & IC ID labels.



Parts to be supplied by End User

All parts required are included in the package contents provided by Saucon Technologies.

Chapter 2: Installation/Power

Mechanical Mounting

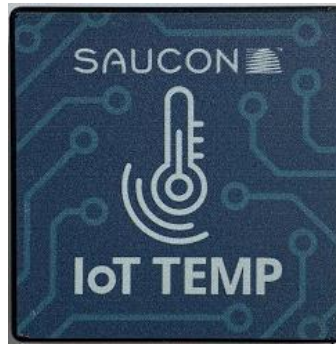
Using installation screws (two are recommended) that are used to mount the IOTTEMP device in a location that requires monitoring. Mounting screws should be assembled, holding the PC board onto back of case.

Battery Powered

The first step is to simply pull the tab out from under the battery contact and snap the cover back in place.



Pull Tab



Cover

Chapter 3: Operation

The IOTTEMP device provides temperature readings over Bluetooth.

Preventing Electrostatic Discharge Damage:

Electrostatic discharge (ESD) is a discharge of stored static electricity that can damage equipment and impair electrical circuitry. It occurs when electronic components are improperly handled and can result in complete or intermittent failures.

Following are guidelines for preventing ESD damage:

- Always use an ESD-preventive wrist or ankle strap and ensure that it makes good skin contact.
- Connect the equipment end of the strap to an unpainted surface of the chassis frame or another proper grounding point or surface. Attach it to the inside bottom of the chassis or to the rear panel (inside or outside) without making contact with any connectors.
- Avoid contact between equipment and clothing. The wrist or ankle strap only protects the equipment from ESD voltages on the body; ESD voltages on clothing can still cause damage.
- Handle printed circuit board by the edges only; avoid touching the components, traces, or any connector pins.
- Place a removed card component side up on an antistatic surface or in a static shielding bag.
- Do not remove the wrist or ankle strap until the installation is complete.



Chapter 4: Safety

General Safety

Do not operate the Saucon Technologies IOTTEMP in areas near medical equipment, where blasting is in progress, where explosive atmospheres may be present, or near any equipment that may be susceptible to any form of radio interference.

Sécurité Générale

N'utilisez pas le Saucon Technologies IOTGTWY à proximité d'équipements médicaux, où des explosions sont en cours, où des atmosphères explosives peuvent être présentes, ou à proximité de tout équipement susceptible d'être sensible à toute forme d'interférence radio.

Vehicle Safety

- If incorrectly installed in a vehicle, the operation of IOTTEMP could interfere with the correct functioning of vehicle electronics. To avoid such problems, be sure that qualified personnel have performed the installation. Verification of the protection of vehicle electronics should be part of the installation.

Maintenance of IOTTEMP

IOTTEMP is the product of advanced engineering, design, and craftsmanship and should be treated with care. The suggestions below will help you to enjoy this product for many years:

- Do not expose IOTTEMP to any extreme environment where the temperature exceeds the recommended operating conditions.
- Do not attempt to disassemble IOTTEMP. There are no serviceable parts inside. This will void your warranty.
- Do not expose your IOTTEMP to water, rain, or spilled beverages.
- Do not abuse your IOTTEMP device by dropping, knocking, or violently shaking it. Rough handling can damage it.
- The use of accessories not authorized by Saucon Technologies, or not compliant with Saucon's accessory specifications may invalidate your warranty.
- In the unlikely event of a fault in the IOTTEMP device, contact Saucon Tech Support.

Your Responsibility

IOTTEMP is your responsibility. Please treat it with care respecting all local regulations. It is not a toy. Therefore, keep it in a safe place at all times and out of the reach of children.

If a device is stolen, report it to Saucon Technologies support immediately.

Chapter 5: Warranty and Repairs

Saucon Technologies Warranty Statement

Saucon Technologies, Inc., (hereafter “Saucon”) warrants that its products will be free from defects in material or workmanship for a period of two years from date of purchase, or if proof of purchase is not provided, 90 days from date of manufacture.

SAUCON MAKES NO OTHER WARRANTY, EXPRESS OR IMPLIED, AND ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED.

This warranty does not apply to any products which have been damaged by lightning storms, water, power surges, temperature extremes outside the limits or products which have been neglected, altered, abused, used for a purpose other than the one for which they were manufactured, repaired by Customer or any party without Saucon’s written authorization, or used in any manner inconsistent with Saucon’s instructions.

Saucon’s entire obligation under this warranty shall be limited (at Saucon’s option) to repair or replacement of any products which prove to be defective within the warranty period or, at Saucon’s option, issuance of a refund of the purchase price. Defective products must be returned by Customer to Saucon’s service center – transportation prepaid.

SAUCON WILL NOT BE LIABLE FOR CONSEQUENTIAL DAMAGES, AND UNDER NO CIRCUMSTANCES WILL ITS LIABILITY EXCEED THE PRICE FOR DEFECTIVE PRODUCTS.

Repair Procedures for U.S. and Canadian Customers

In the event that service is required, products may be shipped, freight prepaid, to our Bethlehem, PA (USA) Service Center:

Saucon Technologies
Production Support
2455 Baglyos Circle
Bethlehem, PA 18020

A Returned Materials Authorization (RMA) is not required. Return shipping charges (surface) will be paid by Saucon Technologies to destinations in the U.S. and Canada.

Please include, inside the shipping box, a description of the problem, a return shipping address (must have street address, no P.O. Box), your telephone number, and if the product is out of warranty, a purchase order for repair charges.

For out of warranty repair charges please contact tech support via email support@saucontech.com.

Extended warranties are available. Please contact support@saucontech.com for more details.

Please direct your questions regarding technical matters, product configuration, verification that the product is defective, repair expediting, shipping or receiving to support@saucontech.com (484) 241-2515

Repairs for damages caused by lightning storms, water, power surges, incorrect installation, physical abuse, or user-caused damages are bill on a time-plus materials basis.

International Customer Repair Procedures (Outside USA and Canada)

Your original point of purchase Reseller may offer the quickest and most economical repair option for your Saucon TDS product.

In the event that factory service is required, products may be shipped freight prepaid to our Bethlehem, PA service center. Recommended international shipment methods are via Federal Express, UPS, or DHL courier services. A Returned Materials Authorization (RMA) is required for products shipped from outside the USA and Canada. Please contact us for return authorization and shipping instructions on any International shipments to the USA. Please include inside the shipping box, a description of the problem, return shipping address (must have street address, not a P.O. Box), your telephone number, and if the product is out of warranty, a check drawn on a U.S. bank for repair charges. Repaired units will be shipped freight collect unless other arrangements are made in advance.

Repairs for damages caused by lightning storms, water, power surges, incorrect installation, physical abuse, or user-caused damages are billed on a time-plus materials basis.

International Distributor Repair Procedures

International distributors should contact their Saucon International sales representative for information about repairs for their Saucon product.

Repairs for damages caused by lightning storms, water, power surges, incorrect installation, physical abuse, or user-caused damages are billed on a time-plus materials basis.

Chapter 6: Reference Information

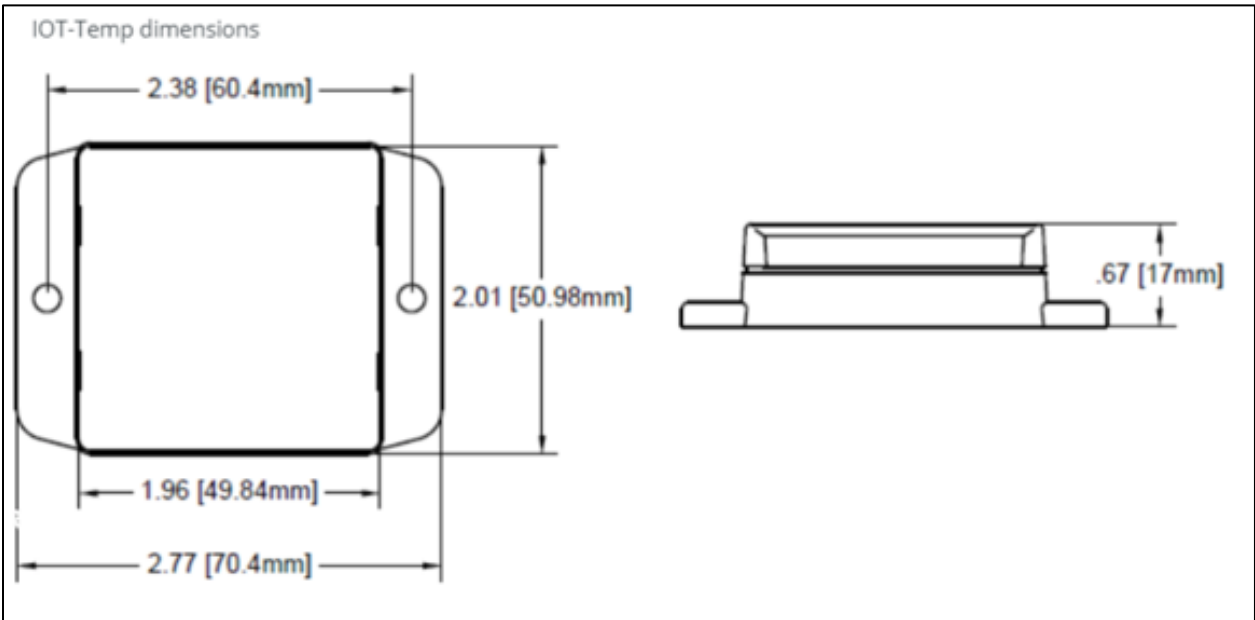
Specifications

| | |
|-----------------------------|-------------------|
| Operating Temperature Range | -40C to +85C |
| Storage Temperature Range | -55C to +105C |
| Voltage (Battery) | 3 |
| Vibration/Shock | Designed for 10 g |

Current Draw

| Current Draw | Battery |
|--------------------------------|----------------|
| Average | 1.4uA |
| Battery Life (600 mAh CR2450X) | 4 Years |

Mechanical Drawings



FCC ID (United States):

2AYQW-IOTTEMP

IC ID (Canada):

26966-IOTTEMP