



LoRaWAN Temperature Sensor (External Probe)

SKU: SI-LRW-TEMP-EXT-125

Monitor temperature with a compact wireless LoRaWAN® sensor featuring a detachable stainless steel probe, IP67 protection and up to 9 years of battery life. Ideal for refrigerators, freezers, cold rooms, pharmaceutical storage, food processing and industrial temperature monitoring.

OVERVIEW

This compact wireless temperature sensor provides accurate and reliable temperature monitoring for cold chain, pharmaceutical, food processing and industrial applications. Featuring a detachable stainless steel temperature probe and long-range LoRaWAN® connectivity, it enables continuous remote monitoring without requiring communication or power cabling.

Designed for demanding environments, the sensor measures temperatures from -40°C to 125°C, making it suitable for refrigerators, freezers, cold rooms, laboratories and temperature-controlled storage. The detachable probe simplifies replacement and calibration while maintaining long-term measurement accuracy. Its IP67-rated enclosure protects against dust and water ingress, ensuring reliable operation in harsh indoor and outdoor environments.

Local storage retains up to 4,000 measurements, automatically retransmitting data when communication is restored to maintain a complete audit trail. Configurable high, low and abrupt temperature change alarms provide early warning of temperature excursions, helping protect valuable products and maintain regulatory compliance.

Integrated with the Sense It monitoring platform, the sensor provides live dashboards, historical trends, automated reports and multi-channel alerts. NFC configuration, optional magnetic mounting and a battery life of up to 9 years make installation and maintenance fast and straightforward.

KEY FEATURES

- High-accuracy temperature monitoring
- Temperature range from -40°C to 125°C
- Detachable stainless steel temperature probe
- Long-range LoRaWAN® connectivity
- Up to 9 years battery life
- IP67-rated enclosure
- Local data logging with automatic retransmission
- Configurable high, low and rapid temperature change alarms
- NFC configuration using a smartphone
- Firmware updates over the air (FUOTA)
- EN12830 certified
- Supports HACCP compliance
- Optional magnetic mounting
- Suitable for food, pharmaceutical and industrial applications

TECHNICAL SPECIFICATIONS

General

- Wireless technology: LoRaWAN®
- LoRaWAN Class A
- Activation: OTAA / ABP
- Frequency bands: EU868, US915, AU915, AS923, KR920, IN865, RU864, CN470 (region dependent)
- RF output power: Up to 22 dBm (915 MHz), 16 dBm (868 MHz), 19 dBm (470 MHz)
- Receiver sensitivity: Up to -137 dBm
- Supports Milesight D2D protocol

Temperature

- Sensor type: Digital DS18B20
- Measurement range: -40°C to 125°C
- Measurement accuracy: $\pm 0.5^{\circ}\text{C}$ (-10°C to 85°C), $\pm 2^{\circ}\text{C}$ (-40°C to -10°C and 85°C to 125°C)
- Resolution: 0.1°C
- Long-term drift: <0.2°C

Probe

- Probe material: FDA-compliant stainless steel 316
- Cable material: TPE
- Cable length: 1.5 m
- Probe length: 50 mm
- Detachable probe

Data & Alarms

- Stores up to 4,000 historical records
- Automatic data retransmission
- High and low temperature alarms
- Rapid temperature change alarms

Configuration

- NFC configuration
- Remote downlink configuration
- Firmware updates over the air (FUOTA)

Power

- 1 × 2,700 mAh replaceable Li-SOC₂ battery
- Battery life: Up to 9 years

Environmental

- Device operating temperature: -30°C to 55°C
- Probe operating temperature: -40°C to 125°C
- Operating humidity: 0–95% RH (non-condensing)
- Ingress protection: IP67

Physical

- Housing material: ABS + PC
- Dimensions: 58 × 65 × 25 mm
- Weight: 70 g

Installation

- Wall mounting
- Cable-tie mounting
- Optional magnetic mounting

Compliance

- EN12830 certified
- Supports HACCP monitoring
- CE
- FCC
- RoHS

Applications

- Cold chain monitoring
- Refrigerators
- Freezers
- Cold rooms
- Pharmaceutical storage
- Food processing
- Laboratories
- Industrial temperature monitoring



SENSE IT
TECHNOLOGIES
MONITORING AND CONTROL SOLUTIONS



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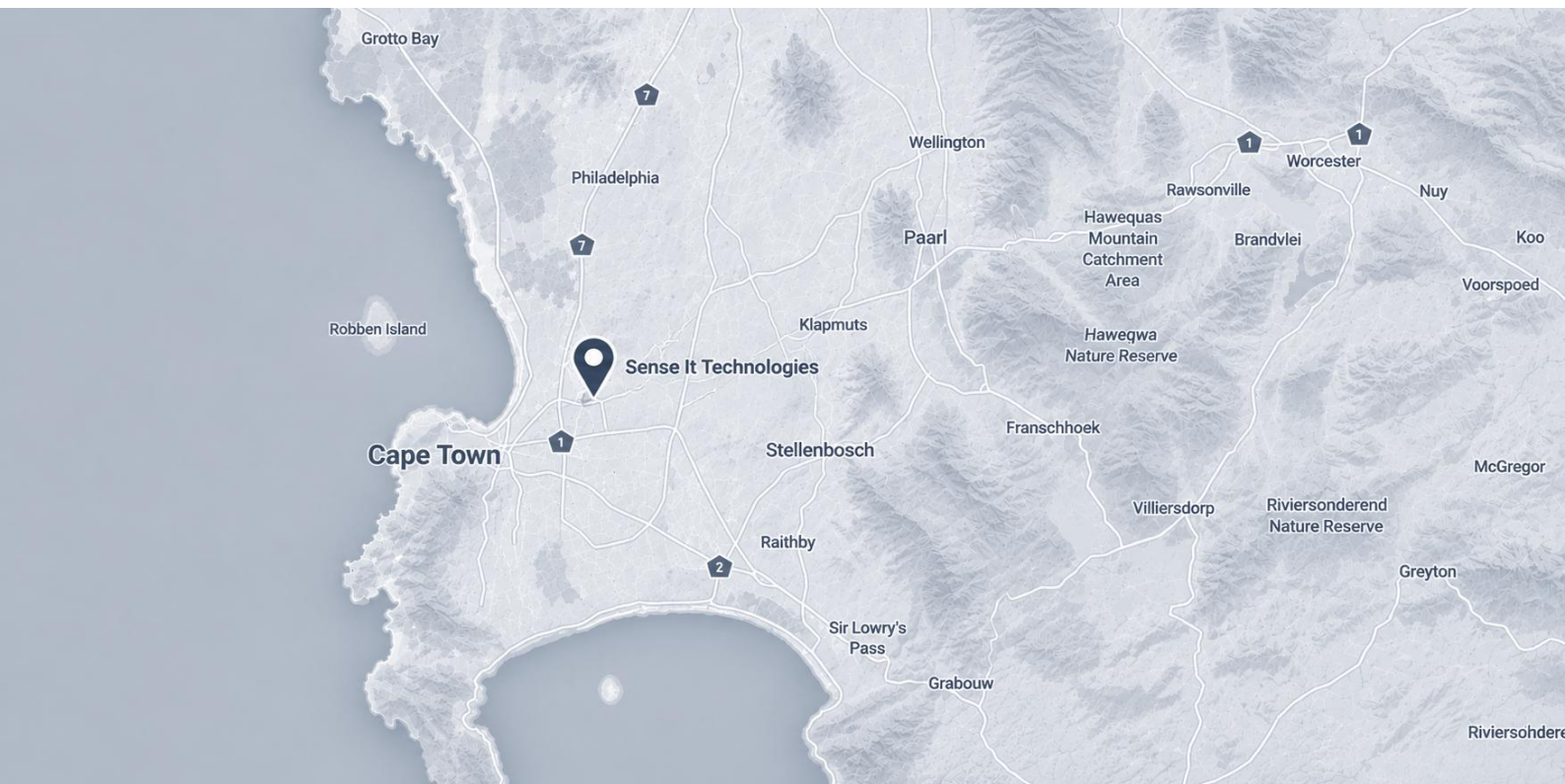
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