SENSE IT
TECHNOLOGIES
MONITORING AND CONTROL SOLUTIONS



LoRaWAN Temperature Sensor with LCD Screen (External Probe)

SKU: SI-LRW-TEMP-EXT-LCD-200

Industrial-grade wireless temperature sensor with an external high-accuracy probe for continuous remote monitoring in demanding environments. Ideal for cold chain, food processing, pharmaceutical storage, industrial refrigeration, laboratories, and process monitoring, delivering real-time temperature data, alarms, and long battery life over LoRaWAN®.

OVERVIEW

This industrial wireless temperature sensor is designed for applications requiring accurate, compliant and reliable temperature monitoring. Featuring support for a single external temperature, temperature & humidity or magnetic door sensor, it provides a flexible solution for cold chain monitoring, pharmaceutical storage, food processing, laboratories, industrial processes and refrigerated environments.

The sensor communicates using LoRaWAN®, allowing long-range wireless connectivity with minimal power consumption while eliminating the need for communication cabling. An integrated LCD display provides instant local readings, while local storage of up to 10,000 measurements ensures no data is lost during temporary network interruptions. Once connectivity is restored, stored data is automatically retransmitted to maintain a complete audit trail.

Designed for demanding industrial environments, the IP65-rated enclosure protects against dust and water ingress, while replaceable lithium batteries provide between 5 and 15 years of operation depending on the connected probe and reporting interval. NFC configuration enables fast commissioning using a smartphone, while firmware updates can be performed remotely using FUOTA.

The sensor supports a range of optional high-accuracy probes, including food-grade, industrial high-temperature, ultra-low temperature and pipe surface probes, allowing the same platform to be deployed across multiple monitoring applications. Integrated with the Sense It monitoring platform, it provides live dashboards, historical trends, automated reporting and configurable alerts via email, WhatsApp, SMS and mobile notifications.

KEY FEATURES

- Single-channel temperature monitoring
- Supports one external temperature, temperature & humidity or magnetic door sensor
- Compatible with multiple PT100, digital and specialised probes
- Long-range LoRaWAN® wireless connectivity
- Up to 15 years battery life (probe dependent)
- IP65-rated enclosure
- Integrated LCD display
- Stores up to 10,000 historical records
- Automatic data retransmission after communication recovery
- Configurable threshold and change alarms
- NFC configuration
- Firmware updates over the air (FUOTA)

- EN12830 compliant
- Supports HACCP monitoring
- Secure PDF and CSV data export
- Suitable for pharmaceutical, food, cold chain and industrial monitoring 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)
- Receiver sensitivity: Up to -137 dBm
- Internal antenna
- Single M12 A-coded 5-pin sensor connector
- Supports one external probe or magnetic door sensor
- LCD display

Sensors

- Supports PT100 temperature probes
- Supports digital temperature probes
- Supports temperature & humidity probes
- Supports magnetic door sensor
- 3-wire PT100 connection

Data & Alarms

- Stores up to 10,000 historical records
- Automatic data retransmission after communication recovery
- High and low threshold alarms
- Temperature change alarms
- Supports encrypted PDF and CSV data export

Configuration

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

Power

- 2 × 4,000 mAh replaceable Li-SOCl batteries
- Battery life: 5–15 years depending on probe type and reporting interval
- Optional Type-C external power supply

Environmental

- Operating temperature: -30°C to 70°C
- Operating humidity: 0–95% RH (non-condensing)
- Ingress protection: IP65

Physical

- Dimensions: 109.35 × 75 × 29 mm

- Weight: 175 g

Installation

- Wall mounting
- Optional magnetic mounting

Compliance

- EN12830 certified
- Supports HACCP monitoring
- Supports 21 CFR Part 11 electronic records

Applications

- Cold chain monitoring
- Refrigerators and freezers
- Cold rooms
- Pharmaceutical storage
- Food processing
- Industrial temperature monitoring
- Laboratories
- Warehouses
- Process monitoring

SENSE IT
TECHNOLOGIES
MONITORING AND CONTROL SOLUTIONS

info@senseit.co.za

+27 21 300 3026

Unit 11, First Floor
Bellfour Office Park
3 Edmar St
Bellville, 7550

Visit our website for more info
www.senseit.co.za



SMART MONITORING

Real-time visibility when it matters.

INSTANT ALERTS

Respond faster. Prevent downtime.

RELIABLE & SECURE

Built for reliability. Secured for peace of mind.

DATA THAT DELIVERS

Insights that help you make smarter decisions.