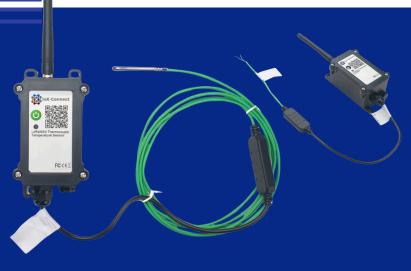# LORAWAN THERMOCOUPLE SENSOR

INDUSTRIAL LORAWAN TEMPERATURE SENSOR

KEY FEATURES

◆ **Dual Models for Flexibility:**
- **TC01:** Includes a pre-connected K-Type thermocouple for measuring temperatures from -50°C to 200°C.
- **TC02:** Features a universal 2-wire input to connect a wide variety of third-party thermocouple types.

◆ **Long-Life Battery:** Powered by an 8500mAh Li-SOCl2 battery, designed for long-term use up to several years.

◆ **Offline Data Logging:** Automatically records sensor readings when out of network range and uploads them upon reconnection to ensure no data is lost.

DEVICE OVERVIEW

The ioX-Connect LoRaWAN Thermocouple Sensor is an industrial-grade converter designed for precise temperature monitoring in a wide range of environments. It accurately measures temperature and transmits the data to your ioX-Connect platform via the LoRaWAN network. The device is available in two models: the TC01, which includes a K-Type thermocouple probe (-50°C to 200°C), and the TC02, which features a universal connector for integrating third-party K, J, N, R, S, T, E, or B type thermocouples.

Engineered for reliability, the sensor includes a configurable temperature alarm for instant notifications and ensures data integrity with an offline data logging feature that syncs readings after network reconnection. Best For: Monitoring industrial process temperatures, HVAC systems, and high-temperature environments to ensure operational safety and efficiency.

TECHNICAL FEATURES

- **LoRaWAN® Version:** v1.0.3, Class A
- **Thermocouple Input:** K-Type probe (TC01) or universal 2-wire connector (TC02)
- **Dimentions:** Size: 127.8 mm (L) x 55.6 mm (W) x 47 mm (H) - Weight: 148 g
- **Battery Type:** 8500mAh replaceable Li-SOCl2 battery
- **Downlink Configuration:** Remotely configurable via ioX-Connect platform
- **Operating Temperature:** -40 ~ 85°C
- **Data Logging:** Supports offline data logging functionality
- **Frequency Range:** 862 ~ 1020 Mhz | **RF Output:** Max +22 dBm | **RX Sensitivity:** Down to -139 dBm
- **Supported Frequency Bands:** EU868 (Europe, Middle East), US915 (USA/Australia), AS923 (Australia/New Zealand, ASIA), IN865 (India).