

EVA-2311

LoRaWAN Temperature PT1000 Round Head Probe Sensor

Preliminary



Features

- LoRaWAN wireless connectivity
- -70°C to 200°C temperature detection range
- IP67 for PT1000 Round Head Probe Sensor
- Battery life up till 5 years@25°C, 15mins interval setting
- Easy to deploy and maintain

Introduction

EVA-2311 is a LoRaWAN PT1000 round head probe sensor. The extended sensor itself has 2m length cable, IP67 rating design with -70°C to 200°C temperature detection range. It capable to measure temperature at different kinds of applications, such like refrigerator, freezer, cooling pipe, etc. With it's wide range, high penetration rate LoRa connectivity, the data transmission range can up till hundred or thousand meters away. EVA-2311 can be installed directly on the walls, metal box or poles. EVA-2311 is powered by 2 AA 3.6v Li-ion batteries, battery life can up till 5 years basing on certain condition.

Common Specification

Wireless Communication

- **Frequency Band** EU 863-870 (MHz) / US 902-928 (MHz) / AU 915-928 (MHz) / AS 919-924 (MHz)
- **Spreading Factor** 7-12
- **Transmit Power** Up to 20dBm
- **Topology** Star (LoRa/LoRaWAN)
- **Sensitivity** -148dB

General

- **Power Input** 3.6V AA Battery *2pcs (Not included)
- **Battery Life** 5 years@25°C, 15mins interval setting
- **LED Indicator** Power on, TX, reset to default
- **Configuration Interface** Wireless downlink commands
- **IP Class** IP30
- **Mounting** Wall, Magnetic, Pole
- **Dimension (H x W x D)** 112 x 51 x 71.5 mm
- **Certification** CE (RED), FCC, TELEC, RCM, NCC

Environment

- **Operating Temperature** -20°C to 55°C
- **Operating Humidity** 0% ~ 90% RH
- **Storage Temperature** -40°C ~ 85°C
- **Storage Humidity** 0% ~ 90% RH

Temperature Sensor

- **Measurement Range** -70°C to 200°C
- **Accuracy (Host and Sensor are in same environment)** $\pm 0.8^{\circ}\text{C}$ between 0°C and 55°C
- **Accuracy (Host and Sensor are in different environment)** $\pm \{(0.15 + 0.002 * |T2|) + 1\}^{\circ}\text{C}$ between -70°C and 0°C
 $\pm \{(0.15 + 0.002 * |T2|) + 0.6\}^{\circ}\text{C}$ between 55°C and 200°C
- **Probe Dimension** 5 x 30 mm
- **IP Class** IP67
- **Wire Length** 2000 mm

Ordering Information

LoRaWAN Temperature and Humidity Sensor

- **EVA-2311-NA** LoRaWAN Temperature PT1000 Round Head Probe Sensor - US 902-928 (MHz)
- **EVA-2311-EA** LoRaWAN Temperature PT1000 Round Head Probe Sensor - EU 863-870 (MHz)
- **EVA-2311-TA** LoRaWAN Temperature PT1000 Round Head Probe Sensor - AS 919-924 (MHz)
- **EVA-2311-ZA** LoRaWAN Temperature PT1000 Round Head Probe Sensor - AU 915-928 (MHz)

LoRaWAN Gateway

- **WISE-6610-N100-A** LoRaWAN gateway supports up to 100 nodes with 915 MHz
- **WISE-6610-E100-A** LoRaWAN gateway supports up to 100 nodes with 868 MHz
- **WISE-6610-A100-A** LoRaWAN gateway supports up to 100 nodes with 923 MHz

Accessories

- ***1760002647-01** Bat.Cylindrical 3.6V/2500mAh AA Li/SOCI2
- *One EVA sensor need 2 batteries.