

TEMPERATURE & HUMIDITY V3.0 SENSOR

Overview

NETOP Temperature and Humidity sensor is a long range wireless sensor which measures temperature and the relative humidity of the air within a room. These sensors are perfect for monitoring ambient temperatures and humidity. This sensor is compatible with LoRaWAN technology. The standard version of this sensor is powered by one replaceable 3.6 V AA sized battery (included with purchase).

Key Features

- Real plug & play
- Easy to mount & install
- Compatible with LoRaWAN™ specification
- Maintenance free – install & forget
- Secure communication (AES-128)
- Ultra Low Power Consumption
- Certifications: LoRaWAN™, CE
- +10 years of battery life (*30 minutes data transmit period)



Communication Specs

- Compatible with LoRaWAN Specification 1.0.3
- The sensor uses Low Power Wide Area Network-LPWAN technology (LoRa) for connectivity
- Compliant with Low and High Frequencies (AS923, AU915, CN470, CN779, EU433, EU868, IN865, KR920, RU864, US915 MHz ISM bands)
- Supports High power and Low power LoRa RF applications:
 - Up to +22 dBm at US915 and AU915,
 - Up to +14 dBm elsewhere
- Ultra low power consumption. Excellent long-term stability.
- 170 dB maximum link budget
- Radio Performance : High RX sensitivity down to -148 dBm
- Full ADR, OTAA and ABP support
- Long range wireless data transmission

Mechanics

- Enclosure: IP65/IP67
- Dimensions: 65 x 55 x 27 mm (for IP65)
- Operating temperature: -40°C to +85°C

Data Security

- AES-128

Power Supply

- AA Battery 3.6 V Li-SOCl₂-Soft LS 14500

Indicators

- Status LED (on board)

Sensor Specifications

| | | |
|--------------------------|---|---------------------|
| Measurement Range | : | -40 °C ~ +125 °C |
| | : | 0-100 %RH |
| Accuracy | : | ± 0.3° C |
| | : | ± 2 %RH |
| Resolution | : | 0.01 °C |
| | : | 0.1 %RH |
| Data Transmission Period | : | 15 minutes(default) |

Certifications & Reliability

- CE
- LoRaWAN™ Certified

Applications

- Real Time Remote Monitoring of Freezer and cooler
- HVAC system monitoring
- Server Room Monitoring
- Cadaver storage cooler
- Greenhouse temperature and humidity monitoring
- Art gallery and museum environment monitoring
- Agricultural environmental monitoring
- Humidor monitoring