

Temperature & Humidity Sensor

Featuring LoRaWAN®

EM300-TH

Milesight



EM300-TH is a compact environment monitoring sensor for measurement of temperature and humidity and transmitting data using LoRaWAN® technology. With this low power consumption technology, EM300-TH can work up to 5 years with 4000 mAh battery. Combining with Milesight LoRaWAN® gateway and Milesight IoT Cloud solution, users can manage all sensor data remotely and visually.

EM300-TH is widely used for both indoor and outdoor applications such as offices, hospitals, factories, greenhouses, etc.

◆ Features

- Embedded with Sensirion high-precision sensor chip
- Ultra-wide-distance transmission up to line of sight of 10km
- IP67 UV-resistant and waterproof enclosure for harsh environment applications
- Built-in 4000 mAh replaceable battery and works for 5 years without replacement
- Equipped with NFC for easily configuration
- Compliant with standard LoRaWAN® gateways and network servers
- Quick and easy management with Milesight IoT Cloud solution

◆ Specifications

| Wireless Transmission | |
|--------------------------|---|
| Technology | LoRaWAN® |
| Frequency | CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923 |
| Tx Power | 16dBm(868)/20dBm(915)/19dBm(470) |
| Sensitivity | -137dBm @300bps |
| Mode | OTAA/ABP Class A |
| Measurement | |
| Temperature | |
| Range | -30°C to + 70°C |
| Accuracy | 0°C to + 70°C (+/- 0.3°C), -30°C to 0°C (+/- 0.6°C) |
| Resolution | 0.1°C |
| Humidity | |
| Range | 0% to 100% RH |
| Accuracy | 10% to 90% RH (+/- 3%), below 10% and above 90% RH (+/- 5%) |
| Resolution | 0.5% RH |
| Operation | |
| Power On & Off | NFC, Power Button (Internal) |
| Configuration | NFC Configuration via Mobile App |
| Physical Characteristics | |
| Power Supply | 1 × 4000 mAh ER18505 Li-SOCL ₂ battery (extendable to 2 batteries) |
| Battery Life* | 10 years (10 min interval) |
| Operating Temperature | -30°C to +70°C |
| Relative Humidity | 0% to 100% (non-condensing) |
| Ingress Protection | IP67 |
| Dimension | 88.5 × 85.3 × 27 mm (3.48 × 3.36 × 1.06 in) |
| Installation | Wall Mounting |
| Approvals | |
| Regulatory | CE, FCC, RoHS |

* Tested under laboratory conditions and for guideline purposes only.

