Temperature & Humidity Sensor

Featuring LoRaWAN®

EM300-TH



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.