

Temperature Sensor

Featuring LoRaWAN®

TS201

Milesight



TS201 is a compact temperature sensor. It is equipped with high-precision sensors and an IP67 waterproof design, making it applicable for accurate temperature data detection in various harsh environments. With the low power consumption technology, TS201 can maintain a long operational life with its internal battery. Combining with Milesight LoRaWAN® gateway and Milesight IoT Cloud solution, users can manage all sensor data remotely and visually.

TS201 is widely used for temperature monitoring applications like cold chain storage of food or medicine, etc.

◆ Features

- Provide highly accurate and stable DS18B20 temperature sensor probe with high-resolution
- Temperature probe is detachable for self-calibration
- IP67 waterproof with specialized battery compartment design , making it suitable for harsh environment
- Flexible design for various mounting options
- EN12830 certified for cold-chain applications
- Store up to 2,800 historical records locally and support retransmission to prevent data loss
- Equipped with NFC for quick and easy configuration
- Function effectively with standard LoRaWAN® gateways and network servers
- Compatible with Milesight IoT Cloud

◆ Specifications

Wireless Transmission

Technology	LoRaWAN®
Frequency	CN470/IN865/RU864/EU868/US915/AU915/KR920/AS923-1&2&3&4
Tx Power	16dBm (868MHz)/22dBm (915MHz)/19dBm (470MHz)
Sensitivity	-137dBm @300bps
Mode	OTAA/ABP Class A

Sensor

Connector Type	1 × 5-Pin M12 A-Coded Male Connector
Measuring Range	-40°C ~ 125°C
Accuracy	± 0.5°C(-10°C ~ 85°C), ± 2°C(-40°C ~ -10°C, 85°C ~ 125°C)
Resolution	0.1°C
Cable Length	1.5 m
Cable Material	TPE

Others

LED Indicator	1 × Status Indicator
Configuration	Mobile App (via NFC)
Advanced Feature	Data Storage, Data Retransmission, Data Retrievalability, Abrupt Temperature Change Alarm

Physical Characteristics

Power Supply	1 × 2700 mAh ER14505 Li-SOCL ₂ Battery
Battery Life ¹	Around 3 Years (25°C, 10 min Interval, SF10) Around 9 Years (25°C, 10 min Interval, SF7)
Operating Temperature	TS201 Device: -30°C ~ 55°C (-22°F ~ 131°F) Sensor Cable: -40°C ~ 125°C (-40°F ~ 257°F)
Relative Humidity	0% to 95% (Non-condensing)
Ingress Protection	IP67
Dimension	84.7 × 58 × 25 mm (3.33 × 2.28 × 0.98 in)
Installation	Wall Screw Mounting, Cable-tie Mounting, Magnetic Mounting (Opt.)

¹Tested under laboratory conditions and for guideline purposes only.

