

Temperature Sensor

Featuring LoRaWAN®

TS301/TS302



Milesight



TS30x is a visualized resistance temperature sensor with extendable connecting lines and different detecting probes including A-class, B-class, and food-grade temperature probes and a magnetic contact switch sensor for options.

TS30x is designed for measuring a wide range of temperature in harsh environments and transmitting data using LoRaWAN® technology. With this low power consumption technology, TS30x can work a long life with 8,000 mAh battery. Combining with Milesight LoRaWAN® gateway and Milesight IoT Cloud solution, users can manage all sensor data remotely and visually.

TS30x is widely used for temperature monitoring applications like food processing, cold chain of food or medicine, etc.

◆ Features

- Corrosion resistance cable and multiple probe options
- 3 wire connection for high-precision detection
- High IP65 protection and provide dust plug in adapting to harsh environment
- Data collection and storage is highly compatible with HACCP
- Simplified PDF data export for easy documentation without complex paperwork
- Built-in two 4,000-mAh batteries large-capacity replaceable battery
- Equipped with NFC/USB for one touch configuration, support card emulation mode
- Function well 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		
Tx Power	16dBm(868)/20dBm(915)/19dBm(470)		
Sensitivity	-137dBm @300bps		
Mode	OTAA/ABP Class A		
Measurement			
Connection Type	3-wire connection		
Temperature Sensor (Optional)	B-Class Probe	A-Class Food-grade Probe	A-Class Probe
Range	-40 °C to +125 °C	-40 °C to +125 °C	-50 °C to +500 °C
Accuracy	±(0.30+0.005 t) °C	±(0.15+0.002 t) °C	
Resolution	0.1°C		
Sensor Type	Magnetic Contact Switch Sensor		
Detection Distance	3mm		
Operation			
Power On & Off	NFC, Power Button (External)		
Reset	1 × Internal Button		
Configuration	Mobile App(via NFC) or PC software(via USB Type-C)		
Physical Characteristics			
Cable Length	1.5 m (Customizable)		
Probe Type	Straight tube (Customizable)		
Display	Segment Code LCD Screen		
Power Supply	2 × mAh Li-SOCL ₂ battery (ER18505)		
Operating Temperature	-30°C to +70°C (Transceiver Only)		
Relative Humidity	0% to 95% (non-condensing)		
Ingress Protection	Transceiver: IP65; Sensor: Differ Based on Temperature Ranges		
Dimension	109.35 × 75 × 20 mm (4.31 × 2.95 × 0.79 in)		
Installation	3M Tape Mounting, Wall Screw Mounting, Magnetic Mounting (Opt.)		