Temperature Sensor

Featuring LoRaWAN®

IOT-S500TC

IOT-S500TC 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, IOT-S500TC can maintain a long operational life with its internal battery. Combining with Linovision LoRaWAN® gateway and Linovision IoT Cloud solution, users can manage all sensor data remotely and visually.

IOT-S500TC 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 Linovision 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 Cable	0.1°C
Length Cable	1.5m
Material	TPE
Others	
LED Indicator	1 × Status Indicator
Configuration	Mobile App (via NFC)
Advanced Feature	Data Storage, Data Retransmission, Data Retrievability, Abrupt Temperature Change Alarm
Physical Characteristics	
Power Supply	1 × 2700 mAh ER14505 Li-SOCL2 Battery
Battery Life1	Around 3 Years (25°C, 10 min Interval, SF10) Around 9 Years (25°C, 10 min Interval, SF7)
Operating Temperature	IOT-S500TC 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
Dim ens ion	84.7 × 58 × 25 mm (3.33 × 2.28 × 0.98 in)
Installation	Wall Screw Mounting, Cable-tie Mounting, Magnetic Mounting (Opt.)

[1]Tested under laboratory conditions and for guideline purposes only.