

LoRaWAN Thermocouple Temperature Transmitter



Smart Agriculture, Smart Building, Smart City, Smart Energy, Smart Facility, Smart Factory, Smart Farm, Smart Retail, Smart Utilities

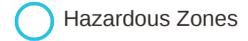
SKU: WSLRW-TCK

LoRaWAN NODE WITH THERMOCOUPLES SENSOR INPUT WSLRW-TCK



Sensor Input port

WSLRW-TCK-H1.JPG



WSLRW-TCK is LoRaWAN wireless transmitter with modular design connected to Thermocouple temperature sensor, based on 10-year experience in design and manufacturing Industrial sensor of Daviteq Company. It has been factory pre-calibrated for high accuracy and quick set-up. The Ultra-Low Power design and smart firmware allow the sensor to last up to 10 years with 02 x AA battery (depending on configuration). The sensor will transmit data over kilometers away to the LoRaWAN gateway, any brand on the market. Some typical applications are temperature monitoring for factories, agriculture, boilers,...

Applications

Temperature Monitoring, Process Monitoring, Safety Monitoring

Notes For Applications

When selecting a thermocouple transmitter node, consider the following criteria:

- Temperature Range: Determine the required measurement temperature range for your application.
- Chemical Resistance: Assess the compatibility and durability of the thermocouple wires with the environment where they will be exposed.
- Abrasion and Vibration Resistance: Choose a transmitter that can withstand abrasion and vibration in your specific installation.
- Installation Requirements: Consider existing equipment and available probe hole sizes to determine the appropriate probe diameter.



LoRaWAN communication

LoRaWAN communication standard to allow sensor connect to any LoRaWAN Gateway on the market



10-Year battery

Ultra-low power sensing technology from Daviteq with Ultra-low power wireless technology allow the sensor can last up to 10 years with 2 x AA batteries 1.5VDC



Pre-calibrated

Sensors are pre-calibrated at factory to deliver high accuracy and quick installation



Outdoor IP67

IP67 design for both Indoor and Outdoor applications and easy cleaning

CONNECT WITH THERMOCOUPLE SENSOR



Thermocouple Type K Temperature Sensor

WSLRW-TCK-H2.JPG

DAVITEQ TECHNOLOGIES INC

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Created date: Dec-21-2022

Updated date: Nov-08-2025

Specification

| | |
|------------------------|---|
| Input | Thermocouple Temperature Sensor Type B, Type E, Type J, Type K, Type N, Type R, Type S, Type T |
| Accuracy | ±0.55°C in ambient temperature range -20~100°C ±1.05°C in ambient temperature range -40~125°C **Not included error of Thermocouples |
| Resolution | 0.1°C |
| Sensor port connector | Internal Connectors via PG9 Cable Gland |
| COMMUNICATION | |
| SF Factors | SF7~SF12 |
| Antenna | Internal Antenna 2.0 dBi |
| Battery | 02 x AA size 1.5, battery not included |
| RF Frequency and Power | 860~930MHz, 14~20dBm, configurable for zones: EU868, IN865, RU864, KR920, AS923, AU915, US915 |
| Protocol | LoRaWAN, class A |
| Data sending modes | Interval time and when alarm occurred |
| Certifications | CE, FCC marks |
| Working temperature | -40~60°C (using L91 Energizer® battery) |
| Dimensions | H180xW90xD50mm |
| Net-weight | 300g |
| Housing | Polycarbonate & POM plastic, IP67 |

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MONITOR CAR ENGINE TEMPERATURE



WSLRW-TCK-H3.JPG

LoRaWAN SENSOR CONNECT WITH THERMOCOUPLE SENSOR VIA PG9 CONNECTOR



PG9 Connector
Sensor Input Port

WSLRW-TCK-H4.JPG

LoRaWAN NETWORK



WSLRW-TCK-H5.JPG

WHAT'S IN THE PACKAGE?



RECOMMENDED BATTERIES

E91 AA Alkaline battery



-18 .. + 60 oC working temperature
10-year shelf life
3000 mAh Capacity
Price: 1X

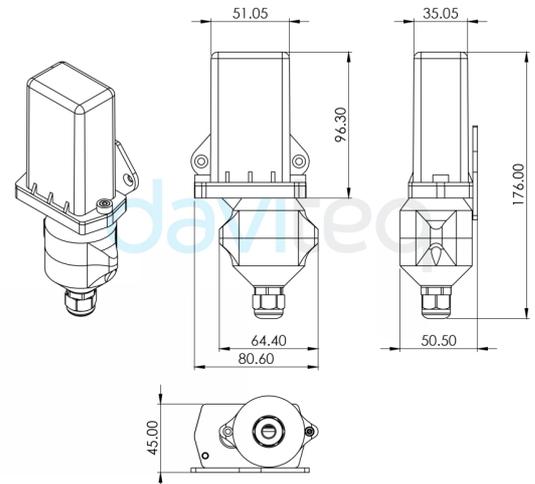
L91 AA Lithium battery



-40 .. + 60 oC working temperature
20-year shelf life
3500 mAh Capacity
Price: 3.5X

WSLRW-TCK-H7.JPG

DIMENSION DRAWING OF WIRELESS NODE
(Unit: mm)



WSLRW-TCK-H6.JPG

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Ordering Information

| ITEM CODE | DESCRIPTIONS |
|--------------|---|
| WSLRW-TCK-01 | Wireless LoRaWAN Thermocouple Temperature Transmitter, Internal antenna, Type AA battery 1.5VDC, IP67, 860-930MHz for all regions |

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