

# 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

LoRaWAN



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: Aug-28-2024

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## Specification

Input	Thermocouple Temperature Sensor Type B, Type E, Type J, Type K, Type N, Type R, Type S, Type T
Accuracy	+/- 0.55 oC in ambient temperature range -20 to +100 oC +/- 1.05 oC in ambient temperature range -40 to +125 oC **Not included error of Thermocouples
Resolution	0.1 oC
Sensor port connector	PG9 Connector
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	-15~60°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

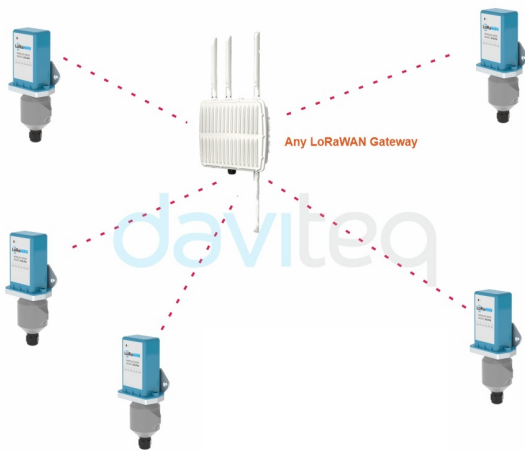
LoRaWAN SENSOR CONNECT WITH THERMOCOUPLE SENSOR VIA PG9 CONNECTOR



PG9 Connector Sensor Input Port

WSLRW-TCK-H4.JPG

LoRaWAN NETWORK



WSLRW-TCK-H5.JPG

WHAT'S IN THE PACKAGE?



LTK2400001

RECOMMENDED BATTERIES

E91 AA Alkaline battery



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

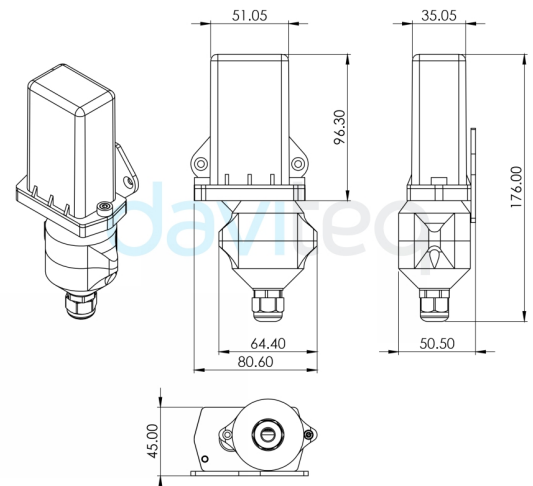
L91 AA Lithium battery



-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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