LoRaWAN Heavy Duty Thermocouple Temperature Transmitter

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

SKU: WSLRWAL-TC

daviteq

✓ Safe Zone   ◯ Hazardous Zones

HEAVY-DUTY LoRaWAN THERMOCOUPLE TRANSMITTER WSLRWAL-TC

WSLRWAL-TC-H1.JPG

WSLRWAL-TC is LoRaWAN wireless transmitter for heavy duty applications, 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 Power design and smart firmware allow the sensor to last up to 10 years with 01 x C 3.6V 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 1 x C batteries 3.6VDC
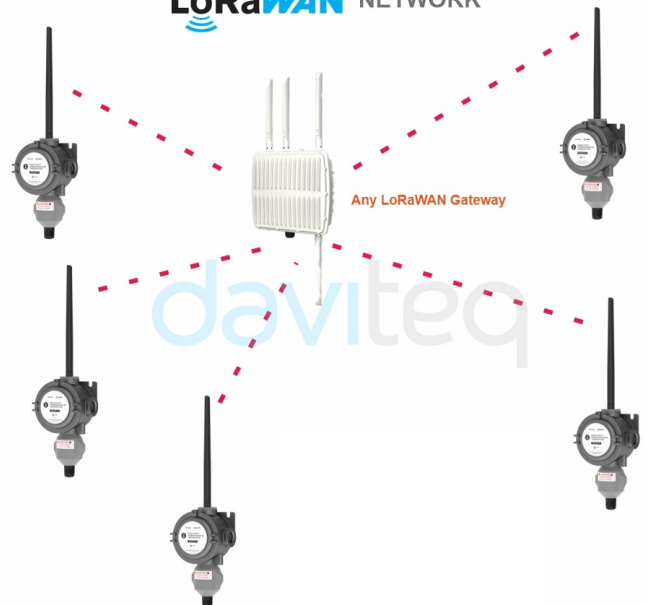
✓ **Pre-calibrated**
Sensors are pre-calibrated at factory to deliver high accuracy and quick installation

✓ **Heavy-duty design**
Cast aluminum, IP66 housing for heavy-duty applications.

WSLRWAL-TC-H5.JPG

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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℃ in ambient temperature range -20~100℃ ±1.05℃ in ambient temperature range -40~125℃ **Not included error of Thermocouples
Resolution	0.1℃
Sensor port connector	PG9 Connector
COMMUNICATION	
SF Factors	SF7~SF12
Antenna	External antenna
Power Supply	Primary batteries 01 x C size 3.6VDC (battery not included)
RF Frequency and Power	860~930MHz, 14~20 dBm, configurable for zones: EU868, IN865, RU864, KR920, AS923, AU915, US915
Protocol	LoRaWAN Class A V1.0.3
Data sending modes	interval time, alarm and manually triggering by magnetic key
Housing	Cast aluminum, IP66
Ambient working temperature	-40~85℃ (use with SAFT LS26500)
Size | Net weight	H190xW100xD75/700g (excluding antenna)
Mounting type	Wall mount

TEMPERATURE MEASUREMENT HELP PREVENT OVERHEATING IN OIL REFINERIES

WSLRWAL-TC-H2.JPG
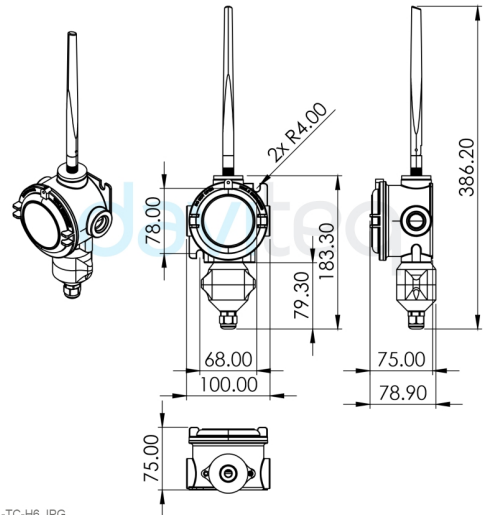
CONNECT WITH THERMOCOUPLE TEMPERATURE SENSOR

Thermocouple
Temperature Sensor

WSLRWAL-TC-H3.JPG

LoRaWAN SENSOR CONNECT WITH THERMOCOUPLE SENSOR VIA PG9 CONNECTOR

PG9 Connector
Sensor Input Port

WSLRWAL-TC-H4.JPG

DIMENSION DRAWING OF WIRELESS NODE
(Unit: mm)

2x R4.00
78.00
183.30
79.30
386.20
68.00
100.00
75.00
78.90
75.00

WSLRWAL-TC-H6.JPG

RECOMMENDED BATTERIES FOR LoRaWAN NODE

LS 26500 Lithium battery

SaFT
LS 26500
3.6V
Li-SOCl2

-60°C..+85°C working temperature

Low self-discharge rate

7.7 Ah Capacity

WSLRWAL-TC-H7.JPG

WHAT'S IN THE PACKAGE?

HEAVY-DUTY
THERMOCOUPLES
TRANSMITTER
WSLRWAL-TC

LOOSE PG9
BEFORE OPEN
SENSOR COVER

Main Device   Antenna   Accessories

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Ordering Information

ITEM CODE	DESCRIPTIONS
WSLRWAL-TC-01	Wireless LoRaWAN Heavy-duty Thermocouple Temperature Transmitter, External antenna, Type C battery 3.6VDC, IP66, 860-930MHz for all regions

Ordering Information