

LoRaWAN Oil Moisture Sensor



Smart Facility, Smart Factory

SKU: WSLRW-OMS

LoRaWAN Oil Moisture Sensor
WSLRW-OMS



Safe Zone



Hazardous Zones

WSLRW-OMS is a LoRaWAN Oil Moisture Sensor to measure the quality and temperature of lubricant, hydraulic oil, gearbox oil, engine oil, fuel oil, turbine oil... Ultra-low Power design and smart firmware allow the sensor to last up to 5-10 years with a 02 x AA-type battery (depends on configuration). The sensor will transmit data at a kilo-meters distance to the LoRaWAN gateway, any brand on the market.

Applications

Oil Quality Monitor

Notes For Applications



LoRaWAN communication

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



5-10 years battery

Ultra-low power sensing technology from Daviteq with Ultra-low power wireless technology allow the sensor can last up to 5-10 years with 02 x AA batteries



High Accuracy & Stable

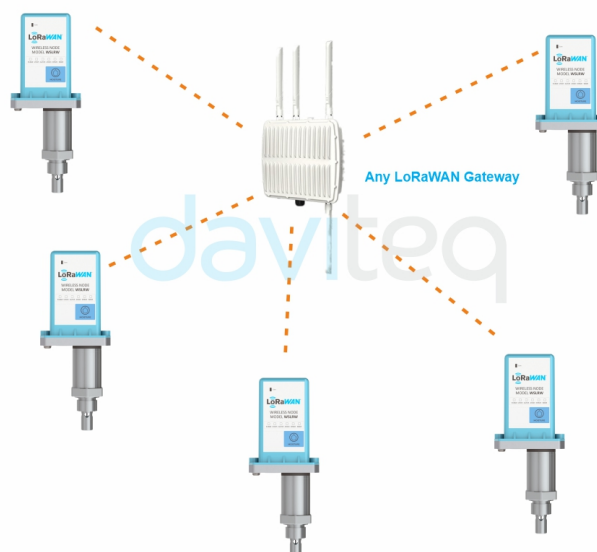
High-sensitive water content measuring technique



Wide applications

To monitor lubricant, hydraulic oil, gearbox oil, engine oil, fuel oil, turbine oil...

LoRaWAN NETWORK



DAVITEQ TECHNOLOGIES INC

Ho Chi Minh City, VN | Koblenz, DE | Melbourne, AU | Zurich, CH

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info@daviteq.com

www.iot.daviteq.com

Created date: Sep-13-2024

Updated date: Mar-05-2025

Specification

Measuring Technology	High-sensitive water content measuring technique
Moisture content	0-1%
Accuracy	0.02%
Resolution	0.001%
Temperature measurement	-40~120°C
Accuracy	±0.5°C max
Resolution	0.1°C
Process connection	G1/2" BSP
Wetted Materials	304SS/316SS/NBR
Working Pressure	vacuum to 100 barg
COMMUNICATION	
SF Factors	SF7~SF12
Antenna	Internal Antenna 2.0 dBi
Battery	02 x AA size 1.5VDC, 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
Data sending modes	Interval time and when alarm occurred
Configuration	via Downlink or Offline cable (software is free)
RF Module complies to	ETSI EN 300 220, EN 303 204 (Europe) FCC CFR47 Part15 (US), ARIB STD-T108 (Japan)
Working temperature	-40~60°C (with AA L91 Energizer®)
Housing/ Protection	Aluminum + Polycarbonate/ IP67
Dimension/ Net weight	H180xW73xD42/ < 400g

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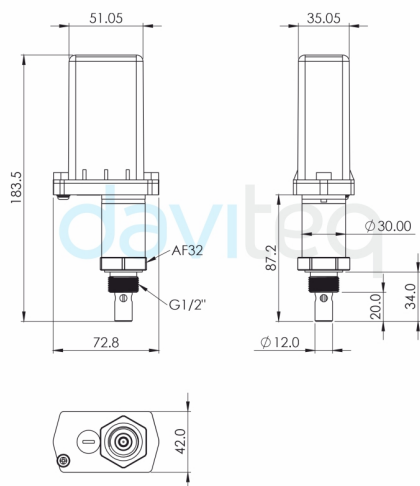
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DIMENSION DRAWING OF SENSOR NODE (Unit: mm)



RECOMMENDED BATTERIES FOR LoRaWAN SENSOR

E91 AA Alkaline battery



-18 .. + 60 oC working temperature

10-year shelf life

3000 mAh Capacity

Price: 1X

L91 AA Lithium battery



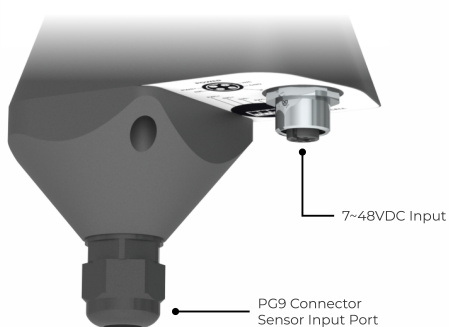
-40 .. + 60 oC working temperature

20-year shelf life

3500 mAh Capacity

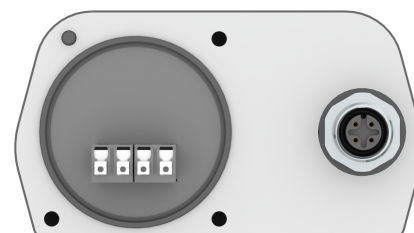
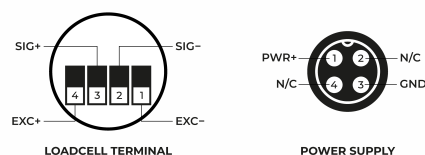
Price: 3.5X

SIGFOX LOADCELL TRANSMITTER WSSFC-LC



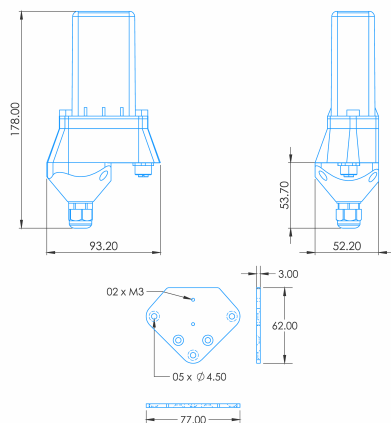
SIGFOX NODE CONNECT TO
LOADCELL SENSOR VIA PG9 CONNECTOR

SIGFOX LOADCELL TRANSMITTER WSSFC-LC



CONNECTORS OF
SIGFOX LOADCELL TRANSMITTER

SIGFOX LOADCELL TRANSMITTER WSSFC-LC



DIMENSION DRAWING OF
WIRELESS NODE (Unit: mm)

SIGFOX LOADCELL TRANSMITTER WSSFC-LC



AA RH6
rechargeable battery

-20~50°C working temperature
2000 mAh capacity



AA NiMH
rechargeable battery

-20~50°C working temperature
2000 mAh capacity

RECOMMENDED BATTERIES

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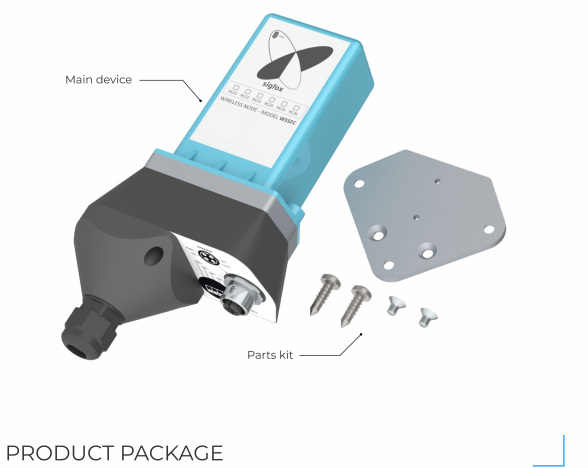
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SIGFOX LOADCELL TRANSMITTER
WSSFC-LC



PRODUCT PACKAGE

Ordering Information

ITEM CODE	DESCRIPTIONS
WSLRW-OMS-01	LoRaWAN Oil Moisture Sensor, 860-930MHz, AA Battery