

LoRaWAN Oil Moisture Sensor



Smart Facility, Smart Factory



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☒ Safe Zone

☐ Hazardous Zones

LoRaWAN Oil Moisture Sensor
WSLRW-OMS



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 kilometers distance to the LoRaWAN gateway, any brand on the market.

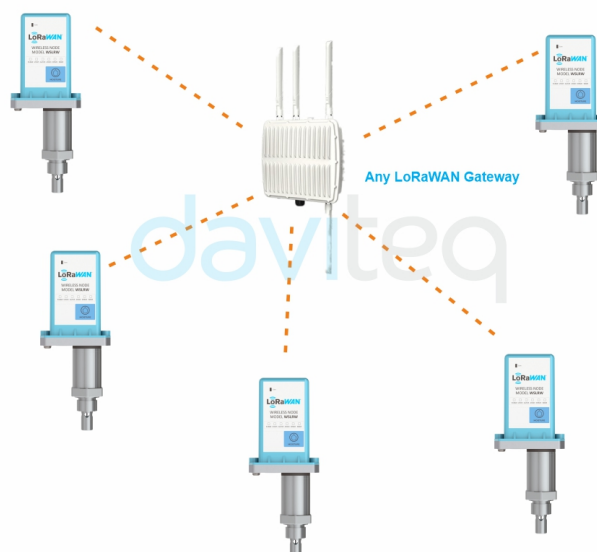
Applications

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



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

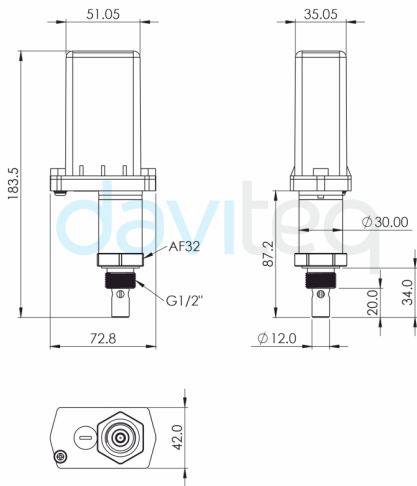


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DIMENSION DRAWING OF SENSOR NODE
(Unit: mm)



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

Ordering Information

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



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