

LoRaWAN Miniature Radar Level Sensor



Smart Agriculture, Smart Building, Smart City, Smart Facility, Smart Farm, Smart Factory, Smart Transportation, Smart Utilities

SKU: WSLRW-RLC

LoRaWAN RADAR LEVEL SENSOR WSLRW-RLC

LoRaWAN



WSLRW-RLC-H1.JPG



WSLRW-RLC is an affordable and efficient radar level sensor for various liquid applications. This battery-operated device accurately measures levels of chemicals, water, and oil in tanks. Powered by advanced 60GHz Pulse Radar Technology, it provides reliable measurements with minimal power consumption. With 2 x AA batteries, it can operate for up to 10 years (depending on configuration). It supports all LoRaWAN frequency bands Worldwide. It is suitable for remote level monitoring, inventory management, and tracking mobile tanks in various industries.

Applications

Level Monitoring, Process Monitoring, Flood Monitoring, Safety Monitoring, Smart Irrigation, Infrastructure Monitoring

Notes For Applications

- ✓ **LoRaWAN communication**
LoRaWAN communication standard to allow sensor connect to any LoRaWAN Gateway on the market.
- ✓ **High Accuracy & Stable**
60GHz Radar technology allow high accuracy and stable
- ✓ **10-Year Battery**
Ultra-low power Radar sensing technology from Daviteq with Ultra-low power wireless technology allow the sensor can last up to 10 years.
- ✓ **IP67 Outdoor**
IP67 design for both Indoor and Outdoor applications

DETECT WATER LEVEL ON THE CULVERT, RIVER,...



WSLRW-RLC-H2.JPG

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Specification

Sensor Technology	Ultra-low powered 60GHz Radar Technology
Measurement range	0.2~12m, 0.2~24m
Resolution	±1.0mm
Accuracy	±10 mm
Working process temperature	-40~85°C
Working process pressure	vacuum to 1 barg
Sensor sampling rate	configurable from 1 min up to 60 min
Alarm setting	setting the alarm threshold for calculated value
COMMUNICATION	
SF factors	SF7~SF12
Antenna	Internal Antenna 2.0dbi
Battery	02 x AA size 1.5VDC, 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
Configuration	via downlink or offline cable (software is free)
Certification	CE and FCC
Working temperature	-15~60°C (with AA L91 Energizer®)
Dimensions	H180xW50xD40
Net-weight	250g
Housing	Polycarbonate & POM plastic, IP67

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LEVEL SENSOR INSTALLED IN WATER TANK



WSLRW-RLC-H3.JPG

LoRaWAN NETWORK



WSLRW-RLC-H4.JPG

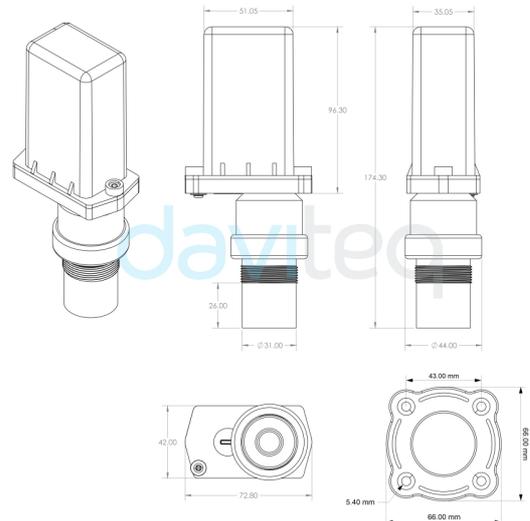
- This wireless network can connect any kind wireless sensors:*
- * RELAY OUTPUTS FOR VALVE/PUMP CONTROLS;
 - * AIR HUMIDITY/TEMPERATURE SENSOR;
 - * CO2 SENSOR;
 - * AMBIENT LIGHT SENSOR;
 - * ...ETC

PACKAGE INCLUDES



WSLRW-RLC-H5.JPG

DIMENSION DRAWING OF WIRELESS NODE



WSLRW-RLC-H6.JPG

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-RLC-H7.JPG

PRODUCT PACKAGE



WSSFC-GCB-H8.JPG

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Ordering Information

ITEM CODE	DESCRIPTIONS
WSLRW-RLC-01	LoRaWAN Radar Level Sensor, 0.2 - 12 m Range, Internal antenna, Type AA battery 1.5VDC, IP67, for all LoRa frequency bands, c/w standard mounting bracket
WSLRW-RLC-02	LoRaWAN Radar Level Sensor, 0.2 - 24 m Range, Internal antenna, Type AA battery 1.5VDC, IP67, for all LoRa frequency bands, c/w standard mounting bracket

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