



daviteq WSLRW-ULC Lorawan Ultrasonic Liquid Level Sensor Owner's Manual

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daviteq WSLRW-ULC Lorawan Ultrasonic Liquid Level Sensor



FEATURES

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 Ultralow power wireless technology allow the sensor can last up to 10 years with 02 x AA type batteries.

HIGH ACCURACY & STABLE

Advanced ultrasonic sensor with digital signal processing to deliver high accuracy and stable measurement of level or distance for liquid surface

IP68

For both indoor and outdoor applications

WSLRW-ULC is LoRaWAN Ultrasonic Level Sensor to measure the level of liquid surface of water, oil... This level sensor utilises the ultrasonic technology to measure the surface of liquid, the principle is to measure the time of flight of the ultrasound pulse in the air environment. The ultrasound pulse will be ejected from ultrasonic transducer, go thru the air and reaching the surface of liquid, then reflected back to the ultrasonic transducer, the measuring circuit will measure the time of flight of the Pulse then calculate the distance from transducer to the surface. With Ultra-low Power design and smart firmware allow the sensor can last up to 10 years with 02 x AA-type batteries (depends on configuration). The sensor will transmit data in kilo-meters distance to LoRaWAN gateway, any brand on the market.

DETECT WATER LEVEL ON THE CULVERT, RIVER



SPECIFICATION

<i>SENSORS SPECIFICATION:</i>	
<i>Sensor</i>	<i>Ultrasonic sensor</i>
<i>Measurement range</i>	<i>280 .. 6300 mm</i>
<i>Resolution</i>	<i>±5.0mm</i>
<i>Accuracy</i>	<i>±10 mm + S*0.3% (with S is the measured value)</i>
<i>Sensor sampling rate</i>	<i>configurable from 10s up to 3600s</i>
<i>Alarm setting</i>	<i>setting the alarm threshold for calculated value</i>
<i>LoRaWAN SPECIFICATION:</i>	
<i>Data rate</i>	<i>250bps .. 5470bps</i>
<i>Antenna</i>	<i>Internal Antenna 2.67 dBi</i>
<i>Battery</i>	<i>02 x AA size 1.5VDC, battery not included</i>
<i>RF Frequency and Power</i>	<i>860..930Mhz, +14 .. +20 dBm, configurable for zones: EU868, IN865, RU864, KR920, AS923, AU915, US915</i>
<i>Protocol</i>	<i>LoRaWAN, class A</i>
<i>Data sending modes</i>	<i>Interval time and when alarm occurred</i>
<i>RF Module complies to</i>	<i>ETSI EN 300 220, EN 303 204 (Europe) FCC CFR47 Part15 (US), ARIB STD-T108 (Japan)</i>
<i>Working temperature</i>	<i>-15°C..+60°C (with AA L91 Energizer)</i>
<i>Dimensions</i>	<i>H180xW50xD40</i>
<i>Net-weight</i>	<i>250 grams</i>
<i>Housing</i>	<i>Polycarbonate & POM plastic, IP67</i>

LEVEL SENSOR INSTALLED IN WATER TANK



NETWORK



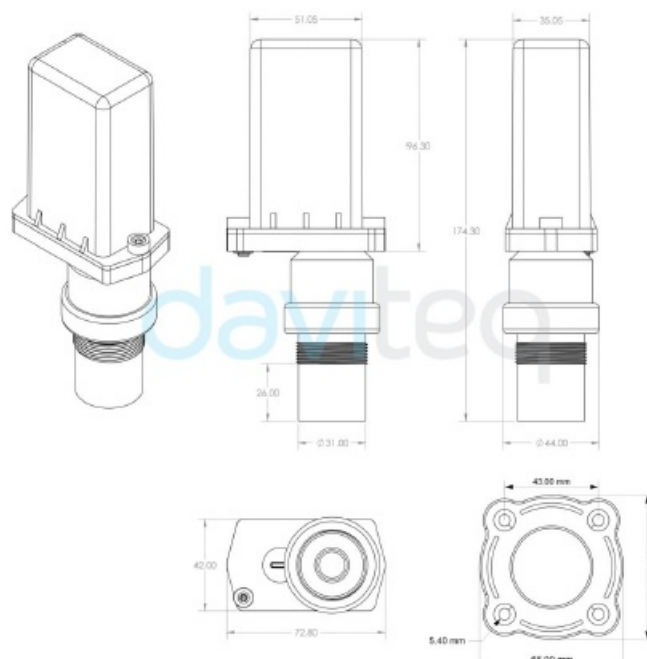
This wireless network can connect any kind wireless sensors:

- RELAY OUTPUTS FOR VALVE/IPUMP CONTROLS
- AIR HUMIDITY/TEMPERATURE SENSOR
- CO2 SENSOR;
- AMBIENT LIGHT SENSOR:
- ETC

PACKAGE INCLUDES



DIMENSION DRAWING OF WIRELESS SENSOR



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-ULC-9-01	Wireless LoRaWan Ultrasonic Level Sensor for General Level/Distance Measurement, 28-750cms, internal antenna, Type AA battery 1.5VDC, IP67, 900-930 Mhz for KR920, AS923, AU915, US915
WSLRW-ULC-8-01	Wireless LoRaWan Ultrasonic Level Sensor for General Level/Distance Measurement, 28-750cms, Internal antenna, Type AA battery 1.5VDC, IP67, 860-870 Mhz for EU868, IN865, RU864


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Documents / Resources

	<p>daviteq WSLRW-ULC Lorawan Ultrasonic Liquid Level Sensor [pdf] Owner's Manual WSLRW-ULC Lorawan Ultrasonic Liquid Level Sensor, WSLRW-ULC, Lorawan Ultrasonic Liquid Level Sensor, Ultrasonic Liquid Level Sensor, Liquid Level Sensor, Level Sensor, Sensor</p>
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References

-  [Daviteq – Nhà sản xuất cảm biến đo lường và hệ thống IoT](#)
-  [TCPDF](#)