

LORAWAN ULTRASONIC LIQUID LEVEL SENSOR



SKU: WSLRW-ULC

LoRaWAN ULTRASONIC LEVEL SENSOR
WSLRW-ULC



WSLRW-ULC-H1.PNG

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.



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 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

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



WSLRW-ULC-H2.PNG

DAVITEQ TECHNOLOGIES INC

No.11 Street 2G, Nam Hung Vuong Res., An Lac Ward, Binh Tan Dist., Ho Chi Minh City, Vietnam

+84.28.6268.2523 / 6268.2524

info@daviteq.com

www.daviteq.com

JUL-2022 | Doc No: WSLRW-ULC-DS-EN-10

SPECIFICATION

SENSORS SPECIFICATION:	
Sensor	Ultrasonic sensor
Measurement range	280 .. 6300 mm
Resolution	±5.0mm
Accuracy	±10 mm + S*0.3% (with S is the measured value)
Sensor sampling rate	configurable from 10s up to 3600s
Alarm setting	setting the alarm threshold for calculated value
LoRaWAN SPECIFICATION:	
Data rate	250bps .. 5470bps
Antenna	Internal Antenna 2.67 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
RF Module complies to	ETSI EN 300 220, EN 303 204 (Europe) FCC CFR47 Part15 (US), ARIB STD-T108 (Japan)
Working temperature	-15°C..+60°C (with AA L91 Energizer)
Dimensions	H180xW50xD40
Net-weight	250 grams
Housing	Polycarbonate & POM plastic, IP67

LEVEL SENSOR INSTALLED IN WATER TANK



WSLRW-ULC-H3.PNG

LoRaWAN NETWORK



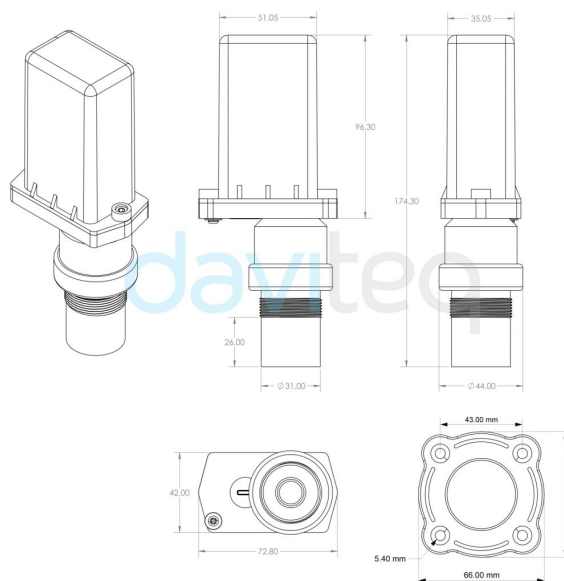
WSLRW-ULC-H4.PNG

PACKAGE INCLUDES



WSLRW-ULC-H5.PNG

DIMENSION DRAWING OF WIRELESS SENSOR



WSLRW-ULC-H6.PNG

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

WSLRW-ULC-H7.PNG

BLANK

WSLRW-ULC-H8.PNG

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