

Sigfox Ultrasonic Liquid Level Sensor



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

SKU: WSSFC-ULC

SIGFOX ULTRASONIC LEVEL SENSOR WSSFC-ULC



sigfox



WSSFC-ULC-H1.PNG



WSSFC-ULC is a Sigfox-Ready Ultrasonic Level Sensor to measure the level of liquid surface of water, oil... This level sensor utilizes 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). WSSFC-ULC can support all regions of Sigfox network in over the world.

Applications

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

Notes For Applications

- Non-Contact Measurement: Reduce wear and maintenance
- Wide Range of Applications: Suitable for fluids, pastes, sludge, and bulk materials in harsh environment.
- Density and Humidity Insensitivity: Don't affect by humidity and density
- Versatility: Used in oil and gas, chemical processing, water treatment, and food industries.
- Height Limitations: Best for small and medium liquid tanks
- Medium conditions: Consider foaming liquids, turbulence, and viscosity

Sigfox Ready
Device are best operating performance on the SIGFOX network

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 or solid surface

IP68 Outdoor
IP68 design for both Indoor and Outdoor applications

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



WSSFC-ULC-H2.PNG

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Created date: Dec-21-2022


Updated date: Aug-28-2024


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Specification

Sensor	Ultrasonic sensor
Measurement range	250~5500mm (Non-flat surface will give shorter range in actual condition)
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
COMMUNICATION	
Sigfox zones	RC1~RC7
Antenna	Internal antenna 2.0 dbi
Battery	02 x AA Type 1.5VDC, working time up to 10 years (depends on configuration)
RF Module complies to	CE, FCC, ARIB
Working temperature	-15~60°C (with AA L91 Energizer®)
Dimensions	H180xW50xD40
Net-weight	250g
Housing	Polycarbonate & POM plastic, IP68

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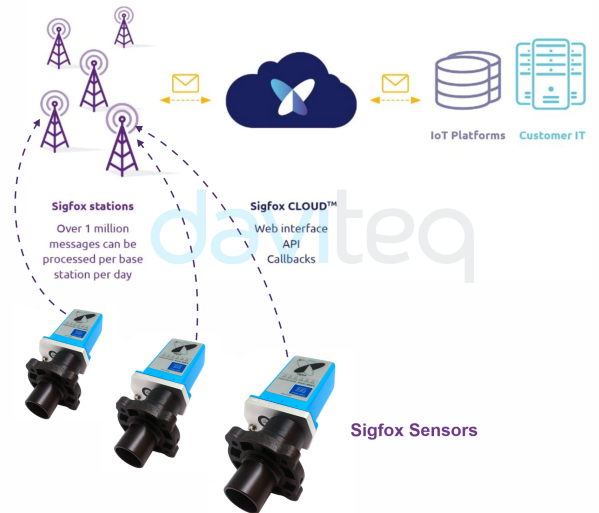
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WIRELESS LEVEL SENSOR INSTALLED ON WATER TANK



WSSFC-ULC-H3.PNG

SYSTEM ARCHITECTURE



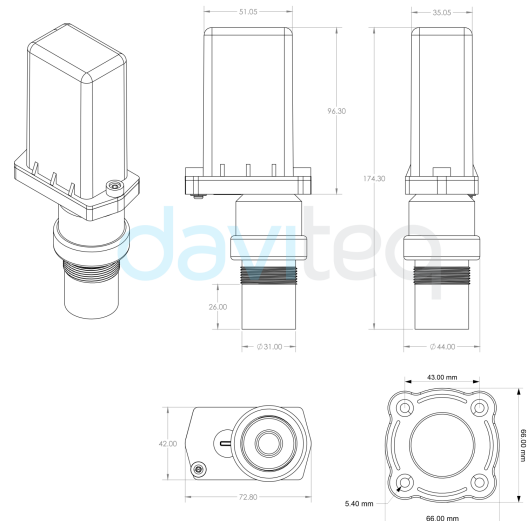
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PACKAGE INCLUDES



WSSFC-ULC-H5.PNG

DIMENSION DRAWING OF WIRELESS SENSOR



WSSFC-ULC-H6.PNG

RECOMMENDED BATTERIES FOR SIGFOX SENSOR

L91 AA Lithium battery



- 40 .. + 60 oC working temperature
- 20-year shelf life
- 3500 mAh Capacity
- Price: 3.5X

WSSFC-ULC-H7.PNG



BLANK

WSSFC-ULC-H8.PNG

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Ordering Information

ITEM CODE	DESCRIPTIONS
WSSFC-ULC-01	Sigfox-Ready Ultrasonic Level Sensor for General Level/Distance Measurement, 25-550CMS, Internal antenna, Type AA battery 1.5VDC, IP68, for all RC zones

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