Product Data sheet for LoRaWAN Sensors

- LoRaWAN Smart Water Meter WSLRW-SHMJ
- LoRaWAN 26GHz Radar Level Sensor WSLRW-RD26
- LoRaWAN Radar 26GHz Lens Level Sensor WSLRW-RD26L
- LoRaWAN Indoor Air Quality Sensor WSLRW-IAQ
- LoRaWAN RS485 Modbus Master WSLRW-MB485
- LoRaWAN Radar Level Sensor for Hydrological Applications WSLRW-RDW
- LoRaWAN Optical Particle Counting Sensor WSLRW-OPC
- LoRaWAN node with Digital Inputs WSLRW-DI
- LoRaWAN Single Axis Vibration Sensor Ex WSLRWX-V1M

LoRaWAN Smart Water Meter WSLRW-SHMJ

SKU: WSSFC-SHMJ

Doc No: WSLRW-SHMJ-DS-EN-10

Introduction

WSLRW-SHMJ is the Multi-jet water meter from DN15 to DN50, for Hot/Cold water, equipped with LoRaWAN communication module. Its design is modular design, based on 10-year experience in design and manufacturing Industrial sensor of Daviteq Company. It complies to international standard ISO4064. With Ultra-low power design and smart firmware allow the complete meter run on a single CR123 battery up to 10 years. It can support all regions of LoRaWAN such as EU868, IN865, RU864, KR920, AS923, AU915, US915.

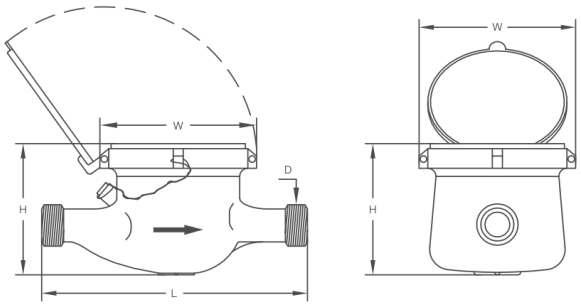
- LoRaWAN standard;
- 10-year battery;
- ISO4064 standard;
- Magnetic shield;
- Dry dial.

Applications

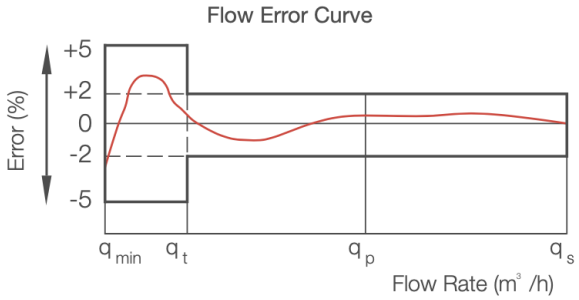
- Hot / Cold water meter in Building / Facility;
- Smart water meter for Utility residential;



Overall Dimension And Weight



DN (mm)	15	20	25	32	40	50	50
Size (inch)	1/2"	3/4"	1"	1-1/4"	1-1/2"	2"	2"
Length (L)	165/190	190	260	260	300	300	280
Width (W)	99/104	98	103.5	103.5	125	125	160
Height (H)	116/121	117	124	124	162	162	187.5
Connecting Thread D	G3/4B	G1B	G11/4B	G11/2B	G2B	G21/2B	Flange end
Weight (kgs)	1.65	1.79	1.85	2.68	5.25	7.25	



Specification

WATER METER SPECIFICATION

Meter type	Multi jet water meter
Dial	Dry dial
Size	DN15, DN20, DN25, DN32, DN40, DN50
Accuracy	R80 (standard), R100, R125, R160
Applicable fluids	Hot or Cold water
Threads end	BSP (standard) or NPT
Working temperature of water	0.1 .. 40 oC for Cold water and 90oC for Hot water
Working pressure of water	<= 16 barg
Max error	+/- 5% for Q1 to Q2, +/- 2% for Q2 to Q3 or Cold water and +/- 3% for Q2 to Q3 for Hot water
Body Materials	Brass (painted or un-painted) or Plastic (black color)
Standard	ISO4064
LORAWAN SPECIFICATION	
Data rate	250bps .. 5470bps
Antenna	Internal Antenna 2.67 dbi
RF Frequency and Power	860 .. 930 MHz, +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 offline USB cable (PC software is supplied at free)
Battery	1 x CR123 Type 3.0VDC, working time up to 10 years (depends on configuration)
RF Module complies to	CE, FCC, ARIB
Working temperature	-40oC..+60oC
Dimensions	H100xW50xD50
Net-weight	100 grams
Housing	Polycarbonate plastic, IP68
Mounting	Integral mounting to meter body or remote mounting with cable (0.5m)

Ordering Code

Item code	Descriptions
WSLRW-SHMJ-9-015MCBSP	LORAWAN SMART WATER METER, MULTI-JET TYPE, DN15, BRASS BODY, COLD TYPE, BSP THREADS, ISO4064, R80, DRY DIAL, TYPE CR123 BATTERY 3.0VDC, IP68, 900-930 MHz for KR920, AS923, AU915, US915
WSLRW-SHMJ-9-020MCBSP	LORAWAN SMART WATER METER, MULTI-JET TYPE, DN20, BRASS BODY, COLD TYPE, BSP THREADS, ISO4064, R80, DRY DIAL, TYPE CR123 BATTERY 3.0VDC, IP68, 900-930 MHz for KR920, AS923, AU915, US915
WSLRW-SHMJ-9-025MCBSP	LORAWAN SMART WATER METER, MULTI-JET TYPE, DN25, BRASS BODY, COLD TYPE, BSP THREADS, ISO4064, R80, DRY DIAL, TYPE CR123 BATTERY 3.0VDC, IP68, 900-930 MHz for KR920, AS923, AU915, US915

WSLRW-SHMJ-8-015MCBSP	LORAWAN SMART WATER METER, MULTI-JET TYPE, DN15, BRASS BODY, COLD TYPE, BSP THREADS, ISO4064, R80, DRY DIAL, TYPE CR123 BATTERY 3.0VDC, IP68, 860-870 MHz for EU868, IN865, RU864
WSLRW-SHMJ-8-020MCBSP	LORAWAN SMART WATER METER, MULTI-JET TYPE, DN20, BRASS BODY, COLD TYPE, BSP THREADS, ISO4064, R80, DRY DIAL, TYPE CR123 BATTERY 3.0VDC, IP68, 860-870 MHz for EU868, IN865, RU864
WSLRW-SHMJ-8-025MCBSP	LORAWAN SMART WATER METER, MULTI-JET TYPE, DN25, BRASS BODY, COLD TYPE, BSP THREADS, ISO4064, R80, DRY DIAL, TYPE CR123 BATTERY 3.0VDC, IP68, 860-870 MHz for EU868, IN865, RU864

⚠ Link for full datasheet:

⚠ Link for manual:

Daviteq Technologies Inc

www.daviteq.com | info@daviteq.com

LoRaWAN 26GHz Radar Level Sensor WSLRW-RD26

SKU: WSLRW-RD26

Doc No: WSLRW-RD26-DS-EN-10



WSLRW-RD26-H1.PNG



WSLRW-RD26-H2.PNG

Introduction

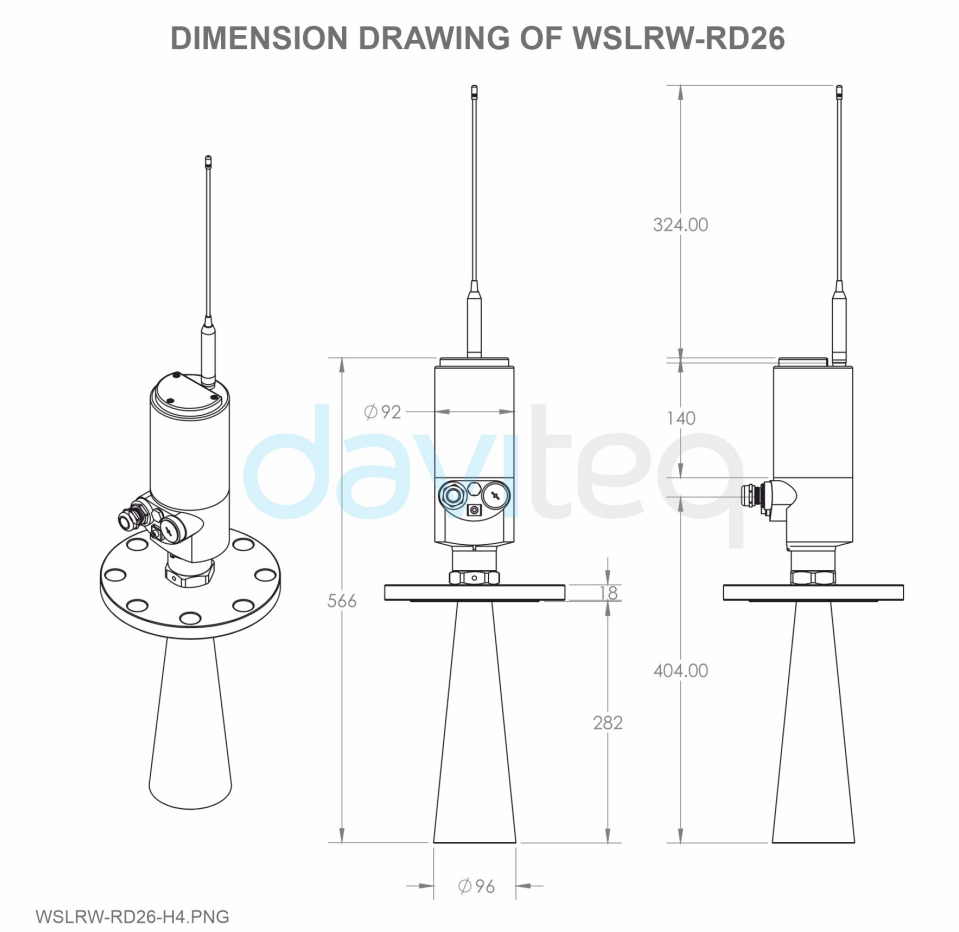
WSLRW-RD26 is K-band radar level sensor with pulse technology for Solid or Liquid measurement. With optional air purging kit, it can be used in high dust environment like cement, grain, powder... It can measure up to 70m range with small beam angle 8 degree. The wireless portion is LoRaWAN technology allows long range transmission at ultra-low power consumption. It will connect wirelessly to any standard LoRaWAN gateway on the market. It can be configured the operation parameters like data sending interval, health check cycle... The complete set of wireless radar sensor can be powered by 12 x AA 1.5V, can last up to 10 years (depends on interval time).

- Measuring any liquid of solid;
- Range up to 70m;
- Support LoRaWAN connectivity;
- Ultra-low power with 10 years battery;
- Plug & Play.

Typical Applications

- Level measurement in Tank;
- Level measurement in Silo;
- Level measurement for Liquid or Solid;

Dimension Drawings



Specification

SENSOR SPECIFICATION	
Sensor technology	26 GHz Pulse radar
Measurement range	30, 70m
Resolution	1.0 mm
Accuracy	+/- 5.0 mm
Beam angle	8 degree
Air purging	Optional
Process temperature	-40 .. + 85oC standard, +120 oC optional
Process pressure	-1 .. + 4 barg
Ambient working temperature	-40 .. + 85 oC
Ambient working humidity	0 .. 95% RH, non-condensing
LORAWAN SPECIFICATION	
Data rate	250bps .. 5470bps

Antenna	Antenna 2.67 dbi
Battery	12 x AA size 1.5VDC, battery not included
RF Frequency and Power	860..930 MHz, +14 .. +20 dBm, configurable for zones: EU868, IN865, RU864, KR920, AS923, AU915, US915
Protocol	LoRaWAN Class A
Data sending modes	interval time, alarm occurred and manually triggering by magnetic key. Recommend max 24 messages per day.
RF Module complies to	ETSI EN 300 220, EN 303 204 (Europe) FCC CFR47 Part15 (US), ARIB STD-T108 (Japan)
Vietnam Type Approval	TBA
Ambient temperature	-40oC..+60oC (with AA L91 Energizer)
Dimensions	220x220x450 (without antenna)
Net-weight	< 10 kgs
Housing	Aluminum + Polycarbonate plastic, IP67

Ordering Codes

Item code	**Descriptions**
WSLRW-RD26-30-01	LORAWAN 26GHZ RADAR LEVEL SENSOR, SUS304 JIS10K 100A RF FLANGE, 0-30M CALIBRATED RANGE, IP67 ALUMINUM HOUSING, 860-930 MHZ FOR EU868, IN865, KR920, AS923, AU915, US915
WSLRW-RD26-70-01	LORAWAN 26GHZ RADAR LEVEL SENSOR, SUS304 JIS10K 100A RF FLANGE, 0-70M CALIBRATED RANGE, IP67 ALUMINUM HOUSING, 860-930 MHZ FOR EU868, IN865, KR920, AS923, AU915, US915
OPTIONS:	
/APG	AIR PURGING KIT

⚠ Link for full datasheet: https://filerun.daviteq.com/wl/?id=chBRtaFCTEaf0jUXUwgzIymONLaekJ3H

⚠ Link for manual:

Daviteq Technologies Inc

www.daviteq.com | info@daviteq.com

LoRaWAN Radar 26GHz Lens Level Sensor WSLRW-RD26L

SKU: WSLRW-RD26L

Doc No: WSLRW-RD26L-DS-EN-10





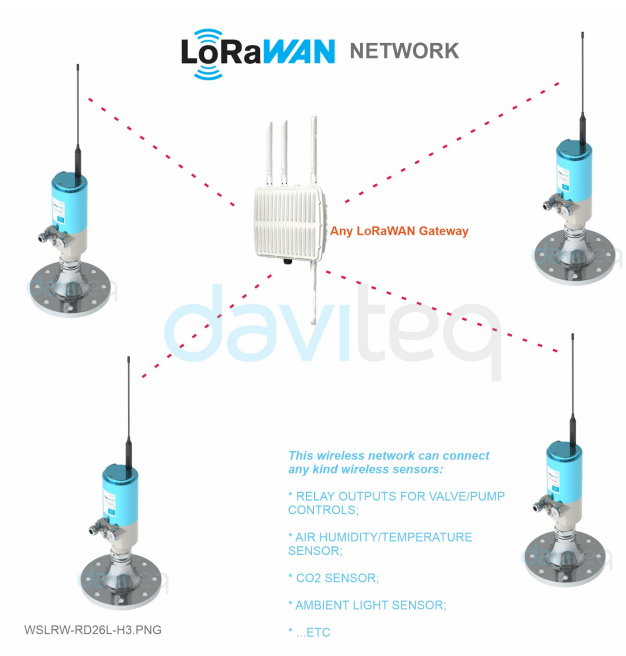
Introduction

WSLRW-RD26L is K-band radar level sensor with special lens for Solid or Liquid measurement. With special lens design, it will be not affected by coagulation/hanging/operating medium/sediment and dust. It can measure up to 70m range with small beam angle 8 degree. With Ultra-low Power design and smart firmware allow the sensor can last up to years with 12 x AA-type battery (depends on configuration). The sensor will transmit data in kilo-meters distance to LoRaWAN gateway, any brand on the market.

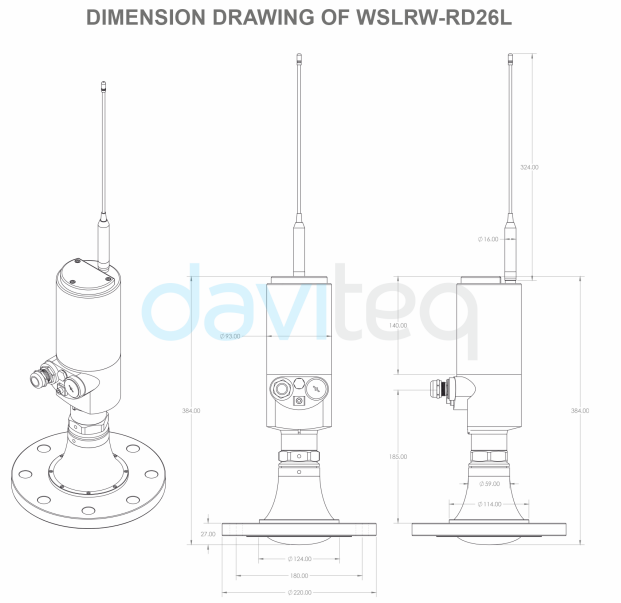
- Measuring any liquid of solid;
- Not affected by Dust
- Range up to 70m;
- Support LoRaWAN connectivity;
- Ultra-low power with 10 years battery;
- Plug & Play.

Typical Applications

- Level measurement in Silo for Solid, Grain, Powder...
- Level measurement in Tank for Liquid, Water, Chemical, Oil...



WSLRW-RD26L-H3.PNG



WSLRW-RD26L-H4.PNG

Specification

SENSOR SPECIFICATION	
Sensor technology	26 GHz Pulse radar with lens
Measurement range	30, 70m
Resolution	1.0 mm
Accuracy	+/- 5.0 mm
Beam angle	8 degree
Lens material	Nylon/PEEK/PTFE/POM
Process temperature	-40 .. + 85oC standard, +120 oC optional
Process pressure	-1 .. + 4 barg
Ambient working temperature	-40 .. + 85 oC
Ambient working humidity	0 .. 95% RH, non-condensing
LORAWAN SPECIFICATION	
Data rate	250bps .. 5470bps
Antenna	Antenna 2.67 dbi
Battery	12 x AA size 1.5VDC, battery not included
RF Frequency and Power	860..930 MHz, +14 .. +20 dBm, configurable for zones: EU868, IN865, RU864, KR920, AS923, AU915, US915
Protocol	LoRaWAN Class A
Data sending modes	interval time, alarm occurred and manually triggering by magnetic key. Recommend max 24 messages per day.
RF Module complies to	ETSI EN 300 220, EN 303 204 (Europe) FCC CFR47 Part15 (US), ARIB STD-T108 (Japan)
Vietnam Type Approval	TBA

Ambient temperature	-40oC..+60oC (with AA L91 Energizer)
Dimensions	220x220x450 (without antenna)
Net-weight	< 10 kgs
Housing	Aluminum + Polycarbonate plastic, IP67

Ordering Codes

Item code	Descriptions
WSLRW-RD26L-30-01	LORAWAN RADAR 26GHZ LENS LEVEL SENSOR, SUS304 JIS10K 100A RF FLANGE, 0-30M CALIBRATED RANGE, IP67 ALUMINUM HOUSING, 860-930 MHZ FOR EU868, IN865, KR920, AS923, AU915, US915
WSLRW-RD26L-70-01	LORAWAN RADAR 26GHZ LENS LEVEL SENSOR, SUS304 JIS10K 100A RF FLANGE, 0-70M CALIBRATED RANGE, IP67 ALUMINUM HOUSING, 860-930 MHZ FOR EU868, IN865, KR920, AS923, AU915, US915

⚠ Link for full datasheet: https://filerun.daviteq.com/wl/?id=X4neiF4Z1RYpWWigKFr4ma3GkI7Fgy8T

⚠ Link for manual:

daviteq

Daviteq Technologies Inc

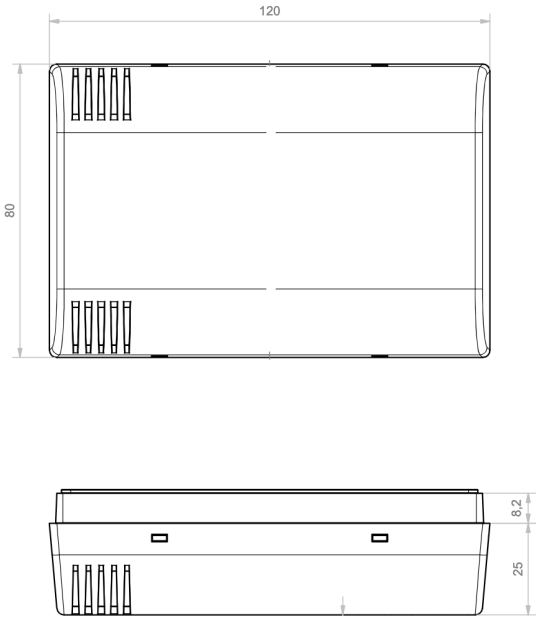
www.daviteq.com | info@daviteq.com

LoRaWAN Indoor Air Quality Sensor WSLRW-IAQ

SKU: WSLRW-IAQ

Doc No: WSLRW-IAQ-DS-EN-10





Introduction

WSLRW-IAQ sensor utilizes CMOSens® Technology for IR detection enables carbon dioxide measurements of the highest accuracy at a competitive price. Along with the NDIR measurement technology for detecting CO2 comes a best-in-class humidity and temperature sensor integrated on the same sensor module. Ambient humidity and temperature can be measured by special algorithm expertise through modeling and compensating external heat sources without the need for any additional components. Besides that, the sensor can be equipped with optional sensors like TVOC, Barometric pressure... The wireless portion is LoRaWAN technology allows long-range transmission at ultra-low power consumption. It will connect 2-way wirelessly to any LoRaWAN gateways on the market. It can be configured the operation parameters like data sending interval, health check cycle... The sensor can last up to 3-10 years with 2 x AA batteries.

- NDIR CO2 sensor technology for accurate measurement
- Integrated TVOC, temperature and humidity sensor;
- Optional Barometric pressure;
- LoRaWAN Class A protocol;
- **Ultra-low-power Technology** with 3-10 years battery;
- Plug & Play.

Typical Applications

Carbon Dioxide is a key indicator for indoor air quality. Thanks to new energy standards and better insulation, houses have become increasingly energy-efficient, but the air quality can deteriorate rapidly. Active ventilation is needed to maintain a comfortable and healthy indoor environment and improve the well-being and productivity of the inhabitants. Daviteq sensor solutions offer accurate and stable monitoring of CO2 in the air, as well as temperature and humidity. This enables our customers to develop new solutions that increase energy efficiency and simultaneously support the well-being of everyone.

- Indoor Air Quality monitoring;
- HVAC Control;
- Green house;
- Smart Agriculture.

Specification

SENSOR SPECIFICATION	
CO2 Sensor technology	NDIR sensor
CO2 range/resolution/accuracy	0-5.000 ppm / 1ppm / (+/- 30ppm + 3% reading)
Repeatability	+/- 10ppm
Temperature Stability	+/- 2.5ppm / oC in range 0-50 oC
Temperature range/resolution/accuracy	-40..+70oC / 0.1oC / ± 0.5 °C in range 0-50 oC
Humidity range/resolution/accuracy	0-100%RH / 0.1%RH /+/- 3.0%RH in range 25-100% RH
TVOC range/resolution/accuracy	0-60.000 ppb / 10 ppb / +/- 15% of Reading
Optional Barometric Pressure range/resolution/accuracy	10-1200 mbar/0.1 mbar/+/- 1.5 mbar
LORAWAN SPECIFICATION	
Data rate	250bps .. 5470bps
Antenna	Antenna 2.67 dbi
Battery	2 x AA size 1.5VDC, battery not included
RF Frequency and Power	860..930 MHz, +14 .. +20 dBm, configurable for zones: EU868, IN865, RU864, KR920, AS923, AU915, US915
Protocol	LoRaWAN Class A

Data sending modes	interval time, alarm occurred and manually triggering by magnetic key. Recommend max 24 messages per day.
RF Module complies to	ETSI EN 300 220, EN 303 204 (Europe) FCC CFR47 Part15 (US), ARIB STD-T108 (Japan)
Vietnam Type Approval	TBA
Ambient temperature	-40oC..+60oC (with AA L91 Energizer)
Dimensions	120x80x40
Net-weight	< 300 grams
Housing	Self-extinguishing ABS

Ordering Code

Item code	Descriptions
WSLRW-IAQ-01	LORAWAN INDOOR AIR QUALITY MONITOR, CO2-HUMIDITY-TEMPERATURE-TVOC, INTERNAL ANTENNA, TYPE AA BATTERY 1.5VDC, 860-930 MHZ FOR EU868, IN865, RU864, KR920, AS923, AU915, US915
WSLRW-IAQ-11	LORAWAN INDOOR AIR QUALITY MONITOR, CO2-HUMIDITY-TEMPERATURE-TVOC-BAROMETRIC PRESSURE, INTERNAL ANTENNA, TYPE AA BATTERY 1.5VDC, 860-930 MHZ FOR EU868, IN865, RU864, KR920, AS923, AU915, US915

⚠ Link for full datasheet:

⚠ Link for manual:

daviteq

Daviteq Technologies Inc

www.daviteq.com | info@daviteq.com

LoRaWAN RS485 Modbus Master WSLRW-MB485

SKU: WSLRW-MB485

Doc No: WSLRW-MB485-DS-EN-10

Introduction

WSLRW-MB485 is a LoRaWAN node with RS485 port support Modbus RTU Master allow data reading from the water meter, flow meter, power meter, gas meter, flow computer... It can support all regions like EU868, IN865, RU864, KR920, AS923, AU915, US915.

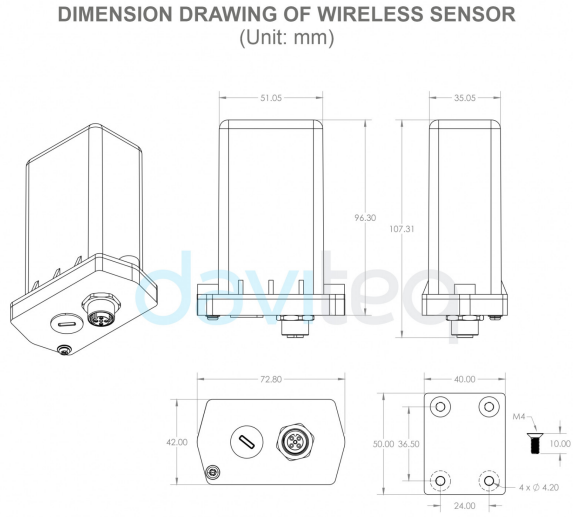
- Support RS485 ModbusRTU;
- LoRaWAN Class A protocol;
- Plug & Play.

Typical Applications

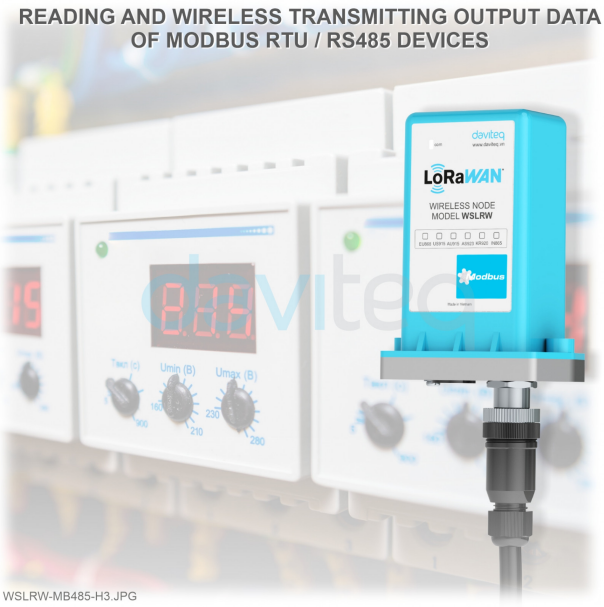
- Read data from the water meter, flow meter, power meter, gas meter, flow computer...via RS485 / Modbus RTU port



WSLRW-MB485-H1.JPG



WSLRW-MB485-H2.JPG



WSLRW-MB485-H3.JPG

Specification

Communication	RS485
Slave Support	1 Slave
Baud rate	max 19600
Electrical connector	M12-female, 4-pin A-coding
Frequency	EU868, IN865, RU864, KR920, AS923, AU915, US915
Antenna	Internal Antenna 2.67 dbi
Configuration	via offline USB cable (PC software is supplied at free)
Power Supply	7-48VDC
RF Module complies to	CE, FCC, ARIB
Working temperature	-20 .. + 60 degC / 95%RH, non-condensing
Dimensions	H110xW73xD42
Net-weight	200 grams
Housing	Polycarbonate, IP67
Mounting	Wall mount bracket

Ordering Code

Item code	Descriptions
WSLRW-MB485-01	LORAWAN RS485 MODBUS MASTER, 7-48VDC, IP67, M12-M CONNECTOR, 860-930 MHZ FOR EU868, IN865, RU864, KR920, AS923, AU915, US915

⚠ Link for full datasheet: https://filerun.daviteq.com/wl/?id=MRobuYEkhOyf4ixIktjE8xKNbUFcUl29

⚠ Link for manual:

Daviteq Technologies Inc

www.daviteq.com | info@daviteq.com

LoRaWAN Radar Level Sensor for Hydrological Applications WSLRW-RDW

SKU: WSLRW-RDW

Doc No: WSLRW-RDW-DS-EN-10

This product is obsolete!

Please check the replacement product at:

https://www.iot.daviteq.com/wireless-sensors/lorawan-miniature-radar-level-sensor

Introduction

WSLRW-RDW is a LoRaWAN sensor with a built-in FMCW radar sensor to measure the water level in hydrological applications such as rivers, canals, lakes, and damp...Sensor with its smart hardware and firmware design allows the sensor to operate with extremely low energy consumption while still delivering the best measurement efficiency as well as high accuracy and reliability. The sensor will transmit data over kilo-meters away to the LoRaWAN gateway, any brand on the market. It supports multi regions: EU868, IN865, RU864, KR920, AS923, AU915, US915.

- High accurate FWCW Radar Sensor;
- LoRaWAN Communication;
- Long battery life;

Typical Applications

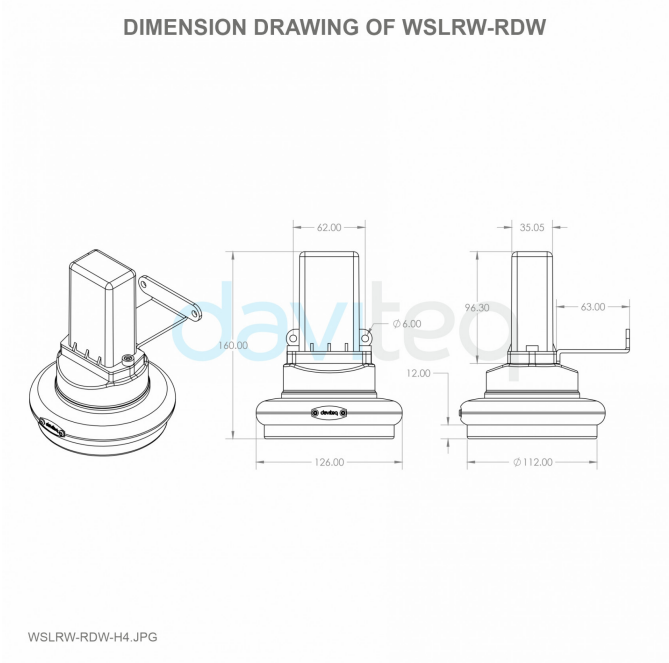
- Measuring water level of hydrological applications like rivers, canals, lakes, and damp...



WSLRW-RDW-H1.JPG



WSLRW-RDW-H2.JPG



Specification

SENSOR SPECIFICATION	
Measuring technology	FMCW, frequency 24GHz-26GHz, <30uW
Range	0.3 ~ 35.00m
Accuracy	±3mm
Beam Angle	10°
LORAWAN SPECIFICATION	
Antenna	Internal Antenna 2.67 dbi
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
Power supply	6 x battery AA 1.5V (not included)
Configuration	via Downlink or offline USB cable (PC software is supplied at free)
RF Module complies to	CE, FCC, ARIB
Working temperature	-40°C..+60°C (with Energizer L91 batteries)
Dimensions	Φ126mm x 160 mm (H)
Net-weight	< 500 grams
Housing / Rating	Polycarbonate, Engineering Plastic, Aluminum, SST / IP68
Mounting	Wall mount bracket

Ordering Code

This product is obsolete!

Please check the replacement product at:

https://www.iot.daviteq.com/wireless-sensors/lorawan-miniature-radar-level-sensor

Item code	Descriptions
WSLRW-RDW-01	LORAWAN RADAR LEVEL SENSOR FOR HYDROLOGICAL APPLICATIONS, 0.3-35M RANGE, IP68, ALL FREQUENCY BANDS

Link for full datasheet:

Link for manual:

Daviteq Technologies Inc

www.daviteq.com | info@daviteq.com

LoRaWAN Optical Particle Counting Sensor WSLRW-OPC

SKU: WSLRW-OPC

Doc No: WSLRW-OPC-DS-EN-10

Introduction

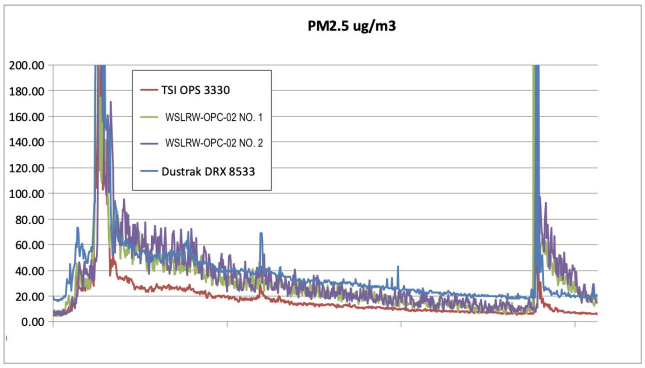
WSLRW-OPC is a LoRaWAN sensor with a built-in advanced optical particle counter. Like conventional optical particle counters, the WSLRW-OPC measures the light scattered by individual particles in a sample air stream through a laser beam. These measurements are used to determine the particle size (related to the intensity of light scattered via a calibration based on Mie scattering theory) and particle number concentration. Particle mass loadings - PM1, PM2.5, and PM10, are then calculated from the particle size spectra and concentration data. The WSLRW-OPC is designed to minimize particle deposition within the unit and thus allow for prolonged unattended operation in dusty environments. Its innovative hardware and firmware design allow the sensor to operate with extremely low energy consumption while still delivering the best measurement efficiency, high accuracy, and reliability. The sensor will transmit data over kilo-meters to the LoRaWAN gateway, any brand on the market. It supports multi regions: EU868, IN865, RU864, KR920, AS923, AU915, and US915.

- High accurate PM measurement for PM1.0, PM2.5, and PM10;
- Prolonged unattended operation in dusty environments;
- LoRaWAN Class Communication;
- Long battery life;

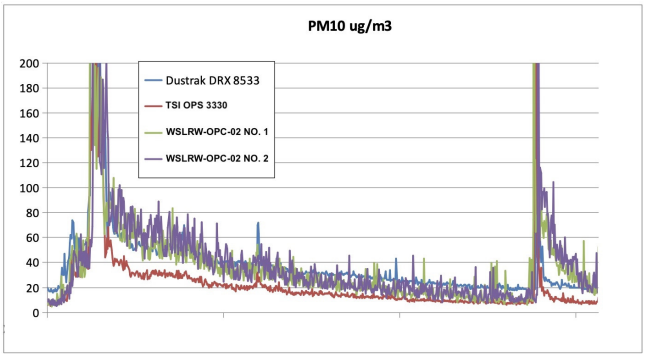
Typical Applications

- Particulate matter monitor for ambient air quality monitor.





This figure shows a comparison of PM2.5 monitoring by a WSLRW-OPC-02 sensor and TSI OPS 3330 and DustTrak instruments. All are set at 5s averaging and are sampling the ambient air of a workshop; the raw 3330 data has been used to calculate a PM figure.



The figure shows a comparison of PM10 monitoring by a WSLRW-OPC-02 sensor and TSI OPS 3330 and DustTrak instruments. All are set at 5s averaging and are sampling the ambient air of a workshop; the raw 3330 data has been used to calculate a PM figure.

Specification

SENSOR SPECIFICATION	
Measuring technology	Laser light scattered method for PM1.0, PM2.5 and PM10
Particle range	0.3 to 12.4 um
Detection limit (PM10)	0.01 ug/m3 to 1500 mg/m3
Resolution	0.01 ug/m3
Accuracy	+/- 10% of Reading value
Sample flowrate	240 mL/min
Laser Classification	Class 1
LORAWAN SPECIFICATION	
Antenna	Internal Antenna 2.67 dbi
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 the alarm occurred
Power supply	2 x battery size D 3.6V (recommend SAFT LS33600), not included
Configuration	via Downlink or offline USB cable (PC software is supplied for free)
RF Module complies to	CE, FCC, ARIB
Storage temperature	-20°C..+60°C
Working temperature	-10°C..+50°C
Working humidity	0-95 % RH (non-condensing)
Dimensions	145x210x60 mm (H)
Net-weight	< 500 grams

Housing / Rating	ASA UL94HB / IP65, weather-proof
Mounting	Wall mount bracket or Pipe mount bracket (order separately)

Ordering Code

Item code	Descriptions
WSLRW-OPC-01	LORAWAN OPTICAL PARTICLE COUNTER PM1, PM2.5, AND PM10, FOR INDOOR
WSLRW-OPC-02	LORAWAN OPTICAL PARTICLE COUNTER PM1, PM2.5, AND PM10, FOR OUTDOOR AMBIENT MONITOR

⚠ Link for full datasheet:

⚠ Link for manual:

Daviteq Technologies Inc

www.daviteq.com | info@daviteq.com

LoRaWAN node with Digital Inputs WSLRW-DI

SKU: WSLRW-DI

Doc No: WSLRW-DI-DS-EN-10

Introduction

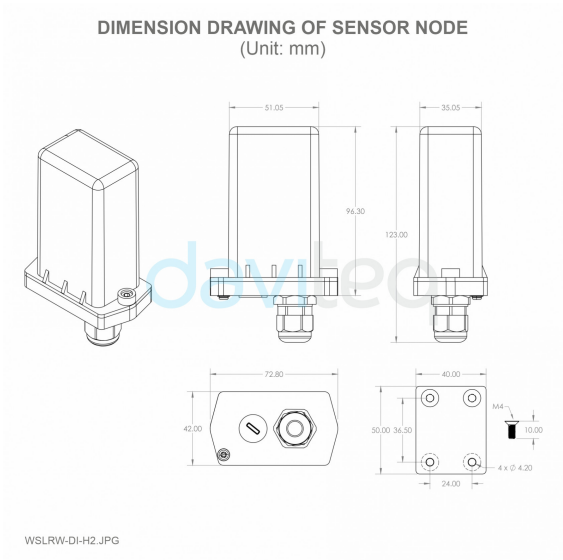
WSLRW-DI is a LoRaWAN node with digital inputs to detect logic status 0/1 OR counting pulses from the water meter, gas meter, power meter, proximity sensor, limit switch, machine output, pressure switch... Ultra-low-power design and smart firmware allow the sensor to run on a 2 x AA battery 1.5V for 10 years with one update per day. It can support all frequency regions in over the World.

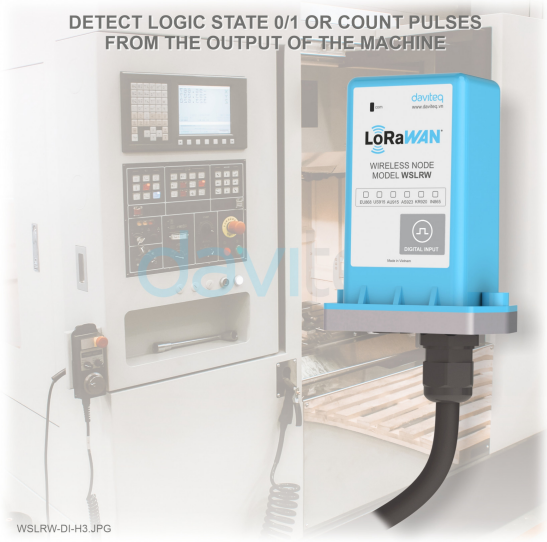
- Logic detecting or Pulse counting with non-volatile memory;
- LoRaWAN Class A;
- 10 years of battery life with one update per day;
- Plug & Play.

Typical Applications

- Counting the output pulses from the water meter, gas meter, power meter...
- Detect the logic status of the proximity sensor, limit switch, machine output, pressure switch...







Specification

SENSOR SPECIFICATION	
Input	2 channel Digital inputs with dry-contact or voltage input (max 3.3VDC)
Functions	Logic Detecting or Pulse Counting
Logic Detecting	Low-Speed version: Max frequency 2 Hz, default Filter time 300mS, adjustable 1 .. 65535 mS High-Speed version: Max frequency 1 kHz
Pulse Counting	Low-Speed version: Max frequency 2 Hz, default Filter time 300mS, adjustable 1 .. 65535 mS High-Speed version: Max frequency 1 kHz
Electrical connection	Shielded cable 2m length with PG9 cable gland
LoRaWAN SPECIFICATION	
Frequency zones	EU868, IN865, RU864, KR920, AS923, AU915, US915
Antenna	Internal Antenna 2 dbi
Configuration	via Downlink or offline USB cable (PC software is supplied for free)
Battery	02 x AA Type 1.5VDC
RF Module complies to	CE, FCC, ARIB
Working temperature	-40°C..+60°C (using Energizer Lithium Ultimate AA battery)
Dimensions	H140xW73xD42
Net-weight	250 grams
Housing	Polycarbonate, IP68
Mounting	Wall mount bracket

Ordering Code

Item code	Descriptions

WSLRW-DI-12	LORAWAN NODE WITH DIGITAL INPUTS, 2-CHANNEL, SHIELDED CABLE 2M LENGTH WITH PG9 CABLE GLAND, INTERNAL ANTENNA, TYPE AA BATTERY 1.5VDC, IP68
WSLRW-DI-12H	LORAWAN NODE WITH DIGITAL INPUTS, HIGH SPEED 2-CHANNEL, SHIELDED CABLE 2M LENGTH WITH PG9 CABLE GLAND, INTERNAL ANTENNA, TYPE AA BATTERY 1.5VDC, IP68

⚠ Link for full datasheet: https://filerun.daviteq.com/wl/?id=okXF7dp5nl0pJIXhaCKkzru2u2G94ljl

⚠ Link for manual:

Daviteq Technologies Inc

www.daviteq.com | info@daviteq.com

LoRaWAN Single Axis Vibration Sensor Ex WSLRWX-V1M

SKU: WSLRWX-V1M

Doc No: WSLRWX-V1M-DS-EN-10

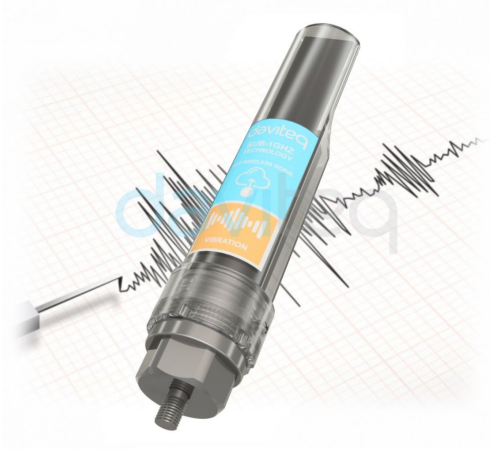
Introduction

WSLRWX-V1M is a LoRaWAN single axis vibration sensor for hazardous Zone 2/21 application. With Ultra-low-power design and smart firmware allow the sensor to run on a 2 x AA battery 3.6V in 10 years. It can support all LoRaWAN frequency regions in over the World.

- MEMS 0.5 - 1500 Hz bandwidth;
- Built-in temperature sensor;
- LoRaWAN Class A;
- 10 years of battery life;
- For Hazardous zones 2/21

Typical Applications

- Vibration monitoring for Machine, Motor, Pump, Piping...



Reference Picture

Specification

SENSOR SPECIFICATION	
Sensor technology	MEMS
9-Parameter Measurement	Acceleration RMS & Peak Velocity RMS & Peak Displacement RMS & Peak Crest Factor Frequency & Temperature
Acceleration Range & Shock Limit (g)	±16, 10,000
Frequency Response and Resonant (Hz)	0.5-1500, > 4200
Non-Linearity	±0.2% FSO

Noise	+/- 20 mg
Temperature Drift at Zero G	+/- 1 mg/oC
Total accuracy	< 4% of Reading
Temperature measuring and operating	-40°C.. +105°C, with accuracy: +/- 0.5 and resolution: 0.125
Sensor housing material, rating	304SS, IP67
Mounting	Stud mount M6, Adhesive Mounting Base
LoRaWAN SPECIFICATION	
Frequency zones	EU868, IN865, RU864, KR920, AS923, AU915, US915
SPF Factor	SF7..SF12
Tx Power	+20 dBm max
Antenna	Internal Antenna 2.67 dbi
Configuration	via Downlink or offline USB cable (PC software is supplied for free)
Battery	02 x AA Type 3.6V LiSOCl2
Certification	CE (RED), FCC, IECEx Zone2, Zone21
Marking	Ex ic ec IIC T6 Gc
Working temperature	0°C..+70°C (using LiSOCl2 battery)
Dimensions	H100xD42
Net-weight	< 200 grams
Electronic Housing	Polycarbonate, IP67

Ordering Code

Item code	Descriptions
WSLRWX-V1M-016	LORAWAN SINGLE AXIS VIBRATION SENSOR, MEMS 1500HZ, INTERNAL ANTENNA, TYPE AA BATTERY, IP67, ZONE 2/21, 16G
ACC-V1A-BASE-01	304SS ADHESIVE BASE FOR VIBRATION SENSOR, 25.4X10, M6X1.0X7,5

⚠ Link for full datasheet:

⚠ Link for manual:

daviteq

Daviteq Technologies Inc

www.daviteq.com | info@daviteq.com