

# LoRaWAN Node with RS485 Master Port



Smart Building, Smart City

SKU: WSLRW-MB485

## LoRaWAN RS485 MODBUS MASTER WSLRW-MB485

LoRaWAN



WSLRW-MB485-H1.JPG

Safe Zone

Hazardous Zones

WSLRW-MB is a LoRaWAN node with an RS485 master port to connect to any sensor, water meter, power meter, gas meter, or flow computer with an RS485 slave port. The device supports different fieldbus protocols like Modbus RTU, Modbus ASCII, DLMS Cosem, and Mbus... The device is configurable via offline software and downlink messages. 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. The sensor will transmit data over kilometers to the LoRaWAN gateway, any brand on the market. It supports all LoRaWAN frequency bands.

### Applications

Electric Meter Reading, Gas Meter Reading, Water Meter Reading, Production Monitoring, Facility Monitoring

### Notes For Applications

**LoRaWAN Compliance**  
Comply with any LoRaWAN gateway and Network Server

**Support various Fieldbus Protocols**  
Support Modbus RTU, Modbus ASCII, DLMS Cosem...

**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 Type AA batteries.

**IP68**  
For both indoor and outdoor applications

### Connect via RS485 DLMS COSEM



WSLRW-MB485-H2.JPG

## DAVITEQ TECHNOLOGIES INC

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Created date: Dec-04-2023


Updated date: Aug-28-2024


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## Specification

Input port	1 x RS485 master port
Cable length	2m, shielded cable with marking A & B wires
Protocol	Select Modbus RTU, Modbus ASCII, DLMS Cosem, Mbus etc. (Contact us before ordering)
Fault protected RS-485 bus pins	up to $\pm 40V$
HBM ESD protection on RS-485 bus pins	$\pm 15kV$
Extended common mode range	$\pm 15V$ (larger than required for RS-485)
High transient over voltage tolerance	$\pm 60V$
Full fail-safe RS-485 receivers	open, short, terminated
COMMUNICATION	
SF Factors	SF7~SF12
Antenna	Internal Antenna 2.0 dBi
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
Certification	CE, FCC
Working temperature	-40~60°C (with AA L91 Energizer®)
Dimensions	H180xW50xD40
Net-weight	250g
Housing	Polycarbonate & POM plastic, IP68
Mounting	Wall mount

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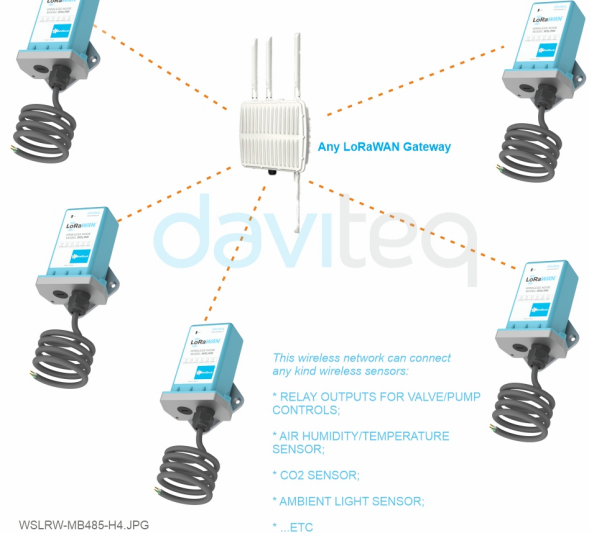
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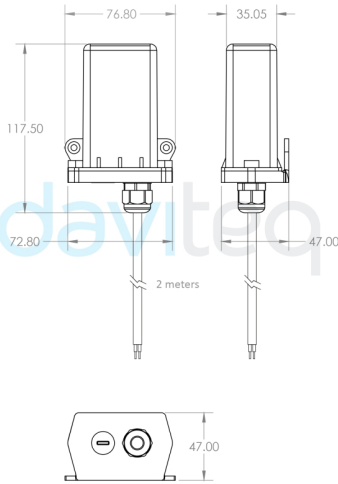
Connect via RS485 Modbus RTU



LoRaWAN NETWORK



DIMENSION DRAWING OF WIRELESS SENSOR (Unit: mm)



RECOMMENDED BATTERIES

E91 AA Alkaline battery

L91 AA Lithium battery



-18 .. + 60 oC working temperature

-40 .. + 60 oC working temperature

10-year shelf life

20-year shelf life

3000 mAH Capacity

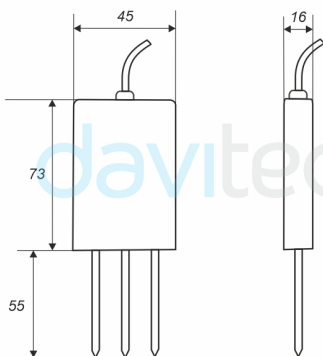
3500 mAH Capacity

Price: 1X

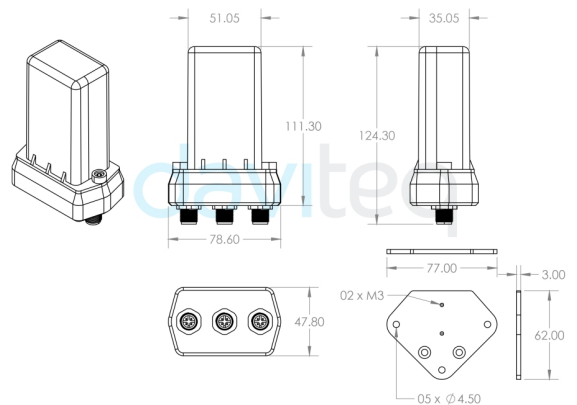
Price: 3.5X

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DIMENSION DRAWINGS OF SENSOR (Unit: mm)



DIMENSION DRAWING OF DEVICE (Unit: mm)



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RECOMMENDED BATTERIES

E91 AA Alkaline battery



L91 AA Lithium battery



-18 .. + 60 oC working temperature

10-year shelf life

3000 mAH Capacity

Price: 1X

-40 .. + 60 oC working temperature

20-year shelf life

3500 mAH Capacity

Price: 3.5X

WSNB-SMT-H9.JPG

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## Ordering Information

ITEM CODE	DESCRIPTIONS
WSLRW-MB485-01	LoRaWAN Node with RS485 Master port, DLMS Cosem protocol, IP68, 2m shielded cable, internal antenna, 860~930 MHz
WSLRW-MB485-02	LoRaWAN Node with RS485 Master port, Modbus RTU protocol, IP68, 2m shielded cable, internal antenna, 860~930 MHz
WSLRW-MB485-03	LoRaWAN Node with RS485 Master port, Modbus ASCII protocol, IP68, 2m shielded cable, internal antenna, 860~930 MHz

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