

LoRaWAN RS485 IEC 62056-21 Meter Reader



Smart Building, Smart City, Smart Factory, Smart Facility

SKU: WSLRW-IEC485

☒ Safe Zone

☐ Hazardous Zones

LORAWAN RS485 IEC 62056-21 METER READER WSLRW-IEC485



WSLRW-IEC485 is a LoRaWAN node with a RS485 master port to connect to water meter, power meter, gas meter, or flow computer with an RS485 slave port. The device supports IEC 62056-21 protocol. The device is configurable via offline software and downlink messages. It is powered by external power supply OR primary battery OR external power supply with rechargeable batteries. The node will transmit data over kilometers to the LoRaWAN gateway, any brand on the market. It supports all LoRaWAN frequency bands.

Applications

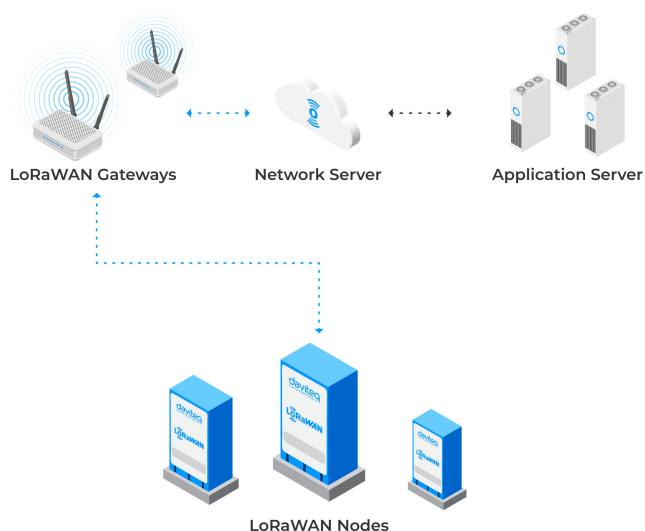
Electric Meter Reading, Gas Meter Reading, Water Meter Reading

Notes For Applications

Compatibility: Match voltage levels and protocols Isolation: Opt for galvanic isolation to protect devices from electrical surges. Baud Rate: Ensure it supports the required communication speed. Connector Type: Choose suitable connectors. Power Supply: Select external grid power or battery power Distance & Devices: Verify distance limit and maximum connected device

- ☒ **LoRaWAN Compliance**
Compliance with any LoRaWAN gateway and Network Server
- ☒ **Connection to any RS485 IEC 62056-21 slave device**
Support any IEC 62056-21 slave device
- ☒ **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

SYSTEM ARCHITECTURE LoRaWAN



DAVITEQ TECHNOLOGIES INC

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Created date: Mar-20-2025

Updated date: Dec-29-2025

Specification

| | |
|---------------------------------------|---|
| Input port | 1 x RS485 master port |
| Connector | Cable with 2 wires for RS485+ and RS485- |
| Protocol | IEC 62056-21 |
| Fault protected RS-485 bus pins | up to ±40V |
| HBM ESD protection on RS-485 bus pins | ±15kV |
| Extened common mode range | ±15V (larger than required for RS-485) |
| High transient over voltage tolerance | ±60V |
| Full fail-safe RS-485 receivers | open, short, terminated |
| COMMUNICATION | |
| SF Factors | SF7~SF12 |
| Antenna | Internal Antenna 2.0 dbi |
| Power supply | 02 x AA size 1.5VDC primary battery (battery not included) OR 7-48 VDC external power OR 6-9 VDC external power with rechargeable batteries |
| 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, alarm, magnetic key trigger, and downlink trigger |
| Certification | CE, FCC |
| Working temperature | -40~60°C (with AA L91 Energizer®) |
| Dimensions | H180xW50xD40 |
| Net-weight | 250g |
| Housing | Polycarbonate & POM plastic, up to IP68 |
| Mounting | Wall mount |

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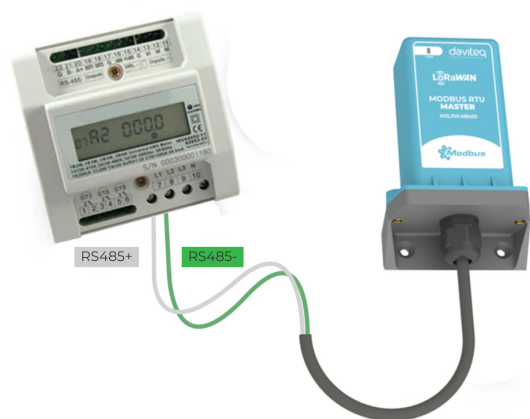
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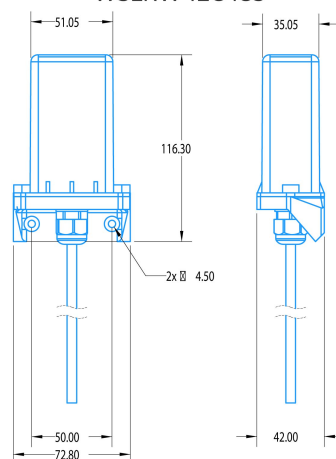


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DEVICE WIRING

LORAWAN RS485 IEC 62056-21 METER READER WSLRW-IEC485



DIMENSION DRAWING (Unit: mm)

RECOMMENDED BATTERIES



E91 AA
Alkaline battery

-18~60°C working temperature
10-year shelf life
3000 mAh capacity
Price: 1X

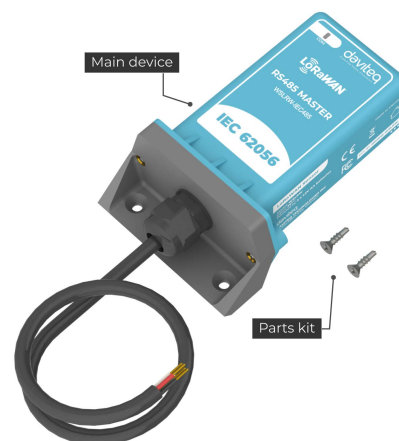


L91 AA
Lithium battery

-40~60°C working temperature
20-year shelf life
3500 mAh capacity
Price: 3.5X

POWERED BY PRIMARY BATTERY

LORAWAN RS485 IEC 62056-21 METER READER WSLRW-IEC485



STANDARD PRODUCT PACKAGE

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Ordering Information

| ITEM CODE | DESCRIPTIONS |
|--------------------|---|
| WSLRW-IEC485-04 | LoRaWAN meter reader with RS485 Master port, IEC 62056-21 protocol, 860~930 MHz, IP65, Internal Antenna, Battery Powered, Plastic Case, 2m-cable |
| WSLRW-IEC485-04-DC | LoRaWAN meter reader with RS485 Master port, IEC 62056-21 protocol, 860~930 MHz, IP65, Internal Antenna, 7-48 VDC External Power, Plastic Case, 2m-cable |
| WSLRW-IEC485-04-RC | LoRaWAN meter reader with RS485 Master port, IEC 62056-21 protocol, 860~930 MHz, IP65, Internal Antenna, External Power with Rechargeable batteries, Plastic Case, 2m-cable |