LoRaWAN Heavy Duty Digital Input Node

Smart Agriculture, Smart Building, Smart City, Smart Energy, Smart Facility, Smart Factory, Smart Farm, Smart Retail, Smart Utilities

SKU: WSLRWAL-DI

daviteq

✓ Safe Zone   ◯ Hazardous Zones

HEAVY DUTY LoRaWAN NODE WITH DIGITAL INPUT WSLRWAL-DI

LoRaWAN

10-Year

IP66 WEATHERPROOF

WSLRWAL-DI-H1.JPG

WSLRWAL-DI is a Heavy Duty LoRaWAN Node with powder-coated cast aluminum housing and a high-efficiency/ heavy-duty antenna that comes with 02 digital inputs for detecting the status of the pump, valve... or counting pulses from the flow meter, energy meter... Ultra-low-power design and smart firmware allow the device to run on a single battery type C for 5 years or more with 10 minutes update. It supports global frequency bands EU868, IN865, RU864, KR920, AS923, AS923-2, AU915, and US915. The sensor can work perfectly with any LoRaWAN Gateway on the market.

Typical applications: detecting the status of the pump, valve...or counting pulses from the flow meter, energy meter...

Applications

Process Monitoring, Safety Monitoring, Energy Monitoring, Electric Meter Reading, Gas Meter Reading, Water Meter Reading, Production Monitoring

Notes For Applications

- Accept the dry-contact output or voltage output with a max of 3.3V;
- Consider the shortest signal cable to avoid noise, especially for high-speed pulse applications;
- Recommend using the shielded cable with twisted pairs;
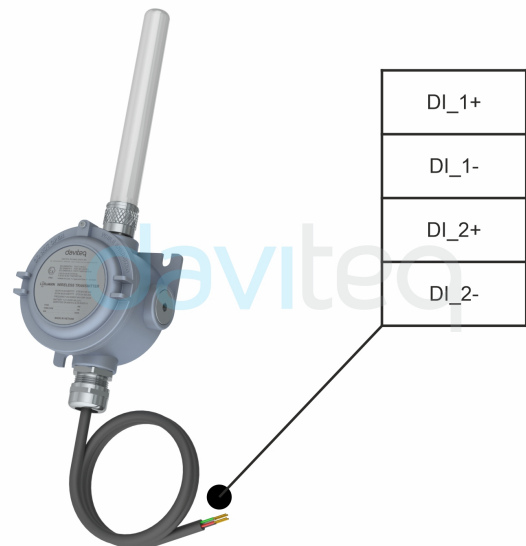- Take note of the signal's duty cycle to meet this device's requirement.

✓ **LoRaWAN communication**
Support LoRaWAN Class A, connect to any LoRaWAN gateway on the market

✓ **Heavy Duty Design**
Powder-coated cast aluminum housing and heavy-duty antenna

✓ **5-10 years battery**
Ultra-low power technology allows 5-year battery life with a single size C battery

✓ **Plug & Play**
The sensor is tested and pre-configured in factory before shipping.

2 CHANNEL DIGITAL INPUT

| DI_1+ |
| DI_1- |
| DI_2+ |
| DI_2- |

WSLRWAL-DI-H2.JPG

Specification

Digital Inputs	2-channel dry contact or low voltage (≤3.3V)
Operation	Detecting status or Pulse counting (max 1kHz)
VERSION	DI-12 (Low-speed digital input)
Input	2-Digital channel inputs with dry-contact or voltage input (max 3.3VDC)
Functions	Logic Detecting or Pulse Counting
	Logic Detecting: 2 channels, recommended minimum interval time between 02 statuses is 5 seconds.
	Pulse Counting: 1 channel only, max frequency 2Hz, minimum Pulse width (low or high) is 200mS, counter is uint32 type.
VERSION	DI-12H (High-speed digital input)
Input	2-Digital channel inputs with dry-contact or voltage input (max 3.3VDC)
Functions	Logic Detecting or Pulse Counting
	Logic Detecting: 2 channels, recommended minimum interval time between 02 statuses is 5 seconds.
	Pulse Counting: 2 channels, max frequency 1kHz, minimum Pulse width (low or high) is 200µS, counter is uint32 type.
COMMUNICATION	
Protocol	LoRaWAN® Class A, V1.0.3
SF Factors	SF7∼SF12
Antenna	External Antenna
RF Frequency and Power	860∼930MHz, 14∼20dBm, configurable for zones: EU868, IN865, RU864, KR920, AS923, AS923-2, AU915, US915
Data sending modes	interval time, or when status changes, or manually triggered by a magnetic key.
Configuration	via Downlink or offline USB cable (PC software is supplied for free)
Battery	01 x C type LiSOCl$_2$ 3.6V battery, not included (recommend SAFT LS26500)
Housing	Cast aluminum, IP66
Applicable Zones	Safe areas
Ambient working temperature	-40∼85℃ (use with SAFT LS26500)
Dimensions	H100xW100xD80 (excluded antenna)
Net-weight	≈1200g (without battery)
Mounting	Wall mount

DIMENSION DRAWING OF WSLRWAL-DI
(Unit: mm)

178.00
280.00
78.00
Ø 85.04
R4.00
1/2" NPT
94.00
74.00
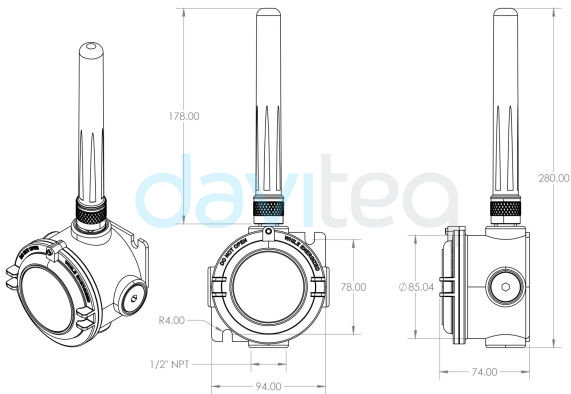
WSLRWAL-DI-H3.JPG

RECOMMENDED BATTERIES FOR LoRaWAN NODE

LS 26500 Lithium battery

SaFT
LS 26500
3.6V
Li-SOCl₂

-60°C..+85°C working temperature

Low self-discharge rate

7.7 Ah Capacity

WSLRWAL-DI-H4.JPG

VIBRATION SENSOR WITH M6 SCREW

M6 x 1.0

WSLRW-V1A-H5.JPG

DIMENSION DRAWING OF WIRELESS NODE
(Unit: mm)

51.05
35.05
96.30
123.00
72.80
42.00
02 x M3
05 x Ø 4.50
3.00
62.00
77.00
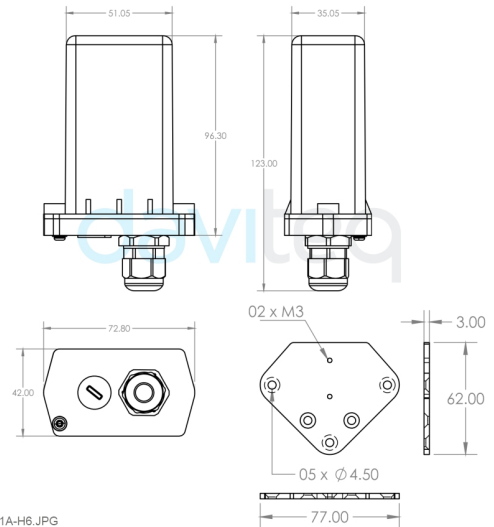
WSLRW-V1A-H6.JPG

RECOMMENDED BATTERIES

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

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WHAT'S IN THE PACKAGE?

Parts kit

KTPI-PARTSKIT-ICT

Main device

Vibration Sensor Module

RECOMMENDED BATTERIES

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-ULA-H8.PNG

Ordering Information

ITEM CODE	DESCRIPTIONS
WSLRWAL-DI-12	HEAVY-DUTY LORAWAN NODE WITH DIGITAL INPUTS, BATTERY 3.6V, IP66, 2-CHANNEL DRY-CONTACT OR VOLTAGE INPUT MAX 3.3VDC, LOGIC DETECTING OR PULSE COUNTING MAX 2HZ