Wireless 2-Input Pulse Counter Interface R718H2 Data Sheet

Wireless Sensor Network Based on LoRa Technology

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Introduction

This device is connected with 2 pulse detection interfaces which can calculate the number of pulses and send the number of detected pulses to the gateway for display. It adopts SX1276 wireless communication module.

Main characteristic

- Adopt SX1276 wireless communication module
- 2 section of ER14505 battery in parallel (AA SIZE 3.6V / section)
- Host protection level IP65/ IP67 (optional)
- The base is attached with a magnet that can be attached to a ferromagnetic material object
- 2-input pulse count detection
- External pulse voltage 2.4v~ 3.3V
- Compatible with LoRaWAN™ Class A
- Frequency hopping spread spectrum technology
- Configuring parameters and reading data via third-party software platforms, and set alarms via SMS text and email (optional)
- Applicable to third-party platforms: Actility / ThingPark, TTN, MyDevices / Cayenne
- Low power consumption and long battery life

Note*:

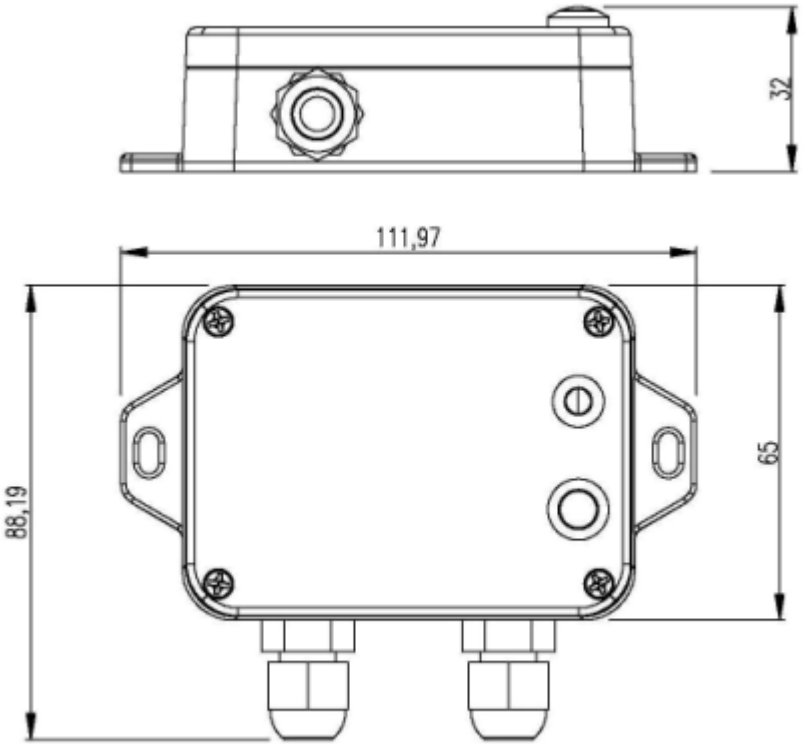
Battery life is determined by the sensor reporting frequency and other variables, please refer to http://www.netvox.com.tw/electric/electric_calc.html

On this website, users can find battery life of various models in different configurations.

Application

- The interface for pulse detection and counting

Dimension



Electric

Power Supply	2 x ER14505 AA lithium batteries (3.6V 2400mah/section) Specific specifications are subject to actual shipment.
Battery Life	5 years (Conditions: ambient temperature 25 °C, 15 min report once, TX power = 20dBm, LoRa spreading factor SF = 10)
Standby Current	24uA
Wakeup Current	Wakeup current range 0.8mA-20 mA * When not transmitting /receiving LoRa data
Battery Measurement Accuracy	±0.1V

Module-R100H

Wake-up Current	0.8mA - 8mA@3.3V
RF Receiving Current (max)	11mA/3.3V
RF Transmitting Current (max)	120mA/3.3V

*Specific electrical characteristics will vary depending on the power supply voltage.

Frequency

Frequency Range	863MHz-928MHz 470MHz-510MHz
TX Power	US915 20dbm AS923 16dbm AU915 20dbm CN470 19.15dbm EU868 16dbm KR920 14dbm IN865 20dbm
Receiving Sensitivity	-136dBm (LoRa, Spreading Factor=12, Bit Rate = 293bps) -121 dBm (FSK, Frequency deviation=5kHz, Bit Rate=1.2kbps)
Antenna Type	Built-in antenna
Communication Distance	Up to 10 km (visible linear obstacle-free transmission distance, actual transmission distance depends on the environment)
Data Transfer Rate	0.3kbps to 50kbps
Modulation System Mode	LoRa/FSK (Note: choose one of them)
Supportable LoRaWAN Band	EU863-870, US902-928, AU915-928, KR920-923, AS923, CN470-510 (Note: The frequency band is optional and needs to be configured before shipment)

Physical

Dimension	L: 112 mm*W: 88.19 mm*H: 32 mm
Host Body Weight	About 160g
Ambient Temperature Range	-20 °C to 55°C
Ambient Humidity Range	<90% RH (no condensation)
Storage Temperature Range	-40 °C to 85°C