Wireless 2-Input Pulse Counter Interface R718H2 Data Sheet

Wireless Sensor Network Based on LoRa Technology

R718H2

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Wireless 2-Input Pulse Counter Interface

General Description

The device is connected with two pulse detection interfaces, which can calculate the number of pulses and send the detected number of pulses to the gateway display. It uses the SX1276 wireless communication module.

Main Characteristics

- Adopt SX1276 wireless communication module
- 2 ER14505 battery AA SIZE (3.6V / section) parallel power supply
- The base is attached with a magnet that can be attached to a ferrous object
- 2-channel pulse count detection

Example Applications

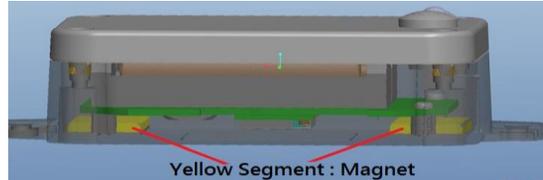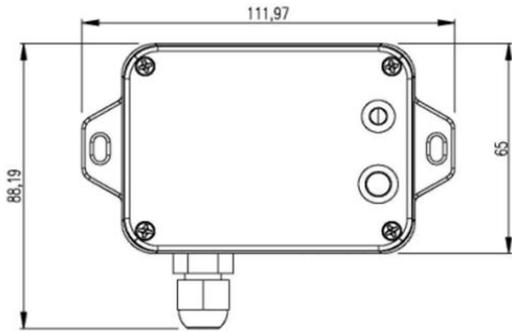• Interface for pulse detection counting

Features of NETVOX Sensors

• LoRaWAN™ Class A compatible
• Frequency Hopping Spread Spectrum (FHSS)
• Improved interference immunity
• Improved power management for longer battery life
• Encrypt-RF™ Security (Diffie-Hellman Key Exchange + AES-128 CBC for sensor data messages)
• Battery Life[*2]:
  - Please refer to web: http://www.netvox.com.tw/electric/electric_calc.html
  - At this website, users can find battery life time for varier models at different configurations.
• Over-the-air updates (future)
• Third-Party online wireless sensor monitoring and notification system to configure sensors, view data
   and set alerts via SMS text and email (optional)
• Available third-party platform: Actility/ThingPark, TTN, MyDevices/Cayenne
• R718X series carry magnets which can be attached to ferromagnetic materials and objects

*1. Actual range may vary depending on environment.
*2. Battery life is determined by sensor reporting frequency and other variables

Wireless 2-Input Pulse Counter Interface

Technical Specifications (Main Part)

Yellow Segment : Magnet

(Uni. mm)

Electric

Input Power	2 x 3.6V ER14505 AA lithium batteries (3.6V2400mah/section）
Sleeping Mode	24 uA
Wake up Mode	6.3mA@3.3V
Receiving Current (max)	11mA @3.3V
Transmitting Current (max)	120mA/3.3V
Battery Voltage Measurement Accuracy	±0.1V

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

Frequency

TX Power	19dBm±1dBm
Rx Sensitivity	-136dBm (LoRa，Spreading Factor=12, Bit Rate=293bps) -121dBm (FSK,Frequency deviation=5kHz, Bit Rate=1.2kbps)
Antenna Type	Build-in antenna
Communication Range	10 km (line-of-sight, the actual transmission distance depends on the environment)
Data Transfer Rate	0.3kbps～50kbps
Spread Technique	LoRa/FSK
Available Frequency	EU863-870, US902-928, AU915-928, KR920-923, AS923, CN470-510 Configured before shipment

Wireless 2-Input Pulse Counter Interface

Physical

Dimension	Main Part: L: 112mm*W: 65mm*H: 32mm
Weight	160g
Environment Temperature Range	-20℃ ～ 55℃
Environment Humidity Range	<90% RH (No condensation)
Storage Temperature	-40℃ ～ 85℃

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