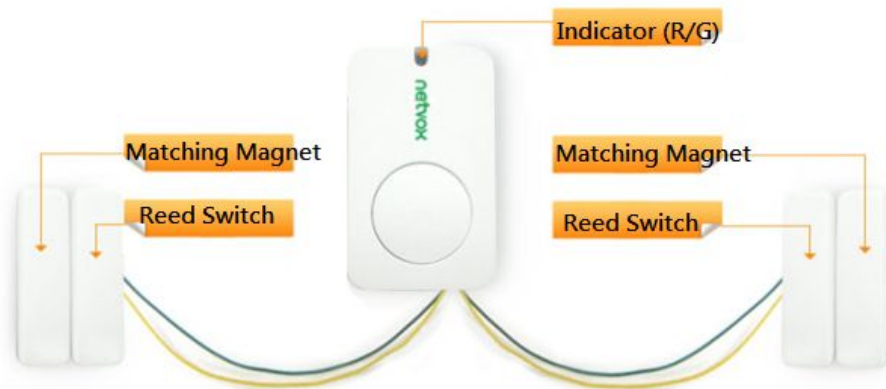

Wireless 2-Gang Reed Switch Open/Close Detection Sensor

Wireless 2-Gang Reed Switch Open/Close Detection Sensor R311CC Data Sheet

Wireless Sensor Network Based on LoRa Technology



R311CC

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Wireless 2-Gang Reed Switch Open/Close Detection Sensor

General Description

The R311CC device is equipped with two external reed switches, which can be used for door and window switch state detection. The built-in wireless module can realize wireless alarm and other functions, and is compatible with the LoRaWAN protocol.

It can be easily networked with other related devices. The R311CC is durable and ensures optimum use and is a low power consumption device. Due to their small size, they can be installed anywhere. They are wireless so they take up very little space.

Main Property

- 2 sections of 3V CR2450 button batteries
- Compatible with LoRaWAN protocol
- Adopt SX1276 wireless communication module

Example Applications

- Condition monitoring of doors and windows such as home or business

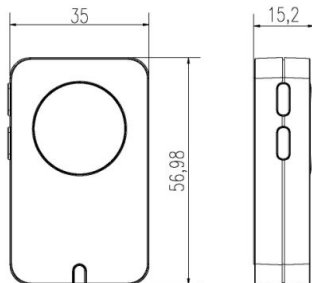
Features of NETVOX Sensors

- LoRaWAN™ Class A compatible
- Frequency Hopping Spread Spectrum (FHSS)
- Improved interference immunity
- Improved power management for longer battery life
- 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

*1. Actual range may vary depending on environment.

*2. Battery life is determined by sensor reporting frequency and other variables

Wireless 2-Gang Reed Switch Open/Close Detection Sensor

Technical Specifications


Main Body

(Unit: mm)

Electric

Input Power	2pcs 3.0V CR2450 button battery
Working Voltage	DC 2.4V~3.0V
Standby Current	10uA /3.0V
Transmitting Current (max)	120mA / 3.0V
Receiving Current (max)	11mA / 3.0V
Battery Voltage Measurement Accuracy	±0.1V

Frequency

Frequency Range	863MHz-928MHz 470MHz-510MHz
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	Up to10 km, 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-Gang Reed Switch Open/Close Detection Sensor

Reed Switch Sensor

Sensor Case Size	42mm x 13mm x 12mm
Sensor Characteristic	Inside the magnetic range, it is at on state (conducting). When out of the magnetic range, it is at off state (non-conducting).
Reed solderability	Good solderability

Main Body

Main Body Dimension	57mm x 35mm x 15.2mm
Weight	48.9 g
Operating Temperature	-20°C ~ 55°C
Environment Humidity Range	<90% RH (No condensation)
Storage Temperature	-40°C ~ 85°C

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