

Wireless Doorbell Button

Wireless Doorbell Button R312 Date Sheet



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Introduction

R312 is a wireless doorbell control device which can detect whether the wireless doorbell is triggered and send the doorbell status to the gateway. It adopts SX1276 wireless communication module. The wireless doorbell does not require wiring and is simple and flexible to install.

Main Features

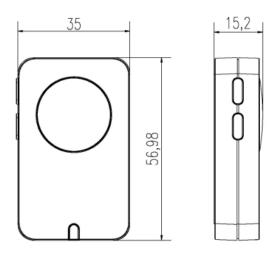
- Compatible with LoRaWAN
- 2 sections of 3V CR2450 button battery power supply
- Doorbell status detection
- Simple operation and setting
- Protection class IP30
- Compatible with LoRaWANTM Class A
- Frequency hopping spread spectrum
- Configuration parameters can be configured via a third-party software platform, data can be read and alerts can be set via SMS text and email (optional)
- Applicable to third-party platforms: Actility/ThingPark, TTN, MyDevices/Cayenne
- Improved power management for longer battery life

Battery Life:

- Please refer to web: http://www.netvox.com.tw/electric/electric_calc.html
- At this website, users can find battery life time for various models at different configurations.
 - 1. Actual range may vary depending on environment.
 - 2. Battery life is determined by sensor reporting frequency and other variables.

Example Applications

- Villa
- Office
- Hotel
- Apartment



Electric

Input Power	2pcs 3V CR2450 button battery
Working Voltage	DC 2.4V ~ 3V
Standby Current	14uA/3.0V
Transmitting Current (max)	120mA / 3.0V
Receiving Current (max)	11mA @ 3.0V
Low Voltage Threshold	2.4V
Battery Voltage Measurement Accuracy	±0.1V

Frequency

Frequency Range	863MHz-928MHz 470MHz-510MHz
TX Power	US915 20dbm; AS923 16dbm; AU915 20dbm; CN470 19.15dbm; EU868 16dbm; KR920 14dbm; IN865 20dbm;
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 to 10km, the actual transmission distance depends on the environment.
Data Transfer Rate	0.3kbps ~ 50kbps(LoRa) 1.2kbps ~ 300kbps(FSK)
Modulation	LoRa/FSK
Available Frequency	EU863-870,US902-928,AU915-928,KR920-923,AS923-1, AS923-2,AS923-3,IN865-867,CN470-510 (Note: optional, to be done in the factory configuration)

Physical

Main Body Dimension	57mm x 35mm x 15.2mm
Weight	45g
Operating Temperature	-20°C ~ 55°C
Environment Humidity Range	<90% RH (No condensation)
Storage Temperature	-40°C ∼ 85°C