Wireless 2-Gang Push Button

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Wireless Sensor Network Based on LoRa Technology

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Introduction

RB02B is a high-reliability wireless controlling terminal device.
It has the characteristics of low power consumption during the standby status, and applying the SX1276 wireless communication module. RB02B is a long-distance smart wall switch which is a Class A device of netvox based on the LoRaWAN open protocol. According to the needs of different applications, press the trigger button of RB02B. The device immediately sends trigger information to the gateway. RB02B is compatible LoRaWAN protocol and has two trigger buttons.
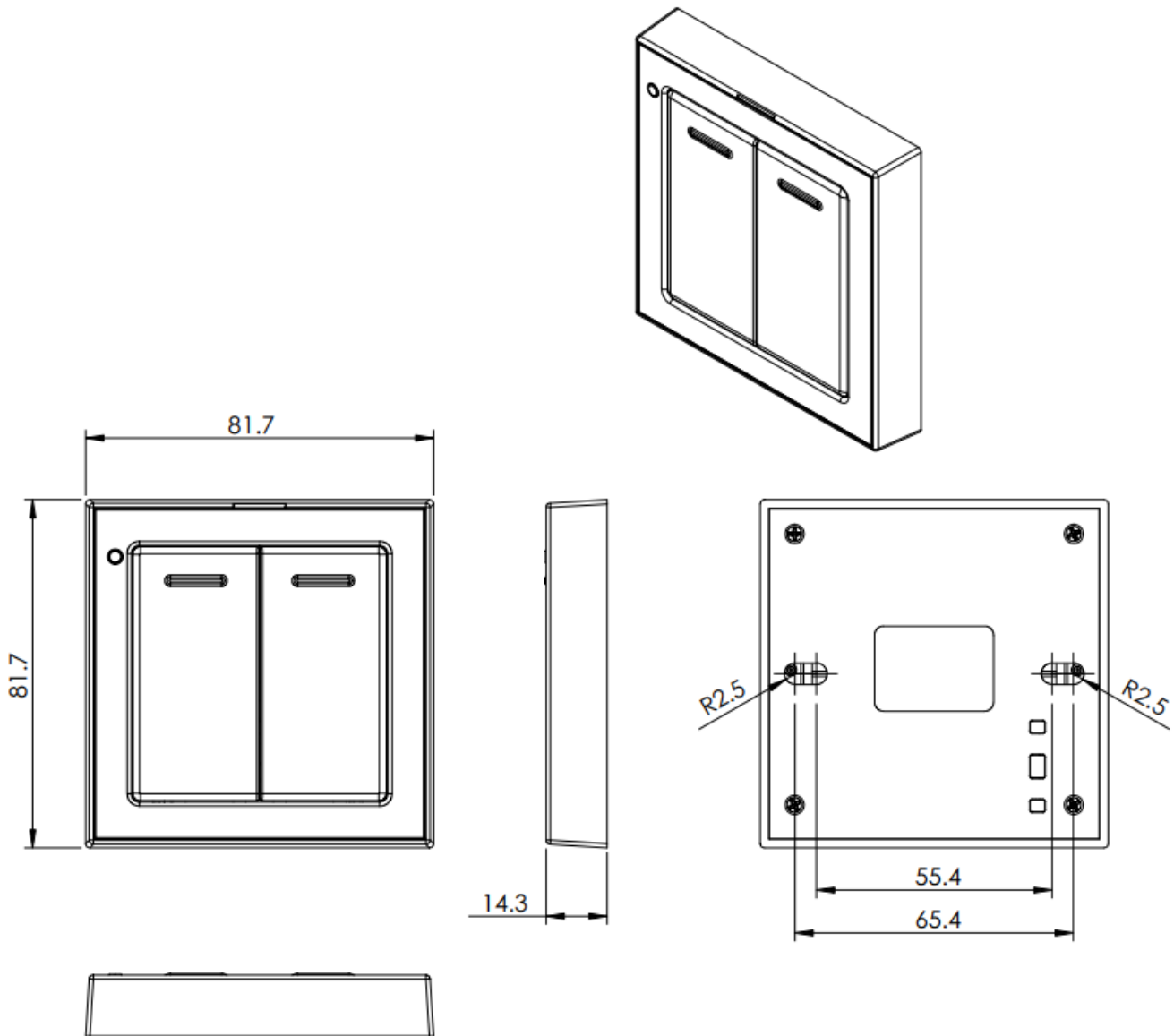
Main Characteristic

- Apply SX1276 wireless communication module
- 2-Gang Push Button
- 2 sections AAA batteries power supply
- Compatible with LoRaWAN^{TM} Class A
- Frequency hopping spread spectrum technology
- Configuration parameters can be configured through a third-party software platform
- 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.

Electric

Power supply	2 sections AAA batteries
Operating Voltage	2.3V-3V
Low Battery Alarm Voltage	2.4V
Standby Current	11uA
Module Transmitting Current (Max)	120mA/3.0V
Module Receiving Current (Max)	11mA/3.0V
Battery 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
Receive Sensitivity	-121dBm (FSK, Frequency deviation=5kHz, Bit Rate=1.2kbps) -136dBm (LoRa，Spreading Factor=12，Bit Rate=293bps)
Antenna Type	Built-in antenna
Communication Distance	10km (visible linear obstacle-free transmission distance, actual transmission distance depending on the environment)
Data Transfer Rate	0.3kbps ~50kbps (LoRa) 1.2kbps ~ 300kbps (FSK)
Modulation Method	LoRa / FSK (Note: choose one of them)
Supportable LoRaWAN Band	EU863-870,US902-928,AU915-928,KR920-923,AS923-1,AS923-2, AS923-3,IN865-867,CN470-510 (Note: The frequency band is optional and needs to be configured before shipment)

Physical

Dimension	82mm* 82mm* 15mm
Operating Temperature Range	-20°C ~ 55°C
Storage Temperature Range	-40°C ~ 85°C
Operating Humidity Range	<90%RH (No condensation)