Wireless Emergency Push Button RB02I Data Sheet

Wireless Sensor Network Based on LoRa Technology

RB02I

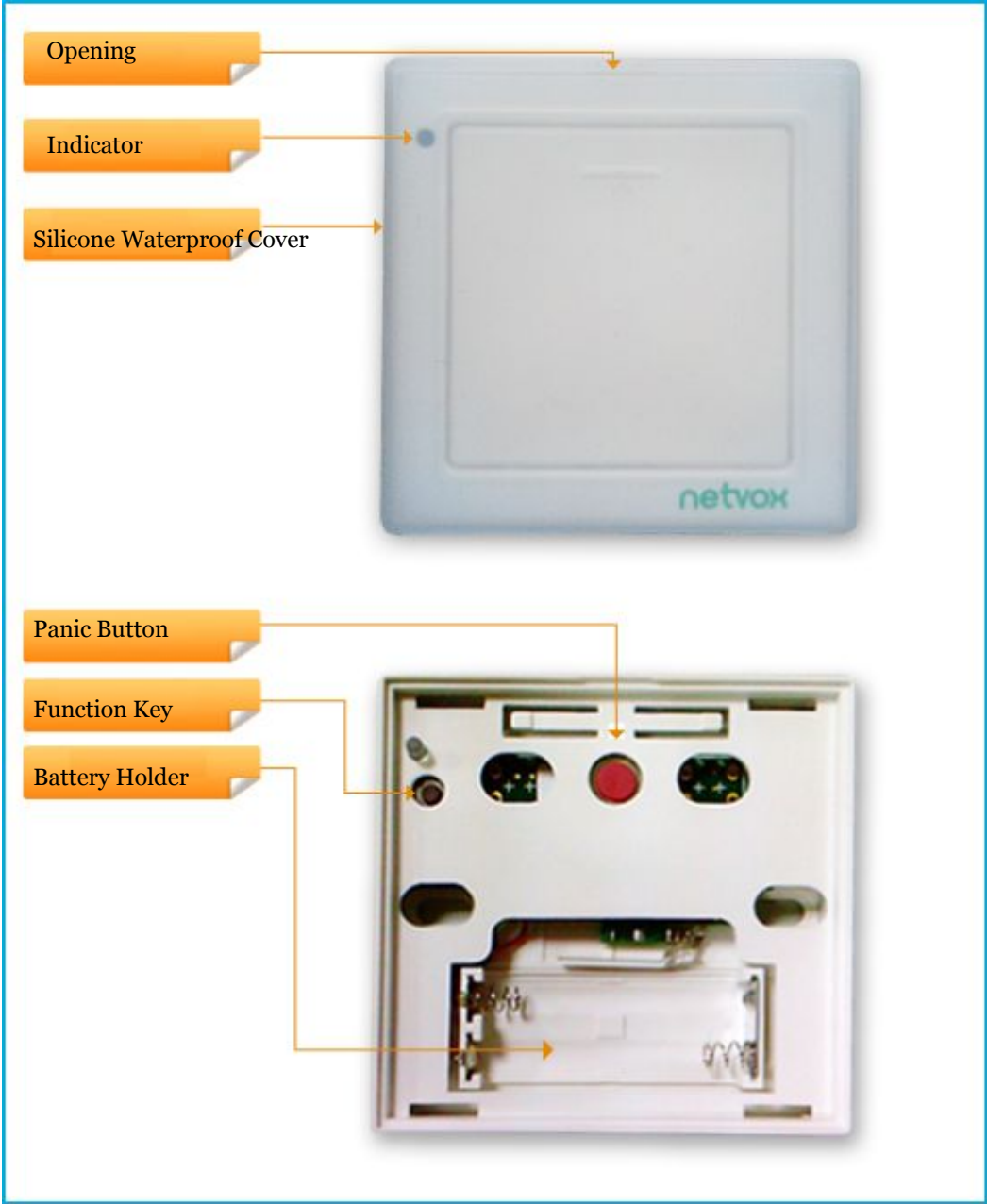**Copyright©Netvox Technology Co., Ltd.**

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Wireless Emergency Push Button

Opening

Indicator

Silicone Waterproof Cover

Panic Button

Function Key

Battery Holder

netvox

RB02I Appearance

Wireless Emergency Push Button

General Description

The RB02I product is a wireless control terminal device for smart homes and high reliability. It features low standby power consumption and is fully compliant with the LoRaWAN™ protocol standard. RB02I is an emergency alarm triggering device, with a silicone waterproof cover.

Principle of Operation

While emergency push button is pressed, it will send the warning signal to data center. Users will be able to receive the warning message shown in PC or mobile.

Example Applications

The device is universal an can be used for many applications. Ideally suited for a wide range of applications such as building automation, condition monitoring, predictive maintenance, security, healthcare and many more use cases. For example:

Home / Schools / Classroom / Reading room / Laboratory
Offices PC room / Working / Meeting room / Canteen / Restroom
Factories Production hall / Laboratory, inspection work / Storage
Hospitals / Bedroom / Entrance area / Restaurant / Bars / Staircases
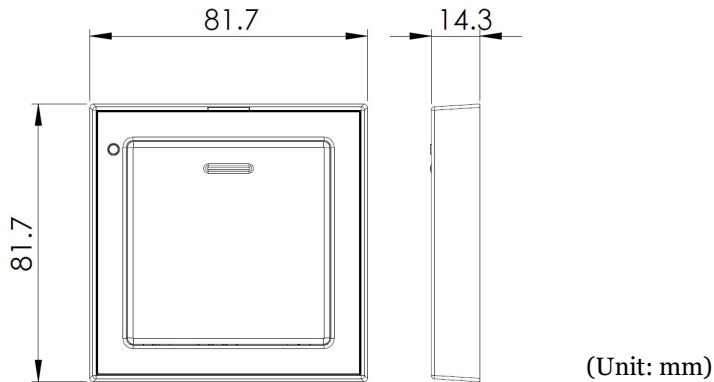
Features of NETVOX Sensors

• Wireless range of 10 km [1]
• 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]:
  5 years
• 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 Emergency Push Button

Technical Specifications

(Unit: mm)

Electric

Power Supply	2*AAA batteries
Operating Voltage	2.1V-3V
Standby Current	14uA
Transmitting Current (max)	120mA/3.0V
Receiving Current (max)	11mA/3.0V

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 Emergency Push Button

Physical

Dimension	81.7mm*81.7mm*14.3mm
Working Temp	-20°C ～ +55°C
Storage Temp	-40°C ～ +85°C
Humidity Detecting Range	**＜90%RH**

Contact:

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