

Wireless Push Button Interface

Wireless Sensor Network Based on LoRa Technology



R718T

Data Sheet

Copyright©Netvox Technology Co., Ltd.

This document contains proprietary technical information which is the property of NETVOX Technology. It shall be maintained in strict confidence and shall not be disclosed to other parties, in whole or in part, without written permission of NETVOX Technology. The specifications are subject to change without prior notice.

Wireless Push Button Interface

Introduction

R718T is a Wireless Push Button Interface.

It can connect with an external push button and detect whether the external button is pressed.

Main Characteristic

- Apply SX1276 wireless communication module
- 2 ER14505 batteries AA size in parallel (3.6V / section)
- The base is attached with a magnet that can be attached to a ferromagnetic material object
- Push button interface
- IP rating IP65
- LoRaWAN™ Class A compatible
- Frequency Hopping Spread Spectrum (FHSS)
- 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
- Improved power management for longer battery life
- Battery Life:

- Please refer to web: http://www.netvox.com.tw/electric/electric_calc.html

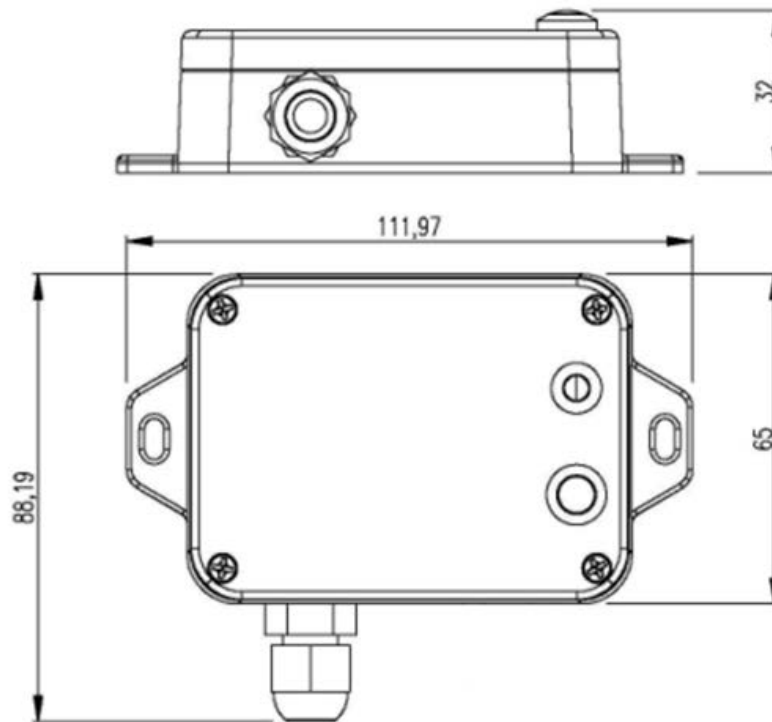
- At this website, users can find battery lifetime for various models at different configurations

*1. Actual range may vary depending on environment

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

Wireless Push Button Interface

Technical Specification



Electric

Input Power	2 ER14505 AA size lithium batteries (3.6V, 2400mah / section)
Operating Voltage	3.1V to 3.65V
Battery Life	5 years (Conditions: ambient temperature 25 °C, 15 min report once, txpower = 20dBm, LoRa spreading factor SF = 10)
Standby Current	22 uA
Low Battery Voltage Threshold	3.2V
Battery Measurement Accuracy	±0.1V

Module-R100H

Wake-up Current	0.8mA - 8mA@3.3V
RF Receiving Current (max)	11mA/3.3V
RF Transmitting Current (max)	120mA/3.3V

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

Wireless Push Button Interface

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	10 km (The actual transmission distance depends on the Environment.)
Data Transfer Rate	0.3kbps ~ 50kbps (LoRa) 1.2kbps ~ 300kbps (FSK)
Modulation Method	LoRa/FSK (Note: choose one of them)
Available Frequency	EU863-870, US902-928, AU915-928, KR920-923, AS923-1, AS923-2, AS923-3, IN865-867, CN470-510 (Note: Configured before shipment)
Communication Range	Up to 10 km, the actual transmission distance depends on the environment

Physical

Dimension	L:112mm*W:65mm*H:32mm
Main Body Weight	About 141g
Environment Temperature Range	-20°C ~ 55°C
Environment Humidity Range	<90% RH (No condensation)
Storage Temperature	-40°C ~ 85°C