

---

**Wireless Activity Event Counter**

---

# Wireless Activity Event Counter R718MBB Data Sheet

---

Wireless Sensor Network Based on LoRa Technology



## R718MBB

**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.



 **LoRa Alliance Member™** **zigbee alliance member**

---

## Wireless Activity Event Counter

---

### General Description

The device detects the number of movements or vibrations (such as detecting the motor a few times a day), the maximum number of movements or vibrations can reach  $2^{32}$  times (theoretical value), and sends the information of the number of movements or vibrations to the gateway for processing. Apply SX1276 wireless communication module.

### Example Applications

- Smart Home
- Industry and Commercial
- Objects to be detected movements or vibrations

### Features of NETVOX Sensors

- Wireless range of 10km \*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:

Please refer to web: [http://www.netvox.com.tw/electric/electric\\_calc.html](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
- R718X series carry magnets which can be attached to ferromagnetic materials and objects

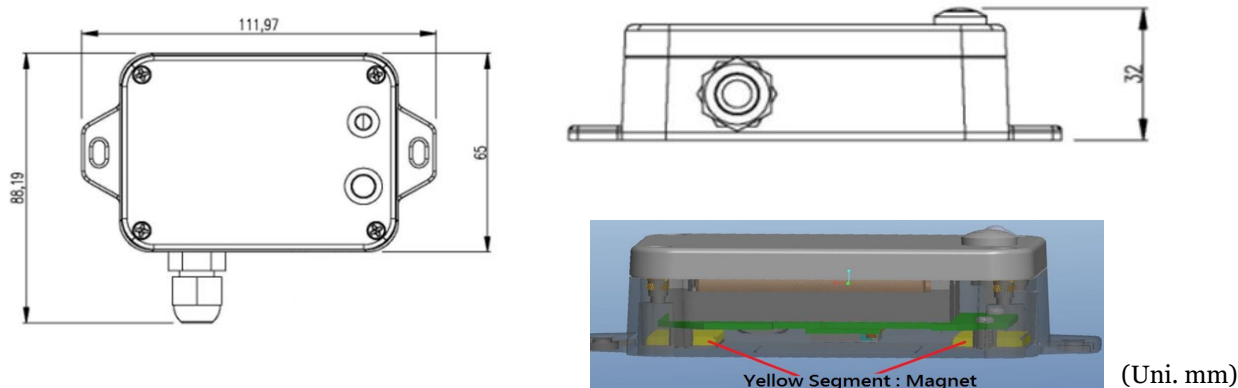
\*1. Actual range may vary depending on environment.

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

---

**Wireless Activity Event Counter**


---

**Technical Specifications (Main Part)**

**Electric**

Input Power	2 x 3.6V ER14505 AA lithium batteries (3.6V 2400mah/section)
Sleeping Mode	76 uA
Wake up Mode	6.3mA@3.3V
Receiving Current (max)	11mA @3.3V
Transmitting Current (max)	120mA/3.3V
Battery Voltage Measurement Accuracy	±0.1V
Low Voltage Threshold	3.2V

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

**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	US915 AU915 AS923 EU868 KR920 CN470 Configured before shipment

---

**Wireless Activity Event Counter**


---

**Physical**

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

**Contact:**
**NETVOX TECHNOLOGY CO., LTD.**
**TEL: 886-6-2617641**
**FAX: 886-6-2656120**
**E-mail: sales@netvox.com.tw**
**WEB: www.netvox.com.tw**
**NETVOX TECHNOLOGY CO., LTD (XIAMEN)**
**TEL: 86-592-5717188**
**FAX: 86-592-5717180**
**E-mail: dyx@netvox.com.cn**
**WEB: www.netvox.com.cn**


**LoRa Alliance Member™ zigbee alliance member**