

Wireless Activity Timer R718MBC Data Sheet

Wireless Sensor Network Based on LoRa Technology



R718MBC

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Wireless Activity Timer

General Description

The device detects the duration of the movement or vibration (timekeeping) and sends the duration or timing information of the movement or vibration to the gateway for processing. The duration of the movement or vibration can be up to 1000 hours (theoretical value). 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

At this website, users can find battery life time for varier models at different configurations.

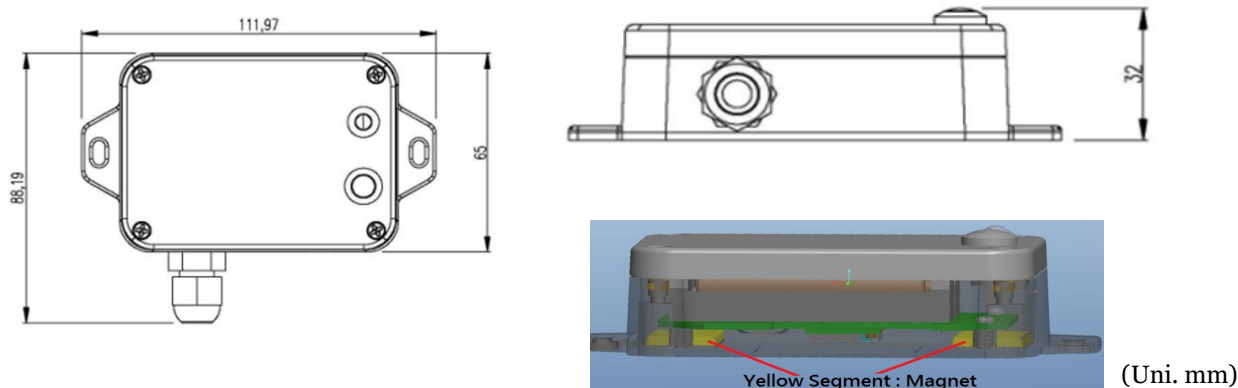
- Over-the-air updates (future)
- Third-Party online wireless sensor monitoring and notification system to configure sensors, view data and set alerts via SMS text and email (optional).
- Available third-party platform: Actility/ThingPark, TTN, MyDevices/Cayenne
- R718X series carry magnets which can 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 Timer

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 | Up to 10 km, 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 Timer

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 |

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