

Wireless Water Leak Detector

Wireless Water Leak Detector R718WA Data Sheet

Wireless Sensor Network Based on LoRa Technology



R718WA

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Wireless Water Leak Detector

General Description

This device is a water leak alarm device. When the water sensor detects a leak, it will send an alarm message to the gateway. When the water sensor detects that there is no water leak again, it will send a back to normal status message to the gateway, which uses the SX1276 wireless communication module.

Main Characters

- Apply SX1276 wireless communication module
- 2 section ER14505 batteries AA SIZE (3.6V/section) parallel power supply
- Base with magnet attached to iron objects

Example Applications

- Engine Room
- Warehouse
- Smart Home
- Archives
- Air Conditioning
- Semiconductor Plant
- Data Center

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 various models at different configurations.

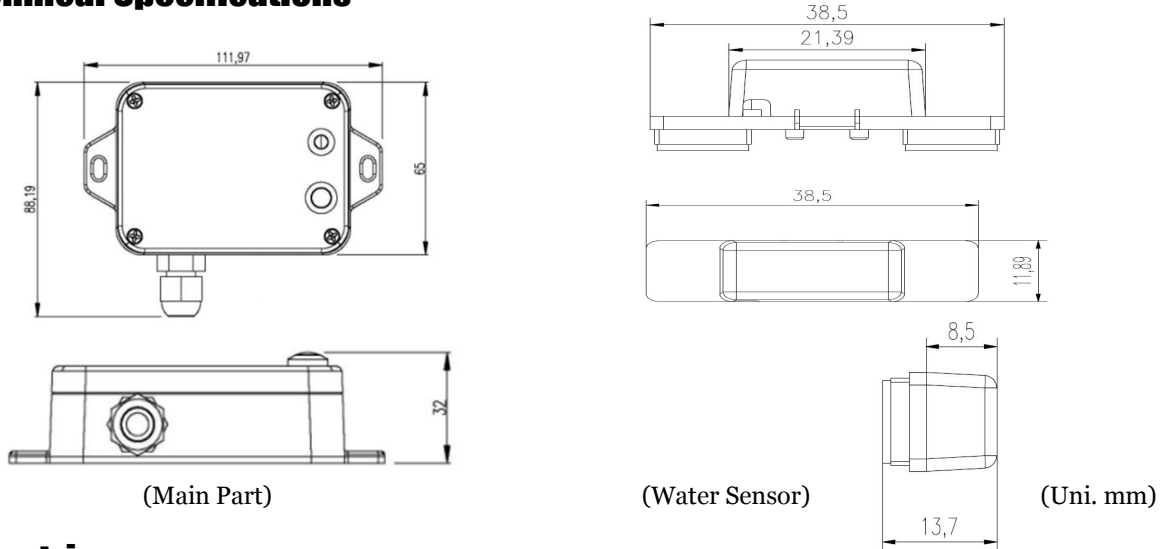
- Over-the-air updates (future)
- Third-Party online wireless sensor monitoring and notification system to configure sensors, view data and set alerts via SMS text and email (optional)
- Available third-party platform: Actility/ThingPark, TTN, MyDevices/Cayenne
- R718X series carry magnets which can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

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Technical Specifications



Electric

Input Power	2 x 3.6V ER14505 AA lithium batteries (3.6V2400mah/section)
Sleeping Mode	22uA
Wake up Mode	6.3mA@3.3V
Low Voltage Threshold	3.2V
Receiving Current (max)	11mA @3.3V
Transmitting Current (max)	120mA/3.3V
Battery Voltage Measurement Accuracy	±0.1V

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

Water Sensor

Water Line Material	UL2547 28AWG
Water Line Max. Working Temperature	80 ° C
Water Line Diameter	2mm
Water Line Length	1000mm (±5mm)
Water Line Flame Resistance Rating	VW-1
Water Line Length Limit	300m (theoretical value)
Water Sensor Size	L: 38.5 mm*W: 11.9 mm*H: 13.7 mm

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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	EU863-870, US902-928, AU915-928, KR920-923, AS923, CN470-510 Configured before shipment

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