



MSL01

Wireless Water-Leak
Sensor

Datasheet



PRODUCT OVERVIEW

MSL01 wireless water-leak sensor is a Bluetooth sensor developed by Minew for monitoring whether there is water leakage in the environment. When the water is over the sensor probe poles, it will send a wireless alarm signal to the gateway. The alarm information can also be pushed from the platform to the user's mobile phone through application development. Then users can avoid property loss caused by water leakage through timely detection. The wireless water-leak sensor has the characteristics of simple deployment and easy maintenance. It is widely used in buildings, data centers, warehousing, archives, homes, and other places that need waterproofing.



KEY FEATURES



Support BLE 5.0



Low cost and low power consumption



Small shape, light weight



Customizable logo



Easy to paste and install



IP67 waterproof probe



150 meters broadcast range



5 years battery life

APPLICATION SCENARIOS

The water-leak sensor can be installed at any place where water leakage needs to be monitored. Such as: Smart Buildings: data centers, warehouses, museums and other construction sites. Smart home: kitchens, bathrooms, laundry rooms, etc.



Note: Applicable to, but not limited to, the above scenarios.

PRODUCT SPECIFICATIONS

BASIC SPECIFICATIONS

| | |
|-----------------------|---|
| Model | MSL01 |
| Material | ABS |
| Color | white |
| Size (L*W*H) | 70.6*38*17.8mm(main body) 1 meter (probe line length) |
| Net Weight | 65g |
| Operating Temperature | 5°C~+50°C |
| Operating Humidity | 0~95%RH, no condensation |
| Battery | 2*AAA alkaline battery |
| Battery Capacity | 1300 mAh |
| Battery Lifetime | 5 years (Default configuration and general trigger frequency) |
| Alarm Type | Low battery alarm / Buzzer beeps / Light flash |
| Button | yes |
| LED | 1 red light, 1 blue light |
| Buzzer | yes |
| OTA | yes |
| APP | BeaconSET Plus ^[1] |

^[1] Bluetooth-related SDK is available, please contact our sales team for details.

TECHNICAL SPECIFICATIONS

| | |
|-----------------------------|---|
| Chip | nRF52 series |
| Broadcast Frames | Leakage frame+INFO frame |
| Bluetooth Version | Bluetooth® LE 5.0 |
| Default Broadcast Parameter | INFO frame (0dBm, 4000ms) Leakage frame (0dBm, 1000ms) |
| Broadcast Distance | Up to 150 meters (open environment) |
| Security | Support password connection, prevent malicious connection and modification. |

SUPPORT SYSTEMS

SUPPORTED MODELS

| | |
|-----------------------|--|
| iOS 10.0 and above | iPhone6 /6 Plus /6S/ 6S Plus /7 /7 Plus /8 /8 Plus /x /xr /xs /xs max /SE /SE2 /11 /11 pro /11 pro max, etc. |
| Android 4.3 and above | Samsung, Xiaomi, Huawei, Honor, OnePlus, Google pixel, etc. |

DEVICE OPERATIONS

- **Power on**

The product is turned off by default and shipped. Hold the button for 3.6 seconds, once the blue light stays on and the buzzer sounds once, that means the device has been successfully booted up.

- **Power off**

When the device is on, hold the button for 3.6 seconds or turn it off on BeaconSET Plus App, once the blue light flashes five times, that means the shutdown is successful.

- **Press the button**

Press to enter the configurable mode for one minute.

- **Low battery**

When the power is less than 20%, the red light flashes once every 8 seconds.

- **Water leakage alarm**

The red light remains on for 5 seconds and the buzzer sounds for 5 seconds, cycling every 5 seconds for three times.

- **APP connection and disconnection**

When the product is successfully connected with the App, the blue light flashes 2 times.

When the product is disconnected from the App, the blue light flashes 3 times.

- **Connection mode**

After connecting with the APP, you can set the unconnected mode, and you can temporarily enter the connection mode by clicking the button.

- **OTA upgrade**

The blue light stays on during the OTA upgrade and goes off after the upgrade.

INSTALLATIONS

Double-sided tapes

* **Surfaces:** Ceramic, glass/epoxy, acrylic, PBT, ABS, PC, rigid PVC, and others. It is not recommended to use the default double-sided tape on walls (such as cement, gypsum board, etc.) with gray texture, incomplete drying, aging, moisture, etc., or there is a risk of peeling off. You can choose 3M double-sided foam tape or nail free glue as alternatives.

* **Requirements:** No dust on the material surface and clean it before installation.

Note: After pasting, press the device for one or two seconds by hand, and repeat several times to make the double-sided tape and the pasting surface better bond. If you need to use it in a low-temperature environment, please use a hot air blower or a hairdryer to slightly heat the sticking surface before sticking to increase the stickiness, or stick it at a suitable temperature for more than half an hour, and then move it to the working environment.

* **Probe installation:** It can be affixed (or fixed by screws) to a solid, clean, vertical material surface by double-sided adhesive. The installation position of the metal probe should be based on the water energy over the two metal parts when flooding occurs.

Please contact our sales team if you have any questions about the installation environment.

CAUTIONS

- * When turning off the connectable function through the app, you need to click the device button to temporarily enter the connectable state.
- * When using the product, it is recommended to use low-end broadcast power and longer broadcast cycles to extend the product's service life while meeting the usage need.
- * Please use the device on the suggested working temperature for safety.
- * Please do not disassemble the main shell without permission, our company will not be responsible for any damage caused.
- * If you have any other questions, please contact our sales team or technical support team in time.

CERTIFICATION INFORMATION



* Note: CE, FCC, RoHS numbers are available , if you need other certifications, please contact our business team.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC warning:

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

IC warning

- English:

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s).

Operation is subject to the following two conditions:

- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

- French:

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- 1) L'appareil ne doit pas produire de brouillage;
- 2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This equipment complies with IC RSS-102 radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Cet équipement est conforme aux limites d'exposition aux rayonnements IC établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé avec un minimum de 20cm de distance entre la source de rayonnement et votre corps.

PACKAGING

| Details | Inner Box(Battery excluded) | Outer Box(Battery excluded) |
|--------------|-----------------------------|-----------------------------|
| Quantity | 8 pcs/box | 80 pcs/box |
| Net Weight | 530.4 g | 5.304 kg |
| Gross Weight | 607 g | 6.49 kg |
| Size | 30.5 x 11 x 7.2 cm | 32 x 23.5 x 40 cm |

QUALITY ASSURANCE

The factory has already obtained the certification of ISO9001 Quality System. Each product has been strictly tested (tests include transmission power, sensitivity, power consumption, stability, aging, etc.).

Warranty Period: 12 months from the date of shipping (battery and other accessories excluded).

DECLARATION

Statement of Rights:

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Disclaimer:

Minew team reserves the right to the final explanation of the document and product differences. And it is not responsible for liability of property or personal injury with the wrong operation if users develop related products without checking the technical specifications of this manual.



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