

Monnit

Wireless Water Detect Plus

Technical Overview



General Description

The Wireless Water Detect Plus Sensor alerts you of potential property damage that results from flooding or leaks. Place this sensor anywhere flooding or faulty plumbing could cause a problem. This sensor can also be used to detect a lack of water.

Features

- 3 ft. lead wire / water detection probe.
- Mounting tabs for positioning at set level above floor to prevent false positives.
- Immediately detects presence or non-presence of water.
- Free iMonnit basic online wireless sensor monitoring and notification system to configure sensors, view data and set alerts via SMS text and email.

Principle of Operation

The Monnit Wireless Water Detection Plus Sensor detects when water is present by completing the circuit between the two prongs at the end of the water probe. When water is present the sensor will immediately turn on the RF radio and transmit the data to the wireless gateway and iMonnit Online Sensor Monitoring and Notification System, allowing the user to immediately receive an SMS text or email alert. The sensor can be configured to detect both the presence and non-presence of water.

Power Options

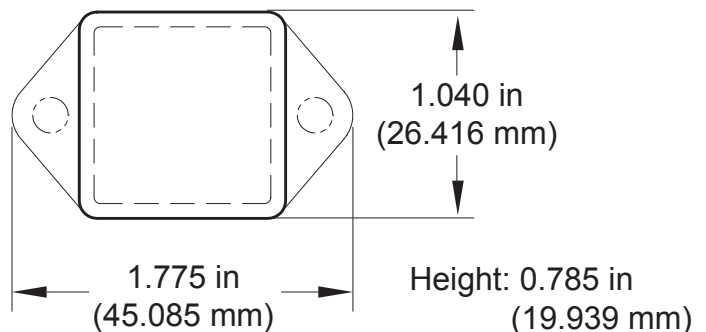
Sensors are powered by a replaceable 3.0 V coin cell battery. Optional AA battery powered sensors are available. The AA version of these sensors are larger in size (3" [L] x 2.1" [W] x 1.2" [H]) and include two long-life AA batteries.

It is recommended that unless you are using the AA battery solution, you set heartbeat to no faster than one hour to preserve battery life.

Monnit Sensor Core Specifications

- Power: Replaceable 3.0 V coin cell battery
- Communication: RF 900, 920, 868 and 433 MHz
- Dimensions: 1.775" x 1.040" x 0.785"
- Antenna: 4" wire antenna
- Operating Temperature: -7° to 60°C (20° to 140°F)
- Device Range: 250 - 300 ft. non-line-of-sight*
- Battery Life: At 1 hour heartbeat setting, coin cell battery will last ~ 1-2 years.**


- * Actual range may vary depending on environment.
** Battery life is determined by sensor reporting frequency and other variables.



Example Applications

- Water heater monitoring.
- Plumbing leak detection.
- Sump monitoring.
- Boat bilge monitoring.
- Basement / crawl space monitoring.

The Leader in Low Cost Wireless Sensors

| Technical Specifications | |
|---|--|
| Supply Voltage | 2.0 - 3.6 VDC * |
| Current Consumption | 0.7 μ A (sleep mode) 2 mA (radio idle/off mode) 2 mA (measurement mode) 25 mA (radio RX mode) 35 mA (radio TX mode) |
| Operating Temperature Range (Board Circuitry and Coin Cell) | -7°C to +60°C (20°F to +140°F)** |
| Optimal Battery Temperature Range (Coin Cell) | +10°C to +50°C (+50°F to +122°F) |
| Probe Wire Length | 3 ft. (36 in.) |
| Probe End | 2 prong conductive detector |
| Detection Wires | High Impedance |
| Certifications |  900 MHz product; FCC ID: ZTL- RFSC1 and IC: 9794A-RFSC1. 920 MHz product; ARIB STD-T108 R210-103733. 868 and 433 MHz product tested and found to comply with: CISPR 22:2008-09 / EN 55022:2010 - Class B and ETSI EN 300 220-2 V2.4.1 (2012-05). |

* Hardware can not withstand negative voltage. Please take care when connecting a power device.

** At temperatures above 100°C, it is possible for the board circuitry to lose programmed memory.

Caution/Notice:

This product is designed for application in an ordinary environment (normal room temperature, humidity and atmospheric pressure). Do not use this sensor under the following conditions as these factors can deteriorate the product characteristics and cause failures and burn-out.

- Corrosive gas or deoxidizing gas - chlorine gas, hydrogen sulfide gas, ammonia gas, sulfuric acid gas, nitric oxides gas, etc.).
- Volatile or flammable gas.
- Dusty conditions.
- Under low or high pressure.
- Wet or excessively humid locations.
- Places with salt water, oils chemical liquids or organic solvents.
- Where there are excessively strong vibrations.
- Other places where similar hazardous conditions exist.

Use this product within the specified temperature range. Higher temperature may cause deterioration of the characteristics or the material quality of this product.



For more information about our products or to place an order, please contact our sales department at 801-561-5555.

Visit us on the web at www.monnit.com.

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