Monnit WIT[™] Wireless Water Sensor

Technical Overview



General Description

The Wireless Water Sensor detects the presence or nonpresence of water.

Features

- 3 ft. leaded wires.
- · Immediately detects water.
- Free iMonnit online wireless sensor monitoring and notification system to configure sensors, view data and set alerts via SMS text and email.

Principle of Operation

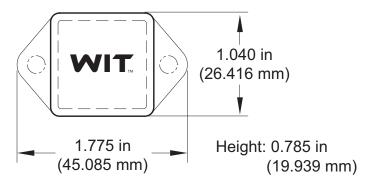
The Monnit Wireless Water Sensor detects when water is present by completing the circuit between the two leaded wires. When water is present the sensor will immediately turn on the RF radio and transmit the data to the wireless gateway and iMonnit Online Sensor Monitoring and Notification System, allowing 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 lithium 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 AA long-life lithium ion 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.

- · Power: Replaceable 3.0 V lithium coin cell battery
- Communication: RF 900 MHz
- Dimensions: 1.775" x 1.040" x 0.785"
- · Antenna: 4" wire antenna
- Operating Temperature: -40° to 85°C (-40° to 185°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.



Maximum Ratings	
Temperature Range	- 40°C to +85°C (-40°F to +185°F)
Storage Humidity Range	<75% RH

Example Applications

- · Water heater monitoring.
- Plumbing leak detection.
- · Sump monitoring.
- · Boat bilge monnitoring.
- Reservoir level monitoring.

The Leader in Low Cost Wireless Sensors

Technical Specifications	
Supply Voltage	2.0 - 3.6 VDC *
Current Consumption	 0.7 μA (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	-40°C to +85°C (-40°F to +185°F) **
Optimal Battery Temperature Range (Coin Cell)	+10°C to +60°C (+50°F to +140°F)
Lead Wire Length	3 ft. (36 in.)
Detection Wires	High Impedance

- * Hardware can not withstand negative voltage. Please take care when connecting a power device.
- ** At temperatures above 100°C, it is possible 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 their 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.



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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.