



SpotProtect FloodSpot Wi-Fi Water Sensor



Technical Overview

General Description

The FloodSpot Wi-Fi Water 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, allowing you to know when a container is nearing empty. An integrated 802.11 b/g radio allows the sensor to work with any existing Wi-Fi network. SpotProtect Wi-Fi sensors can be programmed with your Wi-Fi network's WEP or WPA(2) security via the SpotProtect Setup Utility (PC application) and a SpotProtect USB programming cable. User defined transmission intervals (heartbeats) and sensor threshold settings ensure that sensor data is received when needed, based on the application. All sensor data is stored securely in the SpotProtect Online Sensor Monitoring software and is viewable from any web enabled device (annual subscription plan required). Email and SMS text messages can be configured through the online system to alert personnel immediately when a defined parameter has been met or exceeded.

Features

- Senses immediate presence or absence of water.
- Use for detection of any non-combustible liquid.
- Logs data if Wi-Fi network is disrupted.
- All sensors battery levels and status (alarm or no-alarm conditions) viewable online.

Principle of Operation

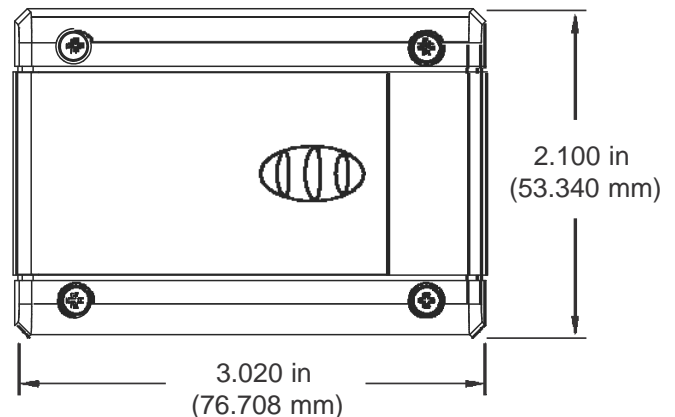
The FloodSpot Wi-Fi Water Sensor detects when water is present by completing the circuit between the two leaded wires. When water is present the sensor will immediately turn sent an alarm signal via the Wi-Fi network back to the SpotProtect servers, allowing the user to receive an SMS text or email alert instantly. The sensor can be configured to detect both the presence and non-presence of water.

FloodSpot Wi-Fi Sensor Electronics Specifications

- Power: 2 replaceable 1.5V "AA" batteries (included)
- Communication: 802.11 b/g
(2.412 - 2.484 GHz)
- Wi-Fi Security: Open, WEP, WPA, WPA2
- Dimensions: 3.02" x 2.1" x 1.27"
- Transmission Range: Up to 250 ft. *
- Battery Life: Up to 5 years.**

* Actual range may vary depending on environment.
** Battery life is affected by sensor type, Wi-Fi security type, distance from Wi-Fi router, reporting frequency and other variables.

Height: 1.270 in (32.258 mm)



Applications

- Water heater monitoring.
- Boiler leak monitoring.
- Plumbing leak detection.
- Sump monitoring.
- Reservoir level monitoring.



Technical Specifications	
Networking Standards	IEEE 802.11 b/g
Frequency Band	2.412 - 2.484 GHz
Wi-Fi Security Standards	Open, WEP, WPA, WPA2
Wi-Fi Security Programming	Via PC software using USB cable. (Can be changed through SpotProtect software.)
Network Settings	Auto DHCP/DNS or Static
Data Logging	Unit can record up to 50,000 readings and transmit when Wi-Fi is available.
Power consumption	4uA sleep, 35mA active RX, 180mA TX (at +12dBm)
Battery Life	Up to 5 years depending on sensor type, Wi-Fi security, distance from Wi-Fi router, reporting frequency and other variables. (Testing surpassed 90,000 transmissions until battery depletion.)
Wi-Fi Data Rate	Auto configures to best rate for maximum range.
Wireless Range	Up to 250 ft. device range (typical to standard Wi-Fi devices).
Electronics Operating Temperature	Using Alkaline Batteries: -18°C to +55°C (0°F to +130°F) Using Lithium Batteries: -40°C to +85°C (-40°F to +185°F)
LED Light	Status I activity
Lead Wire Length	3 ft. (36 in.)

* Hardware cannot 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 they 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.