

Wireless Water Detection Puck Sensors

General Description

The Wireless Water Detection Puck Sensor detects the presence or non-presence of water. Convenient water tight puck design allows the sensor to be placed anywhere needed whether dry or wet.

Water Detection

- Water proof/fully submersible.
- Immediately detects water presence.

Principle of Operation

The Wireless Water Detection Puck Sensor detects when water is present by completing the circuit between the two probe points on the bottom of the puck sensor. When water is present the sensor will immediately turn on the RF radio and transmit the data to the wireless gateway and AlwaysON™ Premises Management Platform, 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.

Applications

- Water heater tank leak monitoring
- Plumbing leak detection.
- Data center subfloor water detection.
- Water intrusion/flood detection.
- Crawl space water intrusion monitoring
- Reservoir/tank level monitoring

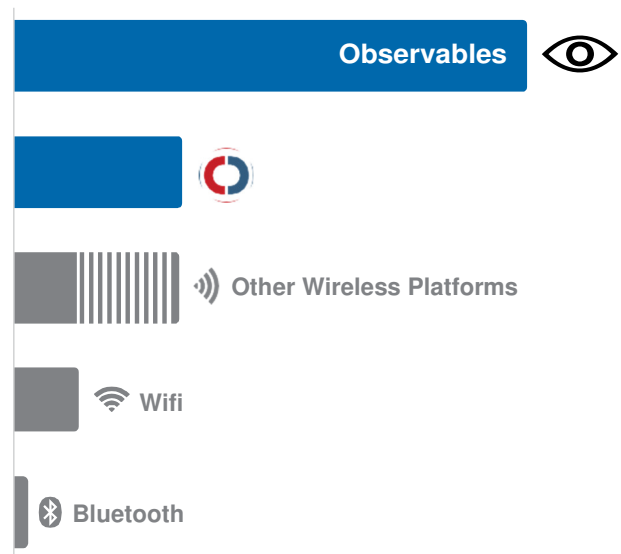
Features of Observables Sensors

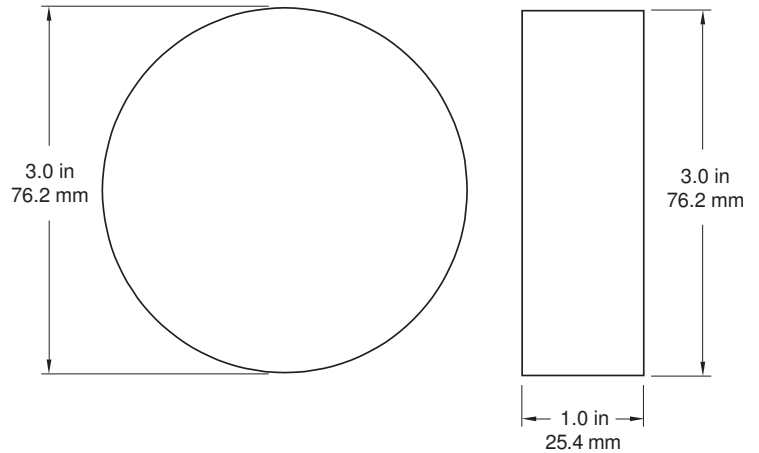
- Wireless range of 1,200+ feet through 12+ walls *
- Frequency-Hopping Spread Spectrum (FHSS)
- Improved interference immunity
- Improved power management for longer battery life ** (12+ years on AA batteries)
- Encrypt-RF® Security (Diffie-Hellman Key Exchange + AES-128 CBC for sensor data messages)
- Onboard data memory stores up to 512 readings per sensor:
 - 10-minute heartbeats = 3.5 days
 - 2-hour heartbeats = 42 days
- Over-the-air updates (future proof)
- Use the AlwaysON™ portal monitoring and notification system to configure sensors, view data and set alerts via SMS text and email

* Actual range may vary depending on environment.




** Battery life is determined by sensor reporting frequency and other variables. Other power options are also available.

Wireless Range Comparison





SWA-PK-WS-WD Wireless Water Detection Puck Sensor | Technical Specifications

Electronics supply voltage	2.0–3.8 VDC
Current consumption	0.2 μ A (sleep mode), 0.7 μ A (RTC sleep), 570 μ A (MCU idle), 2.5 mA (MCU active), 5.5 mA (radio RX mode), 22.6 mA (radio TX mode)
Max operating temperature range	-18°C to 55°C (0°F to 130°F) *
Optimal temperature range	+10°C to +50°C (+50°F to +122°F)
Dimensions	3.0 inch x 1.0 inch
Water Protection	Completely sealed, water proof, fully submersible
Battery	3.6V 1200 mAh Lithium (non-replaceable)
Typical battery life	12+ years **
Integrated memory	Up to 512 sensor messages
Wireless range	1,200+ ft non-line-of-sight
Security	Encrypt-RF® (256-bit key exchange and AES-128 CTR)
Weight	7.6 ounces
Certifications	<div style="display: flex; align-items: center; gap: 10px;">    Industry Canada </div> 900 MHz product; FCC ID: ZTL-G2SC1 and IC: 9794A-G2SC1. 868 and 433 MHz product tested and found to comply with: EN 300 220-2 V3.1.1 (2017-02), EN 300 220-2 V3.1.1 (2017-02) and EN 60950

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

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For more information about our products or to place an order, please contact our sales department at 805-272-9255.

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



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