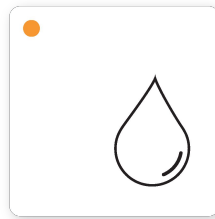


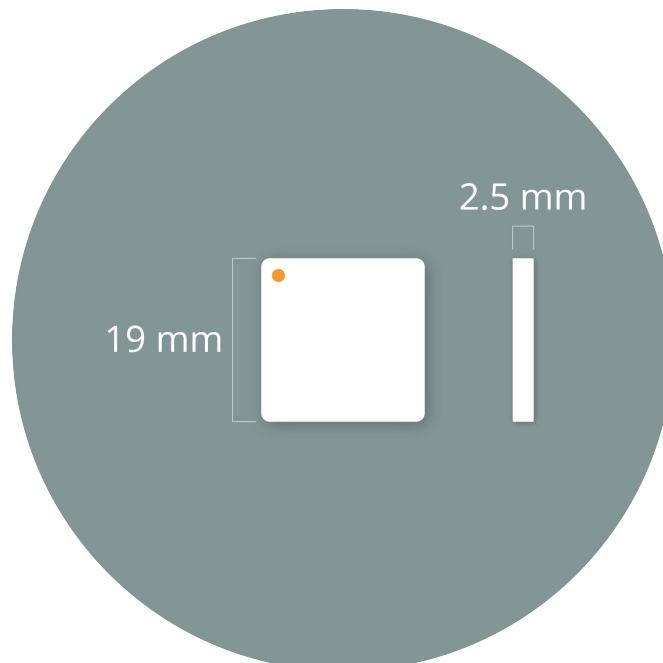
# Wireless Water Detector US



The Wireless Water Detector detects water coming in contact with the front of the sensor. Not for use in applications where the sensor is continuously in contact with water. When status is changed, the sensor transmits a signal wirelessly with SecureDataShot™ to a Cloud Connector (Gateway) that again relays a message to a cloud service. At 15 minute intervals, the Wireless Water Detector transmits a message notifying the system that it is present and operational. The Water Detector has touch functionality for simple installation and use.

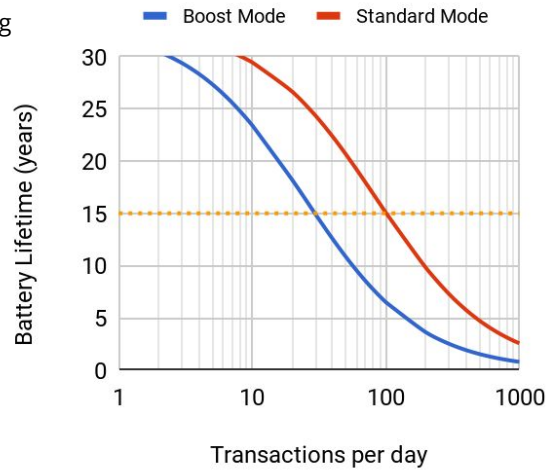
## Features

- Detects if water is present or not
- Touch functionality
- Long lifetime, up to 15 years in default configuration and standard environment
- Robust design, IP68 and UL 50E Type 4X
- Wireless range 25 m typical indoor, similar to a WiFi network with an advanced WiFi router
- Wireless range line of sight up to 300 m in standard mode and up to 1000 m in high power Boost Mode



## Specifications

Operating Conditions		
Temperature range		-40 to 85 °C / -40 to 185 °F
Recommended temp. range <sup>(1)</sup>		0 to 50 °C / 32 to 122 °F non condensing
Humidity at 25 °C / 77 °F		0 to 100% relative humidity
Recommended Storage Conditions		Cool and dry, near normal room temperature
Construction Material		Sealed, IP68 and UL 50E Type 4X Impact modified acrylic film
Typical Dimensions <sup>(2)</sup>		19 x 19 x 2.5 mm (±0.2 mm)
Typical Weight <sup>(2)</sup>		2.0 g (±0.3 g)
Lifetime		Up to 15 years <sup>(3)</sup> , see graph
Certifications and Compliance		Certified to FCC and ISED regulations FCC ID: 2ATFX-100541 IC: 25087-100541
Radio range		
Standard Mode		25 m indoor <sup>(4)</sup> , up to 300 m free-space <sup>(4)</sup>
High Power Boost Mode		Up to 1000 m free-space <sup>(4)</sup>
Wireless Communication		915 MHz ISM band, SecureDataShot™
Detection response/recovery time		750 ms / 1500 ms



## Sensor performance parameters

The Wireless Water Detector performance is temperature dependent. The sensor battery will have reduced current drive capabilities at low temperatures resulting in increased recovery time and reduced range in Boost Mode. Self discharge of the battery will reduce the lifetime significantly at high temperatures.

Temperature dependency	-40 °F	-13 °F	77 °F	122 °F	185 °F
Sensor lifetime recommended temperature range <sup>(1)</sup>		5 y	15 y	7 y	
Sensor lifetime full temperature range <sup>(3)</sup>	1 w <sup>(3)</sup> / 3 y				4 mo
Typical communication recovery time (fresh battery)	1 min		0.5 s		
Typical communication recovery time (close to depleted battery)	10 min				

**Water:** The Sensor is waterproof, but should not be used in applications where the sensor is submerged. Long time exposure to water will result in water penetration and reduced sensor lifetime. High temperatures will accelerate penetration.

**Magnetism, electric fields:** The sensor shall not be exposed to strong magnetic fields. Magnets should not be used for mounting the sensor, as this will make the sensor unresponsive. Strong electric field fluctuations (e.g. fluorescent lamps and switching transformers) may trigger false events.

**Environmental factors:** The sensor is designed to handle heavy stress, but exposure to environmental factors such as strong sunlight, mechanical stress, solvents and extensive temperature variations will impact lifetime.

### Footnotes

(1): For robust operation. Operation outside range can cause false detects, due to e.g. icing and condensation

(2): The backside tape is excluded

(3): Assuming a radio transaction every 15 minutes, operating at room temperature in default configuration. Lifetime will vary based on operating environment and rate of transmissions.

(4): Based on standard ITU-R P.1238 (indoor) and ITU-R P.525 (free-space). Lifetime in Boost Mode is shorter than in Standard Mode.

(5): For conductive and semi-conductive materials. False detects are likely to occur outside the detection distance.

(6): The sensor will become unresponsive if placed at very low temperatures for extended periods of time. The sensor will resume operation when temperature is increased

**Disclaimer:** The right is reserved to make changes at any time. Disruptive Technologies Research AS, including its affiliates, agents, employees, and all persons acting on its or their behalf, disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product. All parameters in datasheet are expected performance and not guaranteed min or max performance.

