Eagle Eye Wireless Water Presence Area (Rope) Sensor Data Sheet

Detect flooding and leaks by tracking the presence or absence of water anywhere.

The Wireless Water Presence Area (Rope) Sensor comes with a 3-meter (~10') lead attached to the sensor enclosure, with a 3-meter orange water detection rope that connects to the 3-meter lead with a waterproof connector. When a detection event occurs, notifications can be sent via the Eagle Eye Cloud VMS. The sensor enclosure is water-resistant and dustproof with a rating of IP66.

Simple plug-and-play deployment

Place the small battery-powered sensor in the location or on the equipment you need to monitor. The gateway instantly identifies the sensor and establishes secure communication. No wires to connect. No software to install.

Secure, scalable, cloud architecture

The system is 100% cloud-managed. The gateway securely transmits sensor data to the cloud using 256-bit AES encryption. The system is scalable from a single sensor, one-site application to multi-site enterprises with thousands of sensors.

Real-time monitoring and analytics with actionable data

Eagle Eye Cloud VMS allows real-time asset monitoring and sophisticated analysis from anywhere via computer, tablet, or smartphone. Data analytics provide operational insights and deep visibility. Eagle Eye Cloud VMS notifications can be set based on customizable thresholds and complex rules based on individual sensors or sensor groups.
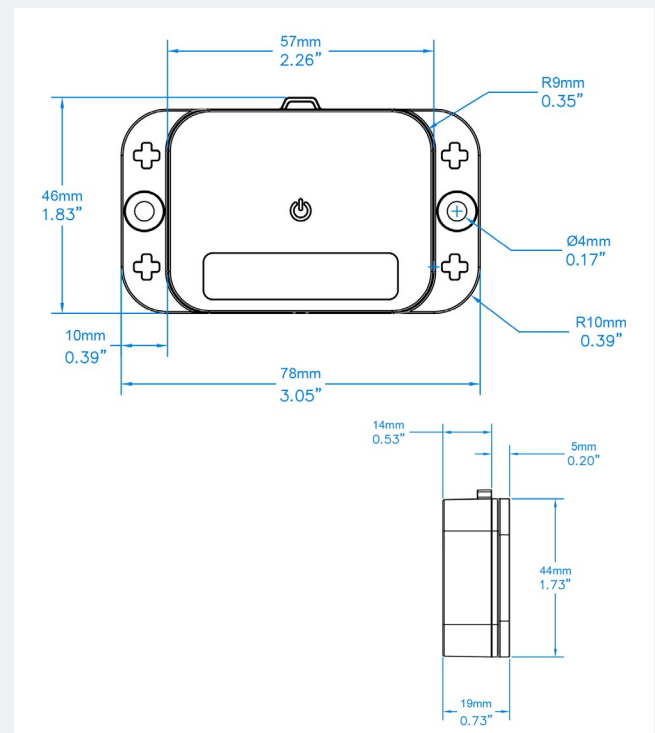
How to use the Rope sensor

For water presence to be detected, the water detection rope must sense at least 10% or 0.3+ meters (1'+) of saturation. The rope may be coiled or extended at the discretion of each application to optimize performance. For example, water leaking from above would benefit most from a coiled rope placed on the ground. This gives a smaller point of water detection. However, if water is leaking up through the ground, an extended rope may perform better, as a coiled rope would require a higher water-level threshold to trigger detection (or will detect water falling onto it).

Applications

- Building management
- Manufacturing and production
- Restaurants and food service
- Facility monitoring
- Data centers
- Warehouses
- Greenhouses
- Cold Chain monitoring
- Transportation
- Museums

Part Number	EN-SS3-109

Operational Specifications

Power	1.8 - 3.6VDC, 0.085mW Average
Battery Type	AAA x2 Replaceable "L92" Lithium Polymer
Operating Voltage	1.8VDC - 3.6VDC
Avg. Current Consumption	18uA (Active, Open), 500uA (Command ACK), <5uA(Sleep)
Operating Temperature	-40°C to +60°C (-40°F to +140°F) defined by batteries
Operating Environment	Indoor/Outdoor, 0-95%+ RH
Avg. Battery Life	3 – 6 Years
Communication Protocol	BLE/BT5 2.4Ghz
BLE Chipset	nRF52840
TX Strength	Default +8dBm
Range	30m (100ft)
Encryption	128-Bit AES Encryption
Button Press	Click to turn on. Press and hold 2 sec to put in sleep mode.
LED	Green LED: 2 sec. blinking when turning on Green LED: 2 sec. solid when entering sleep mode
Find My Sensor	Command from Console to blink sensor LED
Weight	56g (2 oz)
Dimensions	77.5mm x 57.5mm x 44mm (2.26in. x 1.73in. x 0.73in.)
Enclosure Material	ABS PA-765+
IP Rating Sensor	IP66, Cable/Probe Junction: IP68
Cable Specifications	3-Meter Lead Cable 3-Meter Liquid Detection Rope ASC2100 Water-Sensitivity Standard
Certifications	FCC ID: X8WBT840F IC ID: 4100A-BT840F CE Compliance: 2014/35/EU, 2014/53/EU, 2014/30/EU
EMC Compliance	FCC Part 15 Class B
Flammability Rating	UL94-0V
Warranty	2-years

Measurement Specifications

General Use Indications	Monitoring the active presence of water
Output	Binary, Water present "Yes" or "No"
Inspection Rate	Continuous

Only available in the United States and Canada.

Eagle Eye Sensors Gateway

The Eagle Eye Sensors Gateway collects encrypted data from sensors located within the specified communication range (30-60m/100-200ft) and then transmits the data to the cloud through either Ethernet or Wi-Fi. The gateway auto-detects all sensors within range and will immediately establish secure communication without any user configuration or setup. Each gateway can support up to 150 sensors.

Eagle Eye Sensors Console

All sensor data is automatically logged and stored in the cloud. The Eagle Eye Sensors Console in the VMS is configured to monitor and track all sensor data in the cloud. Multiple thresholds and alerts can be set separately for each sensor. An API allows integration with other data sources and third-party data analytics tools.