

Smart detection system for controlling and preventing water leaks

The system identifies irregular water consumption anomalies that may result from small and or large leaks in the water supply system.

The system is cloud-based and is controlled remotely by our application or management software

Real-time notifications will be sent to your smartphone through our application about irregular water consumption that results from a leak, burst in the water lines, temperature changes and low battery percentage.

According to the user's settings the water can be shut off manually or automatically. Also, there is an option to set a schedule for opening and closing the water according to the user's needs.

The flood sensors detect flooding as soon as water hits the sensors and immediately sends the alert.

The system connects to the internet via wired, wireless or cellular communication.

The communication between the components is RF-based.

The system includes a 1" ball valve, a 1" flow sensor, a battery-controlled actuator, and a HUB.

The system can be integrated to a building management systems via API.

The system complies with NSF/ANSI 61: "Drinking Water System Components".

Required preparation

Prepare 2 electricity points for the Hub, at a maximum distance of 35 Feet.

Prepare a network connection point(Ethernet), WIFI or cellular communication.

The advanced solution for preventing leaks and flooding in all kind of properties



Private Homes



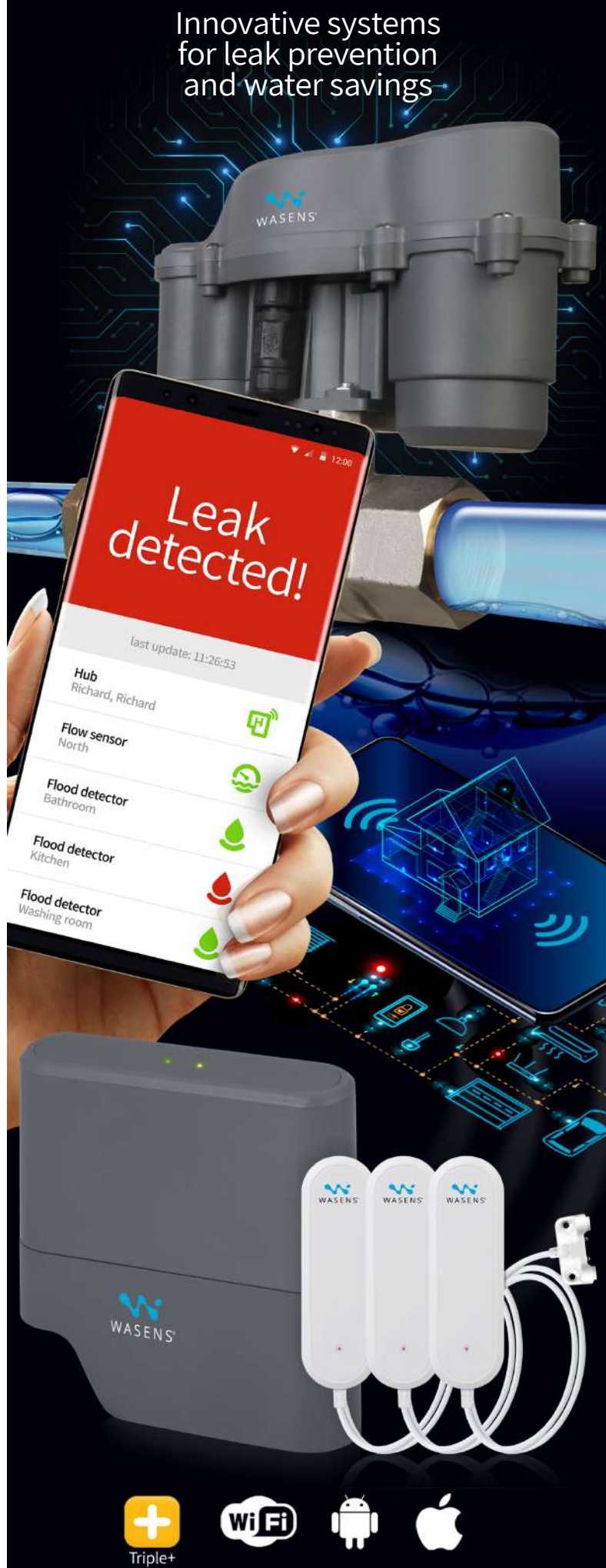
Apartment Buildings



Office Buildings



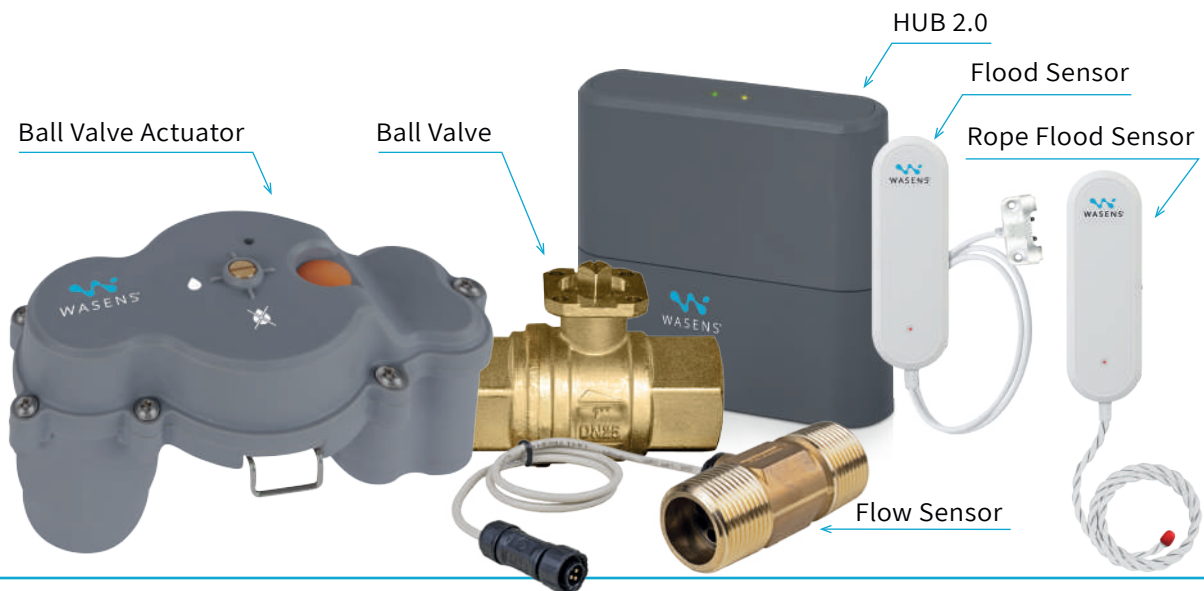
Commercial Buildings



Innovative systems for leak prevention and water savings



System Devices

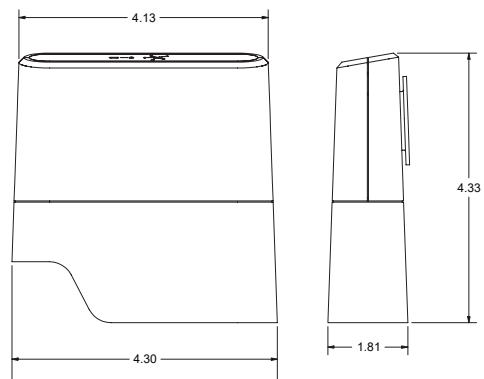


HUB 2.0

The HUB is the core of the system and connects the wireless system components to the cloud.

The HUB communicates wirelessly with the system components, receives alerts and sends commands to the appointed people. The HUB is connected reliably and securely with the WASENS cloud.

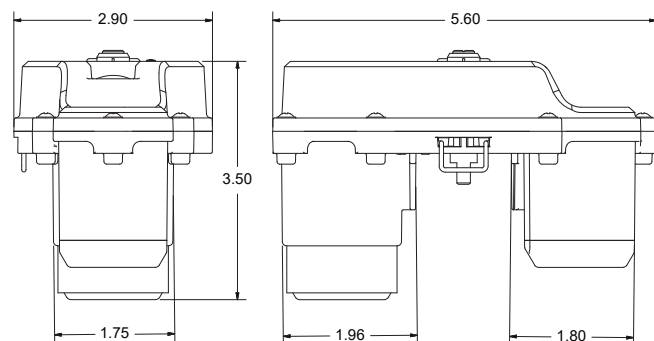
The WASENS HUB connects to AC and is backed up by batteries in case of power outages.



Dimensions	Weight	Voltage	Radio frequency	Temperature range	Backup Batteries	Communication
4.33"/4.13"/1.81"	5.63OZ	110V-240V	915MHz	-4° to 122° F	CR1234A V3 X4	WIFI/SIM/ETHERNET

Ball Valve Actuator

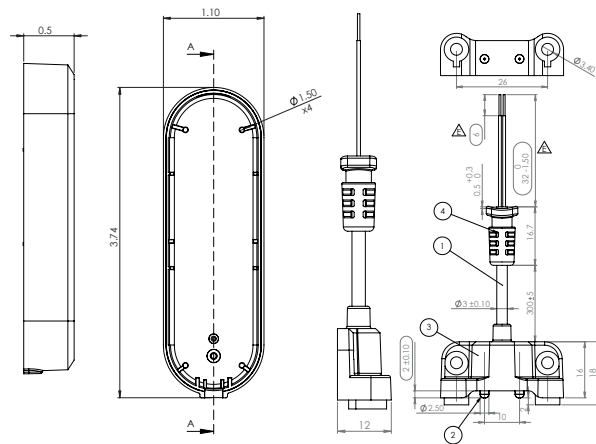
An actuator for the main valve that is controlled and operated wirelessly using batteries. The valve actuator automatically closes the water line on which it is installed when a leak or irregular flow is identified or according to the user's needs and schedule.



Dimensions	Weight	Battery life	Radio frequency	Temperature range	Batteries	Standard
5.51"/3.54"/2.75"	14.63OZ	2-4 years	915MHz	-4° to 122° F	CR1234A V3 X4	IP68 water resistant

Wireless Flood Sensor

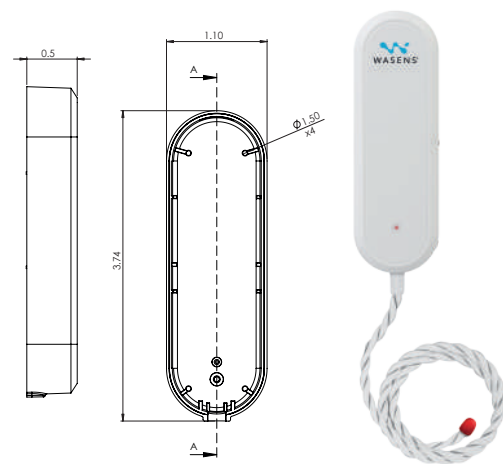
Each flood sensor detects temperature and alerts in case of a change.



Dimensions	Weight	Batteries	Voltage	Radio frequency	Temperature range	Battery life
3.74"/1.10"/1.10"	1.94OZ	2 x AAA	V3	915MHz	-4° to 122° F	2 years

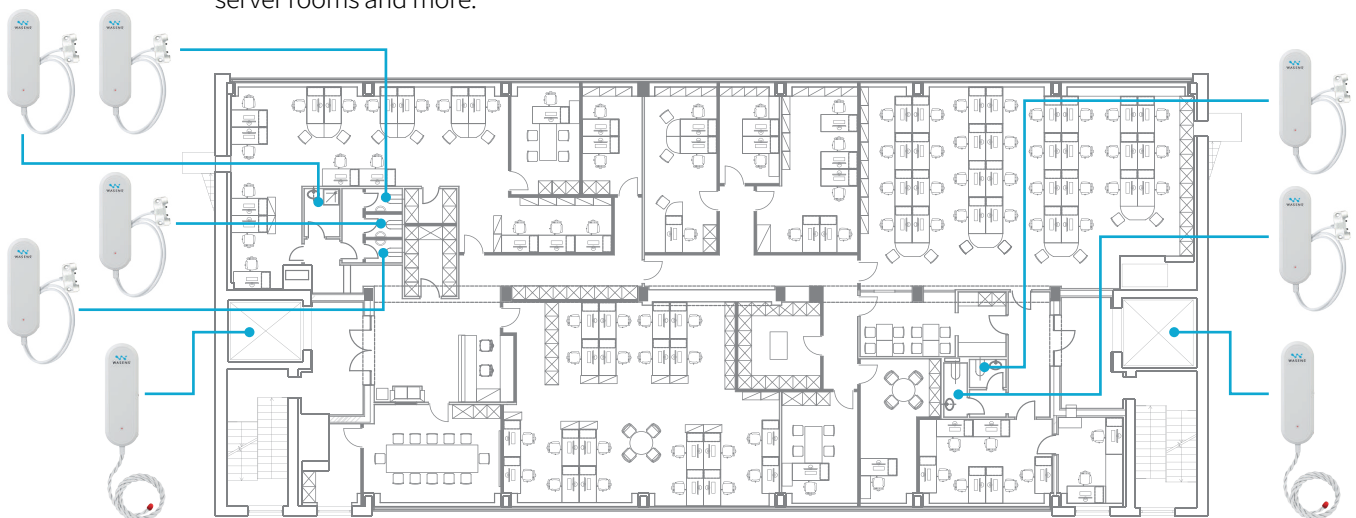
Wireless Rope Flood Sensor

Wireless ropes sensors are designed to detect water from the beginning to its end, which allows you to cover and monitor a larger area. It can be wrapped around pipes and fittings. Ropes are installed in sensitive areas within your property (in server rooms, pump rooms, boiler rooms and machinery rooms, etc.), the sensors are designed to detect water at an early stage. When water is detected, the sensor sends an alert to the HUB and from there it is immediately forwarded to the mobile phone via text, voice and email to the registered users. Each flood sensor detects temperature and alerts in case of a change.



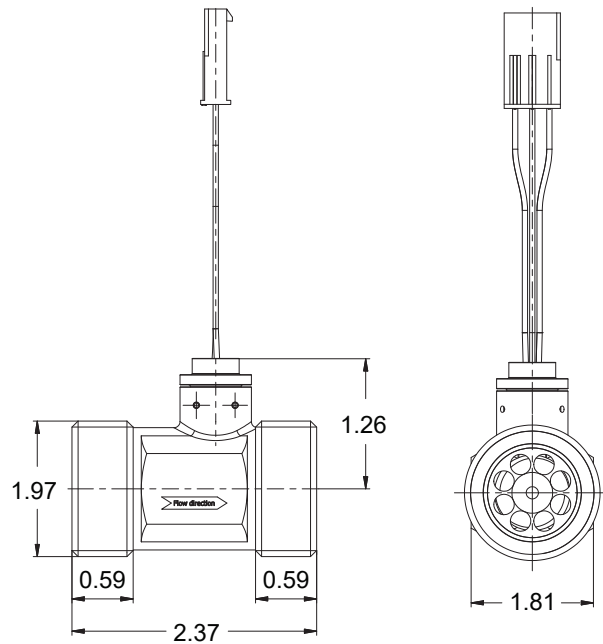
Dimensions	Weight	Batteries	Voltage	Radio frequency	Temperature range	Battery life
3.74"/1.10"/1.10"	1.94OZ	2 x AAA	V3	915MHz	-4° to 122° F	2 years

Flood detectors are located at the sensitive points in the property:
Sinks, bathroom, water bar, coffee machine, laundry room, elevators, electrical cabinets, server rooms and more.



Flow Sensor

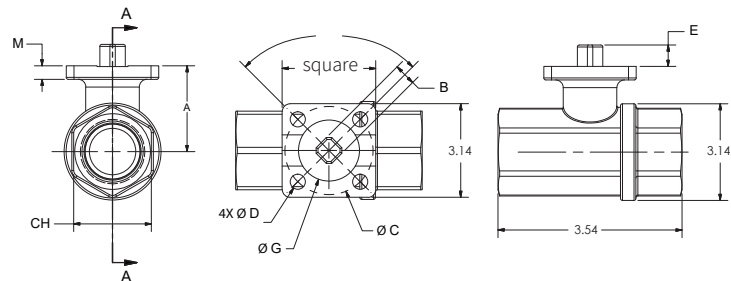
A flow Sensor is installed and connected to the ball valve actuator. this will detect irregular water consumption. The flow sensor measures continuously water usage. Abnormal water usage is typical when there is a leak, burst pipe, open faucets or leaking toilets.



Dimensions	Weight	Material	Pressure rating	Nominal diameter	Pressure drops	Standards
2.37"/1.97"/1.81"	7.05OZ	Brass	PN16	DN20	0.33 bar	5452, WRAS, NSF/ANSI61
Accuracy		Flow range		Medium temperature		Ambient temperature
±1% of range	±1% of reading	16.9oz ...15.85Gal per minute		32° to 194° F		32° to 158° F

Ball Valve

We use an ISO-5211 brass ball valve that is NSF/ANSI 61 to avoid the hammer effect that can occur with other types of valves.



Dimensions	Weight	Operating temperature	Operating pressure	Standards
3.54"/3.14"/2.16"	28.32OZ	-4° to 338° F	40 bar	5452, WRAS, NSF/ANSI61

