



WiFi Water Pressure Sensor

SKU: PREWIE02

Version: 1.1.0



Product Description

The Aqua-Scope pressure sensor detects water consumption, and leaks by analyzing pressure waves in the water supply. It continuously records the temperature, the water consumption, and water pressure. When leaks are detected or when pressure or temperature thresholds are exceeded or not reached, the user is alerted wirelessly. The device consists of two parts:

- The main housing for signal processing and wireless communication with a battery compartment.
- The external sensor head is connected to the water pipe. The stainless steel sensor head features a silicon sensor suspended in silicone oil for highly accurate and low-noise pressure measurements. The pressure measurement range is between 1 to 10 bar. The sensor head is installed somewhere in the building at a standardized 1/4-inch inspection opening or with a provided T-piece under any sink at the edge or corner valve.

The sensor can send an alarm message when predefined threshold values are



exceeded or not reached. The polling frequency of the sensor is adjustable between 0.1 seconds and several minutes, defining the battery life. For a measurement interval of 1 second, a battery life of approximately 10 years is calculated.

Control of the system is centralized through a mobile phone app using WiFi communication. Furthermore, data can be transmitted to an MQTT server or an HTTP 'webhook,' facilitating integration with modern Smart Home systems.

The sensor is powered either by an external power supply with a USB-C power supply or by an optional internal ER26500 battery (Bobbin Cell C). Both the sensor head (IP67) and the main housing (IP65) are waterproof and can be used outdoors or in particularly humid and/or dirty environments.