# FlowCheck

## Wireless Water Leak detector.



**Battery operated wireless sensor to detect water leaks.**

# Product Overview

**FlowCheck** is a wireless battery-operated water leak detector designed to detect water leakages and prevent potential damage to properties and assets.

This intelligent device uses a probe and rope sensor design for detecting water leaks. Upon detecting water immersion, the sensor promptly transmits alarm notifications to the designated application via wireless communication protocols such as LoRaWAN®, NRF and Wi-Fi. This enables users to remotely monitor status information and send instant notifications as alarms to remote control and monitoring systems.

**FlowCheck** water leak detector consumes low power, ensuring long lasting and cost effectiveness on battery replacements.

This sensor can be installed anywhere and takes up minimal floor space.

# Product Features

**Easy Installation and configuration**

**Wireless data transmission Option through LoRaWAN®, and/or WIFI wireless protocol**

**Secure operation with top-down encryption**

**Real-time response enabling fast detection**

**Lower Power Consumption and Battery Operated**

**Integration with Building Management System through protocol converters**

**Multiple application environments**

**Electrode Detection**

**Easy Performance management through MachineSens IoT Cloud Platform**

# Communication Technology

The **FlowCheck** wireless battery-operated water leak detector employs cutting-edge communication technology, LoRaWAN® which provides low power consumption as well as long range signal propagation to enable real-time control and monitoring.

Our smart gateway receives near real-time data from all the wireless sensors within range, converts the raw data into an easy-to-use JSON format, and then publishes it using MQTT protocol. Data can be sent to any local or cloud MQTT broker via Ethernet, LTE (4G), or WIFI.
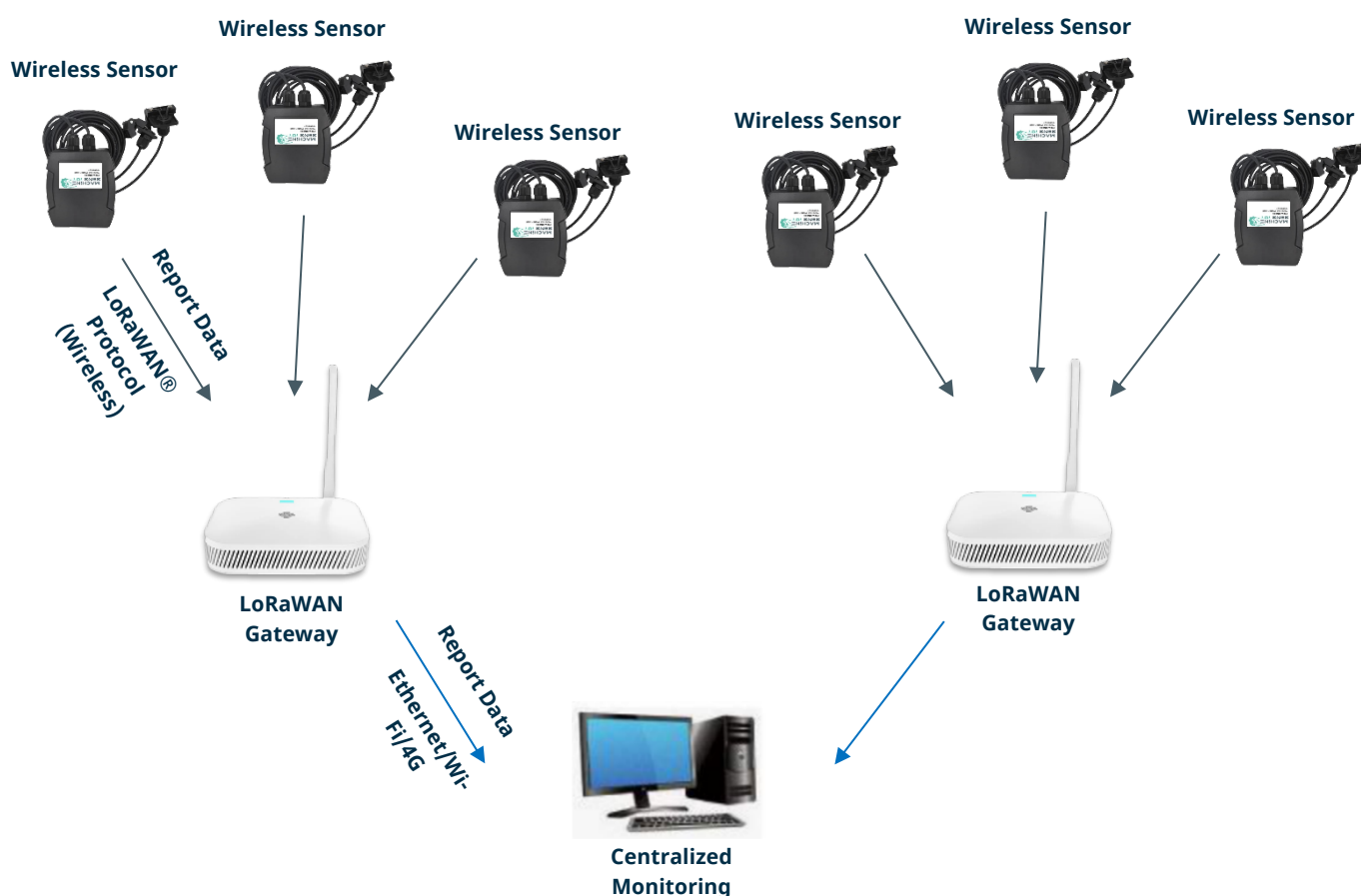


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# Specifications

| General | |
|---|---|
| **Operating temperature** | -20 °C to +60 °C |
| **Storage temperature** | -40 °C to +70 °C |
| **Power** | Battery Powered |
| **Battery Type** | ER26500 3.6V Lithium Battery, 8000 mah |
| **Detector** | Theory: Electrode |
| | 2m length cable from control box to detector |
| | Channel: 2 channel default |
| **Dimension** | 85*80*30mm, Control box |
| **Environment** | Indoor |
| **Housing Material** | Polycarbonate |
| **Wireless Communication** | |
| **Technology** | LoRaWAN® |
| **Frequency** | EU868 (868 Mhz) license free |
| **Transmit Range** | 500m inside Building, 2KM Open Air |
| **Security** | 128 AES Encryption |
| **Antenna** | Internal |
| **Tx Power** | 19dBm ± 1dBm |
| **Rx Sensitivity** | -136dBm (LoRa, Spreading factor=12, Bit Rate=293bps) |
| **Data Transfer Rate** | 0.3Kbps– 50Kbps |
| **Data Format** | JSON |
| **Device Class** | Class A |
| **Activation Method** | OTTA (Over-The-Air-Activation) |
| **Certifications** | |
| **Regulatory** | CE |
| **Environmental** | RoHS |