



Flooding, both predicted and sudden, has become an increasingly common phenomenon in recent years. Many suffering localities have been un- or under-prepared, with little reason to believe they were at risk until it was too late. A reliable and cost-effective advance warning system that continuously monitors rivers, storm drains and overflows for rising water levels can save lives and protect property, alerting authorities and communities to impending danger.

The SonicSens 2 battery-powered ultrasonic level and flow sensor, from specialist manufacturer HWM (UK), offers non-contact, accurate, remote and wireless monitoring of water levels and flow rates. The ultrasonic sensor precisely measures the distance to (and therefore level of) the water surface, and can automatically send alerts to up to 16 phone numbers when the level reaches specified thresholds. When an alarm condition activates, it can also provide accelerated dial-in functionality, allowing users to quickly access detailed, relevant and timely new information when they have to.

For early flood warning systems, the device's versatile telemetry options, robust construction and long battery life make SonicSens 2 particularly well-suited: not requiring any ongoing maintenance or supporting infrastructure, it is perfect for "fit and forget" operations in hard to access locations. Once installed, it will continue to function as programmed without the need for local access, upkeep or interaction.

The system is supplied with user-friendly PC-based software that significantly speeds and eases the installation and setup process. The intelligent sensor features adjustable range settings, a variable dead band or blanking distance, self-diagnostics and an alarm condition in the event of echo loss. Intrinsically safe and ATEX versions are available for use in potentially hazardous environments, and a second channel capability (digital or analogue) allows for additional temperature, pressure (depth) or flow logging via an external device.

The SonicSens 2 includes both the intelligent ultrasonic sensor and a Multilog LX telemetry data logger, which transmits the data via SMS or low cost GPRS. Two-way connectivity enables the unit to be reprogrammed remotely without the need for expensive and time-consuming site visits - really improving convenience and cost-efficiency for hard to access locations.

New alarm conditions such as rate-of-rise have been added, which can now trigger an alert to up to sixteen specified telephone numbers. When an alarm condition is activated, SonicSens 2 can provide accelerated dial-in functionality, which allows data to become rapidly available during these events. This will ensure that operators have detailed information with which to quickly assess the situation and promptly respond to changing levels.

HWM has used specifically-designed low-power electronics for the SonicSens 2 to give it a five year battery life expectancy, which is particularly useful when flow or level sensing is required in remote, hard to reach locations. A low cost extended battery pack is also available to maintain this five year battery life even when the device is transmitting data every 15 minutes.