

## Water Leak Detection Single-zone Alarms

The Waterbug leak detector is designed to detect the ingress of water in sensitive areas where high value equipment and information are present. This compact alarm hosts intelligent water leak detection and cable monitoring function.

Typical applications include archive rooms, comms rooms, computer rooms, tea points, boiler houses, plant rooms and small data centres.

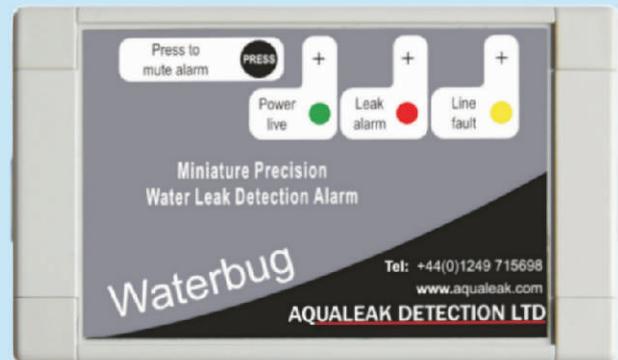
The WaterBug is capable of working with a variety of detection devices including sensor cables and probes.

Main Features include:

- Monitors for the presence of water and outputs an alarm
- Can be connected to a BMS
- Comes in 230VAC/110VAC or 12 - 24VDC versions

The principle of water leak detection involves the use of a low alternating voltage (5V) sent to the sensing device. All sensing devices have a positive and an a negative conductor and when water comes into contact with both, a voltage is passed between them. This in effect closes the circuit electronically and the WaterBug will signal an alarm.

There are two versions of the WaterBug, the BMS WaterBug and the WaterBug. The BMS version has no local alarm outputs and is simply connected via a volt free relay to the BMS. On the detection of a leak the relay will changeover and the BMS will alert to the situation. The WaterBug has the same functionality with the addition of a local audio and visual output on the alarm panel.



### Waterbug - Specification

Power	240AC or 110AC / 12 or 24DC
Power Consumption	30mA / 50mA with LED
Output Signal	No-Volt Relay
Contacts	NO / COM / NC
Max Valves per Relay	1
LED Indicators*	Leak Alarm/Power On/Line Fault
Audio Indicators*	Internal Horn / Mute Button
Additional Relays	Power Fail / Line Fault
IP Rating	65
Max Cable Run	100m
Sensor Wiring	Individual / Parallel
Maintenance	Minimal - Yearly
Output Options	BMS/Autodialler/Repeater Panel
Output Options cont'	Sounder/Beacon



## Types of sensors available

A variety of different sensing devices can be connected to the WaterBug. The following section describes these:

### Sensor Cable (SC)

Sensor cable is used where it would be an advantage to monitor for water leaks over an area or under a run of pipes. Sensor cables monitor for water along their full length and can be run in lengths between 1 and 100 metres. The cable is constructed from a twisted insulated cable that acts as a carrier for a pair of single strand marine grade stainless steel conductors. When water bridges across the conductors this will trigger the alarm.

### Adjustable Sensor Probes (FS4/S) + (FS4/SEOLDG)

The adjustable sensor probe is used where the water from a leak may be present in a certain area, such as in drip trays, bunds, drains and gutters. The height of the sensor from the floor is fully adjustable between 0 and 25mm and can be floor or wall mounted. It is possible to connect several sensors in parallel to offer multiple point leak detection on a single zone alarm panel or multiple sensors connected individually to a multizone system. The sensors are connected using a leader cable.



### Protected Adjustable Sensor Probes (FS4/SB) + (FS4/SBEODG)

The protected adjustable sensor probe has a robust protective housing where the position of the sensor would make it vulnerable to damage. Available as a floor or a wall mount, the protective housing is also the junction box in which the connection cables are terminated. The height of the sensor from the floor is fully adjustable between 0 and 25mm and it is possible to connect more than one sensor together in parallel to monitor a number of different locations.



### Minipad Sensor (MPP) + (MPPDG)

The minipad sensor uses a small printed conductor area to detect the presence of water. These sensors are ideal for small air-conditioning units and in ceiling voids.



### Intelligent Water Sensor (IWS)

This is a microprocessor controlled intelligent leak detection sensor designed to signal when conductive fluids (such as water) touch and bridge the conductors at the bottom of the sensor. This sensor is used where the distance from the Aqualeak alarm panel is very long (over 100m) as each sensor unit is powered independently and a volt free relay is utilized to signal a leak.



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Our full range of Water Leak Detection Systems, Oil Leak Detection, Over Temperature & Environmental Alarms, Telephone Autodial Units can be seen at : <http://www.aqualeak.com>