

AquaSmart

AquaSmart is an internet enabled single-zone system for water leak detection and water usage monitoring. It is ideal for all types of residential property and small commercial premises. Its water usage monitoring capabilities are also applicable to all types of property.



With AquaSmart water consumption can be visualised anytime, from anywhere in the world, using a computer, tablet or smart phone. If a leak is detected an alert is immediately sent to the user via SMS and/or email.

To prevent water damage in the event of a leak AquaSmart will automatically activate an isolation valve to shut off the water supply.

An AquaSmart system comprises a base unit, up to four water meters, and a shut-off valve for the water supply.

AquaSmart is managed online, through your smart phone, tablet or computer, using a service App called FlowReporter.

Benefits:

- ❖ Easy to use, on smart phone, tablet or computer. Anytime, from anywhere in the world.
- ❖ Monitor water usage.
- ❖ Turn water On or Off remotely.
- ❖ Reduces risks from flooding. If leak detected:
 - ❖ Automatically turns water OFF.
 - ❖ Sends SMS/email alert.

AQUALEAK DETECTION LTD

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Main Features:

- ❖ Single-zone system.
- ❖ Managed using FlowReporter App on smart phone, tablet or computer.
- ❖ Multiple AquaSmart units can be controlled through one FlowReporter account.
- ❖ Artificial Intelligence based system that automatically tracks water consumption and learns the pattern of normal water usage.
- ❖ Sends a SMS and/or email alert if unusual water usage detected.
- ❖ Wall-mounted.
- ❖ Powered though mains plug/adaptor.
- ❖ Can be linked to up to 4 water meters and 1 valve.
- ❖ Optional battery back-up.
- ❖ Can be connected to a central BMS.
- ❖ CE marked.

The **AquaSmart** base unit can be supplied with an optional internal rechargeable battery that provides up to 36 hours operation (depending on valve usage) in the event of the mains power failing. The internal battery is recharged by the **AquaSmart** base unit once mains power is restored.

AquaSmart is for indoor use only and must not be used where there is a danger of freezing. Flow meters and the isolation valve are purchased separately.

The **AquaSmart** base unit is wall-mounted. The maximum distance between the **AquaSmart** base unit and the water meters and isolation valve is 10 m.

Water meters and valves are available in the following sizes:

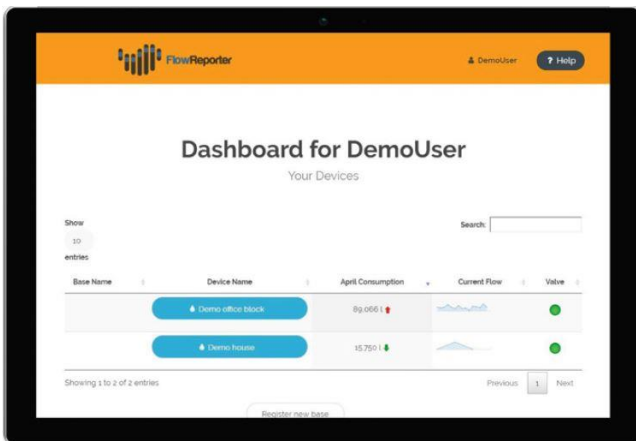
- **Small:** suitable for 15 mm or 22 mm size pipes, e.g. those supplying up to a 4-bed house (or equivalent).
- **Medium:** suitable for 28 mm or 35 mm size pipes, e.g. those supplying up to a 5-story office block.
- **Large:** suitable for 42 mm or 54 mm size pipes, which supply large commercial buildings.



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AQUASMART BASE UNIT SPECIFICATION	
Dimensions (W x H x D)	145 mm x 112 mm x 47 mm
Weight	230 g
Power Supply (Base Unit)	12 V DC, 0.8 A (max) or 5 V DC, 0.8 A (max)
Mains to DC power adaptor (switching PSU)	240 V, \pm 10%, 50/60 Hz, 0.15 A, 3-pin plug
Connectivity	WiFi as standard Upgradeable to 3G mobile phone
Alarm	Audio alarm (horn)
LED indicators:	
Status indicator	Blue/green/red LED (override accessible with a small screwdriver)
Valve open indicator	Green/red LED (override push-button on front panel)
Valve closed indicator	Red LED (override push-button on front panel)
Ingress Protection	IP52
Operating temperature range	0°C to +30°C (32°F to 86°F)
Humidity	5% to 95% non-condensing
Construction	ABS plastic
Sensors	Up to 4 water meters
Output signals	1 x No-Volt relay
Output relay rating	240 VAC, 8 A
Output relay contacts	Common/Normally Open/Normally Closed
Max number of isolation valves per relay	1
Approvals	CE Marked ISO9001 manufacturer
Compliance	Radio Equipment Directive 2014/53/EU Low Voltage Directive 73/23/EEC EMC Directive 89/336/EEC Restriction of the use of certain hazardous substances (RoHS) Directive 2011/65/EU
Aqualeak Product Code	QULKN4 (standard 12V version) QULKN5 (5V version)
Optional Battery Pack	Provides back-up for up to 36 hours (depending upon valve usage)
Recharge time	5 hours
In-service life of battery	10 years



The easy to use **FlowReporter** App allows the **AquaSmart** to be managed online.

FlowReporter features “bank standard” SSL encryption to protect against hacking.

Multiple **AquaSmart** systems can be monitored through one **FlowReporter** account, making it ideal for building management and landlords of multiple properties.

A “Daily View” displays detailed water usage over the previous 24 hours, split into seconds. A “Monthly View” provides an overview of water usage on a day-by-day basis.

The account administrator can grant limited access rights to other users, for example tenants, to allow them to monitor water usage.

METER SPECIFICATION	SMALL METER	MEDIUM METER	LARGE METER
Dimensions	G ¾ A dia, 50 mm long	G 1 A dia, 60 mm long	300 x 170 x 190 mm
Thread size	¾ inch male BSPP	1 inch male BSPP	2 inch male BSPP
Pressure rating	10 Bar	16 Bar	16 Bar
Temperature rating	0 °C to +70 °C	0 °C to +90 °C	0 °C to +30 °C
Nominal flowrate	1.8 m³/hr	3.6 m³/hr	16 m³/hr
Pressure loss	0.25 Bar @ 0.9 m³/hr	0.08 Bar @ 1.8 m³/hr	0.16 Bar @ 8 m³/hr
WRAS Approval No.	1605300	1705302	1512046
Body material	PPO Noryl GFN3	Brass CW617N	Brass and plastic

VALVE SPECIFICATION	SMALL VALVE	MEDIUM VALVE	LARGE VALVE
Dimensions (L x H x W) excluding electrical plug	105 x 64 x 68 mm	123 x 80 x 92 mm	124 x 124 x 190 mm
Thread size	¾ inch female BSPP	1 inch female BSPP	2 inch female BSPP
Pressure rating	10 Bar	10 Bar	16 Bar
Temperature rating	0 °C to +60 °C	0 °C to +60 °C	0 °C to +30 °C
WRAS Approval No.	1306015	1306015	1512046
Body material	PA 6,6 30% fibre glass	PA 6,6 30% fibre glass	Nickel plated brass and chrome plated brass