

Aqualeak 10K

The **Aqualeak 10K** is a water leak detection system capable of determining the location of a water leak, to an accuracy of ± 1 m, along up to 2.5 km of sensor cable.

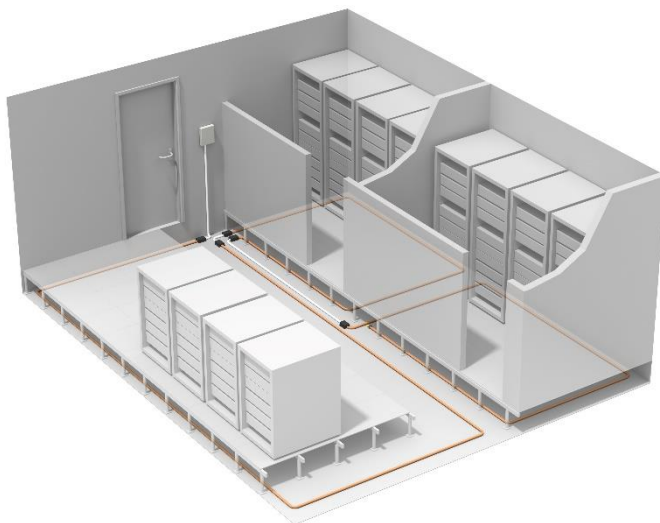
The **10K** is a single zone system designed for continuous operation with minimal human intervention. It reduces the risk of water damage by giving audible and visual alarms and alerting a Building Management System (BMS) or other monitoring system when a water leak is detected.



A **10K** system comprises the **10K** unit and one or more sensors. The **10K** may be used as a stand-alone system; or connected to an Aqualeak LD5200 Master Panel.

The **10K** is normally used with a sensor cable, but sensor probes can be accommodated. Sensor cables and probes are purchased separately.

If a water leak is detected, the **10K** will sound a buzzer and the LED display will give the distance along the sensor cable to the location of the leak. The **10K** will communicate the alert through a Modbus network to a central monitoring system, or via a relay output to a BMS.



Control of the **10K** is through a single button on the front of the unit. The buzzer may be silenced by pressing the button.

The **10K-2** version has an extra relay, allowing it to control a water shut-off valve.

The **10K** will automatically reset when the leak is repaired and sensors dried.

A **10K** can also determine the location of faults and contamination on the sensor cable. Note that the **10K** is for indoor use only and cannot be used where there is a risk of freezing.

Benefits

- ❖ Reduces risk of water damage.
- ❖ Gives audible and visual alarms when leak is detected.
- ❖ Locates water leaks to within 1 m.
- ❖ Simple to use.
- ❖ Alerts BMS or control centre.

Main Features

- ❖ Compact design.
- ❖ Mains powered.
- ❖ Single zone system.
- ❖ Modbus enabled. One or more **10K** systems can be monitored from one central location.
- ❖ Detects sensor faults and contamination.
- ❖ CE marked.

SPECIFICATION	Value	Units	Notes
Dimensions	180 x 180 x 98	mm	Width x height x depth
Weight	800	g	Plastic outer case.
Supply Voltage	100 to 230	VAC	50/60 Hz nominal, 47/63 Hz actual
Power consumption	24	W	
Ingress Protection Code	55	IP	Ingress Protection to IEC 60529
Operating temperature range	0 to +50	deg C	Ambient temperature
Humidity range	10 to 95	%	Non-condensing at 45 deg C
Operating altitude	0 to 4572	m	
Storage temperature range	-20 to +70	deg C	
Max Relay output (DC)	30	VDC	5 A resistive
Max Relay output (AC)	250	VAC	8 A resistive
Relay minimum load	10	mA	@ 5 VDC
Leader cable	4.57	m	Plus, EOL terminator on sensor cable
Maximum sensor cable run	2500	m	
Minimum sensor cable run	10.97	m	
Detection accuracy	0.6	m	+/- 0.5 % of sensor cable length)
Detection repeatability	0.6	m	+/- 0.25 % of sensor cable length)
Detection response time	5 to 990	sec	Selectable
EIA Communication Port	1200, 9600 and 38400	Baud	Selectable. Parity: none. 8 data bits, 1 stop bit
Visible alarm			LED and LED display
Audible alarm	85	dB	at 0.6 m (Can be disabled)
Alarm repeat	0 to 999	min	Configurable
Sensor cable type	Only use the recommended orange coloured sensor cable		
Approvals	CE Marked		
Compliance	Radio Equipment Directive 2014/53/EU Low Voltage Directive 73/23/EEC EMC Directive 89/336/EEC CSA C22.2 No. 61010-1 (and conforms to EN 61010-1 and UL 61010-1) Restriction of the use of certain hazardous substances (RoHS) Directive 2011/65/EU		
Modbus (RTU) protocol	Outstation; RTU mode; supports function codes 03, 04, 06 and 16 Master; RTU mode for integration with any Modbus master BMS/NMS. Addressable from 1-255.		
Johnson Controls Metasys protocol	N2		
Aqualeak Product Code	AQ10K-1 (standard version) AQ10K-2 (with additional relay)		

AQUALEAK DETECTION LTD