Aqualeak EMS-5/10

The Aqualeak Environmental Monitoring System (EMS) Water Leak Detection System series are standalone leak detection systems designed to be capable of integrating into larger Building Management Systems (BMS) and networks, as required.

Designed for continuous operation with minimal human intervention, the EMS series is also compatible with a wide variety of sensing technologies (sold separately) to detect the presence of water and other liquids.

With 5 (EMS-5) or 10 (EMS-10) input channels as standard, the models are ideal for applications ranging from Main Equipment Rooms (MERs), Plant Rooms and Comms/Server Rooms.

This cost-effective multi-zone solution also requires no configuration for ease of installation and operation.

Benefits

- *Remote monitoring for leaks*
- *Reduced risks of flooding*
- *Minimum human intervention required*
- *Built-in fault detection*
- *Built-in visual and audible alarms*
- *Multiple operating modes (including Test and Engineering modes)*

Features

- *Cost-effective multi-zone monitoring system*
- *Easy operation*
- *No configuration required - works straight 'out of the box'*
- *Designed and built in the United Kingdom*
- *CE Compliant*
- *Monitors for leaks, sensor cable breaks, and internal system faults*

Operation

In operation, the EMS-5 and 10 models continuously monitor connected sensing equipment for both circuit integrity and the presence of water. If a leak is detected, the EMS-5 and 10 will or can be configured to:

- *Activate a visual alarm*
- *Sound a buzzer*
- *Activate default outputs*
- *Shut off local water supplies*

EMS Series Models

In addition to EMS-5/10, the Aqualeak EMS series also includes the following models:

- *EMS-5X/10X: 5 or 10 input channels (touch screen configuration)*
- *EMS-1: Single zone (DIP switch configuration)*
- *EMS-OS: Can be integrated with the EMS-5X/10 to make it scalable and modular up to 625 zones (suitable for large scale applications)*

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Technical Specifications

Master Panel/EMS Unit	Specification
Dimensions	*335 x 270 x 110 mm - Width x Height x Depth*
Weight	*4.5 Kilograms*
Supply Voltage	*80 - 264 VAC (Volts / Alternating Current). 50/60 Hz frequency*
Motherboard Output Relay Voltage	*250 VAC*
Motherboard Output Relay Current	*8 Amps. Maximum into resistive load*
Relay Minimum Load	*10 Milliamps - at 5 VDC (Volts / Direct Current)*
Detection Response Time	*1 second per Outstation*
Alarm (Audible) and Alarm (Visible)	*85 Decibels within 0.6 m range; Visible via LED panel*
Input channels	*5 or 10*
Leader Cable	*Belden 9534 - variable length*
Operating Temperature	*0 to +50˚C*
Operating Humidity	*10 to 95% - Relative humidity (non-condensing) at 45˚C*
Operating Altitude	*0 to 3,000 Metres*
Storage Temperature	*-20 to +70˚C*
Sensor Cable Length (per input channel)	*100 Metres (with maximum 20 probes). Use recommended yellow Sensor Cable. Also requires End of Line (EOL) terminator.*

Relay Function and Triggers

Relay	Function	Description and Triggers	
1-10	*Individual zone*	*Used to operate auxiliary devices*	
11	*Common Alarm / Fault*	*Relay latched upon alarm until acknowledged by User or Engineer*	
		Zone cable break	
		Zone Alarm	
12	*Cable break*	*Relay latched upon alarm until acknowledged by User or Engineer*	
		Zone cable break	
13	*Alarm*	*Relay latched upon alarm until acknowledged by User or Engineer*	
		Zone alarm	
15	*Watchdog*	*Relay normally energised. De-energised on any system fault*	
		Motherboard communication failure	*Motherboard loss of power*
		Interface Board loss of power	*Complete power failure to EMS*
		Interface Board communication failure	