Diamond Controls®
Leak Detection & Trace Heating Systems

DATASHEET

WATER LEAK DETECTION



Eco-1+

Single Zone Panel

The EcoLeak™ Eco-1+ leak detection alarm panel is designed for use with all EcoLeak, Aquitron and TraceTek sensing cables and sensors for detection of water, acid, hydrocarbon liquids (fuels) leaks. The Eco-1+ single zone alarm panel now incorporates fault/cable break monitoring for added protection and peace of mind.

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Simple Operation

The LED's located on the faceplate indicate Power, Leak Alarm, Cable Break and Fault Alarm. In the event of a leak or fault, the alarm sounds and the corresponding LED illuminates. The operator silences the alarm by pressing the MUTE button. Once the alarm has been silenced, the Leak or Cable break LED will continue to be illuminated. Once the cause of the alarm has been located and rectified the panel can be reset and the corresponding LED will be extinguished. Resetting the panel also resets the volt free alarm relay contacts. The Eco-1+ also has an 'auto-reset' feature. If enabled, it will allow the panel to reset itself once the leak or fault has been cleared. Any loss of system integrity, whether caused by an interruption of power or a break in a sensing circuit, will cause the Break/Fault relay to operate.

Versatile Design

The compact Eco-1+ enclosure mounts easily to a wall or other flat surface, providing visual and audible alerts for stand-alone applications. Connectivity to external equipment is provided through three volt-free relays: two Leak relays and one Common relay. These can be connected to up to three solenoid valves, a BMS, or other remote monitoring systems.

A remote alarm panel (AT-RAP) can also be added to show alarm status in separate locations, such as reception areas and security rooms.

Applications

The Eco-1+ is ideally suited to projects where cost effective leak detection solutions are required, such as smaller commercial spaces or individual residential properties. Suitable areas include Commercial buildings - tea points, vending areas, kitchens, FCU's, lift pits, plant rooms, tank and pump rooms. Residential Buildings - high risk areas such as kitchens, bathrooms, WC's, utility rooms and risers.

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Technical Information

Sensing Cable	All EcoLeak and TraceTek sensing cable (TT1000, 1100, 3000, 5000, 5001 series)
Probe Compatibility	All EcoLeak and AquiTron probes
Detection Probes	1 x AT-MPS-R or 10 x AT-PROBE, 1 x TT-FFS (Fast Fuel Probe)
Maximum Sensing Circuit	One Zone 30m (EcoLeak Cable) or up to 60 metres when using ECO-BCB 160m (AquiTron, TraceTek Cable)
Maximum Jumper Cable	300 metres of jumper cable (2 or 4 Core)
Number of Zones	1
Sensing Circuit	2 wire sensing (EcoLeak) or 4 wire sensing (AquiTron and TraceTek)
Enclosure	Polycarbonate, colour RAL 7035 matt
Dimensions & Weight	130 x 130 x 60, WxHxD mm. 0.40kg
Ingress Protection	IP66 - Indoor use only
Working Temp Range	5˚C to 40˚C
Humidity	5% to 80% non-condensing
Power supply	110 to 240 Vac, 50-60Hz, Class 2 Insulation
Relays	Volt free relay contacts two for leak, one for break (Common, N/Open & N/Closed)
Relay Output	Maximum Ratings 3A 250Vac / 24Vdc. SPDT. Volt free relay contacts activated by leak or cable fault (NC/COM or NO/COM)
Status LED	Power Mains-Green, Leak-Red, Cable Break-Yellow
Audible alarm	90dB at 10cm

Approvals

MADE IN BRITAIN CE UK CA

BS EN 61326-1	Compliant with standards for immunity
BS EN 61326	Compliant with standards for emissions
CFR 47 Pt 15 B Class A	Radio Frequency Devices - Unintentional Radiators

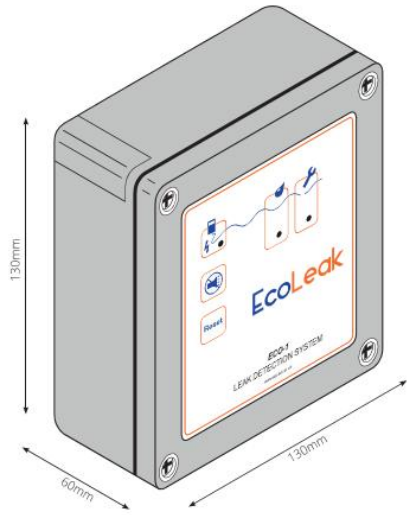
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Ordering Information

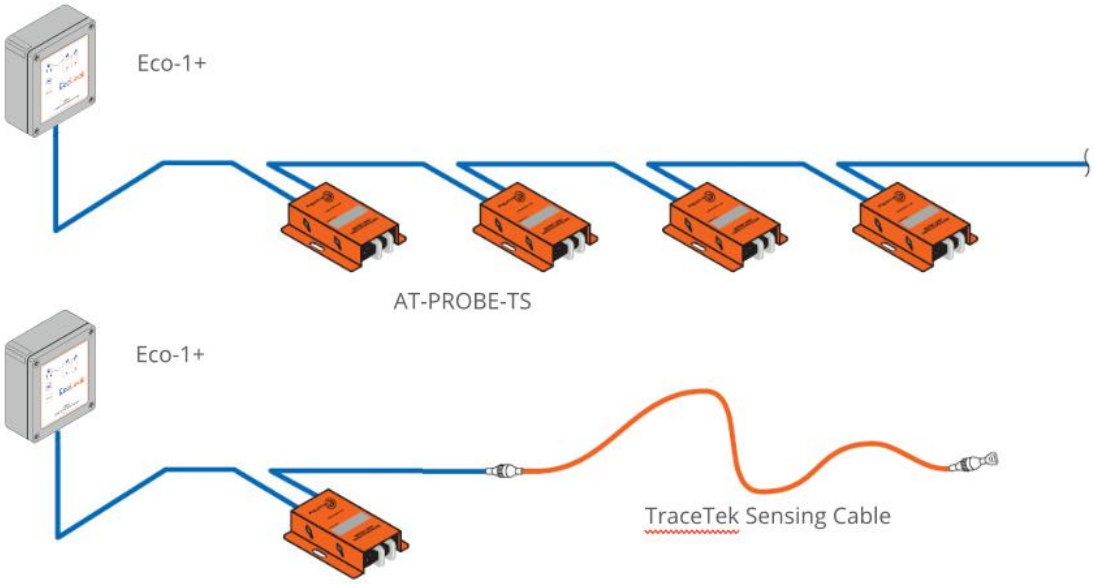
Catalogue Number	Product Description
6128	Eco-1+ Single zone alarm Panel 110-240Vac
6510	ECO-10-1 - EcoLeak Kit - Eco-1+, 10m Leader/1m Sensor - Clips/Tags
6540	ECO-10-5 - EcoLeak Kit - Eco-1+, 10m Leader/5m Sensor - Clips/Tags
6555	ECO-10-10 - EcoLeak Kit - Eco-1+, 10m Leader/10m Sensor - Clips/Tags
6570	ECO-10-15 - EcoLeak Kit - Eco-1+, 10m Leader/15m Sensor - Clips/Tags
6590	ECO-10-25 - EcoLeak Kit - Eco-1+, 10m Leader/25m Sensor - Clips/Tags
6595	ECO-10-30 - EcoLeak Kit - Eco-1+, 10m Leader/30m Sensor - Clips/Tags
6575	6575 ECO-MPR - EcoLeak Kit - Eco-1+ With Mini Probe

Measurements and Kit Examples





Configuration Examples



Important: All information, including illustrations, is believed to be reliable. Users, however, should independently evaluate the suitability of each product for their application.