

General Information

Please read these instructions carefully and keep them in a safe place for future reference. These instructions must be followed to ensure proper operation.

The OPSEN optical sensor has been specifically designed for use with TraceTek and AquiTron™ leak detection systems.

The OPSEN is designed for use in ordinary areas with temperatures of 0°C to 50°C (32°F to 122°F).

Zones / Regions

Probes with terminal strips and built in resistors (weighted lengths) equal to 8 metres (25 feet) for the first sensor and 16 metres (50 feet) for each subsequent sensor when used on the TraceTek TTDM or TTSIM-1/1A/2 alarm & locator panels.

If sensors are used alone on a circuit, without sensing cable, the 'zones' setting within 'units' can be used on the panels.

Power Supply

Each OPSEN requires a 12Vdc power supply. Power is available from a separate power supply unit: AT-PSU-1 for 1 to 10 sensors.

The 12Vdc should be connected as detailed below, care should be taken when connecting the power as the sensor is polarity sensitive.

The Bulk OPSEN cable is colour coded for connection into the TraceTek and AquiTron™ panels: white 12Vdc (+) and blue OV (-) should be used for the power cables.

Power indication

The sensor unit is provided with a GREEN LED to indicate power present.

Alarm indication

In the event of a leak being detected the units RED LED will illuminate.

Indication will also be displayed on the following leak detection panels:

AT-SZA, single zone indication.

AT-DIM, single zone indication.

AT-MZA, individual zone indication.

TTDM, distance or zone number/region/area name.

TTSIM-1/1A/2, via the master panel or BMS a distance or zone number/region/area name is available.

Detection time

The Optical sensor head will detect the presence of a liquid within seconds of it making contact. The alarm activation on the OPSEN (Red LED) will be immediate, however, alarm indication on the leak detection control panel will depend on the model selected.

Application Liquids

The OPSEN has been designed for use with hydrocarbon based liquids such as fuels and oils. The sensor will also detect other none aggressive liquids.

The OPSEN optical sensor head will also detect water and many other chemicals.

For further liquids please contact your distributor.

Maximum number of Sensors

TTDM and TTSIM panels - 100

AT-SZA, AT-DIM and TTSIM-1A - 10

AT-MZA - 10 per channel/zone

Temperature

Environment: Storage: -18°C to 60°C (0°F to 140°F)
Operating: 0°C to 50°C (32°F to 122°F)

Liquid: Operating: 0°C to 50°C (32°F to 122°F)

Enclosure: IP67

Tools required

Phillips (cross-head) screwdriver
Small flat-head screwdriver

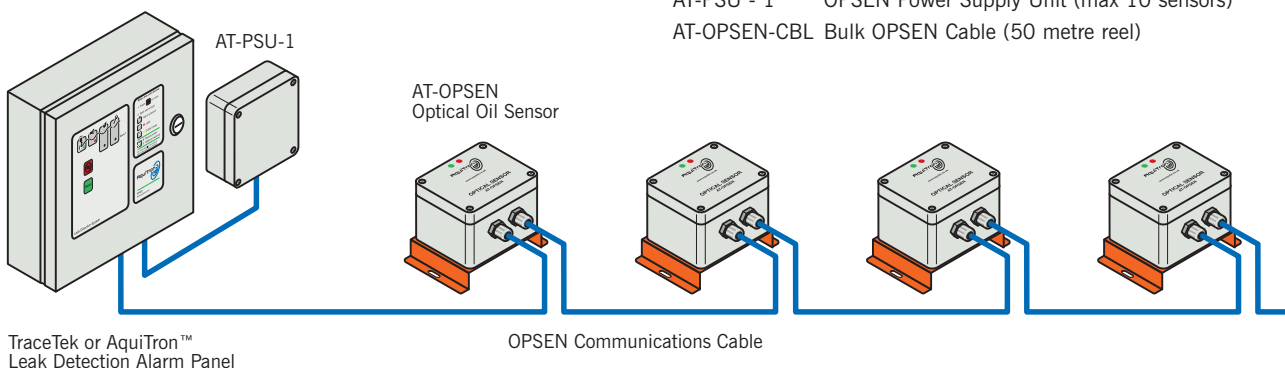
Storage

Keep the module in a dry place prior to installation to avoid possible damage to internal components.

Additional items

AT-PSU - 1 OPSEN Power Supply Unit (max 10 sensors)

AT-OPSEN-CBL Bulk OPSEN Cable (50 metre reel)



Single / Multiple sensors

Wiring/connection Notes

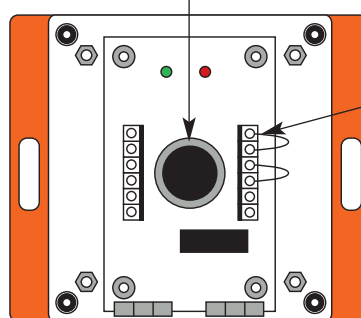
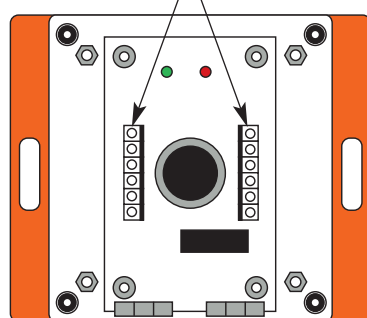
Match colour coding in sequence through the chain of probes:

- Black - Black
- Yellow - Yellow
- Red - Red
- Green - Green
- 12Vdc - 12Vdc (White)
- 0V - 0V (Blue)

Connect to TraceTek / Aquitrone™ Leak Detection Panel

Terminals can be pulled from the circuit board for ease of wiring

Small height adjustment can be achieved by twisting the optical sensor, up = anti clockwise, down = clockwise



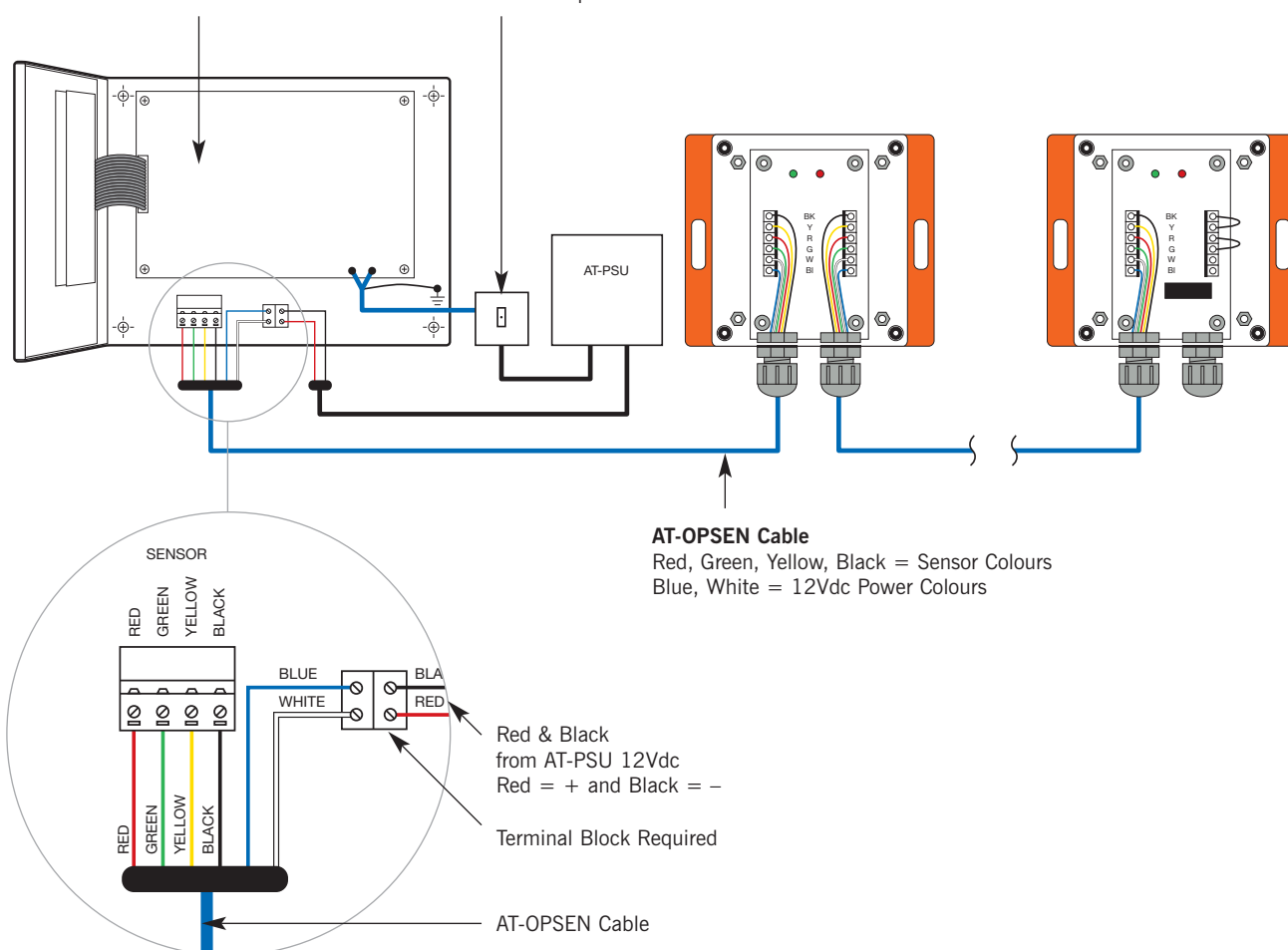
End of line connection
Loop, Black & Yellow
Red & Green
(Remove for future extension)

Connect Bulk Cable AT-OPSEN-CBL

Adjust cable glands to provided strain relief to the cables

TraceTek / Aquitrone™ Leak Detection Alarm Panel

Mains Power 230Vac Fused Spur



Important: All information, including illustrations, is believed to be reliable. Users, however, should independently evaluate the suitability of each product for their application. Aquilar Limited makes no warranty as to the accuracy or completeness of the information, and disclaims any liability regarding its use. The only obligations of Aquilar Limited are those in the Aquilar Standard Terms and Conditions of Sale for this product, and in no case will Aquilar Limited be liable for any incidental, indirect, or consequential damages arising from the sale, resale, use or misuse of the product. Specifications are subject to change without notice. In addition, Aquilar Limited reserves the right to make changes - without notification to Buyer - to processing or materials that do not affect compliance with any applicable specification.

Aquitrone is a trademark of Aquitrone Limited
Aquilar is a trademark of Aquilar Limited
TraceTek is a trademark of Tyco Thermal Controls

Aquilar Limited

Weights & Measures House, 20 Bartelot Road,
Horsham, West Sussex RH12 1DQ. UK
Tel: + 44 (0) 1403 216 100
Fax: +44 (0) 8707 940 320

E-mail: info@aquilar.co.uk
www.aquilar.co.uk

Master TraceTek Distributor UK & Ireland for
Raychem® TraceTek®
Water, Fuel and Chemical Leak Detection