sabre

Fibre-Optic PIDS Mesh Products

Aquamesh

Approved and used by the CPNI (UK Centre for the Protection of National Infrastructure) sites Aquamesh is designed for semi or fully-submerged water course security applications.

Aquamesh is a rigid steel grating supporting an interlaced fibre-optic sensor cable which is fully encased in solid resin. This combination of a tough physical barrier with intrusion detection provides an extremely effective alarm generation system.

Aquamesh can be fabricated in sizes and shapes tailored to your exact requirements. Remsdaq custom engineering services are available for full project support from design to implementation.

The principle of operation is based on fibre-optic continuity sensing; only when a fibre-optic cable is severed is an alarm produced and accordingly the system has a very high level of reliability.

Key Advantages of Aquamesh

- Very high level of intruder detection
- Virtually zero false alarms rate
- Covert - undetectable in operation
- Immunity to RFI and EMI Interference
- Conforms to intrinsic safety requirements
- Aquamesh delivers a very high MTBF performance

Remsdaq support includes:

- Site Survey and Design
- Customised product to exact requirements
- Quality planning
- Project Management
- Installation support
- Maintenance support

Culverts, Water inlets associated with Utilities, Energy Production and Critical National Infrastructure.

Marine or water-side installations offering detection against divers and vessel infiltration.

sabre

Fibre-Optic PIDS Mesh Products

Optimesh

Approved and used by the CPNI (UK Centre for the Protection of National Infrastructure) sites, Optimesh operates on the same principle as Aquamesh but forms a physically flexible weatherproof, tamperproof fibre optic detection mesh suitable for but not limited to, thefollowing applications.

- Covert installation of Optimesh mounted within a wall cavity or covered with appropriate building fabric
- Outdoor applications for Optimesh, include attachment to moving flexible structures
- Dock and Jetty security for both commercial and military scenarios
- the Optimesh system delivers a very high MTBF performance

Sabre II Processor and Analyser

The Sabre II Processor module monitors both Aquamesh and Optimesh applications, available in circuit board form, or supplied in an enclosure with optional power supply/charger and rechargeable battery.

Especially Designed for easy integration with third party monitoring products such as Command and Control (PSIM) Video Management System or Access Control Alarm Management systems.
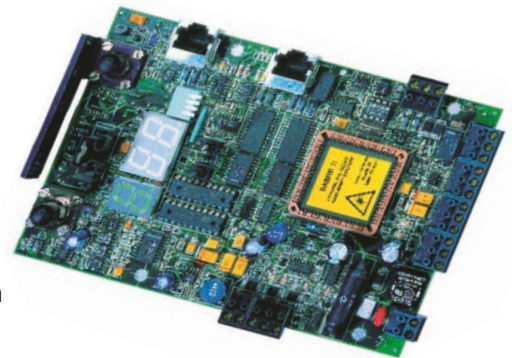
Processor Specifications

Processor
High performance microcontroller with integral digital signal processor and analogue-to-digital converter.

Method of Detection
Laser diode transmitter and photo diode receiver.

Alarm conditions
Discontinuity in Fibre-Optic Cable

Alarm Output Relay
Up to 1A @ 12V DC.

Fibre-Optic Sensor Cable Connections
2 x SMA 905

Power Requirement
11.0 - 14.0V DC @ 300mA.

Operating Temperature
-10°C to +70°C

Operating Humidity
Up to 95% RH at +40°C non-condensing

Storage TemperatureC
-40°C to +70°C

Electromagnetic Compatibility (EMC)
Sabre II meets the requirements of EN55022: 1998, EN50082-1: 1998 and Low Voltage Directive 93/68/EEC.

Dimensions
Printed Circuit Board: 158mm x 111mm
Enclosure (IP 65) 400mm x 400mm x 200mm