

FiberPatrol-BR

Block-reporting intrusion detection system

Features & Benefits

- EMI and lightning immune sensor
- Up to 500 m per sensor
- Up to 15 km (9 mi) of insensitive lead cable
- Up to four zones per processor
- Standalone alarm processor
- Hardened for outdoor deployment
- DSP-enabled intelligent signal processing
- On-board nuisance alarm rejection through multi-sensor correlation analysis
- Relay contact, serial, and IP interfaces
- On-board alarm history storage
- Low power consumption

FIBER OPTIC FENCE-MOUNTED SENSOR

FiberPatrol-BR is a cost-effective fiber optic perimeter intrusion detection system for chain-link fences. The fiber optic sensor is completely immune to EMI and lightning and is intrinsically safe in explosive and high-voltage environments. The processor module is enclosed in a standalone, environmentally hardened panel-mount box and, with the use of non-sensing lead cable, can be installed up to 15 km (9 mi) from the site. Up to four detection zones can be multiplexed on a standard FiberPatrol sensor cable.



FIBER-AND-GO SOLUTION FOR SMALLER SITES

FiberPatrol-BR is designed for smaller sites like rural electrical substations and oil and gas well-heads. In addition to reporting intrusion alarms, the processor module automatically adjusts for sensor length and optical losses. Any issues affecting system integrity are automatically reported.

MULTI-SENSOR CORRELATION PROCESSING

Combining 4-zone detection in a single unit enables the on-board rejection of any weather-induced disturbances that, due to their distributed nature, affect all 4 zones. An intruder, by comparison, can simultaneously disturb at most two zones (i.e. by climbing at a zone junction point).

SYSTEM INTEGRATION

FiberPatrol-BR comes standard with three common alarm interface options: TCP/IP for network-based integration, RS-232 for local hardware integration, and relay contacts for interfacing with legacy systems. No proprietary communication equipment is required when networking multiple alarm processors together. FiberPatrol-BR systems can report to a variety of alarm management systems.

SYSTEM ARCHITECTURE

- Maximum zone length: 500 m
- Maximum lead cable length: 15 km (9 mi)
- Zone Count: 4 per processor

SENSOR CABLE

- Jacket: Black UV-stabilized medium density PE
- Fiber count: 2 sensing per zone
- Optical loss: less than 0.25 dB/km (0.40 dB/mi) @ 1550 nm
- Outer diameter: 1.1 cm (0.44 in)
- Weight: Loose tube construction, 75 kg/km (50 lb/kft) typical
- Compliances and certifications: ANSI/ICEA, IEC, RUS, Telcordia GR-20

INSTALLATION

- Fence type and construction: Most types of flexible fencing

ELECTRICAL POWER

- Protection: Auto-resetting polymer fuses
- Consumption/sensor: None

Requirements/Processor

- DC power: 9–30 VDC

Consumption/Processor

- DC power: 500 mA @ 12 VDC (maximum)

SENSOR CONTROLLER/OPTICAL

- Laser classification: Class IIIb
- Laser wavelength: 1550 nm
- Connector type: ST/UPC

CONNECTORS

- Optical: ST/UPC
- Power: Screw terminal block
- RS-232 data: Screw terminal block
- IP data: RJ-45 (10/100 Base-T)
- Contact closure: Screw terminal block

ENVIRONMENTAL

- Operating temperature (processor): –40 to 70 °C (–40 to 158 °F)
- Operating temperature (sensor): –40 to 70 °C (–40 to 158 °F)
- Humidity (processor): 0 to 95%, non-condensing
- Humidity (sensor): No restrictions

DATA INTERFACE

- Local
 - Interface: RS-232
 - Data Rate: 115.2 kbps
 - Format: XML
- Network
 - Protocol: Ethernet
 - Compliance: IEEE 802.3
 - Format: XML

CONTACT CLOSURES

- Form: A (SPST, N.O.)
- Maximum current: 150 mA
- Maximum voltage: 75 VDC
- On-state resistance: 24 ohms

MECHANICAL

- Circuit board: IPC-compliant
- Dimensions: 17.8 x 12.4 x 7.6 cm (7.0 x 4.9 x 3.0 in)
- Shipping weight: 1.4 kg (3 lbs)

PART	DESCRIPTION
FPFG0500	FiberPatrol-BR intrusion detection system, fence-mounted, multi-zone, 4 zones, box-mount (FP1210-04)
START/ENDMOD03	Start/end module for FP1210 (1 per zone)
GH1080-08	4.8 x 20.3 cm (3/16" x 8 in) stainless steel cable ties (100 each)
GH1080-08C	4.8 x 20.3 cm (3/16" x 8 in) black-coated stainless steel cable ties (100 each)
GM0749-24	Field splice enclosure (24 splice capacity, 3 cable ports) (SPLHW)
FPKT0200	Splice consumables kit (SPLCON)
GX0310	Tool – manual tension and cut-off tool for stainless steel cable ties
GX0311	Tool – upgraded manual tension and cut-off tool for stainless steel cable ties
FPKT0500	One section of 5 cm (2 inch) diameter split conduit 1 m (3 ft) long and two hose clamps (SPCON)
FPSP0424	Fiber optic sensor/lead cable for fence applications, 24 fibers. Priced in 100 m (328 ft) increments.
FPDA0120	Product documentation CD-ROM
Contact Senstar for required training and installation support services.	

