



# **FiberGuard Net 800**

## **FIBER OPTIC PERIMETER INTRUSION DETECTION SYSTEM**

### **FiberGuard Net**

The FiberGuard Net 800 is based on highly reliable fiber optic technology and accordingly is a versatile outdoor Perimeter Intrusion Detection System (PIDS) that provides a very reliable and cost effective solution for a variety of perimeters. The FiberGuard Net 800 can be mounted on a variety of new and existing fences including chain link, welded mesh and palisade or installed in a “stand alone” configuration with support posts. Any attempts to cut through the system will be detected. Attempts to climb over the system will also be detected. The Probability of Detection (POD) is very high while maintaining a very low False & Nuisance Alarm Rate (FAR & NAR)

The major components of the FiberGuard Net 800 are the fiber optic sensor cable woven into a tamper proof net, the FP 880 processor module (electro – optical) and the FM 750 motherboard. The specially designed fiber optic sensor cable is protected by a Kevlar reinforced polyurethane jacket and is suitable for outdoor application in the most extreme environmental conditions. The intersections of the fiber optic sensor cable forming the squares of the net have an additional tamper resistant jacket.

### **Configuration**

Typically the FiberGuard Net 800 is attached to the fence or fence posts and the 2 pigtails of a zone are connected to the corresponding output and input connectors on the FP 880 processor module. Each FM 750 can accommodate 4 FP processor modules for 4 zones. A separate zone (run) of DeTekion's FiberGuard 700 sensor cable can facilitate a tamper proof connection of the FiberGuard Net to the support fence or fence posts and the detection of attempts to climb over the system. The FiberGuard 700 sensor cable is connected to the output of a FP 770 processor module located on the FM 750 motherboard and is woven through (around) the top and bottom rails of the supporting fence and the FiberGuard Net 800 and then returns to the corresponding input on the FP 770 processor module. Another option is to use the FiberGuard Net pig tails for this purpose (when climb detection is not required). Any attempts to detach the FiberGuard Net from its supports will require the cutting of the FiberGuard 700 sensor cable or the FiberGuard Net pig tails, creating an alarm.



### **Control & Integration**

The FiberGuard Net 800 can be installed as a “stand alone” PIDS and seamlessly controlled and annunciated by DeTekions' Open Media Network Interface (OMNI) controller or integrated with other sensor systems and controls.

### **Features**

- Very low Nuisance Alarm Rate (NAR) & False Alarm Rate (FAR)
- Zone length up to 100m
- Immune to EMI and RFI
- Immune to lightning
- Sensor and Physical Barrier
- Modular design
- Can operate in highly combustible areas
- Can operate in extreme environmental conditions
- Can be used to protect ducts and vents

# Specifications

## General:

Processor Size:	8" x 6" x 1" (20.3cm x 15.2cm x 2.5cm).
Processor Weight:	11 oz. (0.3Kg).
Storage Temperature:	-67°F to 85°F (-55°C to +85°C) ambient.
Operating Temperature:	-22°F to 158°F (-30°C to +70°C) ambient.
Humidity (processor):	20% to 95% relative, condensing.
Max Zone Length	330' (100 M'). Final zone length is determined by the height of the FiberGuard Net
FiberGuard Net	Typical 6" x 6" mesh (can be customized) Mesh of net height configuration up to 20' (6.1m)

## Electrical & Optics:

Power	Input voltage: 9 – 50 VDC, 0.5 A or 24 – 36 VAC, 0.5 A, Current 28 mA
Laser Type:	Class 1
Fiber Optic Net & Sensor Cable:	Multi Mode (site specific) Mil Spec Tactical Cable, Kevlar Reinforced Polyetherane Jacket
FM 750 Address Selection:	Factory or Field Set.
Indicators:	One (1) LED for Alarm. One (1) LED for Events One (1) Tx Indication & Rx Indication
Outputs:	Five (5) Alarm relays (dry contacts) – For integration with other systems Five (5) Control Open Collector (300 mA) – For use with DeTekion's OMNI controller
Inputs:	Four Zones (any combination of FiberGuard Net and FiberGuard Sensor Cable) Two (2) 0-5V dc TTL's.
Maintenance Port:	RS-232, DB-9 pin.
Fiber Optic Bus:	Dual Port (Repeaters).
Wavelength:	820nm.
Cable:	Multimode 50, 62.25 or 50 micron.

## Range:

Fiber Optic: 5 Km of fiber cable.

## Jumper selectable:

Dual Zone Control.

## Connectors:

Communication Ports:	Plug & Screw
Power:	Plug & Screw
Relay Outputs:	Plug & Screw
TTL's Inputs:	Plug & Screw
Fiber Optic Sensor Cable & pigtails	ST Connectors

## Mean Time to Repair:

Less than 30 Min. (PCB replacement).

## Mean Time Between Failure:

100,000 Hours.

## Warranty:

12 Months from date of approved Installation



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Specifications subject to change without notice