

FIS Fiber Fence System

The Patented Fiber Fence Perimeter Monitoring System can detect and locate intruders anywhere along a fence line up to 10 miles (16km) in length. The system can be installed on existing objects such as perimeter fencing, walls, and gateways. An alert occurs when someone causes a disturbance to the optical fiber, or Mouse Trip™ sensor (see “sensors” section below) to which it is attached. Fiber Fence™ is relatively inexpensive, and is very easy to install. The system includes a fully functional OTDR for system monitoring and testing.



Key Features

- **Exceptional Range** - Single unit monitors up to 10 miles (16km)
- **Low Cost** - Installs easily on existing fencing without the need for electricity along the fence line
- **Flexible Installation** - The fiber optic sensing cable attaches to your fencing and conforms to the size and shape of your perimeter
- **Fast and Accurate** - Detects intrusion attempts within seconds of the event and identifies the location of the intrusion to within a few feet
- **Fail-Safe Technology** - Fiber optic sensing cable cannot be cut or bypassed without detection
- **No EMI Downtime** - Non-conductive sensing cable is not subject to electromagnetic interference (EMI), such as that produced by lightning storms, high voltage electrical cables, and microwave radio transmissions
- **Safe for All Environments** - The all-weather cable withstands extreme temperature and weather conditions. Mouse Trip™ devices can be adjusted to virtually eliminate nuisance alarms caused by environmental factors

Sensors

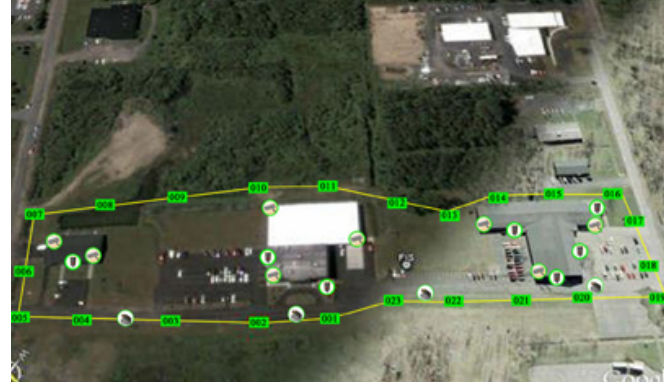
- In addition to the sensing cable itself, a variety of sensors have been developed to increase the overall system sensitivity and cover special applications areas such as corners, gates, and man holes.
- **Mouse Trip** - The Mouse Trip™ device is the patented mechanical triggering device that detects an unusual event such as a tug or pull along the fiber optic cable even though the event does not break the cable. It increases the sensitivity and reliability of the overall Fiber Fence™ System by providing added protection against the unforeseen. The unit is installed directly on the fence, with the fiber attached inside the device. A slight pull (laterally or vertically) will trip the Mouse Trip™ device, which puts a bend in the fiber that the Fiber Fence™ Security System can detect. The control unit's alarm activates and the distance to the Mouse Trip™ is displayed on the monitor screen.

Key Features

- The Fiber Fence Control Unit includes:
 - PC Computer
 - Light Source
 - Power Meter
 - OTDR
 - Alarm Unit with I/O's
- The enclosure can be supplied as a stand alone unit or to be mounted in a 19" rack
- Power
 - 90-240 VAC 500W (Including the Accessories Attached)
- Operation Temperature
 - -10 to +50 Degrees C
- Dimensions
 - 13.5" X 17.8" X 14"
- Weight
 - ~15 lbs
- The computer has the following features:
 - CPU: AMD Sempron 64 bit 1.8GHz
 - Operating System: Windows XP Pro™
 - Ram: 512MB
 - Hard Drive: 80 Gig
 - Inputs/Outputs
 - LAN: RJ45 10/100-T Ethernet
 - RS232
 - 4 USB
 - Parallel Output
 - PS2 for mouse and keyboard
 - Speaker Output
- Light Source and Power Meter
 - Fiber Optic Conenctors: 2 FC/APC
 - Laser Output: 0 to -10 dBm @ 1310nm
 - Laser Output: +14 dBm @ 1310nm
 - Sensing Fiber: Connected in Continuous Loop
- Alarm Unit had 16 digital inputs and 16 digital outputs

Strike Zone™

The StrikeZone™ Intrusion Detection System combines Fiber Fence™ technology with conventional security cameras, alarm systems and motion detection. Unlike camera-only security systems, the StrikeZone™ remains operational during heavy fog, snowstorms, blinding rain, heavy smoke and so forth. StrikeZone™ provides added protection against destructive acts such as vandalism, gunfire or explosions. Should a portion of the StrikeZone™ system be damaged or destroyed anywhere along the perimeter, the system will alert security personnel, activate cameras, and provide the location of the event. StrikeZone™ can be configured to use motion-detection DVRs, PTZ cameras, wireless, ethernet, fiber and conventional fixed cameras, and remote access monitoring via the internet.



Fully Integrated Security

When the Fiber Fence™ control unit is interfaced with existing or additional security systems such as magnetic door and window contacts, motion detectors and such, this creates a fully integrated, multi-level intrusion detection system. As with the Fiber Fence™ system, all integrated sensors are location mapped into the control unit software, with device specific icons for each sensor. The control unit contains 16 dry contact inputs and outputs, which can then be connected to any number of devices that send or receive alarm commands. A good example would be the integration of a DVR and PTZ cameras, where in a trigger of a Mouse Trip™ on the perimeter fence can in turn trigger an output contact to the DVR, automatically moving a PTZ camera to immediately view the location of the intrusion. An example of the StrikeZone™ user face is shown above with cameras, door/window contacts, Cover Cops™, and Mouse Trip™ Devices.

Key Features

Sensing Fiber	UV Resistant, Singlemode
Location Accuracy	+/- 6 Meters
Operating Temperature (Control Unit)	-10 to +50°C
(Sensing Fiber)	-40 to +85°C
Control Unit Dimensions	13.5" Wide X 17.8" Deep X 17" Tall
Control Unit Weight	approx. 15 lbs (Depending on Options)
CU Power Requirements	90-240 VAC 50/60Hz (550W)
Laser Output (continuous)	1310nm Laser, -10dBm
Laser Output (event location)	1310nm, +14dBm
Perimeter Fiber Configuration	Continuous Loop
Maximum Range	10 Miles (16km)
Max range for Non-Critical Even Location	18.6 Miles (30km)
Recommended Distance Between Sensors	50ft
Maximum Number of Sensors	100 (at 10 Miles Total Length)
Typical Location Acquisition Time	16 sec (typical up to 10 miles)
Max Simultaneous Event Detections	Sensor Trip Triggers OTDR Scan
Alarm Event Logging	Up to 50 Events
Maximum Number of Authorized Users	Unlimited

System Interfaces (see control unit diagrams on follow page)

Sensing Fiber	FC/PC (x2)
Alarm Inputs	Dry Contacts N/O (x16)
Alarm Outputs	Audible, Visual (LED), Dry Contacts N/O (x16)

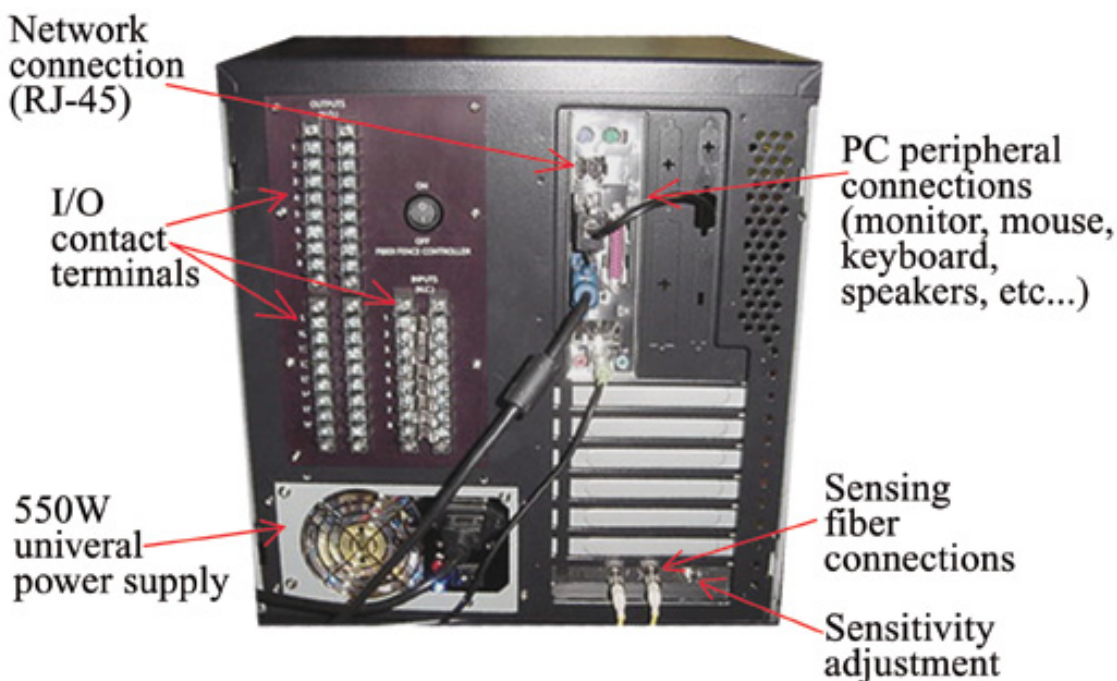
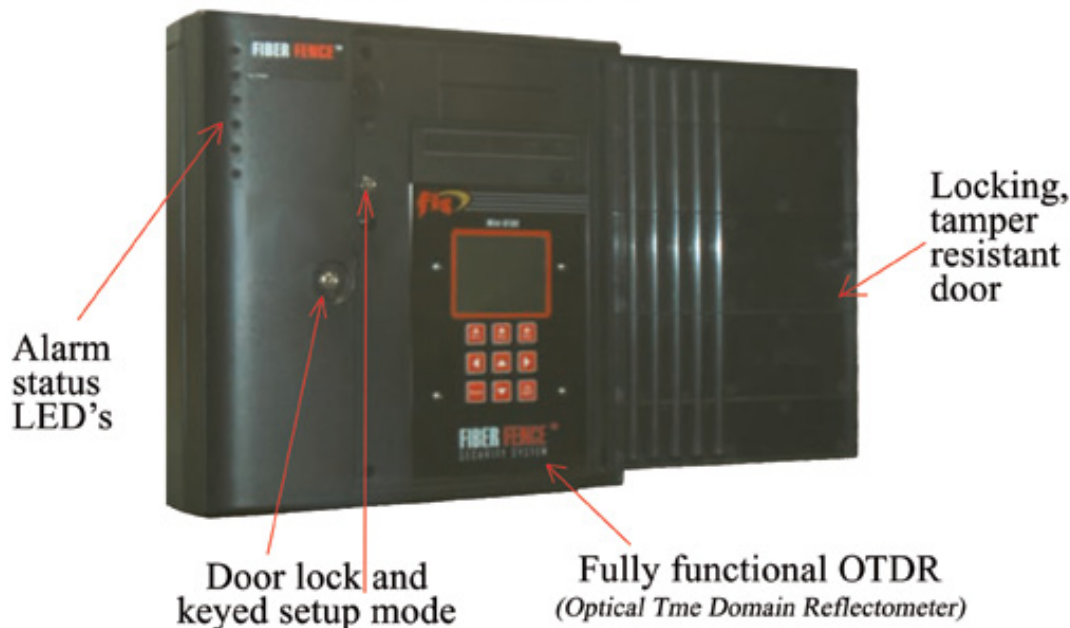
Integration Options (StrikeZone™)

- DVR (Specified by FIS)
- PTZ Cameras (Specified by FIS)
- Auto Dialer
- Any Device Can Be Triggered By a Dry Contact
- Any External device With Dry Contact Outputs Can Be Integrated As An Alarm Input

Fiber Fence Control Unit

Front Panel

Fiber Fence™ Control Unit



FIBER FENCE™ SYSTEM OVERVIEW



1.800.5000.FIS

161 Clear Road • Oriskany, NY 13424
Tel: 315.736.2206 • Fax: 315.736.2285
info@fiberinstrumentsales.com
www.fiberinstrumentsales.com

