Fiber SenSys®

AN OPTEX GROUP COMPANY

Fiber Defender®

Integrated Perimeter Security Solutions

Protecting Perimeters Worldwide

Fiber Defender®

Fiber-optic Intrusion Detection Systems

*For proven high-performance and reliability, wherever perimeter protection is needed, the **Fiber SenSys® Fiber Defender®** family of fiber-optic intrusion detection systems deliver the most trusted solutions in the world.*

Protecting Perimeters

Perimeter security is no longer just for correctional institutions and military sites; it has become standard for organizations throughout the world. Detecting intruders as early as possible provides maximum protection for personnel and resources of all types. Whether securing retail, light industrial facilities, utility and energy plants, petroleum and chemical factories, or transportation centers, Fiber SenSys has a solution for you.

High Security Solutions

Since 1990, more than 20,000 Fiber SenSys **Fiber Defender® Alarm Processing Units** (APUs) have been installed along with over 7,000,000 meters of fiber-optic sensing cable at the most critical sites around the globe. Backed by the US Government's highest approval, Fiber SenSys is the world's leader in fiber-optic intrusion detection systems.

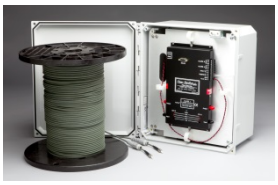
System Integration

Fiber SenSys, Inc. (FSI) partners with end users, manufacturers, and integrators to provide perimeter security solutions. All **Fiber Defender® APUs** offer standard relay outputs with many models offering TCP/IP interface either as a standard interface or as an option. Our basic command and control system, **Fiber Commander™**, allows IP-based high-level integration with all **Fiber Defender®** sensors. Additionally, we offer integration with a growing list of manufacturers and their systems.

High Performance for Larger Installations

The **Fiber Defender® 500 Series Alarm Processors** are the superior choice for medium to large projects with multiple-zone requirements. The **FD504™ and FD508™** Alarm Processor Units (APUs) are 4- and 8-zone, rack-mounted 1U devices, with a single-strand zone design. The **FD504™** can provide up to four zones, and the **FD508™** is ideal for sites with five or more zones, and multiple systems can be economically deployed for sites with up to 16 zones. The **FD525™** and **FD525R™** are designed for larger installations. Each APU is deployed with an insensitive trunk cable and up to 25 individual sensor cables/zones that detect simultaneous intrusion attempts. Since each zone operates autonomously, a sensing cable failure or an intruder on any zone will not affect any other zone's performance, providing the highest level of perimeter protection. The newest addition to the **Fiber Defender® 500 Series**, the **FD525-HALO™**, utilizes its own custom hybrid cable. This robust hybrid cable, containing FSI's proprietary sensor, eliminates the need for conduit and multiple cable paths significantly shortening installation time. Though its cable architecture and easy installation, the **FD525-HALO** delivers the industry's best fiber-optic perimeter solution at an extremely competitive price.

A Fiber Defender® APU for every security challenge



Even first-time users can deploy the superior qualities of fiber-optics—the **FD322-Rapid Fiber Kit™** provides complete dual-zone perimeter protection in easy to order and easy to install kit. The **FD322** Alarm Processor is delivered pre-installed in a NEMA 4X box and includes the tuning software and pre-terminated, robust sensor cable. There is no need for conduit or special tools. Designed specifically for chain link applications, available in a kit or alone, the **FD322** is value-priced and designed for easy installation. The PL-1N* approved **Fiber Defender® FD33X** and **FD34X** APUs are highly programmable to eliminate even the most challenging nuisance alarms while deployed in a variety of applications including fences and walls. The **FD34X** APUs provide a completely remote solution (insensitive lead up to 20 km) eliminating the need for power or communications in the field. The **FD348R** offers the same highly-programmable technology in a rack-mounted processor.

*United States Air Force Protection Level-1 Nuclear

APU Model Number:	FD322	FD331/ FD332	FD341/ FD342	FD348R	FD504/ FD508	FD525-HALO	FD525[1/3]
Fence Applications	●	●	●	●	●	●	●
Walls		●	●	●	●		●
Anemometer Device Input		●					
Remote Capable (Insensitive Lead)			●	●	●	●	●
PL-1N Approved		●	●				
Tuning Software Included	●	●	●	●	●	●	●
Number of Tuning Parameters	6	30	30	30	> 30	> 30	> 30
TCP/IP-Enabled	●	Opt.	Opt.	●	●	●	●
Number of Channels (Zones)	2	1 / 2	1 / 2	1[2]	4 / 8	25	25
Maximum Sensing Cable per Zone	500m	5km	5km	5km	800m	800m	800m

1: The FD525 is available as a stand-alone and a rack-mounted (FD525R) unit; both are designed for rigid fence applications.
2: RK-348 Rack (4U) with power supply for rack-mounted FD348R APUs accommodates up to eight APUs per rack.
3: FD525 PL-1 approved (Not approved for use in Northern tier, or areas where snow and ice accumulations are normal, pending further testing.)

Why Fiber-optic Detection Systems?

Difficult to Defeat

Fiber SenSys offers the only fiber-optic sensor systems designated as PL-1N by the US Air Force — their highest security designation approved for nuclear weapons storage areas and critical resources. Through advanced signal processing, Fiber SenSys ensures every APU performs to the highest standards in probability of detection (PD) and has industry-low nuisance/false alarm rates (NAR/FAR). Also, by offering advanced tuning capabilities, the installer can precisely optimize detection and tune the system according to the unique site conditions.

Designed For Harsh, Hazardous, and Noisy Environments

Fiber SenSys systems transmit light from a laser through the sensor and analyze the distortion of that light to detect threats. There is no electricity in our fiber-optic sensors to ignite vapors or fumes nor are the sensors affected by EMI, RFI, lightning or proximity to electrical cables. With our remote capabilities, the APUs can be centrally located eliminating the need for communications and power in the field. Infrastructure costs are further reduced by installing electronics in a secure, central location up to 20 km away. With this architecture, only passive optical components are installed in the field. Environmental conditions such as temperature, lightning, and corrosive liquids and gases become irrelevant.

Low Total Cost of Ownership

The overall cost of Fiber SenSys APUs bests other security solutions. With a projected life of 20 years and a foundation of performance, durability, and competitive base prices, Fiber SenSys APUs have industry-low ongoing system maintenance costs and are all backed by our dedicated training programs and customer-focused team of technical support professionals.

For reliable, high-performance security solutions, choose the leader in perimeter protection — Fiber SenSys.

Higher security by design

For additional information, please visit www.FiberSenSys.com

For more information, contact us at
info@fibersensys.com
Tel: +1(503) 692-4430
Toll free (US) +1(800) 641-8150
www.fibersensys.com

Fiber SenSys®
AN OPTEX GROUP COMPANY