

## Fiber Defender<sup>®</sup> FD7104<sup>™</sup>

### *Four-zone Fiber-optic Intrusion Detection System*

The Fiber Defender FD7104<sup>™</sup> is a four-zone, fiber-optic intrusion detection sensor optimized for perimeter protection. It delivers a high Probability of Detection (PD), low Nuisance Alarm Rate (NAR), and ease of installation and operation. This Alarm Processing Unit (APU) can be mounted indoors or placed in a weather-proof enclosure and mounted

outdoors. Each zone can drive over three miles (5Km) of combined insensitive/sensing

cable providing flexible system configuration options. A common configuration is to remote mount all processors inside; thus, no active components are located in the field.

The FD7104 utilizes our next generation algorithm – a product of Fiber SenSys's more than 30 years of leadership in fiber-optic perimeter sensors. The APU

captures intrusions while rejecting nuisances such as wind and traffic. The FD7104's intuitive user interface allows site-specific data and characteristics to be incorporated into the algorithm to ensure quicker, consistent, and repeatable tuning results for critical applications.

With the FD7104's browser-based embedded interface, no additional software is needed. The interface can be accessed either through the USB or Ethernet IP port, allowing local or remote access to the processor. Functions available include cable configuration, sensor tuning, network communications, and the installation manual. An alarm history log tracks the last 100 alarms for each zone. The history includes the spectral signal utilized in the built-in graphical modeler to optimize processor tuning and performance. The Fiber Defender FD7104's firmware is easily field-upgradable and automatically updates the embedded user/operations manual.



#### Key Features:

- Next generation algorithm
- Embedded web interface
- Power over Ethernet (PoE)
- Built-in tuning and calibration software and manual
- Four zones
- Remote mount capable

#### Applications:

- Government and military
- Electrical substations
- Solar power generation facilities
- Oil and gas processing sites

### *Higher security by design*

For more information, contact us at:

**Sales@fibersensys.com**

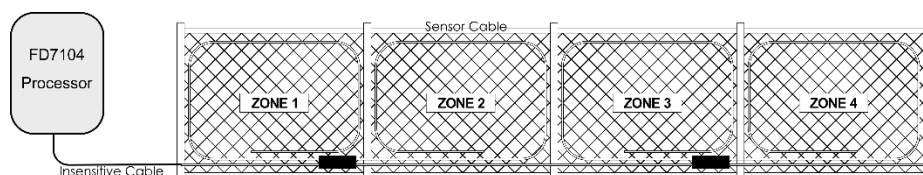
**Tel: +1(503) 692-4430**

**Toll free (US) +1(800) 641-8150**

**www.fibersensys.com**

## Multi-zone Protection

The FD7104 is uniquely suited to remotely monitor and protect multiple zones from a single stand-alone APU.



Basic Configuration Example

FD7104 PRODUCT SPECIFICATIONS	
<b>Application</b>	Perimeter fence
<b>Sensor Configuration</b>	Single run with end of line termination
<b>Number of Zones per APU</b>	Four fully independent zones
<b>Alarm Inputs</b>	One auxiliary input for an external sensor One tamper input
<b>Sensing Fiber</b>	Multimode fiber, custom manufactured to Fiber SenSys specifications
<b>Insensitive Lead-in Fiber</b>	Single-mode fiber
<b>Sensing Cable / Zone Lengths</b>	For each zone, sensing fiber plus insensitive lead-in cable $\leq 5.8\text{Km}$ Sensing fiber length per zone $\leq 800$ meters Zone length $\leq 500$ meters
<b>Standard, External Power Supply</b>	12-24-volt DC or PoE
<b>Peak power consumption</b>	7 watts
<b>Front-panel Display</b>	Zone LED indicator: Secure, Alarm, Fault, Inactive for each zone
<b>Communications</b>	USB type B: Configuration and tuning RJ45 Ethernet: Configuration, tuning with remote monitoring
<b>Relay Contact Ratings</b> <b>Alarm Relay Default</b> <b>Fault Relay</b>	500mA @ 24V Form C: Normally open, and normally closed Form C: Normally open, and normally closed
<b>Operating temperature range</b>	$-40^{\circ}\text{C}$ to $+70^{\circ}\text{C}$
<b>Humidity</b>	95% non-condensing
<b>Dimensions</b>	7.71 x 6.6 x 1.77 (inches) 19.58 x 16.76 x 4.50 (cm)

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



**Fiber SenSys**  
 AN OPTEX GROUP COMPANY