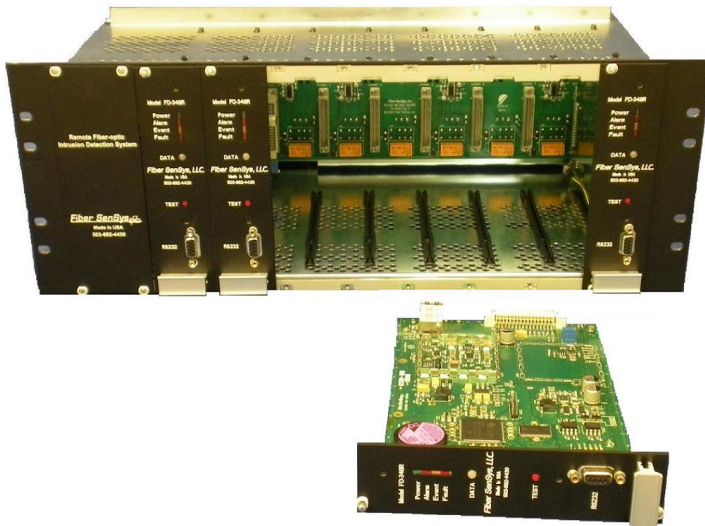# Fiber Defender 348R™

Remote fiber-optic perimeter & data security system

- ✓ Backward compatible with **FD-208R™**
- ✓ XML integration via TCP/IP
- ✓ Wind rejection
- ✓ Immunity to lightning/EMI
- ✓ Automatic alarm waveform recording
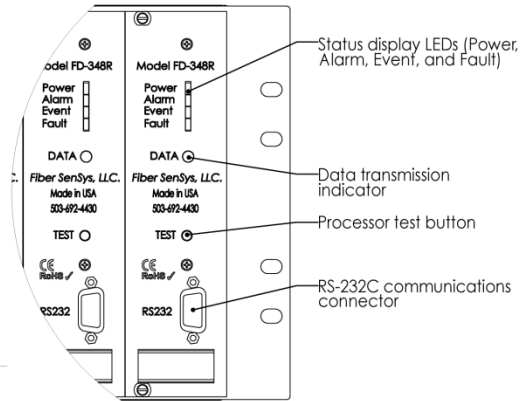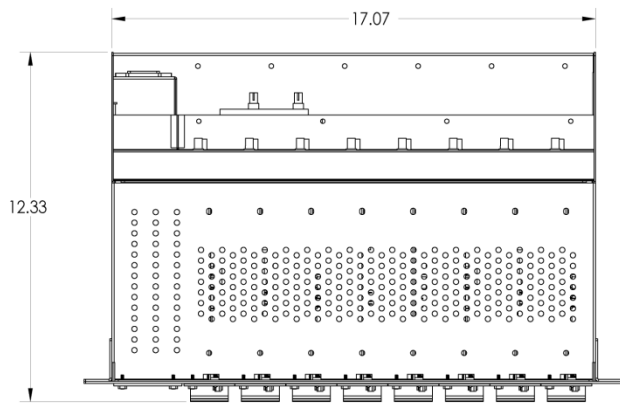- ✓ CE and RoHS Compliant

The **FD-348R™** alarm processing unit (APU) is the replacement for the highly successful **FD-208R™**. It is backward compatible with the **FD-208R**, retaining all the features, functions, and specifications while offering a host of new features such as XML integration, alarm history, and automatic waveform recording of the last 24 alarms.

The **FD-348R,** like the **FD-208R,** is a rack-mounted fiber-optic sensor ideal for fence and buried perimeter security around military, industrial, residential, and high-value commercial property. Each 19-inch **RK-348™** rack holds up to eight **FD-348R** APUs.

The **FD-348R** uses two types of optical fibers. The sensing fiber, located at perimeter zones, detects minute vibrations in a fence or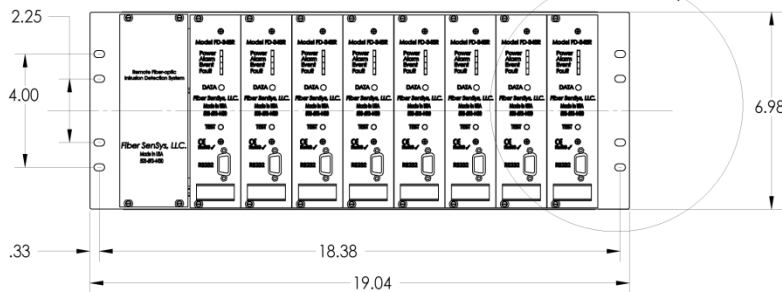 in the ground. The APU uses signals from the sensing fiber to sound alarms. Special non-sensing fiber is used to connect the APUs to the sensing fibers. This allows the APUs to be remotely located from the secure perimeter by as much as 20 km.

All fiber-optic sensors manufactured by **Fiber SenSys** use the industry's most advanced digital signal processing to discriminate between real threats and signals caused by things like small animals and wind. Our **SpectraView™** software provides a real-time spectral view of the signal from the sensor, and numerous parameters for tuning the system's response. Our **AutoTune™** software will even tune the system for you, providing expert results with virtually no training required.
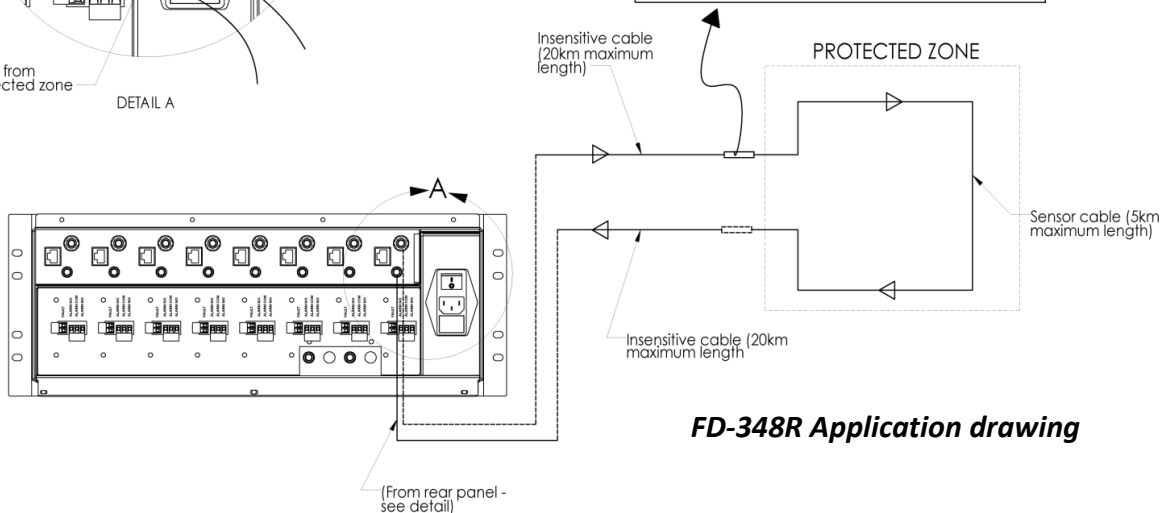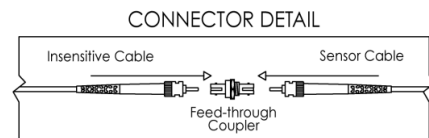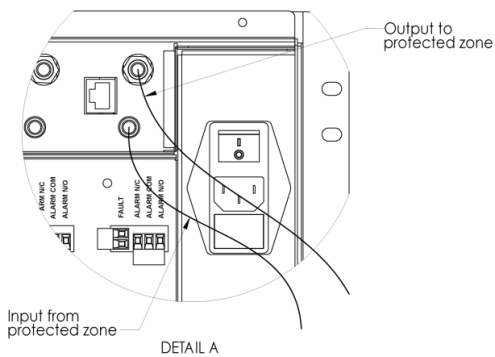
17.07

12.33

2.25

4.00

.33

18.38

19.04

6.98

UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
ANGULAR± ± .5
X.XX ± .010
X.XXX ± .005

Assembly diagram, RK-348 with FD-348R installed

Status display LEDs (Power, Alarm, Event, and Fault)

Data transmission indicator

Processor test button

RS-232C communications connector

Model FD-348R

Power
Alarm
Event
Fault

DATA

Fiber SenSys, LLC.
Made in USA
503-692-4430

TEST

RS232

DETAIL A
SCALE 2 : 3

Output to protected zone

Input from protected zone

DETAIL A

CONNECTOR DETAIL

Insensitive Cable

Sensor Cable

Feed-through Coupler

PROTECTED ZONE

Insensitive cable (20km maximum length)

Sensor cable (5km maximum length)

Insensitive cable (20km maximum length)

FD-348R Application drawing

(From rear panel - see detail)

Sensing fiber specifications	
Operating temperature range	-55°C to 75°C
Humidity	100% condensing
Sensitivity	Uniform over entire length
Insensitive fiber	IC-3 (3mm), IC-3D (duplex), IC-4 (buried), 20 km max.
Sensing fiber	SC-3 (fence), SC-4 (buried), 5 km max
Conduit EZ-300NSS , EZ-400NSS EZ-300SS	 100 meter (5/8", 1/2") non-split conduit kit 100 meter split conduit kit
Connector type	ST

Product specifications: alarm processor units installed into FD348R rack	
Operating temperature range	0°C to 55°C
Humidity	90% non-condensing

Communications
    Network compatibility
 	
    Programming
 	
    Alarm and fault outputs
	
	XML via TCP/IP port and Fiber Security Network (FSN)
	RS-232 using laptop PC or Hyperion™ hand-held calibrator
	100mA @ 400V normally closed or normally open relay contacts, XML via TCP/IP, Fiber Security Network (FSN)

Electrical power and voltage	120-240 VAC, 25 watts, 50 or 60 Hz

Rack physical specifications
    Capacity
    Height
    Width
    Depth
	
	Max 8 FD-348R
	6.98 in
	19 in
	12.33 in

Product compatibility	SpectraView™, AutoTune™ Calibration software

Fiber SenSys®

HIGH PERFORMANCE ▪ HIGH RELIABILITY ▪ HIGH SECURITY

ISO 9001
QMI-SAI Global
#0044147

Certified System
™

Features:

Full two-year warranty

Remotely located electronics

Immunity to lightning/EMI

Automatic tuning algorithms

Wind rejection

Applications:

Military

IT security

Pipelines

Electrical substations

Correctional institutions

Deployments:

Fences

Buried

Walls

Secure data

Rooftops

Learn more

Create peace of mind while protecting your resources and people. Call us today – our sales and support staff are ready to answer your questions.

RoHS

CE

CLASS 1 LASER OUTPUT
This product complies with 21 CFR1040.10

Fiber SenSys ®

HIGH PERFORMANCE ▪ HIGH RELIABILITY ▪ HIGH SECURITY