Safeguards Technology’s Fiber Defense® fiber optic multi-zone sensing intrusion detection system is ideal for any facility that strives to improve perimeter security and to provide continuous, 24-hour monitoring for the protection of lives and property. Fiber Defense® incorporates the latest, most advanced fiber-optic technology into intrusion detection. The system works by sensing disturbances along a perimeter with a high-sensitivity fiber optic cable coupled with a high-speed processor that will alert potential intrusions while minimizing false and nuisance alarms. What separates it from the rest of the fiber optic sensors on the market it’s ability to detect disturbances from multiple zones at the same time.
FEAT URES & BENEFITS

Simple to install and maintain; a single rugged fiber optic cable serves as both the sensor and the telemetry path.

The fiber optic cable is rodent, weather, tamper, and crush resistant.

System automatically adapts to any environment, from freezing arctic temperatures to the desert sun, and can detect through wind, rain, ice, or snow.

Fiber optic cable is unaffected by EMI due to electrical storms, nearby power lines, electrical equipment, radio transmissions, or any magnetic anomalies.

Fiber optic cable is lightweight, yet very strong and durable. A one mile segment weighs only about 40 pounds, and has a breaking strength in excess of 350 pounds.

A one mile cable can include up to 200 sensing zones, and the sensitivity range for each zone is independently adjustable from the operator console.

No special fencing is required; may be installed on existing fencing with minimal mounting hardware.

System requires no calibration; simply plug in the all-optical sensor cable and the system configures and calibrates itself. A continuous built-in monitoring process guarantees the highest accuracy without the need for periodic calibration.

APPLICATION

The FiberDefense® Intrusion Detection System is ideal for factories, energy plants & substations, business parks, water reservoirs & treatment grounds, airports, storage areas, military facilities, cell phone towers, harbors, and anywhere perimeter security is required.

SPECIFICATIONS

Minimum Detectable Disturbance: 2 µstrain
Dynamic Range: 80 dB
Acoustic Bandwidth: 10 kHz
System Update Rate: 100 Hz
Max. Individual Sensor Cable Length: 1 mi.
Output Interface: RS232/422/USB
Power Requirements: 12 Vdc/10 watts
Number of Zones per Sensor Cable: Up to 200
Zone Length/Event Resolution: 25 feet
Sensor Operating Life: 10 Years
Operating Temperature:
  Sensor Cable: -40 to +185°F
  Interrogation Unit: -40 to +140°F
Non-Operating Temperature
  Sensor Cable: -55 to +185°F
  Interrogation Unit: -55 to +185°F
Optical Connector Type: FC/APC
Cable Break Strength: 350 lbs.