

# Fiber Optic Perimeter Intrusion Detection System (FOPIDS)

FOPIDS systems are intrusion detection sensor system developed for the advanced perimeter security. Optical fiber advantages like passive nature, immune to EMI, easy to repair makes FOPIDS systems increased demand in security and surveillance industry. Reliable and field tested distributed sensor for both underground and over ground deployments give it more area of applications. FOPIDS deployment follows a Zone based deployment which makes monitoring after intrusion easier and effective. FOPIDS is designed, developed and manufactured by Fiber Optika Technologies Pvt Ltd.

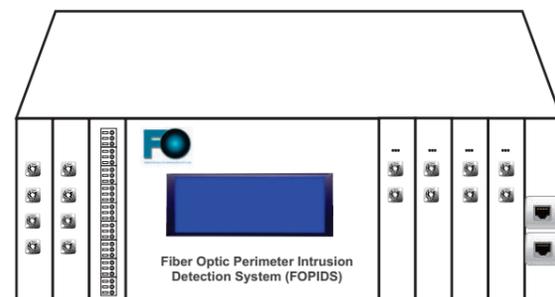
## FOPIDS Features

- Perimeter Intrusion Detection
- Passive Sensor
- Zone Based System
- Distributed Acoustic sensing
- Real Time Alert and Warning
- Overground and Underground deployment
- Intelligent software control of device and zones



## FOPIDS Main Device

FOPIDS is the main control device in the system which can control up to 16 zones using a single device. It has rack mountable design suitable for a control room facility where all the monitoring facilities can be integrated like alarm unit, management unit and any other security layer necessary to be integrated with the system. A plug in card system is used in the device providing easy maintenance and redundancy feature.



## FOPIDS PASSIVE DEVICE

These are the modules which handles the passive part of the FOPIDS system. They have fiber routing facility and manage to split or combine fiber optic signals for the sensor. They have IP65 ABS packaging making it suitable for both over ground and underground applications.



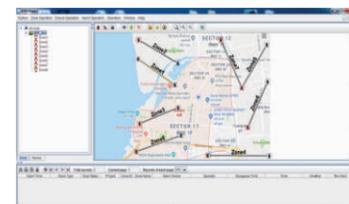
## FOPIDS Sensing Fiber

Optical Fiber Cable is used as the sensing element in FOPIDS system. Industry grade Single Mode optical fiber used in telecommunication industry is used for the deployments. Optical signals are transmitted and received through the optical fibers. Usage optical cable protect the fiber from weather and environmental changes, corrosion, UV exposure etc.



## FOPIDS Management software

FOPIDS Manager System management software realizes the real-time online monitoring, mapping, analysis of intrusion detection, alarm records, statistics report, system configuration and joint-action management.



## FOPIDS Deployment

### 1. Overground

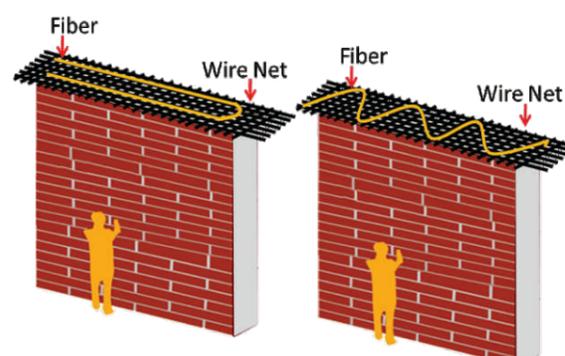
#### 1. Over ground

Overground installations are concentrated majorly on already available physical barriers like fences and walls. Fences like iron wire net, metal wire net, barbed designs are chosen for over ground fence applications. For walls deployment is done on the surface and top of the walls for better intrusion detections

#### Intrusion behaviors detected:

- Climbing the fence or wall
- Digging tunnel beneath the fence/wall
- Cutting the Fiber
- Cutting the fence

### 2. Underground



## 2. Underground

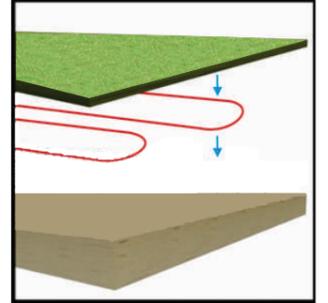
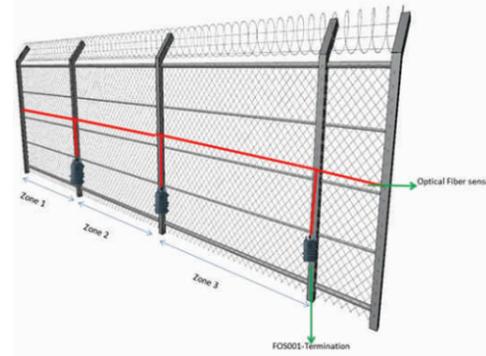
In a buried underground application, vibration and pressure changes are the primary modes of stimuli. However, when the sensor cable is buried in sand or soft soils, vibration is rapidly dampened and thus negligible. I

### Intrusion behaviors detected:

- Digging and tunneling activities
- Running and fast walking
- Vehicle passing
- Tree cutting

### Zone Configuration

FOPIDS sensors are deployed in zone based configurations. Each zone length is limited from 100m to 250 m which makes monitoring the zone after intrusion alerts efficient and easier process. FOPIDS device has wide option of monitoring, 2, 4, 6, 8 extending up to 16 zone at same time using same device controls. Each zone is terminated at the point at the perimeter where termination is decided using FOPIDS Passive Terminals



## Applications

FOPIDS can be used in areas where Perimeter protection is important. Major ones include:

1. Protection of restricted areas such as country borders, protection force areas
2. Environmentally vulnerable areas such as forest, agriculture land, wild life sanctuaries etc
3. Buildings and areas like office spaces, schools, banks, airports, transport stations etc.
4. Security breach vulnerable warning areas like prisons, nuclear power plants, research facilities, electric power stations etc
5. Long distance physical security necessary areas like oil and gas pipelines, railway lines, road and other transport facility lines



### Fiber Optika Technologies Pvt Ltd

#38,22nd Main Rd,14th Cross,Padmanabhanagar, Bengaluru-560070. Karnataka.

Ph.no: +91-80-26395001/02

Fax: +91-80-26395003.

[www.fiberoptika.com](http://www.fiberoptika.com)

[email:info@fiberoptika.com](mailto:info@fiberoptika.com)