Fiber Optic Based Acoustic Sensing System FIPRO PFO-FIP-50D





OVERVIEW

FIPRO PFO-FIP-50D can detect various types of activities analyzing in real time, and remotely, signals captured by a distributed fiber optic cable installed along the sensitive area.

The advanced FIPRO artificial intelligence allows the detection of simultaneous multiple events covering a wide range of applications, such as:

•Perimeter and Border Security

Thanks to advanced AI algorithms, the fiber optic cable installed underground can detect any kind of unauthorized activity such as excavations, walking, running, car/trucks passing nearby.

When the fiber optics is installed on a fence FIPRO PFO-FIP-50D can detect climbing and cutting attempts.

• Environmental and Pipeline Security

Thanks to its long-range scope, FIPRO PFO-FIP-50D is the ideal solution for any kind of pipeline protection (oil&gas, cupper cable conduits, etc.), detecting potential leakage, sabotage, and any kind of unauthorized activity such as excavations, walking, running, car/trucks passing nearby

• Physical Cyber Security and Telecom Data Protection

Physical Cyber Security is a corner stone of data protection and FIPRO PFO-FIP-50D is the perfect for this kind of application.

By leveraging already exiting fiber optic lines, the system can detect potential damages along communication lines and monitor in-real time any kind of unauthorized activities.





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ADVANTAGES

- •No power supply on the field required.
- Digital signal analysis with programmable pattern recognition.
- Filters and masks to change sensibility for every zone.
- Not affected by electromagnetic disturbs and lightening.
- •Not affected by weather conditions.
- •Point of intrusion with precision of few meters.
- •Existing spare fibers can be used.

APPLICATIONS AREA

- •Industrial, residential, and commercial sites security
- •Oil&Gas, copper cable and water pipelines
- Military facilities security
- Homeland security: airports, railways, and highways
- Power plants security
- •Border Security
- •Telecom lines protections

OPERATION

- •The system can be monitored by and advanced and user-friendly interface.
- Desired number, length and sensitivity of each zone can be set up along the fiber optic.
- •Local recording of events can be accessed for monitoring and analysis.
- Multi users.
- •Integration with CCTV cameras through GPS Standard's SCS or through any third-party VMS.

CHARACTERISTICS

- •24/7 remote access to FIPRO through multiple devices via web interface
- •Real-time monitoring
- •Up to 100 km with one single device
- •Cross point technology with an alarm point approximation of 10 m
- Easy to use and to install
- Compatible with previously deployed fiber cables and can have dedicated fiber cables
- $\bullet \, \text{No}$ power supply on the field required

TECHNICAL SPECIFICATIONS

Detection Distance	Up to 100 km
Position Accuracy	Less than 10 m
Number of Channels	l fiber per device
Dimensions and Weight	49 cm(19'') × 50 cm × 8.9 cm(2U), 8 kg
	49 cm (19'') \times 65 cm \times 17.8 cm (4U), 20 kg
Electrical Requirements	Input voltage: 115/220 VAC 50/60 Hz
	Average Power Consumption: ~800 W
	Maximum Power Requirement: 1350 W
Operating Conditions	Fiber Optic Sensor Cable: [-40, 70] °C
	Monitoring Device: [0, 60] °C (AC environment)
System Interface	Web 2.0 - Mobile Compatible



