

FOTAS SF-10

Single Channel Perimeter Security

Fiber Optic Based Acoustic Sensing System



FOTAS SF-10 is an acoustic sensor based on fiber optic infrastructure and It can be easily distributed in variant terrains. SF-10 keeps your perimeter and borders safe and sends you early threat warnings. Laser beams sent by the laser source traveling the entire system. Providing information while flowing through the fiber optic cable. When laser beams come back to the FOTAS, a computer software analyse them. Noises and unrelated data eliminated through the software. Finally FOTAS AI classifies the alarms.

Actions that create vibration can be watched live on the system. Noisy areas can be isolated and deactivated at the request of user. All alarms received and reported over the web interface. They are stored and can be exported.

It is one of the proven early warning security system. FOTAS detects third-party intervention, illegal crossing attempts and unauthorized excavations along a line spanning several kilometres to thousands of kilometres.

Applications Areas

- Industrial, Residential and Commercial Sites Security Military, Public and Private Facilities Security Airports, Railways and Highways Security
- Power Plants Security
- Border Security
- Security of Mining Enterprises

Applications Types

With FOTAS SF-10 a large variety of activities can be detected remotely along a fiber line, such as the below applications:

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- Environmental and Border Security
- A detection fiber can detect unauthorized excavations, when laid on the ground; and it can
 detect climbing and cutting attempts when mounted along a wire-fence.
- Telecom Line Security
- The advanced FOTAS artificial intelligence allows the detection of multiple events, and offers a
 wide range of application areas. Damages along communication lines can be monitored in-real
 time and any unauthorized excavations can be easily detected.



Features

- The fiber optic line can be monitored live using GIS based Human Machine Interface.
- No installation is required to use the operator interface.
- Types and regions of threats can be defined along the desired regions of fiber cables.
- Past threats can be accessed and analysed.
- Access can be granted to multiple users.
- With CCTV integration, threat zones can located and visually monitored.
- FOTAS can be integrated with other security solutions.
- Access to FOTAS with multiple devices via web interface Fast and reliable with 24/7 access
- Up to 10 km of real-time security with one device
- Up to 4 m sensitivity range
- Ease of use and installation
- Compatible with previously deployed fiber cables and can have dedicated fiber cables
- No electricity or electronic devices needed along the protected area

| Detection Distance | 10 km Single Channel | | |
|--------------------------------|---|----------|----------------------|
| Position Accuracy | ≥ 4 m | | |
| Number of Channels | 1 fiber per device | | |
| Dimensions and Weight | 49 cm (19") x 50 cm x 8.9 cm (2U), 8 kg | | |
| Electrical Requirements | Input voltage: | | 115/220 VAC 50/60 Hz |
| | Average Power Consumption: | | ~125 W |
| | Maximum Power Requir | rement: | 250 W |
| Operating Conditions | Sensing Cable: -4 | 40~70 °C | |
| | F-10 Device: 0~60 °C (AC environment) | | |
| System Interface | Web 2.0 - Mobile Compatible | | |

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