



FOTAS SINGLE OR DUAL CHANNEL PERIMETER SECURITY

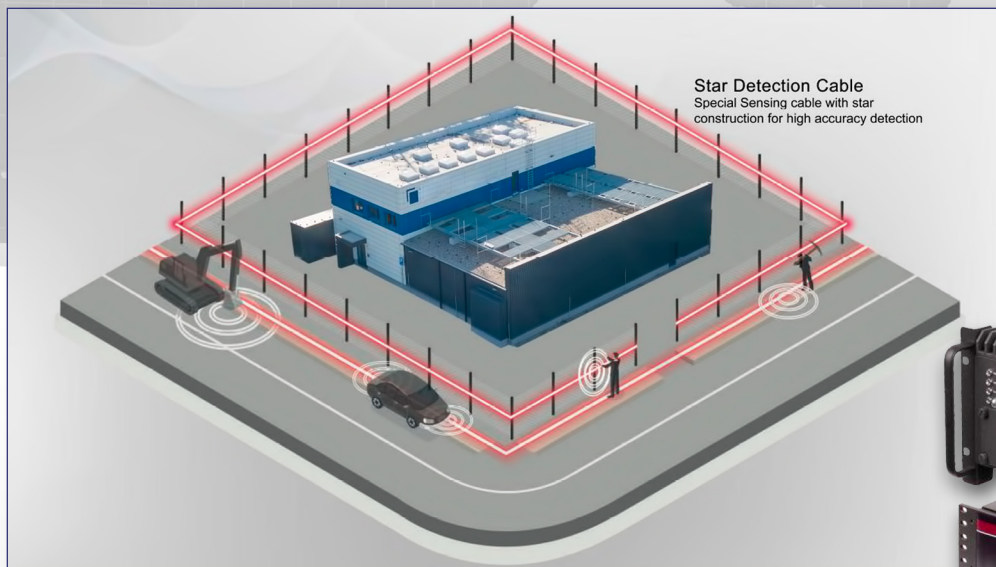
Fiber Optic Based Acoustic Sensing System

MAIN CHARACTERISTICS

FOTAS is an innovative acoustic sensor that operates on a fiber optic infrastructure, making it highly adaptable to various terrains. Fotas is specifically designed to enhance the security of fences and borders, providing early threat warnings for timely response.

The system utilizes laser beams emitted from a laser source, which traverse the entire infrastructure, gathering crucial information as they travel through the fiber optic cable. Upon returning to the FOTAS system, advanced computer software meticulously analyzes the laser beams, effectively filtering out any unwanted noise or irrelevant data. Ultimately, the intelligent FOTAS AI accurately classifies the alarms generated. Live monitoring of actions causing vibrations is possible through the system, enabling real-time surveillance. Noisy areas can be pinpointed and deactivated based on user preferences. All alarms are promptly received and reported via the intuitive web interface, where they are stored and can be easily exported for comprehensive analysis.

FOTAS is a proven early warning security system, renowned for its effectiveness in detecting third-party interventions, illegal crossing attempts, and unauthorized excavations across vast distances, spanning from several kilometers to thousands of kilometers.



Interrogator for Distributed Acoustic Sensor (DAS) + Rugged OPTA-PP62X AI server



Applications Types

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

- **Environmental and Border Security**

A detection fiber can detect unauthorized excavations, when laid on the ground; and it can detect climbing and cutting at 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.



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FUNCTIONAL 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

AICP-X64 Standard AI server pro FOTAS



Alarm: Car Trespassing

Disabled: 15-12-2022 07:56

Zone: Optokon-Gate-2

Perimeter Dist. (m): 798 m

Latitude: 49.457943

Longitude: 15.605734

Buttons: OpenStreetMap, Google, Show, Acknowledge

EVENTS	REPORTED	MAP	ZONE	LANDMARKS	AI	CALENDAR
Last Events (50 / 8933)						
Start Time	End Time	Loc. (m)	End Loc. (m)	Class Name	Path Name	Zone
15-12-2022 07:56:14	15-12-2022 07:56:14	798 m	798 m	Car Trespassing	Optonet	Optokon-Gate-2
15-12-2022 07:56:14	15-12-2022 07:56:14	143 m	143 m	Car Trespassing	Optonet	Optonet-Gate-1
15-12-2022 07:56:32	15-12-2022 07:56:32	143 m	143 m	Car Trespassing	Optonet	Optonet-Gate-1
15-12-2022 07:50:56	15-12-2022 07:50:56	573 m	573 m	Car Trespassing	Optonet	Optokon-Gate-1
15-12-2022 07:50:52	15-12-2022 07:50:52	553 m	553 m	Car Trespassing	Optonet	Optokon-Gate-1
15-12-2022 07:50:50	15-12-2022 07:50:50	849 m	849 m	Car Trespassing	Optonet	Optokon-Gate-2
15-12-2022 07:48:14	15-12-2022 07:48:14	92 m	92 m	Human Walking	Optonet	Optonet-Buried
15-12-2022 07:45:04	15-12-2022 07:45:04	839 m	839 m	Car Trespassing	Optonet	Optokon-Gate-2
15-12-2022 07:45:02	15-12-2022 07:45:02	154 m	154 m	Car Trespassing	Optonet	Optonet-Gate-1
15-12-2022 07:44:58	15-12-2022 07:44:58	573 m	573 m	Car Trespassing	Optonet	Optokon-Gate-1
15-12-2022 07:43:32	15-12-2022 07:43:32	839 m	839 m	Car Trespassing	Optonet	Optokon-Gate-2
15-12-2022 07:43:06	15-12-2022 07:43:06	839 m	839 m	Car Trespassing	Optonet	Optokon-Gate-2

FOTAS - WEB Interface overview

TECHNICAL SPECIFICATIONS

Detection Distance	Depend on type, see table below
Position Accuracy 100 km	100 km Single Channel ≥ 10 m
Position Accuracy 10 km	10 km Single Channel ≥ 4 m
Number of Channels	Depend on type, see table below
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: about 125 W Maximum Power Requirement: 250 W
Operating Conditions	Sensing Cable: -40 – +70 °C SL-50 Device: 0 – 60 °C (AC environment)
System Interface	Web 2.0 - Mobile Compatible