



Core features

- **Decorative and innocent looking**
- **Non-obtrusive**
- **Modular in height and length**
- **Exceptional Probability of Detection (PD)**
- **Adjustable sensitivity**
- **Minimum number of false alarms**
- **No moving parts assures negligible false alarms**
- **Low maintenance**
- **Low power consumption - ~2 W per 1 Km**
- **Long life expectancy**

Description

InnoFence is designed to look like a regular high quality fence with a concealed fiber optic sensor for intrusion detection. It is made from pre-fabricated modules that are between 120 to 300 cm (3.9 to 9.8 ft.) and supplied in standard lengths of 2 meters (6.6 ft). It can be mounted on a low concrete base (free-standing) or wall-mounted.

An alarm will be caused by cutting, bending, tampering with the upper cover or climbing (with or without a ladder).

Fiber optic sensing components are mounted within the top channel of the module's frame (bottom channel on wall-mounted). The concrete base is usually 200 mm (8 in.) wide and 500 mm (20 in.) high.

Markets

InnoFence is the perfect solution for high profiles sites such as VIP residences, government buildings and embassies. It is also installed at airports and industrial / commercial facilities worldwide.

How it works

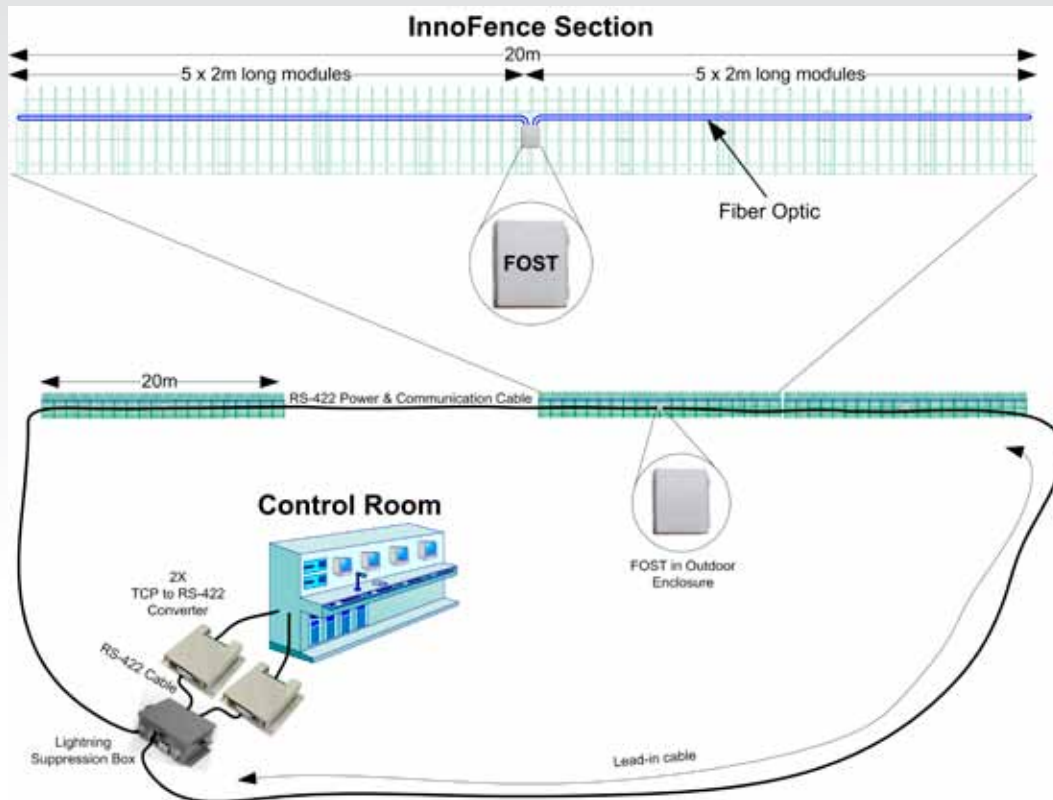
The operating principal of the InnoFence is based on light transmission which is controlled inside a fiber optic cable. Any reduction in light transmission will generate a signal, which is evaluated by the processor, to decide upon generating an alarm.

The fiber optic components are mounted within the top channel of the module's frame (bottom channel on a wall mounted system). It is installed to detect the mechanical forces acting on the module during a forced entry through or over it.

A special fence-mounted processor called a FOST (Fiber Optic System Transponder) receives and transmits light signals through the fibers in the fence modules, processes them and determines whether an alarm signal should be sent to the control system.



System configuration



TECHNICAL DESCRIPTION

STANDARD MODULE

2 m (6.6 ft.) long, 2.5 m (8.2 ft.) high

OPTIONAL HEIGHTS

Minimum: 120 cm (3.9 ft.)

Maximum: 300 cm (9.8 ft.)

Material: All metal parts steel SAE 1020

Finish: Galvanized and primer painted

FOST (Fiber Optic Sensor Transponder)

- The FOST is an outdoor transponder used for processing fiber optic signals. It determines alarms based on attenuation of optical signals in the fiber optic cables that are being used as sensors.
- The FOST is designed to control two fiber optic cables and to transmit data to a control center via proprietary RS-422 communication cable or dry contacts
- The FOST is fitted in an outdoor weatherproof enclosure with a covered tamper switch

Inputs:

- 2 fiber optic cables
- 2 end of line resistor supervised dry contact inputs
- 1 tamper cover switch

Outputs:

- Alarm relay - one Normally Open (NO) contact
- Fail / alarm relay - one NO contact
- Contact rating - 500 mA @ 50 V

Data communication: Proprietary RS-422

Transient suppression: On data and power input and on relay output contacts

Control: Independent control of the output relay through communication line.

Status indicating (LEDs):

- Alarm by the fiber optic cables
- Disconnection of fiber optic cable
- Fail
- Light transmission

Input voltage: 12 - 30 VDC

Current consumption:

- RS-422 option - 4 mA
- Dry contact option - 45 mA max.

Operating temperature (standard):

-20 °C to 70 °C (-4 °F to 158 °F)

Operating temperature (extended):

-40 °C to 70 °C (-40 °F to 158 °F)

Humidity: 20% to 95% condensing

Unit size: Weather-proof enclosure per NEMA 12 / 13 - 240 x 155 x 100 mm (9.4 x 6.1 x 3.9 in.)

Specifications are subject to change without prior notice.