

# Decorative Fence

## Fiber optic intrusion detection sensor

### Features & Benefits ▾

- Attractive solution for intrusion detection
- No moving parts assures negligible false alarms
- Exceptional Probability of detection (Pd)
- Zero false alarms
- Long life expectancy
- Modular in height and length
- Low maintenance
- Versatile
- Can be connected to any existing or future control center

### BARRIER SENSORS

#### DESCRIPTION

**Decorative Fence** is an innocent looking, decorative fence barrier with an integrated fiber optic sensor that is non-obtrusive. Senstar's Decorative Fence is designed primarily for high security sites where appearance, choice of color and heights are important. It offers high security with a pleasing appearance. Any attempt to climb over the fence or pry apart the vertical bars will generate an alarm.



#### APPLICATION

Supplied in standard lengths of 2 meters (6.6 ft.) by 1.2 - 3 meters (4 - 10 ft.) high, it can be mounted on a low concrete base strip (free standing system) or wall mounted to provide an alarm when the wall is climbed over. Fiber optic components are mounted within the top channel of the module's frame (bottom channel on wall mounted).

**DECORATIVE FENCE TECHNOLOGY**

The operating principal of the Decorative Fence is based on light transmission which is controlled inside a fiber optic cable. Any reduction in transmission will generate a signal, which is evaluated by the transponder and visually and audibly announced as an alarm by the control unit.

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 transponder called a FOST (Fiber Optic System Transponder) transmits and receives light signals from fence modules, processes them and determines whether an alarm signal should be sent to the control system for audio or visual display.



**TECHNICAL SPECIFICATIONS**

**STANDARD MODULE:**

2 m (6.6 ft.) long, 2.5 m, (8.2 ft.) high  
 Optional heights: 120 cm (2.9 ft.) minimum, 300 cm (9.8 ft.) maximum  
 Material: All metal parts steel SAE 1020  
 Finish: Galvanized and primer painted  
 Weight: 70 to 80 kg (154 to 176 lbs.)

**FOST DESCRIPTION:**

The FOST is an outdoor transponder for processing fiber optic signals. It determines alarms based on attenuation of optical signals in the fiber optic cables being used as sensors.

- The FOST is designed to control two fiber optic cables and to transmit data to a control center via RS-422 communication channel or by dry contacts
- The FOST is fitted in an outdoor weatherproof enclosure with covered tamper switch

**CONDITIONS FOR AN ALARM:**

Applied force of 40 kg (88 lbs.) and above and / or creation of a 220 mm (8.7 in.) and above gap between adjacent vertical bars

**FOST - FIBER OPTIC SENSOR TRANSPONDER:**

Input:

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

Output:

- Alarm relay - one Normally Open (NO) contact
- Fail / alarm relay - one Normally Closed (NC) (or NO) contact  
 (Contacts rating - 500 mA at 50 V)

Current requirements:

- 4 mA quiescent
- 45 mA max, during alarm and activation of relays and LEDs

Data communication: EIA-422

Input voltage: 12 - 30 VDC

Transient Suppression: On data & power input and on relay output contacts

Control:

- Independent control of the output relays through communication line
- LEDs indicate the status of the following:
  - Fence disturbance alarms
  - Status of relays when under network control
  - Fail condition or low battery

Operating Temperature:

- -20°C to +70°C (-4°F to +158°F)
- -40°C to +70°C (-40°F to +158°F) available

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.)
- Weight: Approx. 2.5 kg (5.5 lbs.)

Specifications are subject to change without prior notice.

