Intelli-FLEX II

Microphonic Cable Intrusion Detection Sensor

- Fence mounted cable
- Low cost
- Quick and easy to install
- Digital signal processing
- High probability of detection
- Independent detection of fence cutting and climbing
- Adaptive algorithms virtually eliminate environmental nuisance alarms
- Two relay outputs per zone
- Easy Setup using hand-held configuration module
- Optional armoured sensor cable

Intelli-FLEX™ II is a unique microphonic intrusion detection system for outdoor, fence-mounted perimeter security applications. Utilizing signals generated by the minute flexing of a proprietary triboelectric coaxial sensor cable, specific characteristic intrusion signatures are analyzed by a powerful digital Signal Processor. Intelli-FLEX II will detect an intruder cutting through, climbing on or lifting the fence fabric.

Installation is quick and simple. Inexpensive UV-resistant tie wraps secure the sensor cable to the fence at 30 cm (1.0 ft.) intervals. The Intelli-FLEX II Signal Processor can monitor two independent zones each with a maximum of 305 m (1,000 ft.) of sensor cable.

A programmable microprocessor enables the user to set the operating parameters for each zone using a simple plug-in Configuration Module. Separate parameters are set for cut and climb detection, resulting in independent alarm processing to optimize detection and minimize false alarms.

Intelli-FLEX II's unique signal processing incorporates a set of non-volatile programs called Adaptive Algorithms. This adjustable firmware allows features such as Ambient Compensation and Common Mode Rejection to interpret the nature of the disturbance, virtually eliminating alarms caused by natural or environmental events.

Magal Senstar Inc

Intelli-FLEX II Microphonic Cable Intrusion Detection Sensor

INTELLI-FLEX II SYSTEM CONFIGURATION

Each Intelli-FLEX II zone (two per Signal Processor) consists of up to 305 m (1,000 ft.) of the Magal-Senstar proprietary microphonic sensor cable. This length of cable will protect approximately 290 m (950 ft.) of a 2.5 m (8 ft.) high metal fabric fence. For fences up to 3.7 m (12 ft.), a double pass of the cable at equal vertical distances is required. Contact Magal-Senstar for details regarding higher fences. In most cases, facility perimeters are configured in shorter zones to match CCTV assessment capabilities and to allow rapid response to the area of attempted intrusion.

Several options are available to protect both swinging and sliding gates. These include using the same proprietary Intelli-FLEX II cable on the gates with properly placed non-sensitive cable, with or without local or remote gate bypass.

A terminator at the end of the cable permits the Signal Processor to supervise the integrity of each zone.

A simple cable splice is used to join the sensor cable to standard coaxial cable which is used as non-sensitive lead-in cable from the fence to the processor. Depending on the coaxial cable selected, the lead-in can have a maximum length of 186 m (610 ft.). A splice kit is also used to repair or replace any segment of sensor cable that becomes damaged. No electrical or sophisticated tools are required. Standalone Intelli-FLEX II processors with relay contact closures are compatiable with virtually any alarm monitoring system

INTELLI-FLEX II INSTALLATION

Installation of an Intelli-FLEX II system is quick and easy. The proprietary sensor cable can be directly attached to the fence fabric using UV-resistant tie wraps (supplied), or installed in conduit. An armoured version is also available. There is no need to weave the cable in and out of the fence fabric. The cable is terminated at the far end. The sensor cable is joined to standard coaxial cable for connection to the processor. Careful sensor cable handling ensures that the uniform cable sensitivity is maintained.

The processor is enclosed in a fiberglass NEMA 4 enclosure on the safe side of the fence. The 12 to 15 VDC local power or 18 to 56 VDC networked power is required for each processor. Alarm information is communicated by relay contact closures.

INTELLI-FLEX II SETUP

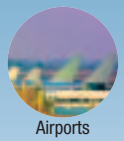
All processing parameters can be adjusted locally using a simple hand-held plug-in Configuration Module. Once calibration is complete for each processor, the Module can be removed and used elsewhere.

The following parameters are adjustable for each zone:
Cut: threshold, minimum count, and time window
Climb: threshold, minimum duration, and time window

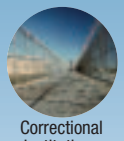
Detects

The innovative fence sensor which rejects alarms from: wind, rain, snow, storms, fog, animals, lightning, debris, and seismic activity.

Applications

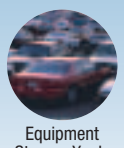

Airports

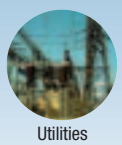

Communications Sites


Correctional Institutions


Government Agencies and Laboratories


Military Bases

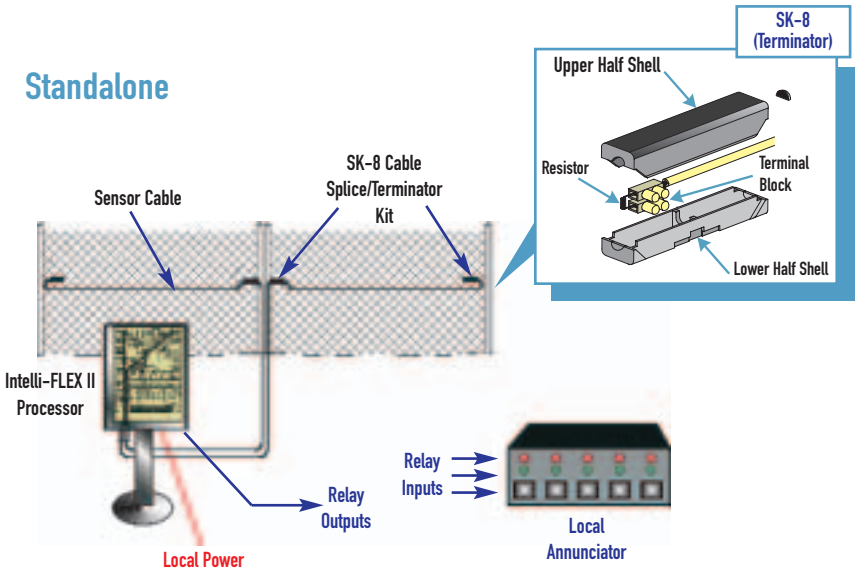

Equipment Storage Yards


Utilities


Oil and Gas

Configurations

Standalone

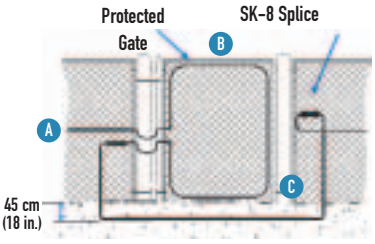


Intelli-FLEX II™ Single Zone Standalone Kit (P/N C6FG0401-001)

- ✔ AC adapter, float charger
- ✔ Backup battery
- ✔ Tie-wraps
- ✔ Intelli-FLEX II product guide

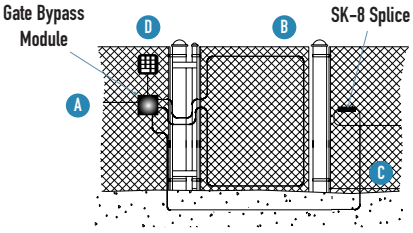
Gates

Single Panel Swinging Gate



- A From prior section of zone
- B Sensor cable on gate section
- C Bypass cable

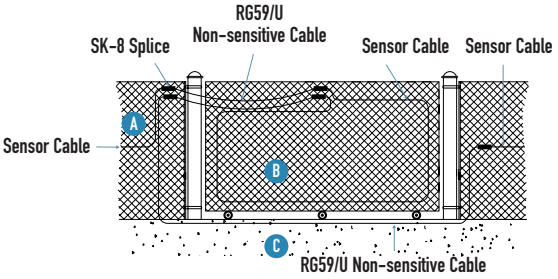
Single Panel Swinging Gate (Bypass)



- A From prior section of zone
- B Sensor cable on gate section
- C Bypass cable from bypass module to sensor cable beyond gate
- D Keypad or card reader by others optional

EconoSlide

Single Sliding Gate Configuration



- A From prior section of zone
- B Sensor cable on gate section
- C Bypass cable

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SPECIFICATIONS

Dual Zone Standalone Processor

Digital Signal Processor on a mounting plate in a fiberglass NEMA 4 enclosure. 12 to 15 VDC local input power, 18 to 56 VDC networked input power. Programmable operating parameters using a hand-held configuration module.

Alarm and Supervision Relay Outputs
Form C, 0.5 Amp at 30 VDC, solid-state relays.
One alarm relay and one supervision relay supplied for each zone.
Alarm relay activation time adjustable from 0.5 to 5.0 seconds, factory default 2.0 seconds.

Standard Processor Features

Lightning Arrestor Package
Transorbs and gas discharge devices on all relay outputs and power supply input.
Supervision
Monitoring of the sensor cable to detect opens, shorts and grounding.
Door Tamper - integral "Hall Effect" magnetic field sensor.
Environment
Operating temperature
-40°C to +70°C (-40°F to +158°F) ambient.
Relative Humidity to 95% non-condensing.
Standard Enclosure
Fiberglass NEMA 4
35 H x 30 W x 16.25 cm D
(14 H x 12 W x 6.5 in. D)
Weight: 4.25 kg (9.5 lbs.)
Backward Compatibility
Fully compatible with existing E-Flex II installations.
Requires only a processor replacement for improved performance.

Configuration Module (Required for Set-up)

Hand-held molded ABS plastic.
Interconnecting Cable with 8-pin Modular Snap-In Connectors.

Input - Membrane tactile switches in graphics panel.
Indicators/Display - Two-character LED alphanumeric display and point LED's.
Operating Temperature -30°C (-22°F) to +40°C (+104°F)
User-Programmable Parameters
Cut - threshold, minimum count, and time window.
Climb - threshold, minimum duration, and time window.
Cipher-Protected Programmable Parameters
Common Mode Rejection - Enable/Disable.
Ambient Compensation - Value, Enable/Disable.
Peak Trigger Values.
Cut Profile Values.
Alarm Output Relay Activation Time.

Triboelectric Sensor Cable

UV-resistant proprietary coaxial cable in 305 m (1000 ft.) rolls.
Model 2387 - Sensor Cable in Armour-FLEX™ vandal-resistant flex conduit in 100 m (330 ft.) rolls.
Cable Accessories
Model 2366 UV- resistant cable tie wraps.
Model SK-8 waterproof cable splice/terminator kit.
Model 2388-R1 7.5 m (25 ft.) of non-sensitive lead-in cable with 90° connector.

Gate Solutions

Model EJ-8 Gate sensor cable quick disconnect connector kit.
Model 2490-1 Gate Bypass Module, locally activated by keyswitch.
Model 2490-2 Gate Bypass Module, remote activation.

Ordering Information

Complete kit for a single zone of fence detection up to 300 m (1,000 ft.) in length includes: (P/N C6FG0401-001)

- A single/dual zone Intelli-FLEX II 12 VDC powered processor with dry contact interface
- NEMA 4 Fiberglass enclosure,
- 115 VAC power supply/float charger
- battery
- 300 m (1,000 ft.) spool of sensor cable
- 7.5 m (25 ft.) feed-in cable with 90-degree connector
- 1,000 tie wraps
- Two splice/terminator kits
- Product guide

Also available with 230 VAC power supply.

Complete kit for a two zones of fence detection up to 600 m (2,000 ft.) in length includes: (P/N C6FG0402-001)

- A dual zone Intelli-FLEX II 12 VDC powered processor with dry contact interface
- NEMA 4 Fiberglass enclosure
- 115 VAC power supply/float charger
- Battery
- Two 300 m (1,000 ft.) spools of sensor cable
- Two 7.5 m (25 ft.) feed-in cables with 90-degree connectors
- 2,000 tie wraps
- Four splice/terminator kits
- Product guide

Also available with 230 VAC power supply.

Requires P/N C6EM0200 Configuration Module (Model 2495) for initial set-up.

** Specifications subject to change without prior notice.*

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