



Acoustic Series

Perimeter fence security – from Auratek

Finally there's a low-cost copper-based perimeter fence security product worthy of the Auratek label – the ENCLOSURE™ FSP-500-A fence intrusion detection system.

Auratek has security systems protecting some of the world's most critical sites. Years of testing and signal analysis experience have led to the development of this new best-of-class copper-based sensor product for commercial and institutional fence applications.

FSP-500-A brings a new level of performance and simplicity to almost any fence security application. Zone lengths up to 500 m (1,640 ft.) and the ability to insert insensitive cable anywhere in the zone give you installation flexibility you can't get from competing products. Sturdy and compact, FSP-500-A is a fence security solution that's affordable, reliable and easy to install and maintain.

- Advanced DSP algorithm
- Reliable detection of cutting, climbing and lifting
- Exceptional resistance to nuisance alarms
- High-performance wind rejection
- Insensitive cable anywhere in 500m zone
- No special tools or equipment required
- Convenient low-cost solution



Digital signal processing prevents nuisance alarms

FSP-500-A incorporates an advanced digital signal processing algorithm for unmatched intrusion detection, immunity to nuisance sources and wind rejection. This high-speed DSP technology was developed for deployment in fiber optic intrusion sensor systems for critical high-security applications.

Powerful algorithms work in real time to differentiate cutting, climbing and lifting of fence fabric from wind-generated signals. FSP-500-A processors instantly check all sensor signals against 18 specific evaluation criteria before triggering an alarm.



Multiple filters work together to reject random environmental events such as road and rail traffic, rain, snow, hailstorms, lightning and seismic activity. Additional filters reject interference from local AC sources and sporadic events such as small animal activity and windblown debris.

FSP-500-A digital processor detects the two most common fence line intrusion occurrences with its 'climb' and 'cut' profiles, using a special algorithm that guards against the stealth activities of sophisticated intruders.

A critical feature available with FSP-500-A advanced DSP chip is exceptional intrusion detection sensitivity during high wind conditions. A proprietary wind rejection feature continuously optimizes the sensor for best performance without requiring anemometers or weather stations.



Cost-effective security for a wide range of commercial applications

FSP-500-A cost-effective features, superior overall performance and simple installation provide the ideal basic solution for almost any outdoor commercial or industrial perimeter security application. FSP-500-A uses UV resistant tie wraps to attach the sensor cable to the fence fabric.

The system is designed to meet the security needs of:

- self-storage lots
- fleet yards
- material and equipment storage yards
- new and used car lots
- boat yards and marinas
- outdoor retail establishments
- gated residential communities
- correctional institutions
- nursing facilities



Why a piezo sensor?

Piezoelectricity is an electrical charge generated by mechanical energy such as an impact or motion. FSP-500-A was designed using a uniquely sensitive yet rugged piezo cable.

FSP-500-A piezo sensing cable can be mixed with insensitive cable, providing detection exactly where it's needed. Electronics may be located indoors next to other reporting devices. An insensitive lead then connects the FSP-500-A alarm processor to the sensing cable.

Insensitive cable may also be placed anywhere in the zone to create non-sensing segments, a feature that allows easy transitions past gates or buildings.

FSP-500-A sensing cable is more durable than conventional electrical fence sensors. Cable built with other technologies may be damaged when ties are over tightened, causing sensitivity hot spots. FSP-500-A piezo cable is also less expensive than most competing products and available in longer zone lengths.



Fast, easy installation, calibration and startup

One small screwdriver is all that's needed to install, calibrate and activate the FSP-500-A system.

Insensitive cable makes it easy to install the alarm processor in the most convenient location, either indoors or mounted on the fence.

Cable ties are provided for mounting the sensing cable to the fence fabric or ornamental fence sections. One person can handle the entire installation. A built-in audio alarm even makes it possible for the same person to simulate intrusion and perform the calibration.

FSP-500-A is all you need

A typical single-zone system would include an alarm processor in an outdoor NEMA enclosure with 100 m (328 ft.) of sensing cable, 300 UV resistant cable ties, mounting bracket and screws, and an end-of-line terminator designed for simple screw-in installation.

All you provide is a DC power supply and an enunciator or alarm panel.



Single-zone system components

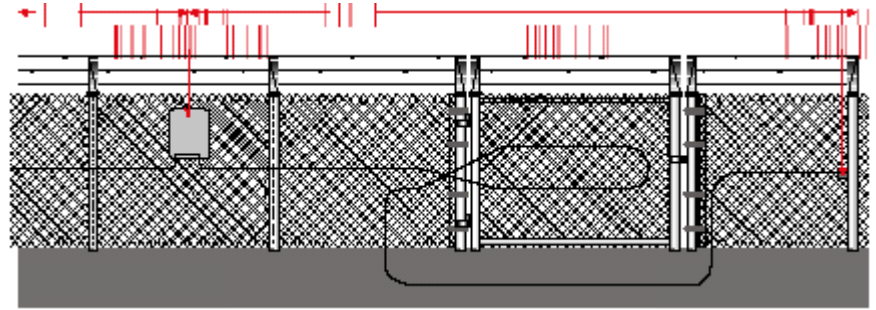
Sensor cables use standard weather-resistant TNC connectors so additional sensing cable can be added by mating junctions. A 1.5 m (5 ft.) pigtail is provided for connection to the alarm panel.

The end-of-line terminator is placed at the end of the last extension length used to ensure zone cable integrity and facilitate supervision.

Insensitive cable is available as an option, providing insensitive regions anywhere in the zone.

Specifications

Sensing Zone Length	500 meters (1,640 ft.) maximum
Insensitive Lead Length	500 meters (1,640 ft.) maximum
Power Requirements	10-26 vdc. 1.5 Watt typical
Environmental	Temperature: -30½C to +70½C
Outputs	Alarm contact closure (Form C) Low-level audio (100 mv rms) Tamper contact closure (optional) Fault contact closure (optional)
Input	Test (optional)
Enclosures	Polycarbonate, gasket sealed Model 401E: 22.2 x 14.6 x 7.6 cm (8.75 x 5.75 x 3 in.) Model 402E: 26.7 x 18.4 x 9.5 cm (10.5 x 7.25 x 3.75 in.)
Sensing Cable	Coaxial 3.5 mm (.14 in.) diameter
Insensitive Cable	Coaxial 5 mm (.195 in.) diameter
Connectors	TNC, moisture-resistant
Alarm Indications	Supervisable relay contacts



Typical 2-zone installation with a swing gate

For more information

Call us at Auratek for the location of your local representative or check out our web site for complete information on FSP-500-A and other Auratek products.



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