

LONG-RANGE with PINPOINT LOCATION

# SENTINEL™ FOCUS

Perimeter Intrusion Detection Solution



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## Perimeter Intrusion Detection Solution

**SENTINEL FOCUS** is a state-of-the-art long-range fiber optic sensor that utilizes Distributed Acoustic Sensing (DAS) to detect and pinpoint the exact location of intrusions to your perimeter. By pulsing light down a single-mode telecommunication fiber, you can detect events caused by vibrational disturbances anywhere along that cable, up to 40km in length.

### OVERVIEW

**SENTINEL FOCUS** can be deployed on any type of security fence to detect Cutting and Climbing, or it can be buried to detect walking or digging. The Sentinel Focus will immediately alert your physical security forces to the presence of intruders in addition to their exact location, ensuring the safety and security of your facility.

**At the heart of the solution is the SENTINEL FOCUS Fiber Optic Intrusion Detection System.**

Using advanced Distributed Acoustic Sensing (DAS) technology, SENTINEL FOCUS is always on watch to protect your perimeter by continually monitoring the fiber optic sensor cable for disturbances caused by intruders. The 24/7/365 continuous monitoring allows the system to immediately detect and report the exact location of even the most stealthy intruders. Sentinel Focus can be easily installed and integrated into your new or existing CCTV or Access Control system to increase your situational awareness and the security stance of your facility. The system is calibrated to provide very high Probability of Detection (PD) and extremely low Nuisance and False Alarm Rates (NAR/FAR).

### WHAT IS DAS?

DAS is an extremely advanced type of OTDR (Optical Time Domain Reflectometer) that sends pulsed laser light into a single strand of single-mode optical fiber and monitors the Rayleigh backscatter from the reflected light. The Rayleigh backscatter pattern changes with acoustic and vibrational energy. Once the reflected pattern is received, it is processed and analyzed by advanced algorithms to determine the type of event, such as CUT or CLIMB activity on a fence or footsteps across a border. The system will also provide the precise location along the perimeter and monitor the event over time.

## FEATURES

- ✓ Extreme sensitivity using state-of-the-art DAS technology
- ✓ Detects intrusions along perimeters up to 40km in length
- ✓ Low installation cost, using a single strand of telecommunications grade optical fiber
- ✓ Immune to EMI/RFI and lightning
- ✓ Pinpoints the exact location of intrusion events within 16' (5m)
- ✓ No electronics or powered devices in the field
- ✓ Monitors entire perimeter across all terrains and in all environments
- ✓ Low Total Cost of Ownership (TCO)

## Full-Featured Dashboard Graphical User Interface

The SENTINEL FOCUS can be combined with other solutions including our VANGUARD™ CS and INTERCEPTOR™ CS Network Infrastructure Cyber Security Systems and Universal Cyber Sensors, creating a layered security approach to protect your facility or critical infrastructure. Using an interactive map of all alarmed zones within and outside the secured perimeter, the map interface provides a Zone Status indicator for each monitored point of vulnerability, such as manholes, secure enclosures, and fiber optic cable runs. When an optical disturbance is detected on the perimeter fence, at a manhole location, or on the fiber between manholes, the location of the disturbance will be displayed on the CyberSecure IMS dashboard within seconds of its occurrence.

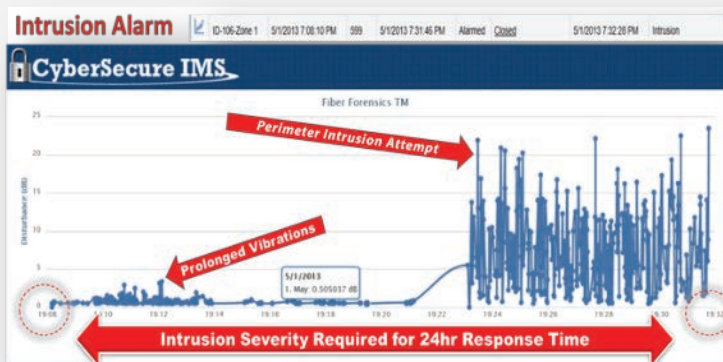


## Nuisance Alarm Mitigation

*SENTINEL FOCUS is capable of virtually eliminating all nuisance alarms.*

## Smart Filtering™ Technology

The SENTINEL FOCUS features Smart-Filtering technology which eliminates nuisance alarms by learning the normal day-to-day activity present within the environment.



## FIBER FORENSICS™

### Optical Disturbance Severity Graph

CyberSecure IMS works with the SENTINEL FOCUS to capture all characteristics of a real-time intrusion attempt and display it to the Physical Security professionals for immediate analysis. A Fiber Forensics™ signature created by a nuisance source is drastically different from a signature created by an actual intrusion attempt. This gives dispatchers complete control over whether or not to trigger an alarm response investigation, effectively eliminating nuisance alarms before they occur.



## OPTICAL WARNING SYSTEM

The CyberSecure IMS software tool gathers unique optical signature information from the SENTINEL FOCUS every time an optical disturbance is detected on an alarmed cable and analyzes the severity of the event. This provides dispatchers with real-time information that allows them to discern accidental contact from real threats. This gives Security Specialists the ability to create a user configurable warning threshold per zone and only trigger alarms when the threshold is crossed, reducing the number of nuisance alarms by as much as 99%.

# ADVANTAGES OF SENTINEL CS

## Perimeter Security Reporting Tools

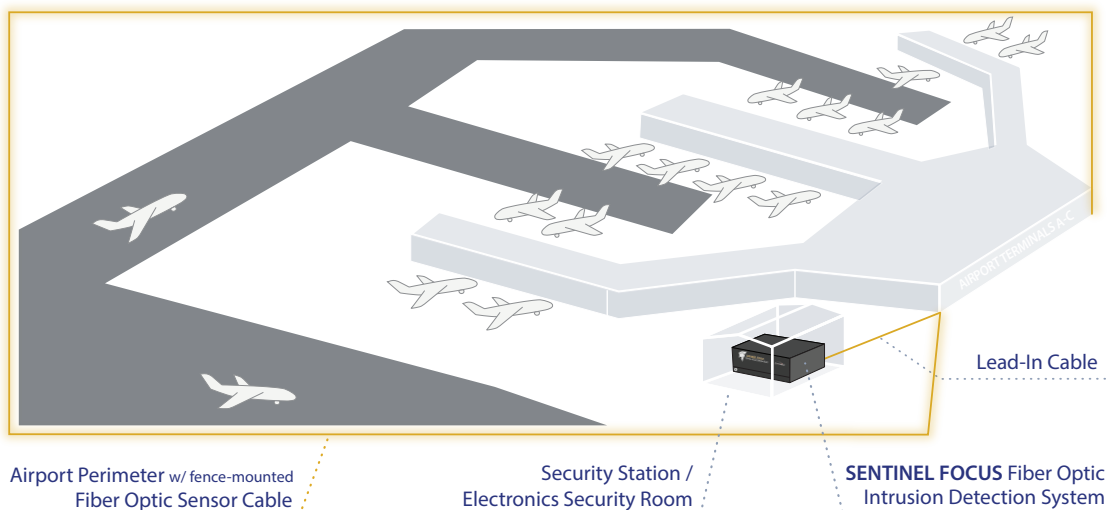
**CyberSecure IMS** allows Security Managers to monitor local, regional, and/or global campuses. Remote managers can receive daily, weekly, monthly, quarterly, and/or annual Health Reports regarding the activity occurring at their facilities on a zone-by-zone basis. Each alarm triggered by the system is tracked and given an alarm resolution code so trends can be analyzed. This proactively prevents nuisance alarms and helps local security managers recalibrate alarmed zones when site conditions change.



## Integrated Site-Specific Standard Operating Procedures (SOP) Management

CyberSecure IMS comes equipped with a user-configurable SOP template that contains the alarm notification list, zone media (digital images & CAD drawings), a case record for each alarm triggered in the system, and a remotely configurable 'Zone Reset' button.

### SENTINEL FOCUS PERIMETER INTRUSION DETECTION SYSTEM



**CyberSecure IMS** - a centralized software management platform and dashboard that enables you to monitor every cable, zone, access point, building, campus, or perimeter within your organization and aggregates the information to perform immediate alarm dispatching and automate your Standard Operating Procedures (SOP).

**SENTINEL FOCUS** is the ever vigilant sentry that monitors your facility for intruders attempting to breach your perimeter. **Contact us today** to request a demo, site assessment, and/or pricing for your environment.



WE BRING SECURITY TO LIGHT™

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