



LONG-RANGE INTRUSION DETECTION w/ PINPOINT LOCATION

# VANGUARD™ FOCUS

Network Infrastructure Cyber Security Solution



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## Network Infrastructure Cyber Security Solution

Long-range cable deployments are frequently targeted for attack, a problem exacerbated by their wide expanse and often remote location. Cables, typically buried, are not easily visually inspected. This creates a situation where it is difficult to identify the nature of the attack and its location.

**VANGUARD FOCUS** is our cutting-edge sensing technology that immediately detects and identifies any threat to your critical network infrastructure, while pinpointing its exact location.

### OVERVIEW

**VANGUARD FOCUS** is a network infrastructure cyber security solution utilizing state-of-the-art Distributed Acoustic Sensing (DAS) technology to provide long-range capability and pinpoint location of any physical disturbance to your communications cables, anywhere along those cables, up to 50km in length per segment. The system continuously monitors the entire cable and pathway to immediately detect and report the most sophisticated intrusion attempts, or even the subtlest tampering, conducted for the purposes of data theft (tapping) or denial of service.

Fully integrated with our proprietary CyberSecure software platform, the **VANGUARD FOCUS** solution will centrally monitor and continually automate site-specific customized Standard Operating Procedures (SOP) for immediate response to any threat to your critical infrastructure. The **VANGUARD FOCUS** can be rapidly deployed in new or existing network infrastructure to rapidly provide security to your physical layer.

### WHAT IS DAS?

DAS is an extremely advanced type of fiber optic sensor 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 digging near buried conduit, cutting into conduit, and physical handling of the cable. The system will also provide precise location along the cable and monitor the event over time.

## FEATURES

- ✓ Identifies disturbances such as **vehicle approach, digging, conduit entry, and cable handling**
- ✓ Extreme sensitivity using state-of-the-art DAS technology
- ✓ Detects intrusions along a cable up to 50km in length
- ✓ Pinpoints the exact location of intrusion events within 16' (5m)
- ✓ Low installation cost, using a single strand of telecommunications grade optical fiber
- ✓ Simplifies Information Assurance (IA) management
- ✓ Creates site-specific Standard Operating Procedures
- ✓ Generates a unique case resolution audit trail

## Full Featured Dashboard Graphical User Interface

The VANGUARD FOCUS can be combined with other solutions including the SENTINEL™ Perimeter Security System and Universal Cyber Sensors. Using an interactive map of all alarmed zones within and outside the secured perimeter, the map interface provides a Zone Status indicator for each optical fiber cable run. When an optical disturbance is detected, the location of the disturbance will be displayed on the CyberSecure IMS dashboard within seconds of its occurrence.

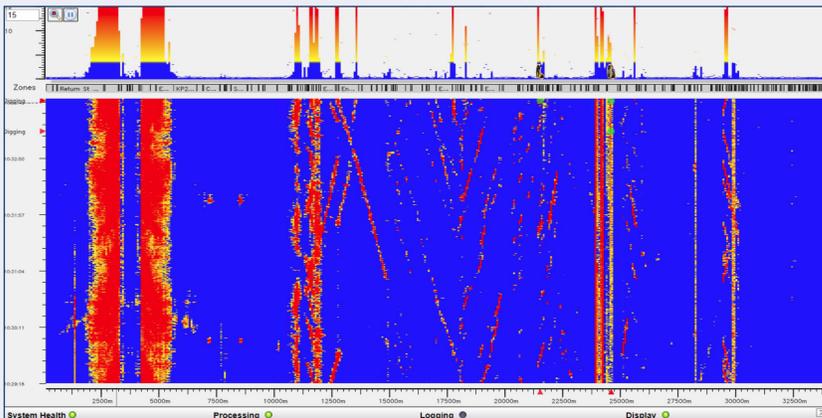


## Nuisance Alarm Mitigation

VANGUARD FOCUS, like all VANGUARD technology, is capable of eliminating all nuisance alarms.

## Smart Filtering™ Technology

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



## FIBER FORENSICS™

### Optical Disturbance Severity Graph

VANGUARD FOCUS captures all characteristics of a real-time intrusion attempt and displays it to the Network Security Specialists for immediate analysis. A Fiber Forensics™ signature created by accidental contact with the cable 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

Our CyberSecure IMS software tool gathers unique optical signature information from the VANGUARD 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 optical disturbances from real threats to the network. This gives Network 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%.



## Integrated 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), an Information Assurance case record for each alarm triggered in the system and a remotely configurable 'Zone Reset' button.

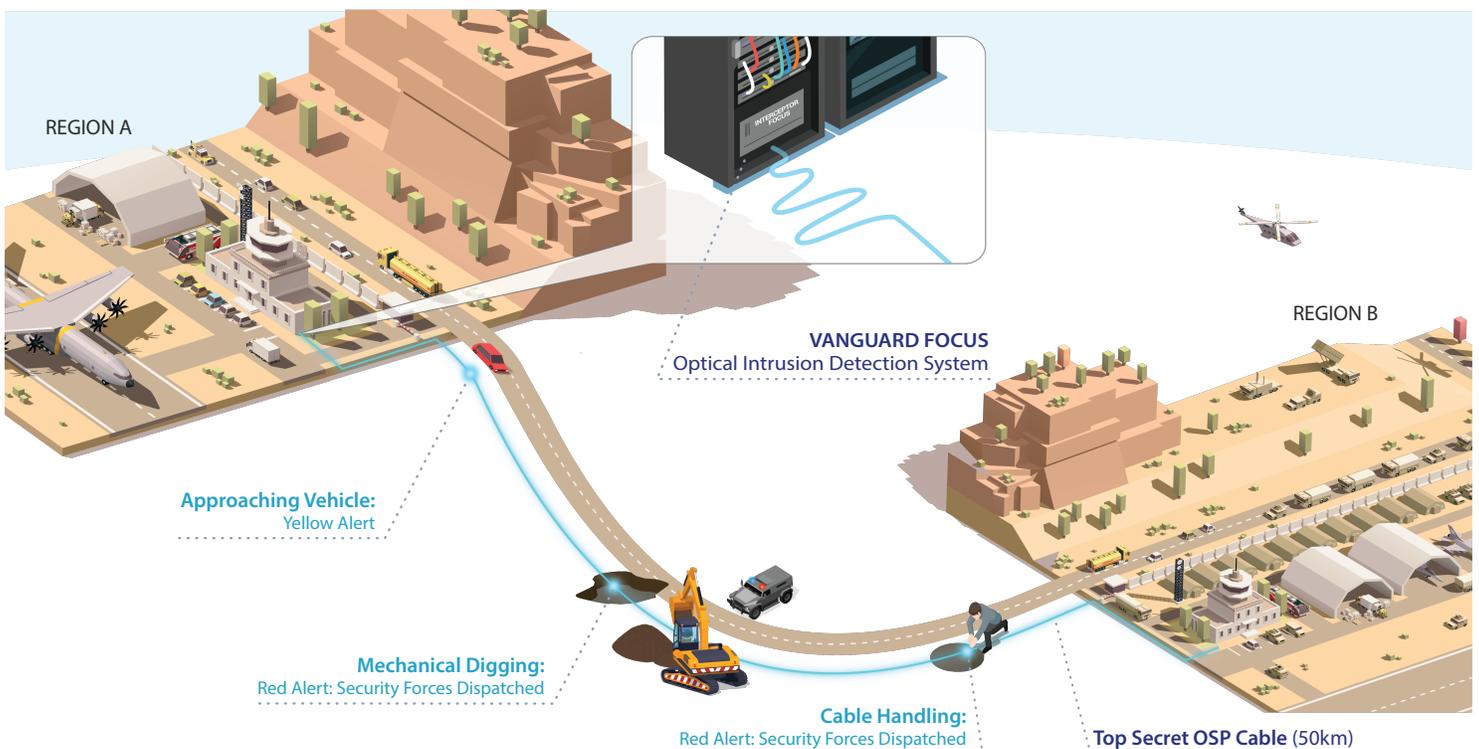
# VANGUARD FOCUS: Critical Data, Protected.

## Protect your critical network infrastructure from impending threats!

VANGUARD FOCUS is designed for deployment on new or existing cables in your critical infrastructure. Our solution will immediately detect and categorize threats, alerting physical security and/or Information Assurance (IA) personnel to the intrusion attempt and providing pinpoint location of the breach. The sensor will immediately, and simultaneously, detect all threat scenarios, including:

- + Approaching vehicles
- + Manual and mechanical digging
- + Cutting of conduit
- + Handling cable
- + Installation of a fiber optic tap

## VANGUARD FOCUS OPTICAL INTRUSION DETECTION SYSTEM



VANGUARD FOCUS is continually on watch to protect your network infrastructure. It is the most secure and cost-effective method of keeping your data secure. Contact us today to request a demo, site assessment, and/or pricing for your environment.



WE BRING SECURITY TO LIGHT™

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