



VANGUARD™ CS

Network Infrastructure Cyber Security Solution

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VANGUARD™ CS is a cyber security solution that quickly and cost-effectively adds physical protection to your critical network infrastructure. **VANGUARD CS** identifies harmful events before they are carried out, preventing data theft or damage that could degrade network performance or availability.

OVERVIEW

Organizations spend heavily on cyber security plans to prevent intrusion within the active portion of their networks, but most fail to address the physical network infrastructure – the optical and copper cabling carrying the critical data – which is a drastically under-publicized point of vulnerability. A single fiber carries vast amounts of information, making fiber optic cables valuable targets for attackers. Gartner reports that 75% of all network cabling is located in publicly accessible spaces. This makes them not only vulnerable but also easy to access.

VANGUARD CS is a network infrastructure (Layer-1) cyber security solution that utilizes proven technologies initially developed for and used extensively by the US Government and Military to defend and protect critical networks from physical attacks. **VANGUARD CS** centrally monitors and streamlines the response to threats by automating site-specific Standard Operating Procedures so the threat can be immediately addressed.

At the heart of the solution is the VANGUARD™ Fiber Optic Network Monitoring System.

Using patented technologies, **VANGUARD** ensures the integrity and availability of network data by monitoring spare strands of fibers within optical cables making up the network infrastructure. This 24/7/365 continuous monitoring allows the system to immediately detect and report even the most subtle tampering or the most sophisticated intrusion attempts conducted for the purposes of data theft (tapping) or denial of service. With Plug-and-Protect™ capability, **VANGUARD** can be rapidly added to new or existing network infrastructure and can be used in a variety of applications and network architectures. The auto-configuration feature of the **VANGUARD** allows organizations to get up and running without a costly and time-consuming manual tuning process.

The **VANGUARD™ CS** incorporates an integrated, customized management system called CyberSecure Infrastructure Monitoring System (IMS). CyberSecure IMS:

- ✓ Simplifies Network Security Management
- ✓ Creates site-specific Standard Operating Procedures
- ✓ Generates a unique case resolution audit trail

The CyberSecure IMS “Rapid Analysis Dashboard” provides Physical Security Officers and Network Security Specialists:

- ✓ Easy-to-use visual tools to monitor an entire office, building, campus or global network
- ✓ Real-time optical warning system to help identify, analyze and react to a disturbance
- ✓ Automatic notification via phone, email, SMS and/or audible/visual alarm
- ✓ Supported Camera Assisted Inspections and ability to redirect IP security cameras
- ✓ Capability to control door locks and security systems at the zone being attacked

Full Featured Dashboard Graphical User Interface

The VANGUARD CS 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 monitored point of vulnerability (such as manholes or secure enclosures) and fiber optic cable runs. When an optical disturbance is detected 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

VANGUARD CS is the industry's first infrastructure protection system capable of eliminating all nuisance alarms.

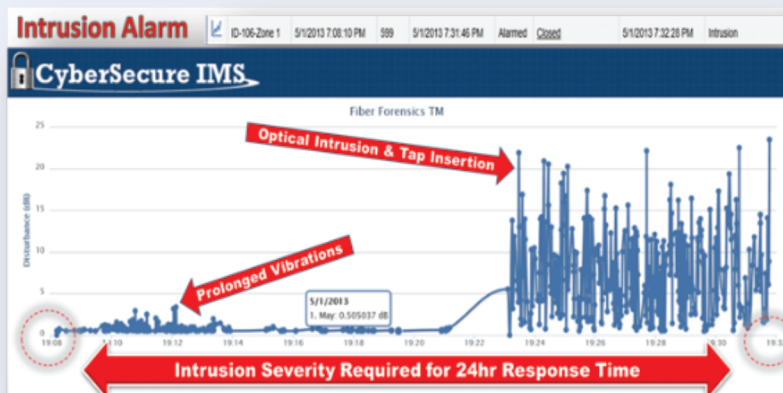
Smart Filtering™ Technology

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

CyberSecure IMS works with the VANGUARD to capture all characteristics of a real-time intrusion attempt and display 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

The 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%.



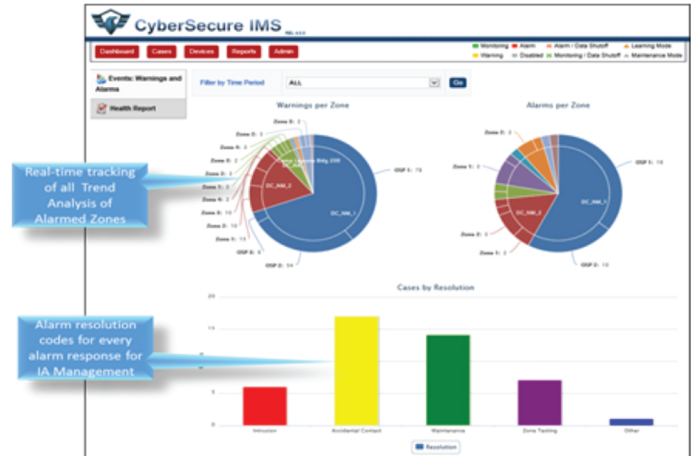
Integrated Site-Specific Standard Operating Procedures (SOP) Management

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

ADVANTAGES OF VANGUARD CS

Network Security Reporting Tools

CyberSecure IMS allows Information Security Managers to monitor local, regional, and/or global alarmed cabling infrastructure. Remote managers can receive daily, weekly, monthly, quarterly, and/or annual Health Reports regarding the activity occurring in the protected network 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 Information Security Managers recalibrate alarmed zones when site conditions change.



Each alarmed zone can be customized to meet the end user requirements specific to each zone. In the event an alarm is triggered, the corresponding data can be shut off using an ancillary device, the **StopLight™ Optical Interface**. Organizations have used this feature to shut down critical data overnight and delay investigation until the next day.

Finally, **VANGUARD CS** allows alarm notification transmission over a separate network by incorporating the optional **Cross-Domain Communications Unit**, enabling an organization to receive notification of alarms at any time, from anywhere.



VANGUARD CS quickly and cost-effectively adds physical protection to your critical networks, closing an open door to cyber security vulnerabilities that have gone unaddressed.

Contact us today to request a demo, site assessment, and/or pricing for your environment.

NetworkIntegrity
SYSTEMS

WE BRING SECURITY TO LIGHT™

Network Integrity Systems, Inc.
1937 Tate Boulevard, SE
Hickory, North Carolina 28602
877.647.4737

networkintegritysystems.com
1.877.NIS.4PDS

