

Virtual Perimeter Monitoring System

Cost-effective Video Surveillance with Video Analytics

Challenge:

The U.S. Navy wanted to be able to deploy a camera surveillance system that could be easily deployed without the high cost of installing a fiber-based infrastructure around a facility. The solution also needed to provide timely automatic surveillance notification of criminal, insurgent, or accident events for enhanced personnel protection, improved public safety, and enhanced critical infrastructure protection. The solution ideally could be extended to other physical assets such as areas housing secure confidential information.

SUMMARY

Customer: U.S. Navy

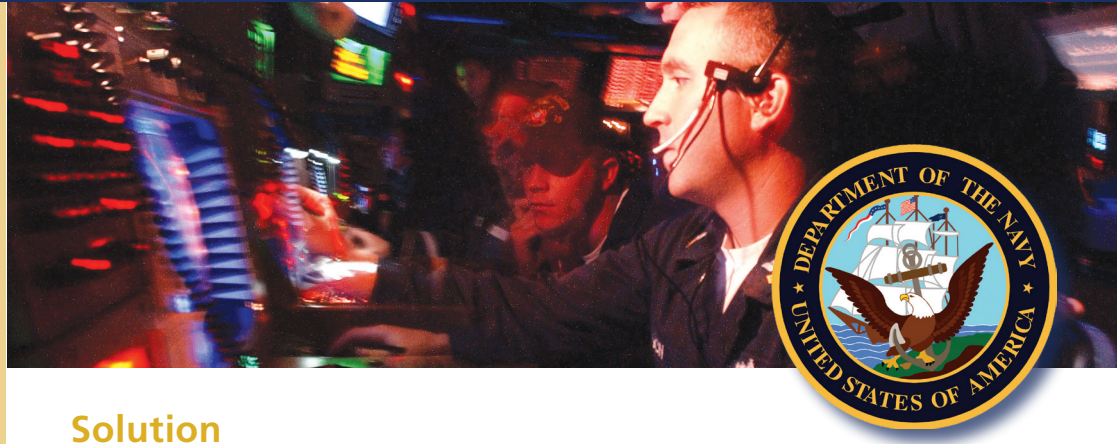
Delivery: 20 Naval Installation Command (CNIC) bases

3eTI Solution

- AirGuard® WiMesh Access Point
- AirGuard WiMesh End Point
- VirtualFence Appliance
- VirtualFence Video

Key Benefits

- **Enhance Safety Response:** Early warning of unauthorized or suspicious activity
- **Improve Target Identification and Tracking:** Real-time wireless video analytics that identify and authenticate vessels, vehicles and personnel entering the observed area
- **Reduce Manpower Costs:** Autonomously scans a wider secure area and can detect loitering or illicit activities without additional personnel
- **Forensic Evidence:** Video recording provides substantive irrefutable proof, which can reduce costs in follow-up investigations
- **Improve Communications:** Mesh network connectivity and data transmission between facility assets that in the past were not possible to reach



Solution

3eTI helped the Navy by designing, developing, integrating, testing and accrediting its VirtualFence™ solution to ensure secure critical infrastructure protection (CIP) with a focus on safety and security operations. VirtualFence is a cost-effective, robust, Virtual Perimeter Monitoring System (VPMS) surveillance system that utilizes secure wired and wireless technology and video analytics to provide security personnel the ability to monitor extensive areas of interest such as facility perimeters, Entry Control Points (ECP), security zones, buildings, infrastructure, and other assets at over 20 U.S. Naval Centers.

VirtualFence provides layers of security at the perimeter and within a facility, thereby improving the ability to detect unauthorized individuals approaching and breaching the established physical or virtual security threshold. VirtualFence will automatically alert and notify essential personnel of a security event reducing response times using intelligent video analytics. This allows the ability to autonomously monitor critical areas for potential hazards or intrusions to increase surveillance efficiency while reducing costs by eliminating personnel-intensive security monitoring tasks.

Core components of the 3eTI's VirtualFence VPMS Kit are MIL-STD compliant making them adaptable for shipboard and port-to-port use. The VPMS Kit is housed in a heavy duty, waterproof case and is suitable for storage, transport and deployment that can be set up in less than 20 minutes, virtually anywhere while powered by any standard 110V AC power source or optional battery kit. Video sensors placed within 2,000 feet of each other can automatically establish a wireless mesh network that relays video and data to the alert console at extended distances.