



VirtualFence Appliance

Perimeter Surveillance System



3eTI's VirtualFence Appliance is an all-in-one system designed to help simplify physical critical infrastructure protection. It provides intelligent video surveillance in a remote, intelligent package with optional built in analytics that identifies and isolates threats in real-time. The VirtualFence Appliance leverages a "plug-n-play" platform using a secure wireless mesh network configuration that extends connectivity, integration and interoperability to devices for easy maintenance and control of video surveillance and auto-detection triggers. VirtualFence delivers highly secure network platforms that are certified to meet military information assurance standards and it is equipped to stand up to demanding industrial environments and harsh climates.

EXTERNAL PORTS / CONNECTORS

- Two 10 / 100 Mbps Ethernet ports (each provides up to 15.4W POE)
- Twelve external antenna connectors for bridging
- Two external antenna connectors for AP mode and WIDS sensor
- Two 10/100/1000Mbps network connection
- Camera connections
 - » Four cameras, max two PTZ cameras
 - » Two PTZ ports (serial RS-232/422/485)
- One ground connector

SECURITY

- Complies with DoDD 8500.1 and DoDD 8100.2
- Common Criteria; EAL4
- FIPS 140-2; Level 2
- Wireless security:
 - » FIPS 140-2
 - * Diffie-Hellman Key Exchange
 - * FIPS - AES - 128-, 192-, 256-bit
 - » FIPS - 802.11i PSK and 802.1x
 - » Enable/disable broadcast SSID
 - » MAC address filtering
 - » NSA Suite B upgradeable
- Wireless Intrusion Detection (WIDS) included
- Wireless Intrusion Prevention (WIPS) included
- Rogue wireless AP detection with email notification

ENVIRONMENTAL

- Temperature: 32 - 104°F (0 - 55°C)
- Humidity: 10% to 90% RH (non-condensing)
- Temperature alarm through network

MANAGED FIELD SWITCH

- SNMP v2,v3 management
- Relay contacts available for alarms
 - » Form C, one NC indicating internal power, one NC software controllable.
- 802.1p QoS prioritization
- VLAN support

TOOLS, UTILITIES & SOFTWARE

- Ping utility
- Trace route utility
- Firmware upgrade via web GUIs
- Reboot system
- Factory default
- Configuration file transfers
- Remote administration access control
- Radio TX off control
- NTP (Network Time Protocol)
- Web user interface for video
- Up to 4 channels of real-time video analytics built in

INTERNAL POWER

- Single 110VAC outlet
- On/off switch
- Circuit breaker

CERTIFICATIONS

- FIPS 140-2 validated (cert # 1971)
- WiFi

WIRELESS FEATURES

- Multiple RFs
 - » 802.11a/b/g/n for AP & bridge
- Operation mode (user configurable)
 - » Access Point
 - » Bridge
 - » Client (Client-Bridge)
 - » Mesh
 - » Self-forming, self-configuring, self-organizing mesh
 - » IPv4/IPv6
- Channel number
 - » Fixed or automatic select (optimum)
- Adjustable Tx power
- 802.11h Dynamic Frequency Selection
- 802.11h Transmit Power Control
- 3eTI Layer 2 discovering protocol
- Layer 2 Isolation for Hotspot
- 802.1Q VLAN allows use of multiple SSIDs over a common physical network

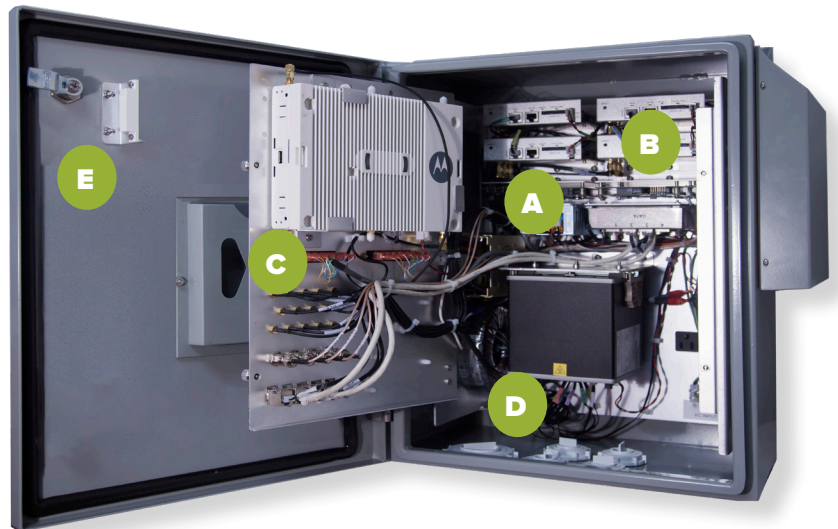


PHYSICAL

- Secure lockable enclosure
- Access alarm triggers anytime the enclosure door is opened, authorized or not.
- Dimensions: 22.5”H x 16.5”W x 11”D
- NEMA rating: 3S rated
- External mounting lugs
- Power requirements:
 - » Input voltage 115 VAC +6%, -10%
 - » Input frequency 47-63 HZ
- Power consumption:
 - » VirtualFence 120W max
 - » 24VAC to external cameras, up to 220W
- Secure web management GUI

VIDEO

- 802.11n 300 Mbps wireless bridging / repeating of video to operations centers
- Termination of the video at one or more operations centers
- Four video interfaces (fixed and PTZ)
- Analog composite video inputs
- Remote PTZ control capability over wireless or wired IP network connections using RS232/RS485 PTZ control
- Capability to convert and send frames at 7.5 to 30 frames per second
- Encoding / decoding capability H.264, MPEG4, MPEG2 Motion JPEG
- Optional advanced video analytics built in
 - » Object recognition and classification
 - » Rule based event detection and alarming
- Wireless camera signals are securely transmitted with FIPS 140-2 validated AES encryption
- Standalone operation and control via web browser
- Optional ability to interface into network video command, control, and storage systems



A: Certified Wireless Bridge

802.11 a/g/n secure wireless mesh node with link rates of up to 300 Mbps

B: Video Server

Converts and streams real-time video information to a secure wireless network

C: Wireless Intrusion Detection System

Scans the wireless network and detects unauthorized WiFi devices

D: External Interface

Ethernet, antenna, PTZ, and power ports

E: Physical Intrusion Detection

Access alarm triggers anytime the enclosure door is opened



3eTI