

#### **FEATURES**

- Intelligent analytics: Intelligent system using video analytics to alert
- Central control & alerts:
   Automatically alerts key personal via email or mobile text should any abnormal occurrence or emergency transpire
- Seamless interoperability:
   Open network video interfaces—regardless of manufacture or communications protocol
- Built-in security: Provides the highest levels of security, ensuring absolute integrity of sensor and control data
- Cost effective: Repurposes existing network infrastructure and augmenting with secure wireless nodes
- Easy to manage: Managers can monitor the system through an easy-to-use, web-based client, from anywhere in the world
- Scalable: Scales to facilities both small and large, through a "plug-n-play" interface capability common with most systems



## Virtual Fence Appliance

3e-733B

Vulnerability starts at the perimeter. Infrastructure and perimeter surveillance is imperative with the increasing concern over security and safety due to threat of terrorism and protection of critical assets. 3eTl's secure wireless VirtualFence\* system is a cost-effective, easy to maintain, video surveillance and auto-detection system. The VirtualFence Appliance identifies and isolates threats in real-time and is equipped to stand up to the most demanding locations and harshest climates.

#### Federally assured to meet security mandates

The federal government's stringent security standards require validated communications solutions. VirtualFence delivers highly secure network platforms that enable maximum operational productivity. 3eTI's patented platforms are certified to meet military IA standards. VirtualFence cyber modules have undergone independent security evaluation to achieve FIPS 140-2 validation and Common Criteria NIAP certification.



- A: AirGuard WiMesh Bridge 802.11 a/g/n secure wireless mesh node with link rates of up to 300 Mbps
- **B:** VirtualFence 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 Wi-Fi devices
- **D:** External Interface
  Ethernet, antenna, PTZ, and power ports
- **E:** Physical Intrusion Detection

  Access alarm triggers anytime the enclosure door is opened

### **Specifications**

# Wj Fi



#### **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 10/100/1000Mbs network connection
- Camera connections
  - » Four cameras, max two PTZ cameras
  - » Two PTZ ports (serial RS-232/422/485)
- One ground connector

#### **ENVIRONMENTAL**

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

#### **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

#### **INTERNAL POWER**

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

#### **WIRELESS FEATURES**

- Multiple RFs
  - » 802.11a/b/g/n for AP & bridge
- Operation mode (user configurable)
  - » Access Point
  - » Bridge
  - » Client (Client-Bridge)
  - » Mest
  - » Self-forming, self-configuring, selforganizing 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

#### **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

#### **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

#### CERTIFICATIONS

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



