

Terafence Vsecure 20|50

Where Every IoT Counts



The accelerated growth of IoT/NoT (Network of Things) applications and devices brings new dimensions of risk and vulnerability protection from cyber-attack and hackers, especially in critical areas such as medical, industrial infrastructure and transportation. Unprotected IoT/NoT systems may lead to substantial economic damage, injury and even loss of life.

Terafence Vsecure, developed by Terafence, is designed, and configured to fully match IoT/NoT cyber security market requirements, especially the BMS (Building Management System) growing market.

Vsecure physically enforces data-flow direction at the physical and logical layers by proprietary FPGA hardware, creating a secure IoT/NoT environment that prevents IoT/NoT devices from being controlled and misused. Using advanced isolation architecture to secure network segments, such as IP-camera-VLAN, Vsecure denies hackers from gaining access to IoT devices. The Vsecure platform also restricts outbound traffic from existing networked devices, preventing their use for cyber attacks.

Vsecure will also provide a centralized platform for IP camera control and management. The platform will enable automated management functions such as password changes as well as firmware upgrades. Terafence Vsecure will monitor the activity of IP cameras and will generate device related alarms and reports according to their activity.

Security Features

- Secures IoT/NoT devices from being used for TCP/IP-based attacks (IP cameras on segmented networks)
- Proprietary FPGA hardware based Data flow direction control enforcement at the physical and logical layers
- Complete block of information flow, either physical or logical
- Secure Command and Control Channel for reverse sending commands to end-devices
- Strong, secure solution utilizes four independent security layers, plus a single integration layer
- Timed, event or logic decision-driven centrally controlled camera hardware power cycling*
- Prevents non-authorized viewing of video streams controlled by the Vsecure data-flow direction control unit and optional encryption **

Device Management

- Provides camera-operational alarms, information and statistics such as down time, bit rate per camera, upper or lower bit rate, thresholds and more statistics
- High throughput per unit – 1Gpbs.
- Provides a centralized tool for management and camera control *
- Warns against vandalism or camera alteration, such as turning the camera from a preselected angle. *
- On a given bandwidth (limited), using CRI “DietCoder®” sophisticated video compression, allowing more frame-per-second delivery to the control center.**
- Provides the ability to promptly disconnect a suspiciously infected device/network from the company infrastructure
- Load balancing **
- High availability via unit clustering **

* Future release

** Optional

Hardware Specifications

- 19" half-size rack-mount
- Power supply: 1x12VDC, 15AMP
- 2xRJ-45 Gigabit Ethernet CAT-7 ports
- Front Panel indication LEDs
- 20, 50 and 100 Video Channels support (according to the model)
- 20, 50 CCTV devices per unit according to model (1Gbps aggregated)
- Unit self-resurrection after a direct attack *

* Future releases

