Features

Secure & Compliant
Conforms to the DISA periods processing procedures and satisfies related Cybersecurity requirements, RMF compliant

Failsafe Process
Eliminates residual settings and data from being transferred from one network to another

Improved Switch Time
The average switch time when integrated with a current generation video CODEC is approximately two minutes

Scalability
Base configuration can be scaled from two to twenty-five networks

Network Isolation
Utilizes a DISA approved (CCEVS certified, previously NIAP validated) fiber switch for video network management

Stand-Alone or API Control
Front panel operation or integration with third-party control systems (AMX, Cisco, Crestron, and Extron)

Cloud Based VTC Apps
Now supporting approved cloud based VTC applications

Cisco Endpoint Support
Desk Pro, Board Pro (55/75), Room Kit, Room Kit Plus, Room Kit Pro & Room Panorama
*Legacy endpoint support as well

The Freeport Technologies Multi-Domain Video Network Switch (MDVNS) utilizes an automated periods processing procedure to safely and securely switch between numerous video networks of varying classification levels using a single video CODEC. The MDVNS is the only secure VTC switching solution that has been approved by the Defense Intelligence Agency for use on the JWICS Top Secret network. It has also been approved for operation by DISA for NIPR, SIPR, NRO, NGA, Coalition Forces, and many other classified networks and SAPs.

The MDVNS adheres to the DISA approved periods processing procedure (as detailed in the latest Video Tele-Conference STIGs) when traversing video networks, which is consistent throughout every system configuration regardless of the number of networks or network type being utilized. The period processing procedures along with the unique design of the Freeport MDVNS hardware components ensures that security requirements will be met during the switching and operational processes.

Security Risk Mitigation
In an environment where a single video CODEC is used to support multiple networks, audio visual related security can be minimized. A system design based on a single video CODEC utilizing a multi-class switching system alleviates a majority of the security requirements involved with the sharing of AV resources (inputs, outputs, control). It also alleviates the high cost associated with purchasing and supporting multiple video CODECs, and if implemented correctly, provides an automated set of procedures to traverse those networks thus eliminating manual errors while maximizing data security.

Design Approach
The MDVNS design approach focuses on ensuring physical video network security, video CODEC information security, inter-unit isolation, hardware fail safes and redundant isolation. This approach provides electrical and data isolation between all networks. Data isolation is achieved using multiple processor and memory units, where each unit is dedicated to configuring the CODEC for a particular network. Data from a particular video network is never stored in more than one place and data from different networks is never intermingled into one processing unit.

Product Specifications

MDVNS Components & Functions

Freeport SCC5NET Switch

- Enforces and initiates all Periods Processing tasks & the order in which they occur
- Validates that all tasks are executed as intended
- Manages room classification signage
- Provides the RS-232 connection path between the VTC CODEC & Freeport SCC Units
- Manages and isolates the RS-232 connection of an external third-party control system to the VTC CODEC
- Controls the removal & application of power to the VTC CODEC, Freeport SCC units, & media converters
- Provides dry contact closures for managing source isolation devices, shades, noises generators, etc
- Manages the fiber optic switch
- Responsible for enabling/disabling an unclassified/classified POTS or VoIP phone connection
- Front panel LCD provides access to system information, network selection, & maintenance

Freeport Secure CODEC Configurator (SCC)

- Used to capture, clean & restore the configuration settings of the VTC CODEC for a specific video network
- Provides data isolation of the VTC CODEC configuration, passwords, & certificates between all networks
- Capable of capturing & restoring all VTC CODEC configuration settings provided by the manufacturer including users, camera pre-sets & directories
- Capable of restoring VTC CODEC passwords, certificates, and user accounts

Fiber Optic Switch

- DISA approved (CCEVS certified, previous NIAP validation)
- Manages & isolates all video network connections
- Only hardware component in the MDVNS system that physically connects to a customer's network(s)

Fiber Optic Media Converters

- Enables/Disables the network connection between the fiber optic switch & the VTC CODEC
- Provides second layer of isolation between the customer's video network connections & the fiber optic switch

Classification Signage

- Provides the ability to display *Joining*, *Leaving*, & *Network Classification* messages for classification awareness
- Provides switching process feedback such as *Preparing System*, *System Off*, & *Error*
- Supports all makes/models of RS-232/485 controllable signs

Physical Characteristics

- *Freeport SCC5NET Switch* – 1 RU
- *Freeport SCC Unit* – .25 RU each
- *3 Network Fiber Optic A/B/C Switch* – 1 RU
- *CODEC Fiber Optic Media Converter* – .25 RU
- *Network Fiber Optic Media Converter* – .25 RU each

Electrical

- *Freeport SCC5NET Switch* – 63W
- *Freeport SCC Unit* – Powered by *SCC5Net Switch*
- *3 Network Fiber Optic A/B/C Switch* – 60W
- *CODEC Fiber Optic Media Converter* – 60W
- *Network Fiber Optic Media Converter – 60W*

Environmental

- *Heat Dissipation* – 1033.88 BTU/hr Max (2 Network IP Only)
- *Operating Temperature* – 32° to 104°F (0° to 40°C)
- *Storage Temperature* – 0° to 122°F (-18° to 50°C)
- *Humidity* – 10% to 90% RH (non-condensing)
- *RoHS, TAA & ITAR Compliant*
- *Made in the U.S.A*

Warranty and Support

All systems include remote help desk support, next day hardware replacement, and firmware updates for the life of the hardware at no additional cost