


VectorIT

VIT-400

A Vector IT Product

- Fast Ethernet **single-direction** fibeoptic coupled network isolation unit - **Network Diode** for fully protected single direction network to network data transfers.
- Approved by the Israeli National Information Security Authorization (**NISA**). 
- **CIP device, Unidirection data transfer between isolated and/or secured local area networks.**
- **VectorIT** software installed on the outgoing/ingoining endpoint server/workstation facilitating unidirectional transfer of certain TCP based protocols as well as raw files over standard Ethernet interfaces
- Fully transparent, pure HW, single direction data transfer
- Auto-negotiation, auto MDI 100Base-T standard interfaces
- Supports single direction verification of link integrity
- Dual isolated internal wide-range power supplies.
- Complete isolation between the incoming and outgoing internal network diodes
- 19" 1U desktop and rack mount installation

The VIT-400 is a Fast Ethernet **single-direction** network to network fibeoptic coupled isolation device - **Network to Network Diode**, design and **approved** for Critical Infrastructure Protection (CIP) connectivity.

Composed of a pair of single-direction network diodes (WSD-2/TXO/RXO like), internally connected by a single fiber optic cable and having two separated power supplies, the VIT-400 provides complete protection, isolation and security for unidirectional transparent data transfer between two networks.

Separating between the pure HW network to network diode and the unidirectional VectorIT SW application, installed on the networks endpoint servers, assures unbreakable single-direction solution for protecting the networks against intrusion and leakage.

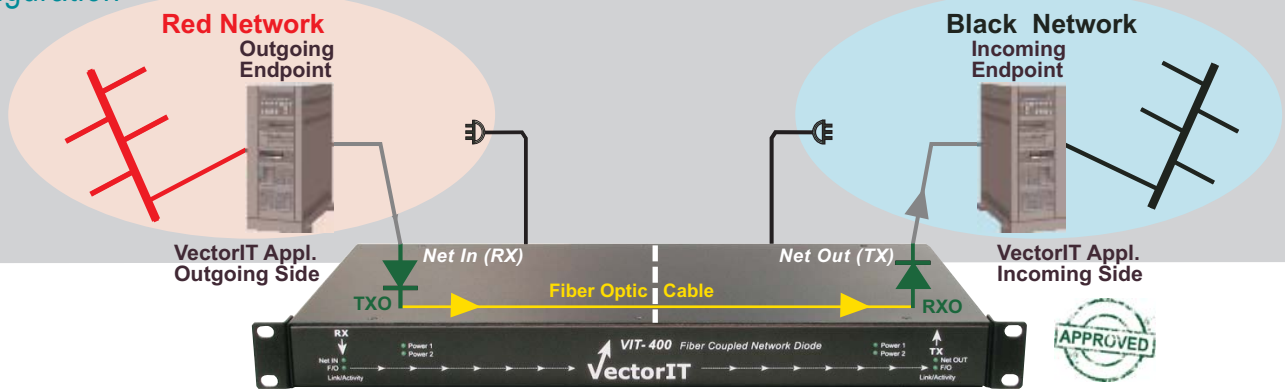
VectorIT software application facilitates unidirectional transfer of certain TCP-based protocols as well as raw files over standard Ethernet interfaces with utilization of up-to full wire speed. Currently supported protocols are FTP, SMTP TCP and raw files. The software is dedicated to and employs only unidirectional data flow over single or bidirectional link, but has otherwise no relation to data security services.

The VIT-400 includes a unique link verification function in which the link of the incoming endpoint (receiving server) will drop if there is any problem with the end to end link continuity up-to the outgoing endpoint (transmitting server). This is a powerful HW management feature especially for single direction applications.

The VIT-400 is a plug & play device that doesn't require any setup and include highly visible LED indications that assure fast & easy installation, operation and maintenance.



Typical Configuration



Technical Specifications

VIT-400 Single-Direction Network to Network Diode

100Base-TX Copper TP Network ports (RJ45)

100Base-TX, auto-negotiation Auto MDI/MDIX and polarity
100meter (330 ft) distance over CAT5 or above TP cables

100Base-FX Fiber Optic Ports (internal)

Dual fiber type, Multimode (MM) 1310nm, ST connectors
located and interconnected by F/O patch cord inside the unit.

LED Indicators

Network In side

POWER 1 - Main power supplied and power supply 1 is "ON"

POWER 2 - Main power supplied and power supply 2 (redundant) is "ON"

Net In - LINK/ACT - Link/Activity indication for the Network In
100Base-T port

F/O - Link/Act - Link/Activity indication of the internal F/O diode port

Network Out side

POWER 1 - Main power supplied and power supply 1 is "ON"

POWER 2 - Main power supplied and power supply 2 (redundant) is "ON"

Net Out - LINK/ACT - Link/Activity indication for the Network Out
100Base-T port

F/O - Link/Act - Link/Activity indication of the internal F/O diode port

Link Verification (option, set at factory)

The Link of the NIC of the Incoming endstation will be "ON" only if the VIT-400 is active and its Link with the Outgoing endstation is properly established.

Vector IT Software (default option)

The software facilitates unidirectional transfer of certain TCP-based protocols as well as raw files over standard Ethernet interface. All data between the two endpoints flows in one direction only, which can be further enforced by the hardware. VectorIT application is installed on dedicated machines, servers or workstations (not supplied) on both networks endpoints

Minimum software requirements: any Windows OS from XP in workstations and 2003 in servers, 32/64 bit.

The application runs as a service in the local system account by default. Microsoft .NET framework 4 is optional for UI settings and progress monitoring. All settings can be configured during installation, UI is not required for operation. C++ runtime is installed with the application.

Hardware requirements: Any reasonable WS or Server. A single dedicated NIC is required to connect to the VIT-42 or VIT-400 network diodes. A second NIC is required if the machine is also connected to a local LAN.

Ordering Information

VIT-400/___ Network to Network single direction F/O coupled transparent diode, 100Base-T to 100Base-T, and VectorIT SW application [environment]/[Options]

VIT-400HW/___ Network to Network single direction F/O coupled transparent diode, 100Base-T to 100Base-T, HW only, [environment]/[Options].

Ordering terminology

VIT-400/[environment]/[option]

[] - Standard Temp. 0°C to +45°C
ETR - Extended Temp. 0°C to +60°C
IND - Industrial Temp. -20°C to +70°C

[] - two power supplies
[R] - four (redundant) power supplies

Technology

Pure HW based single direction physical layer 3R transparent repeater (Re timing, Reshaping and Regeneration).

Fully transparent, supports any frame length.

Standard Compliance

IEEE802.3u

Environment

	Standard	ETR	IND
Operating Temp (°C):	0 to +45	0 to +60	-20 to +70
Operating Temp (°F):	32 to 113	32 to 140	-4 to 158

Storage: -40 to +85°C (-40 to 185°F)
Humidity: 10% to 90% non-condensing

Safety and Emission

CE, FCC part 15, EN60950

Power

Two separated and isolated wide range power supplies

AC inputs: 85 - 264VAC 47-440Hz.

Max. power consumption: 4Watts per side/PS.

Optional: Redundant (four) power supplies

Module Dimension

VIT-400

Height

94.5mm(1")

Width

440mm(17.3")

Depth

225mm(8.9")

All specifications are subject to change without notice. Neither manufacturer nor seller shall be liable for any loss, damage or injury, direct or consequential, arising from the inability to use the product.



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