



NetVanta 950

Multi-T1, 48-port, TDM IAD

Product Features

- Multi-T1 interfaces
- Up to 48 analog voice interfaces
- One expansion slot for T1/V.35 module and future modules
- Six access slots for Octal FXS, and Octal Ethernet Switch modules
- T1/V.35 module for interfacing to routers, PBX's and other external communications equipment
- Integral IP router based on ADTRAN's NetVanta 3000 Series
- Feature-rich ADTRAN Operating System (OS)
- Stateful inspection firewall for managed network security
- Network Address Translation (NAT) for IP address concealing
- FTP/TFTP firmware upgrades
- Command Line Interface (CLI) that mimics industry *de facto* standard
- Optional battery backup system
- Industry-leading carrier-class ten-year North American warranty

The NetVanta® 950 is designed for cost-effective deployment of voice and data services to small- and medium-size businesses. The NetVanta 950 benefits both enterprise customers as well as integrated communications providers, such as CLECs, ILECs, and ISPs who require a customer premises device that integrates voice and data traffic for integrated access services. The NetVanta 950 features remote management, an integrated IP router, and support for up to 48 analog voice ports.

The NetVanta 950 is a modular device with a field replaceable AC power supply, a system controller slot, one expansion slot, and six access slots. Common cards required for operation include the AC Power Supply and the System Control Unit.

The multi-T1 interfaces on the System Controller can be used as two network-facing T1 WAN interfaces or as one network-facing T1 interface and one customer-facing DSX-1 port. When a third T1 interface is needed, the T1/V.35 Module can be added to the expansion slot to allow for connection to a customer's PBX, router, or other external communication device.

A variety of access modules are available for use in any of the six access slots. These include the Octal FXS Module and Octal Ethernet Switch Module. Access modules allow the user to serve numerous voice and data applications. Up to six Octal FXS Modules can be installed to support up to 48 analog voice lines.

The versatile hardware platform of the NetVanta 950 is further complemented with the ADTRAN® Operating System (OS). The ADTRAN OS allows for the support of static and default routes, and allows for fast, accurate network convergence using routing protocols such as OSPF and RIP. In addition,

the ADTRAN OS terminates Frame Relay and PPP WAN protocols.

The ADTRAN OS offers a standard Command Line Interface (CLI) that mimics the widely adopted, industry *de facto* standard. Using an already familiar CLI virtually eliminates training costs associated with learning a new operating system or costly industry certifications. The CLI also allows for configuration scripts to be used, saved, and downloaded for a quick and easy recovery mechanism.

For added security, the ADTRAN OS provides a powerful, high performance stateful inspection firewall. It will examine all incoming and outgoing packets against the security policies established by the IT Manager. In addition, the firewall can identify and protect against common Denial of Service (DoS) attacks like TCP syn flooding, IP spoofing, ICMP redirect, ping-of-death, and IP reassembly problems.

Using local or remote management, carriers can turn features, functions, and access ports on and off. Easy access to modules, the System Controller, AC power supply, and the optional battery back-up system simplify maintenance procedures. Hot-swappable modules may be replaced without disrupting other services.

The compact and rugged metal chassis provides the safety and reliability required for customer premises installations. When wallmounted, the NetVanta 950 only occupies a 7.5 by 10-inch wallmount area of the customer's telephone wiring closet. Pre-configured systems are available. In addition, these products are backed by an industry-leading carrier-class ten-year North American warranty and world-class toll-free technical support from ADTRAN.





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ADTRAN is a
TL 9000 3.0 certified supplier.

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NetVanta 950

Product Specifications

Physical Interfaces

- Two RJ-48C T1 interfaces
- Two 50-pin Amp (RJ-21) connectors for analog voice
- 10/100Base-T Ethernet Interface
Auto-negotiation
Auto-MDI/MDI-X crossover
- Three-pin connector for optional battery back-up system
- Alarm contact connector
- Console port (DB-9)

NetVanta 950 Router Features

Firewall

- Stateful Inspection Firewall
- Cyber Assault Protection
- Denial of Service (DoS) Protection

Network Address Translation

- Basic NAT (1:1) and NAPT (many:1)
- Application Level Gateways (ALGs)

DHCP

- Client, Server, Relay

WAN Protocol

- PPP, Frame Relay

PPP

- LCP, IPCP, BCP

Frame Relay

- Point-to-point
- RFC 1490 Encapsulation (Multiprotocol Over Frame Relay)
- LMI types: LMI, ANSI (Annex D), CCITT (Annex A) and Static

Routing Protocols

- OSPF, RIP, Static

Routed Protocols

- IP, Bridging (other protocols)

Processor and Memory

- 120 MHz, Motorola MPC 866
- RAM: 32 Mb
- FLASH: 8 Mb

Management and Administration

- Familiar Command Line Interface (CLI)
- SYSLOG
- Email alerts (SMTP)
- Access control policies
- SSH management
- Policy statistics

Modules

T1/V.35 Expansion Module

- One RJ-48C T1 interface
- One female Winchester V.35
- V.35 data: 56k-1.536 Mbps

Analog FXS Ports

- Five REN/port (35 REN max per system)
- Ringing voltage: Balanced 70 VRMS with 20 VDC offset—open circuit, no load
- Loop current: 24 mA nominal
- On-hook battery: 48V nominal
- Maximum loop length: 2,400 ft. intra-building, 26 AWG

Ethernet Switch Module

- RJ-48C, 10/100Base-T, Auto MDI/MDI-X crossover, Auto negotiation

Environment

- **Operating Temperature:** 0° to 50° C (32° to 122° F)
- **Storage Temperature:** -20° to 70° C (-4° to 158° F)
- **Relative Humidity:** Up to 95%, non-condensing

Physical

- **Dimensions:** 7.5" H, 10.0" W, 7.0" D
- **Weight:** 12.0 lbs. (fully loaded)
- **AC Power:** 120 VAC, 60 Hz
- **Power Dissipation:** 100 Watts max.

Agency Approvals

- FCC Part 15 Class A, FCC Part 68, UL 60950

Ordering Information

Equipment	Part #
NetVanta 950 Spare AC Power Supply	1200785L1
NetVanta 950 Chassis and AC Power Supply	1200786L1
NetVanta 950 Controller	1200788L1
NetVanta 950 Octal FXS Module	1200791L1
NetVanta 950 Octal Ethernet Switch Module	1200793L1
NetVanta 950 T1/V.35 Expansion Module	1200798L1
System Chassis	
NetVanta 950 Bundle	4200788L0
NetVanta 950 24 Voice Bundle	4200788L24
NetVanta 950 48 Voice Bundle	4200788L48

Accessories

Battery Back-up (Rackmount)	1175044L1
Battery Back-up (Wallmount)	1175044L2
48-port Breakout Panel (Rackmount)	1200799L48
48-port Breakout Panel (Sidemount)	1200799L50



Left Side View



Right Side View

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