NetVanta 4305

Multi-slot Access Router Supporting up to Eight T1s of Bandwidth

Product Features

- Three-slot, dual-Ethernet IP Access Router for Frame or PPP networks

- Dual Auto-sensing 10/100Base-T interface for LAN segmentation

- Stateful inspection firewall for network security

- Command Line Interface (CLI) mimics de facto industry standard

- QoS for delay sensitive traffic like VoIP

- VLAN Trunking (802.1Q) for routing between VLANs

- Network Address Translation (NAT) conceals private IP addresses

- Optional VPN for secure corporate connectivity across the Internet

- Feature-rich ADTRAN Operating System (OS)

- Built-in DSU/CSU for circuit protection

- Industry-leading five-year North American warranty

The NetVanta® 4305 is an access router designed for cost-effective Internet access, corporate Frame Relay, point-to-point connectivity, and Virtual Private Networking (VPN) for large-bandwidth applications supporting up to eight T1s. Residing in a 1U high, 19" rack-mountable metal enclosure, the NetVanta 4305 is a single platform that offers one Wide Module slot, two Network Interface Module (NIM) slots and dual 10/100Base-T Ethernet LAN ports for true LAN segmentation or DMZ applications.

The single Wide Module slot within the NetVanta 4305 will house the Octal T1 Wide Module, while the NIM slots will support a variety of the NetVanta NIMs and DIMs: 56/64K, T1/FT1, T1/FT1 with DSX-1, Dual T1, E1/FE1, E1/FE1 with G.703, and Serial interfaces. For dial-backup an Analog Modem or ISDN BRI DIM are available for preventing downtime by dialing around a failed circuit to any PPP compliant device.

The versatile hardware platform of the NetVanta 4305 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, PPP, PPPoE, and Multilink 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.

Quality of Service (QoS) is also supported for delay sensitive traffic like VoIP or video. The NetVanta 4305 uses Priority Queuing, DiffServ marking and packet recognition, and allows for Frame Relay Fragmentation to avoid latency.

The ADTRAN OS includes built-in alert and logging mechanisms for notifying network administrators about suspicious activities going on in the network. For managing IP addresses, the ADTRAN OS can act as a DHCP server by assigning IP addresses, or as a client by receiving an IP address. In addition, the ADTRAN OS also offers Network Address Translation (NAT/NAPT) for IP address concealment and conservation.

With the ADTRAN OS Enhanced Feature Pack Upgrade, the NetVanta 4305 adds the support for IPSec compliant Virtual Private Networking (VPN). The NetVanta 4305 supports up to 1,000 simultaneous VPN tunnels, while supporting encryption algorithms like DES, 3DES, and AES. With this upgrade, the NetVanta 4305 is fully compatible with ADTRAN's IPSec VPN equipped NetVanta products: Ethernet switches, access routers, and VPN/firewall appliances.

ADTRAN, the leader in WAN connectivity, offers reliable equipment that increases network performance, lowers cost, and positions networks for the future. The NetVanta 4305 is no exception. In addition, these products are backed by an industry-leading five-year North American warranty and world-class 24-hour technical support from ADTRAN.

ISO 9001:2000
QUALITY

ADTRAN is an ISO 9001:2000
certified supplier.

TL 9000
TELECOMMUNICATIONS

ADTRAN is a TL 9000 3.0
certified supplier.

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Product Specifications

Physcial Interface
- **One Wide Slot:** Octal T1 Wide Module
- **Dual NIM Slots:** 56/64k, T1/FT1, T1/FT1 with DSX-1, Dual T1s, E1/FE1, E1/FE1 with G.703, and Serial
- **Dual LAN Ports:** Auto-Sensing 10/100Base-T Ethernet Ports (RJ-45)
- **Console Port**

Firewall
- Stateful Inspection Firewall
- Cyber Assault Protection
- Denial of Service (DoS) Protection
- NAT compatible SIP ALG

Diagnostics
Front Panel Status LEDs
- Power
- **Slots:** status, activity, test
- **LANs:** link, transmit, receive

Processor and Memory
- 300 Mhz, MPC 8250
- **RAM:** 128 MB
- **FLASH:** 16 MB

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

WAN Protocol
- Frame Relay, PPP, PPPoE, and Multilink PPP

Routing Protocol
- OSPF, RIP, and Static

Routed Protocol
- IP and Bridging (other protocols)

PPP
- PAP and CHAP

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

Network Address Translation
- Basic NAT (1:1) and NAPT (Many:1)
- Application Level Gateways (ALGs)

DHCP
- Client, Server, and Relay

Quality of Service (QoS)
- Priority and Weighted Fair Queuing
- DiffServ marking and packet recognition
- Frame Relay Fragmentation

Virtual Private Network (VPN)

IPSec Mode
- Tunnel

Hash Algorithms
- MD5-HMAC
- SHA1-HMAC

Encryption
- DES, 3DES, and AES

Diffie Hellman Group Support
- Group 1: MODP 768
- Group 2: MODP 1024

Authentication Mechanisms
- XAUTH
- Digital Certificates
- Preshared keys

Key Management
- IKE (ISAKMP/Oakley)

IKE Modes
- Main and Aggressive

Dead Peer Detection

NAT Traversal V2

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
Chassis: 1U, rack mountable metal enclosure
Dimensions: 1.75" H, 17.25" W, 11" D
Weight: 7.5 lbs.
Power: 100–250 VAC, 50/60 Hz

Agency Approvals
- FCC Part 68
- Industry Canada CS03
- UL & Canadian UL (CUL), IEC/EN, CSA
- CE Mark

Product Includes
- User Manual
- Quick Start Guide
- AC Power Cord

Ordering Information

Equipment	Part #
NetVanta 4305 Chassis	1200890L1
NetVanta 4305 Chassis with VPN	4200890L2
VPN Upgrade	4200368L3
Systems	
NetVanta 4305 with Octal T1 Wide Module	4200893L1