



# NetVanta 1544

## Layer 3 Gigabit Ethernet Switch

### Product Features

- 28-port multi-layer Gigabit Ethernet aggregation switch
- 24-Gigabit Ethernet ports and four SFP optical ports
- Four enhanced 2.5 Gbps SFP ports
- Non-blocking, up to 68 Gbps switching capacity
- Line rate Layer 2 and Layer 3 switching
- Static routes, RIP V1/V2, OSPF and BGP
- VRRP
- 802.1Q VLANs, Private VLANs and VLAN assignment via 802.1x
- Advanced QoS with support for 802.1p and DiffServ prioritization with four queues per egress port
- Automate actions with Port Scheduler and TCL scripting
- VoIP ready with LLDP/LLDP-MED and voice VLANs
- Business-class security with RADIUS, TACACS+, 802.1x and port security
- Optimized for iSCSI storage area networks (SANs) solutions
- Wi-Fi® access controller for centralized management of NetVanta Wireless Access Points (WAPs)
- Cable and SFP diagnostics provides easy to use troubleshooting tools for copper and fiber cable
- Familiar CLI and Web GUI
- Next business day advance replacement
- Limited lifetime warranty

NetVanta® 1544 is a managed, 28-port, Layer 3, Gigabit Ethernet switch designed as an access layer or network backbone switch for Small to Medium-sized Enterprises (SMEs). With the combination of the advanced multi-layer switching fabric, high-bandwidth capabilities, and enhanced Quality of Service (QoS) features, the NetVanta 1544 is ideal in Gigabit-to-the-desktop deployments, and converged voice and data networks.

#### Hardware

The NetVanta 1544 rackmount switch provides 28 Gigabit Ethernet ports, consisting of 24 fixed 10/100/1000Base-T Ethernet ports and four 2.5 Gbps Small Form-factor Pluggable (SFP) ports located on the back. Together the four SFP ports can provide up to 20 Gbps of bandwidth between interconnected NetVanta 1544 switches. "Half-rack" in size, you can scale to 48 Gigabit Ethernet ports and eight SFP optical ports using two NetVanta 1544 switches side-by-side in a single 19-inch rack space.

#### Multi-layer Switching

The NetVanta 1544 supports advanced multi-layer (Layer 2 and Layer 3) switching. It supports static routes, RIP V1/V2, OSPF, Border Gateway Protocol (BGP) and Virtual Router Redundancy Protocol (VRRP), allowing it to easily scale from small businesses to enterprise-sized networks.

#### Standards Protocols

Based on the ADTRAN® Operating System (AOS), this device supports Link Layer Discovery Protocol (LLDP) which auto-discovers neighboring Ethernet devices, simplifying integration into multi-vendor environments.

#### VoIP Ready

NetVanta 1544 has been designed specifically for VoIP. The ability to automatically configure IP phones using LLDP-MED, and the ability to separate voice traffic onto voice VLANs, helps ease the deployment of VoIP.

#### Quality of Service

NetVanta switches also support QoS to prioritize mission-critical traffic like VoIP and control network congestion. NetVanta 1544 offers 802.1p and DiffServ Class of Service (CoS). It also supports frame tagging, as well as enforcement of tagged traffic received from trusted sources. Four egress queues (per port) are available for assigning traffic priorities using Weighted Round Robin (WRR) and Strict Priority Scheduling.

#### Security

Rest assured, with NetVanta 1544 your network is protected. This product offers a variety of data security features including DoS protection, MAC-based port security, multilevel user passwords, Secure Shell (SSH) and Secure Socket Layer (SSL) for encrypted user login, and Access Authentication and Authorization (AAA) for authentication with RADIUS and TACACS+. With features such as 802.1x and port security, administrators can assure that only authorized users are allowed access to the network.

AOS also features desktop auditing using DHCP in conjunction with Microsoft Network Access Protection (NAP) protocol to monitor the health of client computers. The two protocols work together to ensure that systems connected to the network are using appropriate corporate policies, such as firewall settings, antivirus settings and other client health information.

#### Port Scheduler

NetVanta 1544 allows ports to be enabled or disabled based on time of day. This ability to schedule available ports allows for added security and can provide less power consumption during off hours saving on utility cost.

#### iSCSI Optimized

All ADTRAN NetVanta Gigabit Ethernet switches are optimized for iSCSI Storage Area Networks (SANs) deployments. Network administrators can take advantage of features such as Jumbo frame support (up to 13K), separation of iSCSI network traffic utilizing VLANs, and 802.3x flow control to seamlessly integrate ADTRAN switches with iSCSI SANs devices.

#### Administration

AOS offers both a Command Line Interface (CLI) that mimics the widely deployed, industry *de facto* standard and an intuitive Web-based Graphical User Interface (GUI) with step-by-step configuration wizards. For automating setup and configuration, NetVanta 1544 supports Auto-Config which provides the ability to automatically obtain the switch configuration via DHCP.

AOS also offers network forensics to aid in troubleshooting network problems by allowing network administrators to easily locate devices on the network by MAC or IP address.



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## Layer 3 Gigabit Ethernet Switch Product Specifications

### Physical Interface

#### Ethernet Ports

- 24 – 10/100/1000Base-T
- 4 – 1.0/2.5 Gbps SFP Ports
- Auto rate/duplex/MDI/MDI-X

#### Console Port

- DB-9, RS-232

### Switching Performance

- Non-blocking Layer 2/3 Switching

### Maximum Forwarding Bandwidth

- 68 Gbps

### Layer 2 Support

- 802.1D Spanning Tree
- 802.1w Rapid STP
- 802.3ad Link Aggregation
- 16,000 MAC Addresses
- Jumbo Frames (13K)
- 802.3x Flow Control

### Layer 3 Support

- Static Routes
- RIP V1/V2
- OSPF
- BGP
- VRRP
- UDP Relay
- 128 Layer 3 Interfaces
- 1k ARP Entries
- 1k Unicast Routes
- IPv6 Management

### Diagnostics

- Port Mirroring
- LLDP (802.1AB)
- Ping
- LLDP-MED
- Cable Diagnostics
- SFP Diagnostics
- Troubleshooting Page

### Front Panel Status LEDs

- Power Status
- LAN: link, activity

### Port Statistics

- Number of TX/RX Frames, Collisions, Errors

### Quality of Service

- 802.1p and DiffServ
- Four output queues per egress port
- Weighted Round Robin (WRR)
- Strict Priority Scheduling

### VLAN

- Port-based VLANs
- 802.1Q tagged trunked VLANs
- Voice VLANs
- Private VLAN Edge
- Dynamic 802.1x assigned VLANs
- Support for up to 255 active VLANs

### Storm Control

- Broadcast, Unicast, and Multicast

### Administration

- CLI (Console/Telnet/SSH)
- SNMP v3
- Web-based GUI (HTTP/SSL)
- SYSLOG
- n-Command® support
- Email Alerts
- RADIUS
- TACACS+
- TCL Scripting
- Auto Config
- Port Scheduler
- DHCP Network Forensics

### Security

- Port authentication (802.1x)
- Port Security
- DoS Protection
- Hardware ACLs
- Microsoft Desktop Auditing

### Wi-Fi Controller

- Controls up to 24 NetVanta Wireless Access Points

### 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, 19" Rackmountable Metal Enclosure (Rackmount Brackets Included)
- Dimensions: H 1.72", 8" W, 11" D
- Weight: 4 lbs.
- AC power: 100–250 VAC, 50/60 Hz
- Power: 30 Watts, 1 A Max

### Agency Approvals

- FCC Part 15 Class A, UL 1950/CSA, CE Mark, C-tick, RoHS

## Ordering Information

Equipment	Part #
NetVanta 1544	1702544G1
NetVanta 1000BaseSX SFP Transceiver	1200480E1
NetVanta 1000BaseLX SFP Transceiver	1200481E1
NetVanta 2.5Gbps Multimode SFP Transceiver	1200482G1
NetVanta 2.5Gbps Singlemode SFP Transceiver	1200483G1
NetVanta 1 Meter SFP Interconnect Cable	1200484G1
NetVanta 3 Meter SFP Interconnect Cable	1200484G3
Dual Mounting Tray	1700508F1
Wall Mount Brackets	1700507F1



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