# NetVanta 1544P

## 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
- 802.3af (PoE), 802.3at (PoE+) and Legacy PoE
- Non-blocking, up to 68 Gbps switching capacity
- Line rate Layer 2 and Layer 3 switching
- Static routes, RIP V1/V2, OSPF and BGP
- Desktop security audit
- DHCP network forensics
- 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

**The NetVanta® 1544P is a managed, 28-port PoE, 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 1544P is ideal in Gigabit-to-the-desktop deployments, and converged voice and data networks.

### Hardware

The NetVanta 1544P 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. Together the four SFP ports can provide up to 20 Gbps of bandwidth between interconnected NetVanta 1544P switches.

### Multi-layer Switching

The NetVanta 1544P 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

The NetVanta 1544P 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. The NetVanta 1544P 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.

### PoE

The NetVanta 1544P provides up to 370 watts of 802.3af (PoE), 802.3at (PoE+) and Legacy PoE for powering IP phones, Wireless Access Points (WAPs), and other devices requiring LAN power.

### Security

Rest assured, with the NetVanta 1544P 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) 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 and antivirus settings.

### Port Scheduler

The NetVanta 1544P 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, the NetVanta 1544P 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.

ADTRAN®

**TL9000**

TL19.1270

# NetVanta 1544P

## Layer 3 Gigabit Ethernet Switch

# Product Specifications

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

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

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

### 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

## PoE
- 802.3af (PoE) and 802.3at (PoE+) and Legacy PoE
- 370 Watts (Total)

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

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

## Wi-Fi Controller
- Controls up to 24 NetVanta Wireless Access Points

## Environment
- **Operating temperature:** 0° to 45° 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:** 1.72" H, 17.2" W, 10" D
- **Weight:** 9.5 lbs.
- **AC power:** 110–230 VAC, 50/60 Hz
- **Power:** 500 Watts, 4.9 A Max

## Agency Approvals
- FCC Part 15 Class A, UL 1950/CSA, RoHS

# Ordering Information

| Equipment | Part # |
|---|---|
| NetVanta 1544P | 1702545G1 |
| NetVanta 1000BaseSX SFP Transceiver | 1200480E1 |
| NetVanta 1000BaseLX SFP Transceiver | 1200481E1 |
| NetVanta 2.5 Gbps Multimode SFP Transceiver | 1200482G1 |
| NetVanta 2.5 Gbps Singlemode SFP Transceiver | 1200483G1 |
| NetVanta 1 Meter SFP Interconnect Cable | 1200484G1 |
| NetVanta 3 Meter SFP Interconnect Cable | 1200484G3 |