



# NetVanta 1524ST

## Product Features

- 24-port Managed Gigabit Ethernet Switch
- 20-10/100/1000Base-T and 4 combo 10/100/1000Base-T/SFP ports
- Non-blocking 48 Gbps switching capacity
- 802.1Q tagged and port based VLANs
- Support for up to 255 active VLANs
- Single IP address management for up to 16 units
- Provides QoS to 802.1p marked traffic
- Spanning Tree and Rapid Spanning Tree Support
- MAC based port security
- Broadcast Storm Control
- Port Mirroring
- Link Aggregation, GVRP, and LLDP
- Web-based GUI
- Familiar Command Line Interface (CLI)
- SSL and SSH management encryption
- Free access to ADTRAN's n-Command NetVanta Internetworking Essentials Management Software
- Free firmware updates
- Industry-leading five-year North American warranty and toll-free support



## Managed Layer 2 Gigabit Ethernet Switch

### The NetVanta® 1524ST is the first in a series of Gigabit Ethernet switches from ADTRAN®.

Offered at a price point less than half the cost of other 24-port Layer 2 Gigabit switches, this product is setting a new standard for affordable higher bandwidth and Gigabit to the desktop deployments. Ideal for new installations or network upgrades, these switches can provide higher bandwidth for corporate and branch office LANs to support today's most bandwidth intensive applications.

### Hardware

The NetVanta 1524ST rackmount switch provides 24 Gigabit Ethernet ports, consisting of 20 fixed 10/100/1000Base-T Ethernet ports and four combo 10/10/100Base-T or Small Form-factor Pluggable (SFP) ports. The 100/100/1000Base-T ports provide auto-rate, auto-duplexing, and auto-MDI/MDI-X sensing. The SFP slots are available to accommodate optical interfaces using industry-standard SFP modules. The 1524ST can support up to 16 units stacked together and easily managed with a single IP address for the entire stack.

### Standard-based Protocols

Based on the ADTRAN Operating System (AOS), these devices offer support for Link Aggregation (802.3ad), Port Mirroring, Port-based switching features including Broadcast Storm Control, Spanning Tree (802.1D) and Rapid Spanning Tree (802.1w) for faster network convergence, link redundancy, and recovery from topology changes. Link Layer Discovery Protocol (LLDP) auto-discovers neighboring Ethernet devices, simplifying integration into multi-vendor environments.

### VLANs

All NetVanta switches support 802.1Q trunking and up to 255 port-based VLANs to allow network managers to separate broadcast domains for efficient network performance and traffic control. To help aid configuration in larger networks, Generic VLAN Registration Protocol (GVRP) is also available.

### Security

Rest assured, with the NetVanta 1524ST your network is protected. These products also offers a variety of data security features including 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 a RADIUS or RSA SecurID server.

### Quality of Service (QoS)

NetVanta switches also support QoS to ensure network managers have the ability to prioritize mission critical traffic and control network congestion. The NetVanta 1524ST offers 802.1p and DiffServ Class of Service (CoS). Each switch supports frame tagging as well as enforcement of tagged traffic received from trusted sources. Two egress queues (per port) are available for assigning traffic priorities using Weighted Round Robin (WRR) or Strict Priority Queuing.

### Administration

The AOS offers both a Command Line Interface (CLI) that mimics the widely deployed, industry *de facto* standard and an intuitive web-based GUI with step-by-step configuration wizards. For a centralized enterprise-wide management scheme, ADTRAN offers n-Command™, an intuitive, scalable software suite for managing firmware revisions, push firmware upgrades and configuration changes, backup and restore configurations, and manage security policies and Access Control Lists (ACLs).

NetVanta 1000 Series of Ethernet switches are easily coupled with other ADTRAN inter-networking products including NetVanta 1000 Series switch-routers, NetVanta 3000/4000/5000 Series Access Routers, and NetVanta 2000 Series VPN/Firewall appliances. All these solutions are backed by ADTRAN's industry-leading support, services, and North American five-year warranty.



# NetVanta 1524ST



## Managed Layer 2 Gigabit Ethernet Switch

### Product Specifications

#### Physical Interface

##### 24 Gigabit Ethernet Ports

- 10/100/1000Base-T
- RJ-45
- Auto-rate/duplex/MDI/MDI-X

##### 4 SFP Ports

- Industry-standard SFP interface
- SFP slots for optical connectivity

##### Console Port

- DB-9, RS-232
- 10/100Base-T management port

#### Performance

- Non-blocking
- **Switching Capacity:** 48 Gbps
- **Maximum Forwarding Rate (based on 64-byte packets):** 35.7 Mpps
- 8,000 MAC Addresses

#### Diagnostics

- Port Mirroring
- Ping
- LLDP (802.1AB)

#### Front Panel Status LEDs

- Power
- Link
- Stacking

#### Network Access Control

- Multi-Level Access Control
- Port Authentication (802.1x)
- MAC-based port security
- RADIUS AAA

#### Port Statistics

- TX/RX Frames
- Collisions
- Errors

#### Spanning Tree Support

- 802.1D Spanning Tree
- 802.1w Rapid Spanning Tree

#### Stacking

- Up to 16 switches/stack
- Single IP Address for entire stack
- Utilizes built-in 1000Base-T or SFP interfaces
- Compatible with NetVanta 1000 Series Switches

#### Link Aggregation

- 802.3ad Link Aggregation
- Support for 12 trunk groups
- Trunk groups consist of up to 12 ports

#### Class of Service

- 802.1p and DiffServ
- Two output queues per egress port
- Strict Priority Queuing

#### Storm Control

- Broadcast and Multicast

#### VLAN Support

- Port Based VLANs
- 802.1Q tagged trunked VLANs
- Support for up to 255 active VLANs
- Generic VLAN Registration Protocol (GVRP)

#### Security

##### Firewall

- Stateful Inspection Firewall
- Denial of Service (DoS) Protection
- Access Control Lists (ACLs)
- Application Level Gateways (ALGs)

##### Optional Virtual Private Network (VPN)

- **IPSec Mode:** Tunnel
- **Encryption:** DES, 3DES, and AES
- **Diffie Hellman Group Support:** Group 1: MODP 768, Group 2: MODP 1024
- **Hash Algorithms:** MD5-HMAC and SHA1-HMAC
- **Authentication Mechanisms:** XAUTH, X.509 Digital Certificates, Preshared Keys, Secure ID, DSS Signature
- **Key Management:** IKE (ISAKMP/Oakley)
- **IKE Modes:** Main, Aggressive, Perfect Forward Secrecy, Mode Configuration
- Dead Peer Detection
- NAT Traversal V2

##### Network Address Translation

- Basic NAT (1:1) and NAPT (Many:1)
- NAT compatible SIP ALG

##### Secure Management

- Multi-level access control
- RADIUS AAA
- SSH CLI and SSL GUI

##### Network Access Control

- Port Authentication (802.1x)
- MAC-based Port Security

#### 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
- **Dimensions:** 1.7" H, 17.2" W, 7.8" D
- **Weight:** 7 lbs.
- **AC Power:** 100–250 VAC, 50/60 Hz
- **Power:** 36 Watts (122 BTUs/hour)

#### Agency Approvals

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

## Ordering Information

Equipment	Part #
NetVanta 1524ST	1200560L2
NetVanta 1000Base-SX SFP (LC Connectors)	1200480L1
NetVanta 1000Base-LX SFP (LC Connectors)	1200481L1

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61200560L1-8C 9.1 May 2005  
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