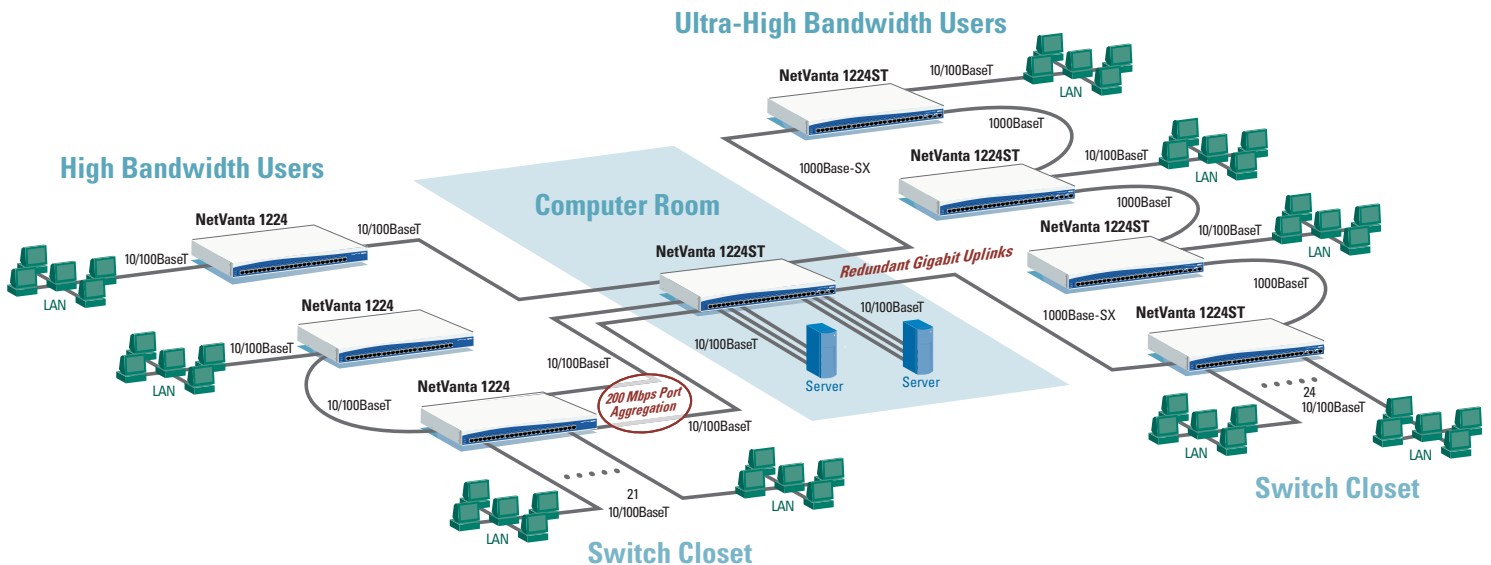


# LAN Segmentation

## Layer 2 Switching

Featuring  
NetVanta 1000 Series



The NetVanta™ 1000 Series is designed for networks requiring a managed switching solution for interconnecting Local Area Networking (LAN) access devices such as hubs, computers, or servers. The NetVanta 1224 and 1224ST are ideal for growing enterprises with the need for more efficient network performance or for carrier networks requiring segmentation and management of Ethernet-enabled devices.

These products support Layer 2 switching in a cost-effective, easy-to-deploy rackmount chassis. Both products support 24 Fast Ethernet ports. The NetVanta 1224ST also supports dual Gigabit uplink ports for high-speed link redundancy and stacking capability for up to 16 units or 384 ports. Metallic interfaces support Gigabit over copper with two 1000BaseT ports for Cat 5 or 5e cabling. Small Formfactor Pluggable (SFP) slots provide Gigabit Ethernet over single or multi-mode fiber using industry-standard SFP modules. These products easily integrate into switching closets, computer rooms, or network operations centers. Utilizing standards-based switching technology, these devices may be used in multi-vendor networks for new or existing installations.

The NetVanta 1224 and 1224ST support advanced switching features including Rapid Spanning Tree (802.1w) and Spanning Tree (802.1D) protocols, up to 255 active 802.1Q tagged or port-based VLANs, and 802.1p traffic prioritization for enforcing Quality of Service (QoS) for mission critical applications. Storm Control, Link Aggregation (802.3ad), and Port Mirroring are among other features supported.

In this application, link aggregation is used to provide a 200 Mbps link from the NetVanta 1224 switches to the computer room. RADIUS authentication, SSH secure login and multi-level user passwords provide network security. Switch management and configuration, using a familiar Command Line Interface (CLI), are both available via the ADTRAN™ Operating System (OS). A Graphical User Interface (GUI) is also available for configuration and management. Using the management IP address of the switch, users can access the GUI from a standard web browser. Dual firmware images and configuration files may be stored in the units, and FTP or TFTP can be used for quick, easy, firmware updates.

### SOLUTION FEATURES

- Cost-effective managed Layer 2 switching
- Standards-based switching technology
- High-speed uplinks provided by industry standard 1000BaseT/SFP Gigabit Ethernet ports
- Link Aggregation (802.3ad) for higher-speed links
- Ideal for enterprise or carrier networks
- Familiar CLI with ADTRAN OS
- Web-based GUI for configuration and remote management
- Support for stacking, VLANs, and traffic prioritization
- Industry-leading service and support

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# NetVanta 1224 and 1224ST

## Managed Layer 2 Ethernet Switches

## Product Specifications

### Physical Interface

#### 24 Fast Ethernet Ports

- 10/100BaseT
- RJ-45
- Auto rate/duplex/MDI/MDI-X

#### Dual Gigabit Ethernet Ports (1224ST Only)

- Built in 10/100/1000BaseT for copper connectivity
- SFP slots for optical connectivity

#### Console Port

- DB-9, RS-232

### Performance

- Non-blocking
- 8,000 MAC addresses
- 16 MB memory shared by all ports

#### Maximum Forwarding Bandwidth

- 4.8 Gbps (1224)
- 8.8 Gbps (1224ST)

### Diagnostics

#### Front Panel Status LEDs

- Power
- LAN: link, activity

#### Port Statistics

- Number of TX/RX bytes, frames, collisions
- Number of under/oversized frames, CRC errors, jabbers
- Frame size analysis

#### Port Mirroring

### Spanning Tree Support

- 802.1D Spanning Tree
- 802.1w Rapid Spanning Tree

### Flow Control

- Backpressure jamming for half-duplex links
- 802.3x flow control on full-duplex links

### Stacking (1224ST only)

- Up to 16 switches/stack
- Utilizes built-in 1000BaseT or SFP interfaces

### Link Aggregation

- 802.3ad Link Aggregation
- Support for six trunk groups
- Trunk groups consist of up to eight access ports or two uplink ports

### Class of Service

- Enforces 802.1p priorities
- Four output queues per egress port
- Weighted Round Robin (WRR) or Strict Priority scheduling

### VLAN Support

- Port-based VLANs
- 802.1Q tagged trunked VLANs
- Support for up to 255 active VLANs



Web-based GUI

### Storm Control

- Broadcast, Unicast, and Multicast

### Management

#### Management Methods

- Console
- Telnet CLI
- Web-based GUI
- SSH CLI

#### Management Security

- Multi-level access control
- Port security
- RADIUS AAA

#### Management Features

- NTP (Network Time Protocol)
- TFTP/FTP firmware update
- Dual firmware images stored in unit
- DHCP client/server
- Configuration script download

### 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 dissipation:** 25 Watts (85 BTU/hour)

### Agency Approvals

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

## Ordering Information

Equipment	Part #
NetVanta 1224	1200500L1
NetVanta 1224ST	1200504L1
NetVanta 1000BaseSX SFP (LC Connectors)	1200480L1
NetVanta 1000BaseLX SFP (LC Connectors)	1200481L1



NetVanta 1224



NetVanta 1224ST



NetVanta 1224/1224ST backplane

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