

# NetVanta 1234/1238

## Layer 3 Lite Fast Ethernet Switches

### Product Features

- 24/48-port auto-sensing 10/100Base-T managed Layer 2 Ethernet switch
- Two standard 1 Gbps (shared copper and SFP) ports and Two enhanced 2.5 Gbps SFP ports
- Non-blocking, up to 23.6 Gbps switching capacity
- Line rate Layer 2 and Layer 3 Lite capabilities
- Up to 32 static routes
- 802.1Q tagged and port-based Virtual LANS (VLANs)
- Support for up to 255 active vVLANs
- 802.1p and DiffServ prioritization with 4 queues per egress port
- Link aggregation, LLDP and LLDP-MED
- Weighted Round Robin (WRR) and WRR + expedite
- 802.1D Spanning Tree and 802.1w Rapid Spanning Tree support
- DHCP network forensics
- Business-class security with RADIUS, TACACS+, 802.1x and port security
- Port mirroring
- TFTP/FTP firmware upgrades
- Broadcast, Unicast, and Multicast storm control
- Wi-Fi® Access Controller for centralized management of NetVanta Wireless Access Points (WAPs)
- Cable diagnostics identifies cable length and detects shorts or open twisted pair
- Familiar CLI and Web GUI
- Limited Lifetime Warranty
- Next Business Day Advance Replacement

The NetVanta® 1000 Series of managed, Layer 3 Lite, Ethernet switches is designed for fast, secure, cost-effective Local Area Network (LAN) switching. These scalable, full-featured business-class switches are perfect for Voice over IP (VoIP) applications. The switches use robust Quality of Service (QoS) features, protecting the organization with advanced security capabilities, and ease of management with an easy-to-use Web-based Graphical User Interface (GUI) and familiar Command Line Interface (CLI).

#### Hardware

The NetVanta 1234 and 1238 rackmount switches support 24 and 48 10/100Base-T Ethernet ports with auto-rate, auto-duplexing and MDI/MDI-X sensing. In addition, each switch supports two 1.0 Gbps shared Small Form-factor Pluggable (SFP) or copper ports, and two 2.5 Gbps enhanced SFP ports. Together the four uplink ports can provide up to 14 Gbps of bandwidth between interconnected NetVanta 1234 or 1238 switches.

#### Multi-layer Switching

The NetVanta 1230 Series switches support advanced multi-layer (Layer 2 and Layer 3 Lite) switching with up to 32 static routes allowing it to easily scale from SMBs to enterprise-size networks.

#### Standards-based Protocols

Based on the ADTRAN® Operating System (AOS), these devices offer support for Link Aggregation (802.3ad); Port Mirroring; and 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.

#### Security

Rest assured, with the NetVanta 1234 and 1238 your network is protected. These products also offer a variety of data security features including 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, RSA SecurID and TACACS+.

#### Quality of Service

NetVanta switches also support QoS to ensure network managers have the ability to prioritize mission-critical traffic like VoIP and control network congestion. The NetVanta 1000 Series 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. Four egress queues (per port) are available for assigning traffic priorities using WRR.

#### Administration

The AOS offers both a 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 to manage 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 products including access routers, WAPs, IP Business Gateways, IP phones, and VoIP telephony solutions. All of these solutions are backed by ADTRAN's outstanding support and services, and an industry-leading warranty.





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# NetVanta 1234/1238

## Layer 3 Lite Fast Ethernet Switches

### Product Specifications

#### Physical Interface

##### Ethernet Ports

- **NetVanta 1234:** 24 10/100Base-T
- **NetVanta 1238:** 48 10/100Base-T
- Two Combo 10/100/1000Base-T/SFP
- Two Enhanced 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
- 8,000 MAC Addresses

##### Maximum Forwarding Bandwidth

- **NetVanta 1234:** 18.8 Gbps
- **NetVanta 1238:** 23.6 Gbps

#### Layer 2 Support

- 802.1D Spanning Tree
- 802.1w Rapid STP
- 802.3ad Link Aggregation
- 8,000 MAC Addresses
- Jumbo Frames (9K)
- IGMP Snooping
- 802.3x Flow Control

#### Layer 3 Support

- 32 Static Routes
- 16 Layer 3 Interfaces
- UDP Relay
- 232 ARP Entries
- IPv6 Management

#### Diagnostics

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

##### Front Panel Status LEDs

- Status
- LAN: Link, Activity

#### Port Statistics

- Number of TX/RX Frames
- Number of Collisions
- Number of Errors

#### Spanning Tree Support

- 802.1D Spanning Tree
- 802.1w Rapid Spanning Tree

#### Link Aggregation

- 802.3ad Link Aggregation
- Support for 6 Trunk Groups
- Trunk groups consist of up to 8 access ports or 2 uplink ports

#### Quality of Service (QoS)

- 802.1p and DiffServ
- 4 output queues per egress port
- Weighted Round Robin (WRR)

#### VLAN Support

- Port-based VLANs
- 802.1Q Tagged Trunked VLANs
- Support for up to 255 Active VLANs

#### Wi-Fi Controller

- Controls up to 24 NetVanta WAPs

#### Storm Control

- Broadcast, Unicast, and Multicast

#### Administration

- Familiar Command Line Interface (CLI)
- Web-based GUI
- n-Command Support
- SNMP v3 n TCL Scripting
- SYSLOG Logging
- Email Alerts (SMTP)
- IPv6 Management
- Requires AOS R10.8 or higher

#### Network Access Control

- Port Authentication (802.1x)

#### Environment

- **Operating Temperature:** 32° to 122 °F (0° to 50 °C)
- **Storage Temperature:** -4° to 158 °F (-20° to 70 °C)
- **Relative Humidity:** Up to 95%, Non-condensing

#### Physical

- **Chassis:** 1U, 19" Rackmountable Metal Enclosure
- **NetVanta 1234**
  - **Dimensions:** 1.7 in. x 17.2 in. x 10.1 in. (H x W x D) (4.3 cm x 44.2 cm x 20.6 cm)
  - **Weight:** 5 lbs (2.3 kg)
  - **Power:** 25 watts
- **NetVanta 1238**
  - **Dimensions:** 1.7 in. x 17.2 in. x 10.8 in. (H x W x D) (4.3 cm x 44.2 cm x 31 cm)
  - **Weight:** 8.5 lbs (3.9 kg)
  - **Power:** 40 watts
- **AC Power:** 100–250 VAC, 50/60 Hz

#### Agency Approvals

- FCC Part 15 Class A and UL 1950/CSA

### Ordering Information

Equipment	Part No.
NetVanta 1234	1702594G1
NetVanta 1238	1702598G1
NetVanta 1000BaseSX SFP (LC Connectors)	1200480E1
NetVanta 1000BaseLX SFP (LC Connectors)	1200481E1
NetVanta 1000Base-T SFP	1200485G1
NetVanta 2.5 Gbps multi-mode SFP Transceiver	1200482G1
NetVanta 2.5 Gbps single-mode SFP Transceiver	1200483G1
NetVanta 1 meter SFP Interconnect cable	1200484G1
NetVanta 3 meter SFP Interconnect cable	1200484G3