

## **NetVanta Ethernet Switches**



## Flexible, innovative switching solutions.

ADTRAN® provides a full line of powerful switching solutions for all your network needs. With ADTRAN's award-winning and innovative NetVanta® Ethernet switches, routers, Virtual Private Networking (VPN), wireless, and IP telephony products, it is easy to find a quality solution to meet your specific requirements for IP business communications.

Our portfolio of business-class switching solutions is perfect for Small- and Medium-sized Businesses (SMBs) or multi-site enterprise networks. These solutions address today's highest networking priorities, from bandwidth expansion to network security.

You can select from a full range of products, including multiservice and fixed-port routers with Ethernet switching, as well as, Fast Ethernet, Power over Ethernet (PoE), and Gigabit Ethernet switches.

### Bandwidth Expansion

ADTRAN offers a breadth of products from Fast and Gigabit Ethernet switches to integrated switch-router platforms with security and wireless access. Switching products range in port count from 24 to 48 ports and from Fast to Gigabit platforms to accomodate your network's most bandwidth-intensive applications.

VoIP Migration

NetVanta switching solutions make it easy to transition your network to accommodate Voice over IP (VoIP) applications. ADTRAN's Ethernet switching solutions are VoIP-ready with 802.3af, 802.3at and Legacy PoE, Quality of Service (QoS), and Class of Service (CoS). Robust multiservice routers with on-board switching also provide a unique, cost-effective Wide Area Network/Local Area Network (WAN/LAN) solution for all-in-one SMB networking.

### Network Security

The NetVanta Series of Ethernet Switches provides various lines of defense against common security threats. Denial of Service (DoS) protection identifies and blocks common network attacks. Desktop security audit utilizes DHCP in conjunction with Microsoft Network Access Protection (NAP) protocol to monitor the health of client computers and ensure that systems connected to the network are using appropriate corporate policies, such as firewall and antivirus settings. Security audit is an ADTRAN Operating System (AOS) feature that identifies possible vulnerabilities to network security. The security portfolio features support for 802.1Q trunking for Virtual LANs (VLANs) to allow network managers to segregate traffic, and enhance networking performance.

### Power Conservation

As networks continue the transition to all-IP architectures, and the demand for bandwidth continues to increase, the need for energy-efficient power consumption and "green" technologies will hold an even greater role. NetVanta Switches offer several ways to conserve on power. They efficiently deploy only the needed power to a device and also offer the ability to schedule a port to be activated and deactivated based on time-of-day. This conserves on power usage and utility costs.

### Innovative ActivReach<sup>™</sup> and ActivChassis Switching Technology from ADTRAN ADTRAN's innovative ActivReach technology unlocks the power of Ethernet delivering 10/100 Mbps full-dur

ADTRAN's innovative ActivReach technology unlocks the power of Ethernet delivering 10/100 Mbps full-duplex connectivity over all grades of wiring—CAT5/6, CAT3 or even legacy copper, at distances up to 1,600 feet.

ADTRAN's ActivChassis stacking technology brings the power of chassis-switches in a cost-effective, build-as-yougrow model allowing stacking and centralized management of up to eight Gigabit switches as a single, logical switch, with the flexibility to manage switches spread across wiring closets up to 6 miles (10 km) apart within a campus. Powerful switching solutions for all your networking needs.

### Fast Ethernet and Gigabit Ethernet Switches

The NetVanta Series of Ethernet Switches includes full-featured, managed, Layer 3-lite and full Layer 3, Fast Ethernet, Gigabit Ethernet, and PoE switches. The NetVanta Fast Ethernet series offers 24-48 ports, as well as Gigabit uplink ports for stacking and optional PoE. The NetVanta series of Gigabit Ethernet Switches supports bandwidth-hungry applications such as, Gigabit-to-the-desktop, video streaming, 802.11n Wi-Fi, and large file transfers. The Gigabit series is available from 24 to 48 ports and features up to four 16 Gigabit uplink capabilities to support multi-floor, campus aggregation and core switching needs of SMEs. Business-class features, flexible management, and a favorable price point set these switches apart from all other switches in their category.

### **Multiservice Routers**

Delivering greater throughput, the NetVanta 3448, NetVanta 3458 and NetVanta 1335 Multiservice Access Routers offer a variety of networking functionalities wrapped into a single chassis. These VoIP-ready, all-in-one routers include a modular WAN interface, IP router, PoE switch (Layer 2 or Layer 3), firewall, and VPN. In addition to the convenience and ease-of-use of a single platform, these multi-function routers contribute to a reduced Total Cost of Ownership (TCO).

### **World-Class Support**

ADTRAN's products are backed by our award-winning ProServices<sup>™</sup> for complete lifecycle support, from planning through implementation to ongoing support and management. The ProServices portfolio includes standard solutions with per product pricing as well as custom ProServices for meeting unique customer requirements—delivering the technical services to ensure deployment and ongoing support of a high-performance network.

### **Wireless Access Points**

Wi-Fi<sup>®</sup> your NetVanta network with the NetVanta 160 or NetVanta 161 dual-radio 802.11n APs that provide 2x300 Mbps throughput and advanced security features like 802.1x authentication, WPA/WPA2, and the disabling of SSID broadcasts. Through the use of VAPs, these wireless products have the ability to segment a wireless network securely. These business-class wireless products are perfect for the corporate environment in need of a secure, integrated WLAN solution.



### **NetVanta Switches**

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## **VoIP** made easy.

The NetVanta 1200 Series is part of a family of full-featured, managed, Layer 3 Lite Fast Ethernet, and PoE switches. There are many compelling reasons to implement a NetVanta switching solution as part of your networking plan.

### VoIP-ready

The NetVanta 1200 Series includes full-featured, managed, Layer 3 Lite Fast Ethernet switches. The NetVanta 1234 offers 24-ports Fast Ethernet and the NetVanta 1238 features 48-ports. Each switch comes with Gigabit uplink ports and optional PoE. Designed for fast, secure LAN switching, the NetVanta 1200 Series supports robust QoS features, and Link Layer Discovery Protocol-Media Endpoint Discovery (LLDP-MED) making NetVanta switches ideal for use with VoIP applications. The business-class features, flexible management, and a favorable price point set these switches apart from all others in their category.

### **Intelligent Switching**

The NetVanta Series of switches offers advanced switching features—starting with intelligent power management. The power conservation feature has the ability to power down devices when not in use.

In addition to providing energy efficiency, this feature also turns off IP phones and APs after business hours to minimize security risks. To aid in troubleshooting, an intelligent cable diagnostics feature identifies cable length and detects shorts or opens in Ethernet cables.

### Affordability for SMBs

NetVanta switching solutions offer a low initial investment, coupled with simplified installation, configuration and management without sacrificing functionality or reliability. NetVanta switching solutions significantly lower TCO and improve Return on Investment (ROI). These full-featured solutions are priced free of hidden charges, such as mandatory maintenance agreements and costly firmware downloads. In addition, they are backed by a limited lifetime warranty and unlimited toll-free technical support.



### NetVanta 1234

- 24-port, managed, Layer 3 Lite Fast Ethernet switch
- 2 Gigabit ports for uplinks
- 2 enhanced 2.5 Gbps SFPs for high-speed connectivity
- Non-blocking switching capacity up to 18.8 Gbps
- 1U, 19-inch rackmount metal enclosure

### NetVanta 1234P

24-port, managed, Layer 3 Lite Fast Ethernet switch

AAAAAA AAAAAA WAA

- 2 Gigabit ports for uplinks
- 2 enhanced 2.5 Gbps SFPs for high-speed connectivity
- Non-blocking switching capacity up to 18.8 Gbps
- 802.3af and Legacy PoE
- 1U, 19-inch rackmount metal enclosure

ADTRAN's NetVanta family of voice and data networking solutions is designed specifically to meet the needs of the value-driven SMB by providing a reliable, easy-to-use, business-class product at an SMB-friendly price point.



ADTRAN NetVanta products are VoIP-Ready! Inherent QoS functionality supports Voice over IP needs!



### NetVanta 1238

- 48-port, managed, Layer 3 Lite Fast Ethernet switch
- 2 Gigabit ports for uplinks
- 2 enhanced 2.5 Gbps SFPs for high-speed connectivity
- Non-blocking switching capacity up to 23.6 Gbps
- 1U, 19-inch rackmount metal enclosure



### NetVanta 1238P

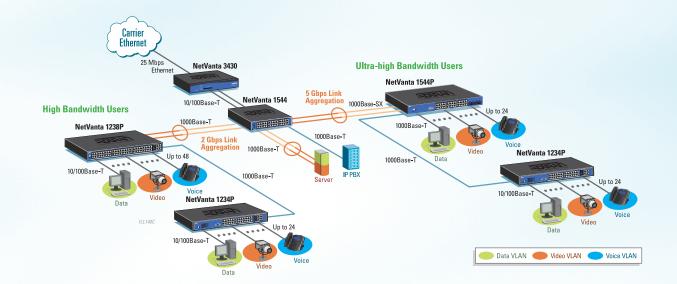
- 48-port, managed, Layer 3 Lite Fast Ethernet switch
- 2 Gigabit ports for uplinks
- 2 enhanced 2.5 Gbps SFPs for high-speed connectivity
- Non-blocking switching capacity up to 23.6 Gbps
- 802.3af and Legacy PoE
- 1U, 19-inch rackmount metal enclosure

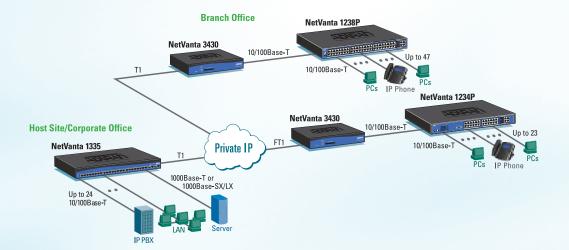
### NetVanta Fast Ethernet Switches At-A-Glance

- Full-featured, managed, Layer 3 Lite, Fast Ethernet, and Power over Ethernet switches
- Interoperable in established, multi-vendor networks
- Up to 23.6 Gbps switching capacity, non-blocking
- Gigabit SFP/1000Base-T uplink capability
- Link Aggregation
- MAC-based port security
- 802.10 tagged and port-based VLANs
- LLDP/LLDP-MED for easy IP phone configuration
- Wi-Fi Access Controller for centralized management of NetVanta APs
- Cable diagnostics detects shorts or opens in Ethernet cables
- Port Scheduler for power saving and increased security
- Feature-rich AOS
- Easily recognizable Command Line Interface (CLI)
- Intuitive Web-based Graphical User Interface (GUI)
- Limited lifetime warranty
- Next business day advance replacement

### **VLAN Switching and Inter-VLAN Routing**

NetVanta switches provide managed switching features, like 802.1Q VLANs and VLAN trunking. VLANs provide logical segmentation of the network adding security and the separation of broadcast domains, which improves overall network performance. NetVanta switches can use the Gigabit Ethernet ports for uplink capability using 1000Base-T or optical connections using the Small Form factor Pluggable (SFP) modules for single-or multimode fiber applications. In addition, these Gigabit ports can be used for VLAN trunking to an upstream switch, link redundancy or to connect high-speed ports on servers or other devices.





### **PoE and QoS for VoIP Networks**

NetVanta Ethernet switches and multiservice routers provide PoE and QoS functionality for VoIP networks. QoS ensures network managers have the ability to prioritize delay-sensitive or mission-critical traffic and control network congestion. NetVanta 1200 Series Switches support Layer 2 802.1p CoS, and DiffServ while Weighted Round Robin (WRR) and Strict Priority Queuing are used for traffic prioritization. At Layer 3, NetVanta Multiservice Routers support bandwidth shaping, DiffServ marking and Classbased Weighted Fair or Low Latency Queuing.

## Powerful, Business-class Switching Solutions

The NetVanta 1500 and 1600 series Gigabit Ethernet (GigE) switches are a family of full-featured, multi-layer, PoE, aggregation and stackable switches that deliver affordable, high-capacity switching. Perfect for use in branch offices, SMBs, and multi-site networks of all sizes, these switches are ideal for campus applications, Gigabit-to-the-desktop deployments, switch aggregation, or core switching, and offer optional PoE.

### **Bandwidth Intensive Applications**

The NetVanta Series of Gigabit Ethernet switches provides higher bandwidth to corporate and branch office LANs in support of today's most bandwidth intensive applications. These switches are perfect for new installations or network upgrades. The NetVanta 1630s are managed, 48-port, Layer 3, GigE switches featuring up to four 16 Gigabit links for a total of 128 Gbps of bi-directional traffic when in ActivChassis stacking mode (stack up to eight switches) for distribution or campus backbone applications. The NetVanta 1544 and NetVanta 1544P are managed, 28-port, Layer 3, GigE switches designed as access layer or distribution switches for small to medium enterprises. All NetVanta Gigabit switches are ideal as aggregation switches for high-bandwidth video, Gigabitto-the-Desktop deployments, Wi-Fi and data network. Optional PoE supports 802.3af, 802.3at and Legacy PoE. <u>The NetVanta</u> 1544F switch features all SFP fiber ports.

### Aggregation Switching

With a flexible line of Gigabit NetVanta products, ADTRAN offers an all-ADTRAN solution for the small-to-medium enterprise network. The Layer 3 switching capability of these products offers wire-speed routing between VLANs allowing for fast transmission of IP traffic between access layer switches.

### **Campus Networks**

Fiber Optics extends the reach beyond the 100 meter limitation often associated with copper switchport interfaces. The NetVanta 1544F is an all-Fiber solution, extending the reach and offering redundancy, with virtual router redundancy protocol (VRRP) between buildings in campus environments or between wiring closets. The SFP ports support up to 2.5 Gbps per interface increasing throughput between NetVanta switches.



### NetVanta 1131 RPS/EPS

- Redundant and Extended Power Supply for NetVanta Gigabit switches
- Redundant Power for up to three NetVanta switches
- Backup PoE budget power (NetVanta PoE switches)
- Supplemental PoE budget power (NetVanta 1638P)
- 1U, half-width form factor

### NetVanta 1534 and NetVanta 1534P

- 28-port, managed, Layer 3 Lite Gigabit Ethernet switch
- 24 1 Gbps copper and two 1 Gbps, 2-2.5 Gbps SFP module slots for optical connections
- 62 Gbps Non-blocking switching capacity
- Optional backup power supply and supplemental PoE
- 1U, half-width (NetVanta 1534)
- 1U, 19-inch rackmount metal enclosure (NetVanta 1534P)
- 802.3af, 802.3at and Legacy PoE (NetVanta 1534P)

### NetVanta 1544 and NetVanta 1544P

- 28-port, managed, Layer 3 Gigabit Ethernet switch
- 24 1 Gbps copper and four 2.5 Gbps SFP module slots for optical connections
- 68 Gbps non-blocking switching capacity
- Optional backup power supply and supplemental PoE
- 1U, half-width (NetVanta 1544)
- 1U, 19-inch rackmount metal enclosure (NetVanta 1544P)
- 802.3af, 802.3at and Legacy PoE (NetVanta 1544P)

### ActivChassis Stacking

For many organizations adding additional switches and managing multiple switch stacks spread across wiring closets is cumbersome, and can introduce configuration errors. ADTRAN's innovative, featurerich ActivChassis technology brings chassis-switch capability and resiliency in a build-as-you grow model. ActivChassis technology, now available on the NetVanta 1600 series Gigabit switches, allows:

- Stacking and management of up to eight Gigabit switches as single, logical switch
- Simplifies management of switch stacks spread across wiring closets up to 6 miles apart (10 km)
- Boosts backplane capacity up to 128 Gbps
- Enhances network redundancy and availability to ensure a high-performance, always-on network.





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### NetVanta 1544F

- 28-port, managed, Layer 3 Fiber Optics Gigabit Ethernet switch
- 24 1 Gbps optical SFP module slots and four 2.5 Gbps optical SFP module slots
- 68 Gbps non-blocking switching capacity
- 1U, 19-inch rackmount metal enclosure

### NetVanta 1638 and NetVanta 1638P

- 48-port, managed, Layer 3 GigE Switch
- Two high-speed interface slots provide up to four 10-Gigabit uplink or four 16G stacking ports
- 224 Gbps non-blocking switching capacity
- Optional backup power supply and supplemental PoE
- Advanced Stacking capability with ActivChassis
- 1U, 19-inch rackmount metal enclosure
- 802.3af, 802.3at and Legacy PoE (NetVanta 1638P)

### NetVanta GigE Switch Solutions

- Full-featured, managed Layer 3, PoE, and Gigabit Ethernet switches
- Interoperable in established, multi-vendor networks
- Up to 224 Gbps switching capacity, non-blocking
- Advanced stacking capability with ActivChassis (NetVanta 1638/1638P)
- 10 Gigabit and Gigabit SFP/1000Base-T uplink capability
- Link Aggregation
- Desktop Security Audit, DOS, and DHCP Network Forensics
- MAC-based port security
- 802.10 tagged and port-based VLANs
- LLDP/LLDP-MED for easy IP phone configuration
- Wi-Fi Access Controller for centralized management of NetVanta APs
- Cable and SFP diagnostics
- Port Scheduler for power saving and increased security
- Intuitive Web-based GUI
- Recognizable CLI
- Limited lifetime warranty
- Next business day advance replacement

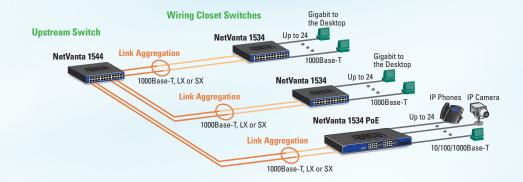


ADTRAN NetVanta 1544 Named "2010 Internet Telephony Product of the Year" by TMC

### **NetVanta Gigabit Ethernet Solutions**

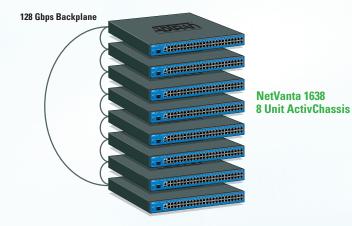
### Affordable Gigabit-the-desktop Deployments

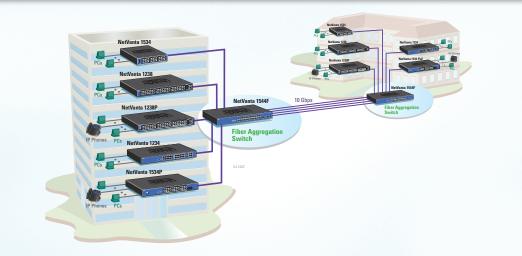
The NetVanta 1534 Gigabit Ethernet Switch is ideal for affordable higher bandwidth and Gigabit-to-the-desktop deployments. Link aggregation provides additional bandwidth for connectivity to upstream or core switches. Ideal for new installations or network upgrades, these switches can provide higher bandwidth for corporate and branch office LANs to support today's most bandwidthintensive applications. The NetVanta 1534 also offers PoE functionality for VoIP, Wi-Fi, and other PoE applications.

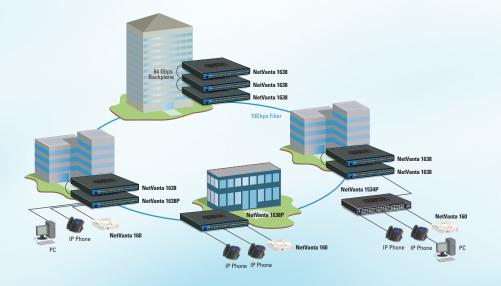


### **Increased Backplane Capacity**

Today's business applications and the proliferation of wireless devices exacerbates the need to maximize throughput between devices, as well as ensure data availability at all times and for all users. When the NetVanta 1600 Dual Stacking XIMs are used to construct ActivChassis configurations, the 10 Gbps local stacking ports are automatically boosted to 16 Gbps of unidirectional throughput. This equates to 32 Gbps for a single port and a total of 128 Gbps when using both option modules on the NetVanta 1600 series switches. The result is an extremely efficient switching backplane that is fully capable of meeting the demands of high bandwidth business applications.







### **Fiber Optic Aggregation Switching**

With the reach of Fiber Optics, distances beyond 100 meters are now supported for switch aggregation. This allows for direct connectivity between floors to a central switch as well as providing connectivity between buildings for campus network aggregation. The NetVanta 1544F offers flexible connectivity options supporting 1 Gbps of bandwidth on the 24 SFP slots. Four 2.5 Gbps SFP uplink ports may be used for link aggregation (up to 10 Gbps) between NetVanta 1544 units. This solution offers wire-speed switching performance with flexible connectivity options.

### Manage Switches Across Multiple Wiring Closets

ActivChassis allows centralized management of physically-dispersed NetVanta 1600 series switches utilizing a single IP address and a single configuration file. Now administrators can connect and manage NetVanta 1638/1638P switch stacks spread across multiple wiring closets at distances up to 6 miles (10,000 meters) as a single, logical switch.

## Unlock the Power of Ethernet with ActivReach

Many older office buildings, schools, retail stores, hotels, hospitals and distribution facilities rely solely on CAT3 or voice-grade cabling infrastructure for their legacy phone systems. Traditionally, businesses have been forced to run new cable to access cutting edge Ethernet services. However, with new cabling upgrade costs running at hundreds of dollars per drop, this option becomes cost-prohibitive for many companies—until now. ADTRAN now introduces ActivReach, an innovative technology that breaks down these barriers, and unlocks the true power of Ethernet. ActivReach, currently available on the NetVanta 1235P and 1535P Ethernet switches allow businesses around the world to utilize their existing wiring infrastructure (CAT5/6, CAT3 or Legacy Copper) to deliver 10/100 Mbps Ethernet and PoE up to 1,600 feet (488 meters).

### **VoIP over Voice-Grade Wiring**

When businesses decide to upgrade their voice infrastructure from analog or digital hand-sets to Voice over IP (VoIP), many considerations must be made. For many businesses, the risk of a converged voice and data network is simply too great and IT managers are forced to run new cable to enable VoIP and cutting-edge UC. ActivReach provides the ability to deliver 10/100 Mbps Ethernet and PoE at distances up to 1,600 feet (488 meters), taking advantage of the existing cable plant infrastructure to deliver flawless voice quality over longer distances without impacting the existing data network.

### **Support Extended Reach Endpoints**

With network installations, it is not uncommon to come across situations that require cabling longer than the 328 feet (100 meters) supported by standard IEEE Ethernet today. Having only one or two of these types of endpoints hardly justifies the cost of additional switching infrastructure. With ActivReach, businesses can connect extended reach endpoints up to a distance of 1,600 feet (488 meters) delivering 10/100 Mbps throughput and PoE. Now, distance runs to support individual workstations or IP security cameras or wireless access points becomes possible.

### **Seamless Migration to Gigabit**

The NetVanta 1535P is a true Layer 3 Lite Gigabit switch, which provides the ability to deploy a converged voice and data network over existing CAT3 cabling in addition to providing an easy upgrade path to Gigabit networking speeds without the need to change the hardware. Each Ethernet port can be configured for ActivReach Ethernet speeds of 10/100 Mbps or standard IEEE 10/100/1000Base-T Ethernet. Therefore, infrastructure upgrades can be performed incrementally and the same switch port previously configured for ActivReach— can be configured to provide Gigabit networking speeds over standard IEEE Ethernet once new cabling is put in place, thereby maximizing TCO.

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### NetVanta 1235P with ActivReach

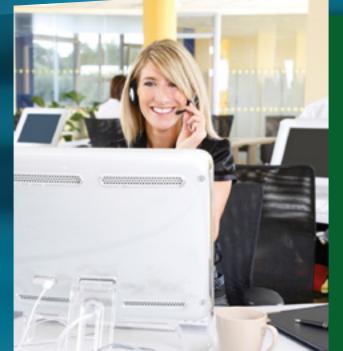
- 28-port managed Layer 3-Lite Fast Ethernet Switch
- 24-10/100Base-T or ActivReach and four SFP optical ports
- 10/100 Mbps data and PoE over CAT5, CAT3 or legacy copper at distances up to 1,600 ft (ActivReach or Standard Ethernet)
- Non-blocking switching capacity up to 18.8 Gbps
- 1U-high, rackmountable metal enclosure
- 802.3af (PoE), Legacy PoE, and PoE over ActivReach

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### NetVanta 1535P with ActivReach

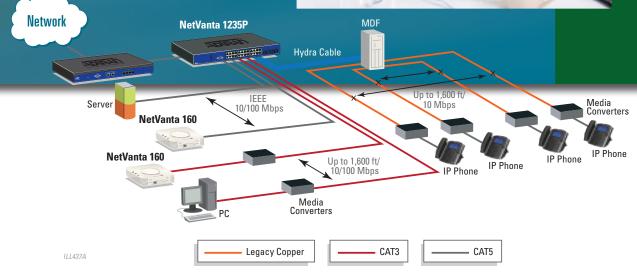
- 28-port managed Layer 3 Lite GigE Switch
- 24 10/100/1000Base-T or ActivReach and four SFP optical ports
- 10/100 Mbps data and PoE over CAT3 or legacy copper up to 1,600 ft (ActivReach mode) or 10/100/1000 Mbps up to 328 ft (Standard Ethernet mode)
- Non-blocking switching capacity up to 62 Gbps
- 1U-high, rackmountable metal enclosure
- 802.3af (PoE), Legacy PoE, and PoE over ActivReach

"ActivReach Ethernet technology unleashes the power of Ethernet, supporting bi-directional networking speeds of up to 100 Mbps, and PoE over all grades of wiring: CAT3, CAT5, or CAT6 providing the ability to deploy a complete solution for voice and desktop connectivity"



### NetVanta Switches with ActivReach Ethernet

- 24 port multi-layer, Fast Ethernet and Gigabit switches
- Data connectivity of 10/100 Mbps over one, two, or four pair of voice-grade cabling (ActivReach mode)
- Data connectivity of 10/100/1000 Mbps over CAT5 and higher-grade cabling (Standard Ethernet)
- Extended reach at distances up to 1,600 ft
- 802.3af (PoE), Legacy PoE, and PoE over ActivReach Ethernet
- Non-blocking switching capacity up to 62 Gbps (NetVanta 1535P)
- Line rate Layer 3 Lite capabilities
- VoIP ready with LLDP/LLDPMED and voice VLANS
- Business-class security with RADIUS, TACACS+, 802.1x and port security
- iSCSI optimized for Storage Area Networks (SANs) solutions (NetVanta 1535P)





## Multiple networking functions—a single box solution.

The NetVanta Series of Multiservice Routers provides affordable, all-in-one connectivity by offering a variety of networking functions wrapped into a single, compact device. These integrated, versatile platforms are capable of solving a multitude of switching challenges. These products are perfect for bandwidth-intensive applications like VoIP or for reliable, corporate LAN/WAN connectivity and Internet access.

### The Power of Integration

With the integration of multiple networking functions, NetVanta all-in-one routing platforms perform services such as switching, IP routing, firewall, VPN, as well as Wi-Fi control in a single platform. These platforms are modular in nature and can accommodate a wealth of WAN interfaces depending on your connection needs. These integrated solutions simplify installation, configuration and troubleshooting, reducing the number of devices to be managed, all while eliminating excess cabling costs.

### The Speed of Layer 3 and the Integration of Wi-Fi

The NetVanta 1335 integrates a modular IP access router, 24-port PoE Layer 3 switch, firewall, VPN appliance, and wireless access control in an all-in-one compact platform. NetVanta 160 and 161 APs support rates up to 300 Mbps and offer a full suite of businessclass security needs like WPA/WPA2, 802.1x user authentication, and VAPs, the equivalent of wireless, VLANs.

### **Performance and Flexibility**

The NetVanta 3448 is the perfect high-performance, versatile solution for smaller network switching needs. The NetVanta 3448 features a fully managed, non-blocking, eight-port PoE switch. It can power any 802.3af compliant PoE device, including IP Phones, APs, or security cameras. Compact and economical, it delivers high-performance throughput with ADTRAN's *RapidRoute*<sup>™</sup> technology for bandwidth-intensive applications.

### NetVanta 3448 and 3448P

- Multiservice router with integral 8-port, Layer 2 Ethernet switch
- CompactFlash<sup>®</sup> slot for configuration files, auto provisioning, and firmware
- Native content filtering or Websense<sup>®</sup> integration
- VQM for MOS, jitter, delay and packet loss statistics
- 802.3af PoE switch (NetVanta 3448 PoE)

### NetVanta 3458 and 3458P

- Multiservice router supporting up to four T1s with integral 8-port, Layer 2 Ethernet switching
- CompactFlash slot for configuration files, auto provisioning, and firmware
- Native content filtering or Websense integration
- VQM for MOS, jitter, delay and packet loss statistics
- 802.3af PoE switch (NetVanta 3458 PoE)

### NetVanta 1335 and 1335P

- Multiservice router with integral 24-port, Layer 3 Ethernet switch
- Dual Gigabit/SFP module slots for uplink or stacking

- CompactFlash slot for configuration files, auto provisioning, and firmware
- Cable diagnostics to identify an open or short per twisted pair
- VQM for MOS, jitter, delay and packet loss statistics
- 802.3af PoE switch (NetVanta 1335 PoE)



### Voice Quality Monitoring

reduces the time and pain of troubleshooting by monitoring trends within the network, including: MOS, jitter, delay, and packet loss.



### **NetVanta Multiservice Solutions**

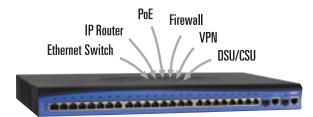
- Modular all-in-one platforms supporting an Ethernet switch (Layer 2 or Layer 3), IP access router, PoE, firewall, and VPN in a single chassis
- Multiple models with 8-port or 24-port Ethernet switches
- Network options ranging from 56k to multi-T1, ADSL2+, and Ethernet
- Modular chassis supporting a variety of Network Interface Module (NIMs) and Dial Backup Interface Modules (DIMs)
- Integral stateful inspection firewall protects against DoS attempts
- VoIP-ready with QoS, CoS, and SIP ALG
- VQM for easy troubleshooting of VoIP traffic
- Wi-Fi access controller for centralized management of NetVanta APs

### INCOMPANY DISTORT

### NetVanta 6355

- IP Business Gateway with integral 24-port, Layer 2, PoE Ethernet switch
- Dual Gigabit/SFP module slots for uplink or stacking
- CompactFlash slot for configuration files and new firmware
- VQM for MOS, jitter, delay and packet loss statistics

Significantly reduce your TCO with a single platform that accomplishes multiple networking functions. Multiservice access routers are affordable routing, switching, firewall, VPN, and Wi-Fi controller solutions for business-class networking needs.



# Answering the growing demand for secure access to sensitive corporate data.

ADTRAN's NetVanta Series of Fixed-port Access Routers offers cost-effective IP switching and routing solutions for business-class broadband networks. Based on the widely deployed AOS, this family of products offers a robust feature set with standards-based functionality and addresses the growing need for secure access to corporate information resources over the Internet.

### Guarantee Bandwidth with Disaster Recovery

The NetVanta 3100 Series provides an Ethernet or ADSL WAN interface, four-port fully-managed switch, and an analog port for disaster recovery or dial-in for remote management. These products are full-featured, low-cost solutions perfect for switching, secure Internet access, and high-speed corporate connectivity using broadband access such as DSL or cable.

### **Higher Bandwidth**

The NetVanta 3130 is a fixed-port, business-class ADSL router with an integrated Fast Ethernet four-port switch. It supports today's most advanced ADSL technology, ADSL2+, for applications taking advantage of its extending reach and higher bandwidth, up to 25 Mbps. The NetVanta 3130 is perfect for SMB applications. No matter if they are bundled with a carrier service or employee deployed, they deliver secure, high-speed corporate connectivity.

### Work Remotely, Work Securely

The NetVanta Series is designed for high-speed, cost-effective connectivity for remote offices, telecommuters and mobile users. All of these fixedport routers support VPN and a firewall to ensure your remote employees can work without the security concerns normally associated with shared networks.

### NetVanta 3130

- Fixed-port ADSL-to-Ethernet access router
- 1 ADSL/ADSL2/ADSL2+ WAN interface
- Full-featured, managed 4-port 10/100Base-T switch
- Analog interface for dial backup or remote management
- Wi-Fi access controller for centralized management of NetVanta APs

### NetVanta 3120

- Fixed-port Ethernet-to-Ethernet access router
- 1 Ethernet WAN interface
- Full-featured, managed 4-port Ethernet switch
- Analog interface for dial backup or remote management
- Wi-Fi access controller for centralized management of NetVanta APs

## **NetVanta Switch Product Comparison**

• Supported	Ethernet Switches							Multiservice Access Routers			Fixed-port Access Routers		
<ul> <li>Not Applicable or Unavailable</li> </ul>	NetVanta 1234	NetVanta 1238	NetVanta 1235P	NetVanta 1534	NetVanta 1535P	NetVanta 1544	NetVanta 1544F	NetVanta 1638	NetVanta 1335	NetVanta 3448	NetVanta 3458	NetVanta 3120	NetVanta 3130
Ports and Slots	Ports and Slots												
Fast Ethernet Switch Port(s)	24	48	24	-	-	-	-	-	24	8	8	4	4
1 Gbps Ethernet Switch Ports	2	2	2	26	26	24	-	48	2	-	-	-	-
Fast Et Optical SFP Ports	4	4	4	4	4	4	28	4	-	-	-	-	-
1-Gbps SFP	•	•	•	•	•	•	•	•	-	-	-	-	-
2.5-Gbps SFP	•	•	•	•	•	•	•	•	-	-	-	-	-
10-Gbps SFP	-	-	-	-	-	-	-	•	-	-	-	-	-
Features and Capabilities													
Stateful Inspection Firewall	-	-	-	-	-	-	-	-	•	•	•	•	•
Switching Capability	Layer 3 Lite	Layer 3	Layer 3	Layer 3	Layer 3 Lite	Layer 2	Layer 3	Layer 4	Layer 5				
ActivReach Support	-	-	•	-	•	-	-	-	-	-	-	-	-
ActivChasssis Support	-	-	-	-	-	-	-	•	-	-	-	-	-
Port Scheduler	•	•	•	•	•	•	•	•	•	-	-	-	-
CABLE/SFP Diagnostics	•	•	•	•	•	•	•	•	•	-	-	-	-
Quality of Service (QoS)	•	•	•	•	•	•	•	•	•	•	•	•	•
Class of Service (CoS)	•	•	•	•	•	•	•	•	•	•	•	•	•
Power over Ethernet (PoE)	Optional	Optional	Standard	Optional	Standard	Optional	-	Optional	Optional	Optional	Optional	-	-
802.10 VLAN Support	•	•	•	•	•	•	•	•	•	•	•	•	•
802.1X Port Authentication	•	•	•	•	•	•	•	•	•	•	•	•	•
Microsoft Desktop Audit Capabilities	-	-	•	•	•	•	•	•	-	-	-	-	-
Network Forensics	-	-	•	•	•	•	•	•	-	-	-	-	-
Wi-Fi Access Controller	•	•	•	•	•	•	•	•	•	•	•	•	•
IPSec VPN	-	-	-	-	-	-	-	-	•	•	•	•	•
Maximum VPN Tunnels	-	-	-	-	-	-	-	-	100	100	500	10	10
n-Command Support	•	•	•	•	•	•	•	•	•	•	•	•	•
Warranty	Limited Lifetime	5-Year	5-Year	5-Year	5-Year	5-Year							

## A switching solution so remarkably versatile it makes your job easy.

### **Multiple Management Options**

The NetVanta Series is a standards-based solution that merges seamlessly into existing networks and is easy to configure and operate. The NetVanta CLI mimics the *de facto* industry standard, and is both familiar and easy to use. The CLI supports multiple configuration scripts to simplify setup of local and remote units. A Web-based GUI can be used to configure, troubleshoot, and view statistics about the AOS device.



The NetVanta Command Line Interface has a familiar look and feel, eliminating retraining costs.

### **Quality of Service**

As voice and data networks converge into a single communications network, QoS is of the utmost importance. NetVanta switches support 802.1p CoS and DiffServ standards, using WRR and Strict Priority queuing. Mission-critical traffic may be marked or prioritized over non mission-critical traffic on a switch-port basis in the NetVanta 1000 Series products. 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.

### **The Port Scheduler**

The Port Scheduler feature built into ADTRAN's switches helps conserve power and add security to today's networks. The Port Scheduler feature allows system administrators to configure ADTRAN switch products to automatically activate and deactivate switch ports based on time of day. A common application of the Port Scheduler feature enhances security by temporarily disabling the interface connected to an AP to prevent network intrusion after business hours.

The Port Scheduler

automatically activates and deactivates switch ports based on a defined schedule.



### **Cable/SFP Diagnostics**

The NetVanta Cable and SFP Diagnostics feature available in the NetVanta Switches provides insight into cable and SFP interfaces and lines when connected to ADTRAN NetVanta Ethernet Switches. This innovative feature allows the administrator of NetVanta switches to obtain real time information on physical cable characteristics.

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**Cable Diagnostics** detects cabling problems like broken wires (an open) or touching wires (a short).

### **Built-in Wi-Fi Access Controller**

All NetVanta switches and routers come with a built-in Wi-Fi access controller, eliminating the need for additional expensive controllers. Now businesses can quickly expand their wireless network to support growing number of mobile devices or Wi-Fi-enabled scanners and monitoring systems, while managing the wired and wireless network from a single platform. In addition, ADTRAN offers the NetVanta 160 or NetVanta 161 dual-radio 802.11n APs which provide 2x300 Mbps throughput and advanced business-class features, perfect for deploying a secure, integrated WLAN solution.



## **Re-inventing the Network.**



**Unified Communications** Software and Appliances



IP Business Gateway for Trunking and Hosted VoIP NetVanta 6000 Series

### Multiservice Access Router NetVanta 3448, 1335



IP Business Gateways for Business Trunking Total Access® 900/900e Series



Modular Access Router NetVanta 3000/4000/5000 Series



Fixed-port Access Router NetVanta 3100

Ethernet Switch NetVanta 1200/1500 Series



Access Points Bluesocket® 1800/1900 Series

ADTRAN, Inc. is a leading global provider of networking and communications equipment. ADTRAN's products enable voice, data, video and Internet communications across a variety of network infrastructures. ADTRAN solutions are currently in use by service providers, private enterprises, government organizations, and millions of individual users worldwide.

### Technical Questions 888-423-8726 www.adtran.com/support

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### Simple, Reliable, and Affordable

When you need a networking solution that fits the unique connectivity requirements of your business, ADTRAN is the smart alternative. Our product portfolio offers a breadth of solutions, including a product suite that is tailored to the specific needs of SMB and distributed enterprise customers. With ADTRAN's award-winning and innovative switches, routers, multi-service access routers, wireless LAN solutions, VPN solutions, IP Business Gateways and Unified Communications products, it is easy to find a quality solution that is perfect for your specific network needs.

ADTRAN products are backed by industry-leading warranties and best-in-class technical support from our team of degreed engineers. As a TL 9000 3.0 and ISO 9001:2000 certified supplier supporting next-generation quality standards, the company maintains in-house labs for reliability, component and compliance testing—all with a focus toward customer satisfaction.

### High-touch Customer Support and Training

 ProServices for Complete Lifecycle Support. ADTRAN's ProServices is your single source for complete lifecycle support, from planning through implementation to ongoing support and management. The ProServices portfolio includes standard solutions with per product pricing as well as custom ProServices for meeting unique customer requirements delivering the technical services to ensure your network deployment and ongoing maintenance is successful. Whether it is an essential network deployment and support need or a highly customized application, ProServices brings the expertise to ensure customer satisfaction.

Comprehensive Training and Certification Services. ADTRAN provides innovative training solutions designed with a focus toward varying skill levels and job functions. Professional certification programs are designed to help customers structure and individualize continuing education needs. Access to the certification and training programs includes both free and fee-based options. Sessions are available both on-and off-site, using Instructor-Led Training (ILT); Computer-Based Training (CBT); or virtual classroom training with real-time, Web-enabled classes.



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