

# NetVanta Routers

Solutions to Empower Your Network



## Making the smart connection for your business.

*The success of your business depends on making the right connections. Whether you work remotely or in a company with thousands of employees, you need a network that can scale to the demands of a continuously connected world. At ADTRAN®, we understand the power of connecting people and businesses, and we know every connection must be reliable, secure, and fast. For that reason, we developed the NetVanta® family of access routers to provide your business with a wealth of diverse networking solutions.*

Our portfolio of business-class networking equipment is perfect for corporate branch offices or in multi-site networks. These solutions address today's highest networking priorities, including bandwidth expansion, Voice over Internet Protocol (VoIP) migration, network security, and Wireless LAN (WLAN).

### ■ Bandwidth Expansion

ADTRAN offers a breadth of products from fixed-port and modular access routers to multiservice routers performing multiple networking functions. The products support throughput for bandwidths from 56k to 100 Mbps for Carrier Ethernet performance. The ADSL-to-Ethernet access routers support innovative ADSL2+ technology for further reach and higher bandwidth up to 25 Mbps.

### ■ VoIP Migration

NetVanta makes it easy to transition your network to accommodate bandwidth-intensive applications. ADTRAN's series of routers are VoIP-ready with Quality of Service (QoS), Class of Service (CoS), Session Initiation Protocol (SIP) Transparent Proxy, Net Flow 9 Traffic Monitoring,

and Voice Quality Monitoring (VQM). Traffic Monitoring is for collecting and measuring network traffic patterns, while VQM is a graphically-intuitive interface displaying captured data for Mean Opinion Score (MOS), jitter, delay, and packet loss statistics necessary to troubleshoot VoIP calls.

### ■ Network Security

The NetVanta Series of routers provides a stringent line of defense against common security threats to your network. The security portfolio features a stateful inspection firewall to protect against Denial of Service (DoS) and other unauthorized access attempts; and optional Internet Protocol Security (IPSec) -compliant Virtual Private Network (VPN) with DES/3DES/AES encryption to secure transmissions across a public infrastructure.

### ■ Wireless LAN

A comprehensive wireless networking solution is available for organizations that need business-class features, security and reliability at an affordable price. The NetVanta Series features a standards-based WLAN solution as part of an industry-unique, all-in-one access platform and centralized control architecture for easy deployment and management. WLANs from ADTRAN are Power over Ethernet (PoE) capable; have the ability to segment wireless networks through the use of Virtual Access Points (VAPs); and can disable SSID broadcasts. The enhanced security features combined with ease-of-use and outstanding technical support make it perfect for businesses of all sizes.

### Introducing the Revolutionary *FastFlow* VPN and *RapidRoute* Technology from ADTRAN.

*FastFlow* VPN and *RapidRoute*™ technology interpret session traffic to deliver faster processing cycles and rapid routing decisions. Even with processor-intensive services enabled like VQM, QoS, NAT, firewall, and VPN; NetVanta platforms utilizing *FastFlow* VPN and *RapidRoute* technology outperform the competition and can accommodate larger bandwidth applications. *FastFlow* VPN and *RapidRoute* Technology are featured in the NetVanta 3448, 3458, and 1335 from ADTRAN's Multiservice Router Series, and in the NetVanta 3430, 3450, 4305, 4430, and 5305 from the Modular Access Router Series.

## The value-rich alternative you can count on.

### Multiservice Routers

Delivering greater throughput, the NetVanta 3448, NetVanta 3458 and NetVanta 1335 Multiservice Access Routers offer a variety of networking functionality wrapped into a single chassis. These VoIP-ready, all-in-one routers include a modular Wide Area Network (WAN) interface, IP router, PoE switch (Layer 2 or Layer 3), firewall, VPN and a built-in Wi-Fi® Access Controller. 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).

### Modular Routers

ADTRAN's industry-leading series of NetVanta 3000/4000/5000 Modular Routers is designed for cost-effective Internet access, MPLS, Frame Relay, PPP, Ethernet services, point-to-point, ADSL, and VPN connectivity. These full-featured solutions support line rates ranging from 56 kbps to 750 Mbps, at a cost that is significantly lower than other name-brand routers. The NetVanta 3000 Series is a full-featured, low-cost, access router platform that fits seamlessly into your existing network. For higher-bandwidth applications, the NetVanta 4000 Series offers access routing that supports up to 750 Mbps platform. The NetVanta 5000 Series offers access routing for large-bandwidth applications supporting up to two T3s of performance.



### Fixed-port Routers

The NetVanta family of Fixed-port Access Routers offers a cost-effective, secure, business-class solution for broadband networks. The fixed-port routers include the NetVanta Series for access to the most advanced ADSL2+ technology; the NetVanta 3100 Series for connectivity using DSL or cable; and the NetVanta Series for secure, high-speed connectivity for remote workers.



### Wireless Access Points

Wi-Fi your NetVanta network with the NetVanta 150 Wireless Access Point (WAP). Centrally managed from any of the Wi-Fi Access Controller platforms, this solution provides 802.11a/b/g radio support at speeds up to 54 Mbps and advanced security features like 802.1x authentication, WPA/WPA2, and the disabling of SSID broadcasts. In addition, with WAPs, this wireless product has the ability to segment a wireless network securely. This business-class wireless product is perfect for the corporate environment in need of a secure, integrated WLAN solution.



## NetVanta Routers

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## Multiple networking functions – a single box solution.

*The NetVanta Series of Multiservice Routers offers a variety of networking functions wrapped into a single, compact device. These integrated, all-in-one, versatile platforms are capable of both dedicated and switched access, solving a multitude of different applications. These solutions are perfect for bandwidth-intensive applications such as IP telephony or for reliable corporate connectivity and Internet access.*

### The Power of Integration

With the integration of multiple networking functions, the NetVanta 3448, NetVanta 3458 and NetVanta 1335 perform services such as IP routing, switching, firewall, VPN, and even a built-in Wi-Fi Access Controller. These platforms are modular in nature and can accommodate a wealth of WAN interfaces depending on your connection needs. These integrated, all-in-one solutions simplify installation, configuration, and troubleshooting, and reduce the number of devices to be managed while eliminating excess cabling costs.

### Accelerating Performance and Flexibility

The NetVanta 3448 and NetVanta 3458 have the added features of a fully managed, non-blocking, eight-port 802.3af-compliant PoE switch. They can power any 802.3af-compliant PoE device, including IP phones, WAPs, or IP security cameras. The NetVanta 3448 and NetVanta 3458 also deliver high-performance throughput with ADTRAN's *RapidRoute* and *FastFlow* VPN technology for bandwidth-intensive applications, including VoIP and digital video. Combined with their compact size and low cost, these platforms provide the perfect high-performance, versatile solution.

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

The NetVanta 1335 integrates a modular IP access router; 24-port, PoE, Layer 3 switch; firewall; VPN appliance; and even a built-in Wi-Fi Access Controller; all in one compact platform. This unique platform also delivers enhanced-performance necessary such as IP telephony, corporate connectivity and Internet access, even with advanced services enabled. When combined with the NetVanta 150 wireless access point, the NetVanta 1335 is the perfect LAN and WLAN, centrally managed solution.



#### NetVanta 3448 and NetVanta 3448 PoE

- Multiservice router with integral 8-port, Layer 2 Ethernet switch
- 802.3af PoE switch delivering 15.4 watts per port (NetVanta 3448 PoE)
- Dual 10/100Base-T Ethernet ports for LAN segmentation or broadband backup
- Supports IPSec VPN tunnels and VQM (optional)
- VQM for MOS, jitter, delay and packet loss statistics (optional)



#### NetVanta 3458 and NetVanta 3458 PoE

- Multiservice router with 2 modular Network Interface Module (NIM) slots and integral 8-port, Layer 2 Ethernet switch
- 802.3af PoE switch delivering 15.4 watts per port (NetVanta 3458 PoE)
- Dual 10/100Base-T Ethernet ports for LAN segmentation or broadband backup
- Supports IPSec VPN tunnels and VQM (optional)
- VQM for MOS, jitter, delay and packet loss statistics (optional)



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



**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 Access Routers

- Modular platforms supporting an IP access router, Ethernet switch (Layer 2 or Layer 3), firewall, and VPN
- Performance-enhanced with *RapidRoute* and *FastFlow* VPN technology
- Bandwidth ranging from 56K to 40 Mbps of Carrier Ethernet performance
- NIM slot(s) supporting all current NIMs and Dial Backup Interface Modules (DIMs)
- VQM — Real-time monitoring of mean opinion, scores, delay, jitter, and packet loss to enable high-performance VoIP performance
- CompactFlash® slot for auto-provisioning (flash-provisioning)
- Integral stateful inspection firewall protects against DoS attempts
- VoIP-ready with QoS, CoS, and SIP ALG
- Ideal for MPLS, Ethernet, Frame Relay, Multilink Frame Relay, PPP, PPPoE, Multilink PPP, PPPoA, or ATM (ADSL NIM) networks
- Inherent URL filtering or Websense® integration
- Wi-Fi Access Controller for centralized management of NetVanta WAPs
- Local survivability for SIP phones



### NetVanta 1335 and NetVanta 1335 PoE

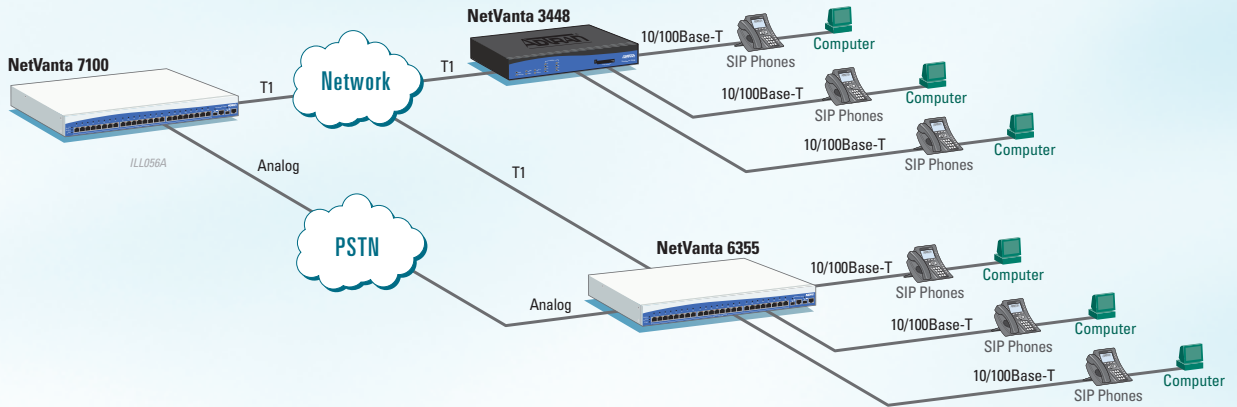
- Multiservice router with integral 24-port, Layer 3 Ethernet switch
- 802.3af PoE switch delivering 15.4 watts per port
- Dual Gigabit/SFP module slots for uplink or stacking
- Cable diagnostics identify an open or short per twisted pair
- Built-in IPSec VPN tunnels and VQM

**In independent third-party tests conducted by The Tolly Group,** ADTRAN's NetVanta 3430 provided significantly better performance compared to other routers in its class; and the NetVanta 1335 has achieved *Foremost Unified Wired/Wireless Multiservice Access Routers*.



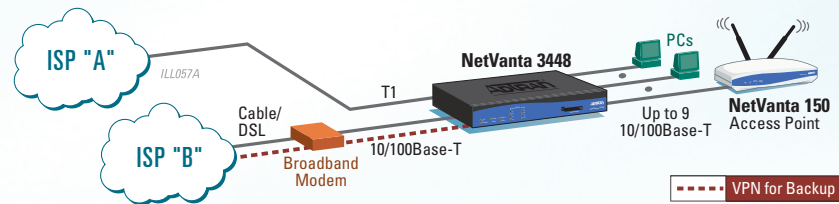
## Multi-site SIP Networking with Local Survivability

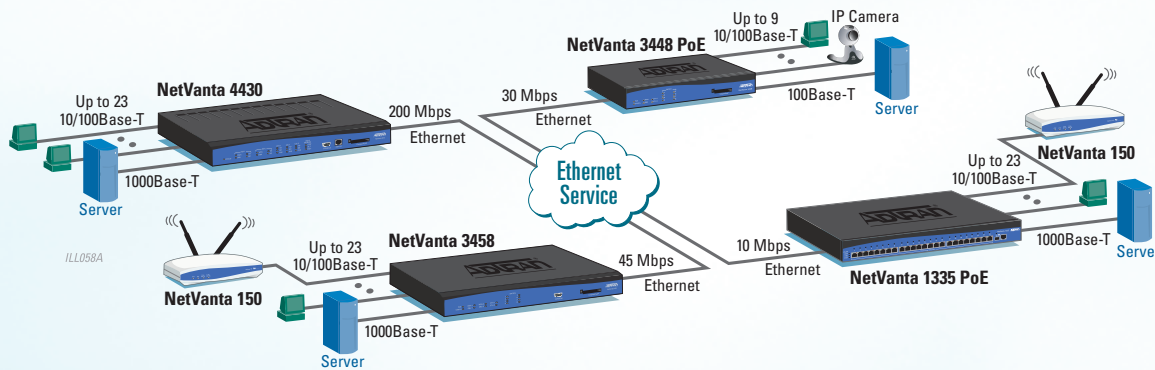
The ADTRAN NetVanta 7100 IP PBX supports SIP networking between multiple locations. With SIP networking, businesses can connect multiple sites and have three- to four-digit dialing, local call routing, and on-net calls for toll bypass. In the event of a network outage and the VoIP network is unreachable, the remote NetVanta 3448 and 6355 provide local survivability by continuing to route intra-office calls, or where provisioned, directly to a local PSTN guaranteeing phone service.



## Internet Access with Broadband Backup

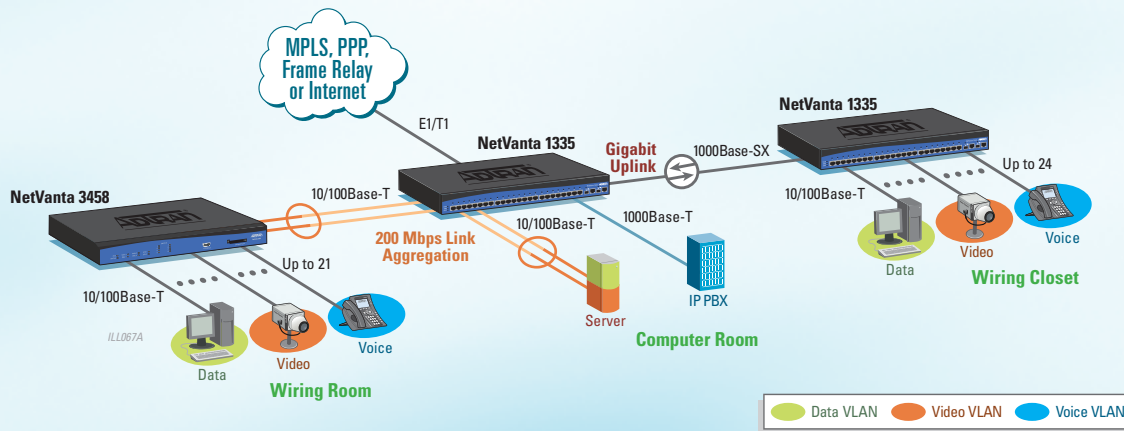
By using any one of the available Ethernet interfaces, NetVanta routers can utilize a broadband Internet connection for high-speed backup. In the event that the main circuit is lost, corporate communication can continue by seamlessly redirecting traffic to the broadband connection. In addition, to maintain secure, private communication over the public Internet, the NetVanta router can establish a VPN.





### High-speed Ethernet Services

NetVanta Modular and Multiservice Access Routers are performance-enhanced platforms that meet the demands for Carrier Ethernet service. The NetVanta high-performance routing solutions enable bandwidth transmission for 10-100 Mbps of high-speed Ethernet services. With QoS, VPN and Firewall capabilities, these platforms optimize voice, video, and data transmission over an end-to-end Ethernet network.



### VLAN and Layer 3 Switching

The NetVanta 1335 provides managed switching features, like Virtual LAN (VLAN) trunking and GVRP, to ease the configuration of larger VLAN networks. Up to 24 Fast Ethernet ports may be configured for 802.1Q VLAN functionality to provide separation of broadcast domains and functional work areas, while Layer 3 switching capabilities are used for high-speed inter-VLAN switching. The 1000Base-T or fiber Small Formfactor Pluggable (SFP) Gigabit uplink ports can be used for VLAN trunking to another switch or for link redundancy.



# Providing your connectivity needs today, while preparing for future growth.

*ADTRAN's NetVanta Series of Modular Access Routers are designed to meet your needs for secure, cost-effective Internet access; Carrier Ethernet; MPLS; Frame Relay; point-to-point; ADSL; and VPN. NetVanta 3000, 4000, and 5000 routers provide all the necessary components to engineer a complete LAN/WAN connectivity solution between headquarters and branch offices.*

### Choose the High-Value Alternative

This family of modular access routers combines access routing and wide area connectivity into a single, compact chassis. These devices are perfect for Internet access, public and private Frame Relay, private IP, leased-line connections, and VPN. Without compromising quality or performance, NetVanta routers represent a reliable, high-value alternative compared to other access router brands. A lower acquisition cost, combined with high-performance,

best-of-class technical support, free firmware updates, and an industry-leading five-year warranty add up to a lower TCO.

### A Flexible Modular Platform

These modular devices accommodate a wealth of NIMs supporting line rates from 56 kbps to 200 Mbps. In addition, DIMs are available as plug-ons, providing ISDN BRI and analog network restoral.

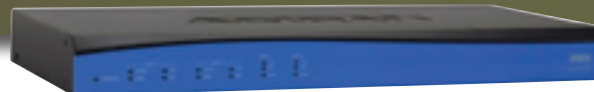
### Answering Your Networking Needs

The NetVanta 3000 Series of modular access routers is the most cost-effective way to integrate voice and data over a common circuit. These versatile platforms are complete turnkey solutions with unsurpassed performance. Ideal for larger bandwidth requirements, the NetVanta 4430 is a multi-slot access router supporting up to 200 Mbps of Carrier Ethernet. Our most powerful modular router, the NetVanta 5305 is a six-slot, dual-Ethernet IP access router supporting up to two T3s of bandwidth.



#### NetVanta 3200/3205

- Single NIM slot, single-Ethernet
- Terminates up to two T1s of bandwidth
- Supports optional IPSec VPN tunnels and VQM
- Desktop (NetVanta 3200) and rackmount (NetVanta 3205) versions available
- 21 VDC and 48 VDC power supply and NEBS level 3 compliant (NetVanta 3205 only)



#### NetVanta 3305

- Dual NIM slot, dual-Ethernet
- Terminates up to three T1s of bandwidth
- Supports optional IPSec VPN tunnels
- Inherent URL filtering or Websense integration



#### NetVanta 3430

- Single NIM slot, dual-Ethernet
- Terminates up to two T1s of bandwidth
- Supports optional IPSec VPN tunnels and VQM
- Inherent URL filtering or Websense integration
- Wi-Fi Access Controller for centralized management of NetVanta WAPs

**“NetVanta 3430’s performance shows that the product’s design has the processing power to handle high packet rates, even when security services are active and vying for processor cycles”**

*Kevin Tolly,  
President/CEO/Founder  
The Tolly Group*



## NetVanta Modular Access Routers

- Performance-enhanced with *RapidRoute* and *FastFlow* VPN technology
- Perfect for MPLS, Frame Relay, Multilink Frame Relay, PPP, Multilink PPP, PPPoE, PPPoA, RFC 1483, ADSL, and Ethernet-based networks
- Bandwidth ranging from 56K up to 200 Mbps of performance
- Stateful inspection firewall and QoS included as standard on all models
- Optional standards-based IPSec VPN tunneling secures Internet communication
- Optional dial backup minimizes network downtime (NetVanta 3000 and 4000)
- Optional DSX-1 port for TDM PBX connectivity (NetVanta 3000 and 4000)
- Recognizable Command Line Interface (CLI) and user-friendly Web-based Graphical User Interface (GUI)
- Local survivability for SIP phones
- VQM — Real-time monitoring of mean opinion, scores, delay, jitter, and packet loss to enable high-performance VoIP performance



### NetVanta 3450

- Dual NIM slot, dual-Ethernet
- Terminates up to four T1s of bandwidth
- Supports optional IPSec VPN tunnels and VQM
- Inherent URL filtering or Websense integration
- Wi-Fi Access Controller for centralized management of NetVanta WAPs



### NetVanta 4430/4305

- Three-slot (one Wide Module and two NIM slots), dual-Ethernet
- Terminates up to eight T1s of bandwidth or 200 Mbps Carrier Ethernet (NetVanta 4430)
- Supports optional IPSec VPN tunnels and VQM
- Wi-Fi Access Controller for centralized management of NetVanta WAPs
- Gigabit Ethernet and SFP interfaces (NetVanta 4430)

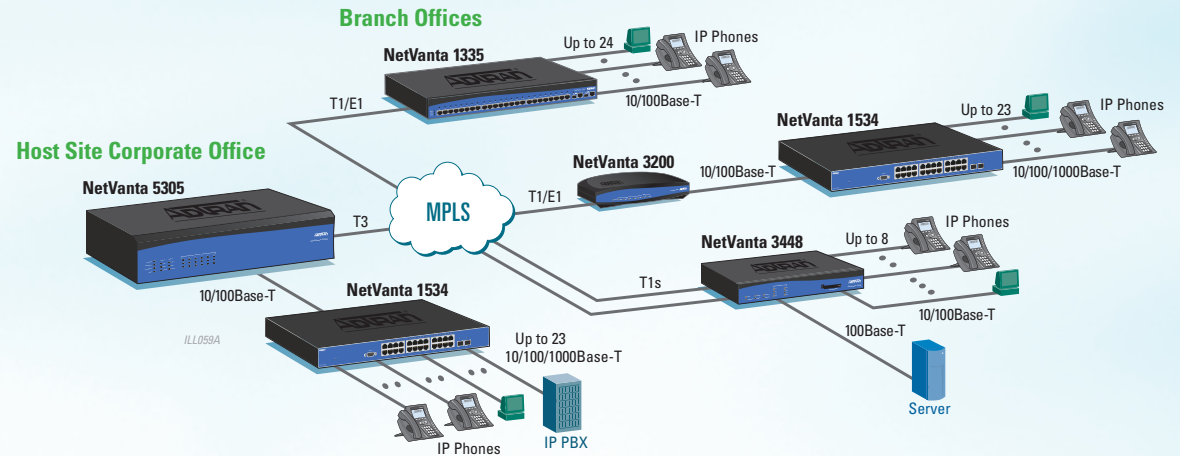


### NetVanta 5305

- Six wide slots and dual-Ethernet
- Performance-enhanced platform supporting RapidRoute
- Terminates up to two unchannelized DS3s of bandwidth
- Supports optional IPSec VPN tunnels and VQM
- Wi-Fi Access Controller for centralized management of NetVanta WAPs

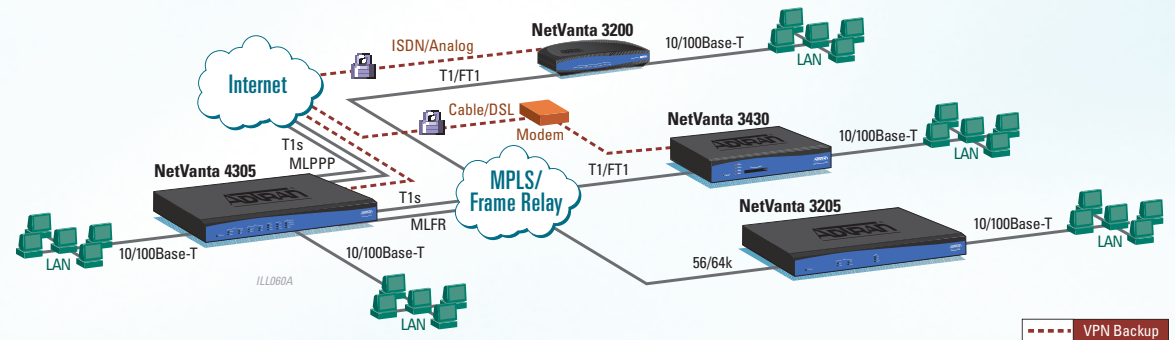
## QoS for VoIP Networks

NetVanta routers and switches offer QoS for prioritizing delay-sensitive, mission-critical traffic, such as VoIP. These routers prioritize traffic using Low Latency, Weighted Fair, or Class-based Weighted Fair queuing. NetVanta platforms with an integrated switch also support 802.1p CoS standards, using Weighted Round Robin and Strict Priority queuing. In addition, all NetVanta routers are Session Initiation Protocol (SIP) aware to traverse NAT-enabled firewalls. To monitor and troubleshoot VoIP issues, VQM is a graphically-intuitive interface to track MOS, jitter, delay and packet loss statistics.

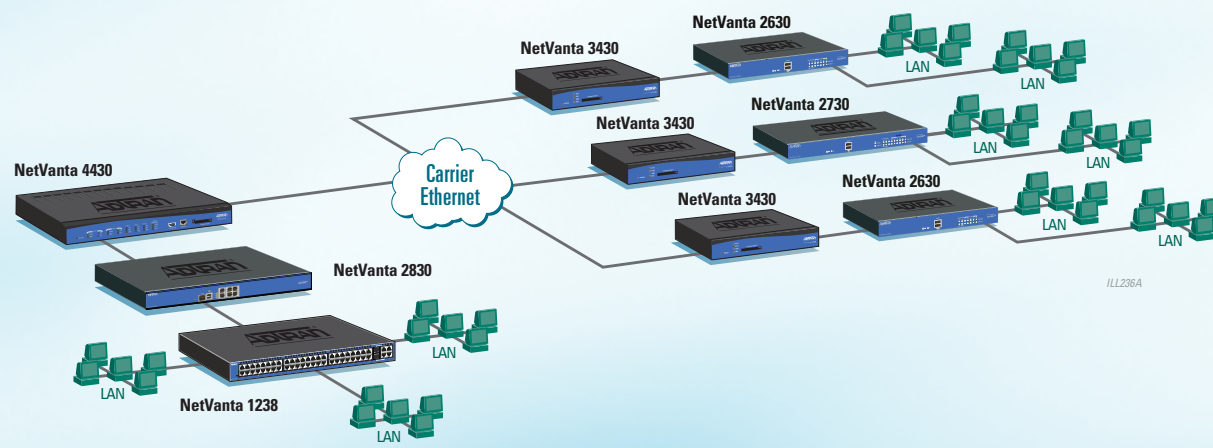
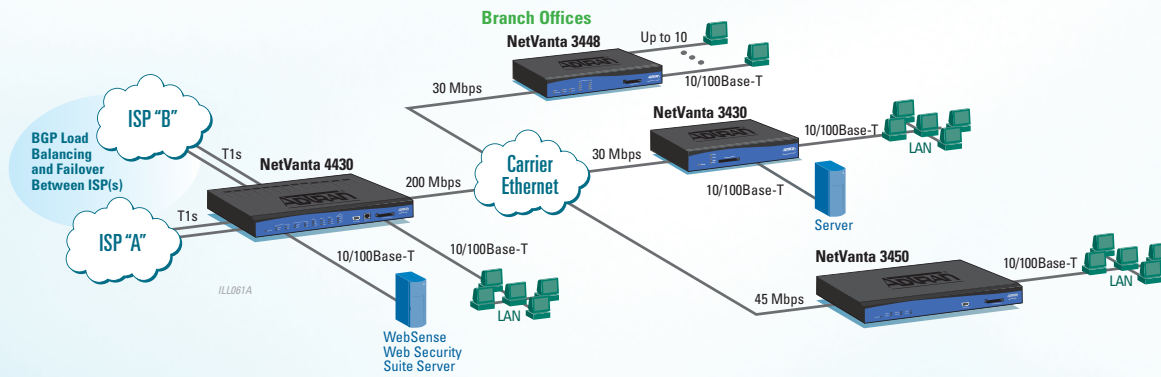


## Multi-T1 Internet Access and Corporate Frame Relay

The NetVanta 4305 access router offers cost-effective Internet access, corporate Frame Relay, point-to-point connectivity, and VPN in applications requiring up to eight T1s. Multilink PPP or Multilink Frame Relay support high-bandwidth, point-to-point IP or Internet applications, aggregating up to eight T1s. Residing in a 1U-high, 19-inch chassis, the NetVanta 4305 offers routing, WAN termination, firewall, VPN, and dial backup.







## Load Balancing and Failover Using BGP

For an automated approach to load balancing and failover, NetVanta routers can share bandwidth between ISPs using Border Gateway Protocol (BGP). With BGP, “best route” routing decisions are made automatically between ISPs. In the event that one connection is lost, the NetVanta router switches traffic over to the remaining ISP in service. This maximizes bandwidth usage and provides a high-speed disaster recovery scheme, if needed. In addition, for a safe and controlled Internet surfing experience, NetVanta routers integrate with Websense, a leading provider in Web content filtering.

## Unified Threat Management for High Speed Ethernet Service

To protect high bandwidth applications such as Carrier Ethernet, the NetVanta 2000 Series Unified Threat Management (UTM) security appliances can support up to 200 Mbps of UTM throughput (775 Mbps stateful throughput). This type of horsepower allows the NetVanta UTM appliances to eliminate performance bottlenecks, while protecting your infrastructure from malicious blended attacks, which use various techniques trying to infiltrate your network. UTM solutions incorporate a range of security technologies in a single platform, providing high-speed threat protection, reliable communications, lower total cost of ownership and flexible connectivity options.

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

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

### Higher Bandwidth

The NetVanta 3100 Series is a family of business-class access routers supporting today's most advanced ADSL technology, ADSL2+ for applications taking advantage of its extending reach and higher bandwidth, up to 25 Mbps. The NetVanta 3100s are perfect for Small-to-Medium-sized Business (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

NetVanta Fixed-port Access Routers are designed for high-speed, cost-effective connectivity for remote offices, telecommuters, and mobile users. These small, security routers ensure your remote employees can work without the security concerns normally associated with shared networks.

### Guarantee Bandwidth with Disaster Recovery

The NetVanta 3100 Series offers the best of both worlds by supplying an Ethernet or ADSL WAN interface, four-port fully managed switch, and an analog port for a disaster recovery scheme or to dial-in for remote management. These products are full-featured, low-cost alternatives perfect for secure Internet access or high-speed corporate connectivity using broadband access such as DSL or cable.



#### NetVanta 3120

- Fixed-port Ethernet-to-Ethernet access router
- One Ethernet WAN interface
- Full-featured, managed four-port Ethernet switch
- Supports IPSec VPN tunnels and VQM
- Wi-Fi Access Controller for centralized management of NetVanta WAPs



#### NetVanta 3120 DBU

- Fixed-port Ethernet-to-Ethernet access router
- One Ethernet WAN interface
- Full-featured, managed four-port Ethernet switch
- Supports IPSec VPN tunnels and VQM
- Wi-Fi Access Controller for centralized management of NetVanta WAPs
- Built-in analog port for management or survivability

**“We needed an economical solution, without short cuts on features and service. We wanted a device with firewall, bridging and routing capability — the NetVanta 3205 was a perfect fit.”**

*Scott Nielsen,  
IT Manager  
City of Napa*



**NetVanta 150**



**Wi-Fi your NetVanta network with the NetVanta 150 WAP.** Providing concurrent 802.11a/b/g support at speeds up to 54 Mbps, it's perfect for the corporate environment needing a secure, integrated WLAN solution.

## NetVanta Fixed-port Access Routers

- Affordable routing and switching solutions for business broadband networks
- Innovative ADSL2+ technology provides further reach and higher bandwidth up to 25 Mbps
- Integral stateful inspection firewall protects against DoS attempts
- Optional standards-based IPSec VPN tunneling secures Internet communications
- Interoperable with other NetVanta products and many carrier-based DSL service offerings
- Recognizable CLI and user-friendly Web-based GUI



### NetVanta 3130

- Fixed-port ADSL-to-Ethernet access router
- One ADSL/ADSL2/ADSL2+ WAN interface
- Full-featured, managed four-port Ethernet switch
- Supports IPSec VPN tunnels and VQM
- Wi-Fi Access Controller for centralized management of NetVanta WAPs



### NetVanta 3130 DBU

- Fixed-port ADSL-to-Ethernet access router
- One ADSL/ADSL2/ADSL2+ WAN interface
- Full-featured, managed four-port Ethernet switch
- Supports IPSec VPN tunnels and VQM
- Wi-Fi Access Controller for centralized management of NetVanta WAPs
- Built-in analog port for management or survivability



### NetVanta 3G NIM

The NetVanta 3G NIM allows NetVanta routers to use 3G CDMA cellular service as a primary WAN connection, or as a backup/disaster recovery link. As a primary WAN connection, 3G is perfect for mobile or temporary sites needing connectivity.

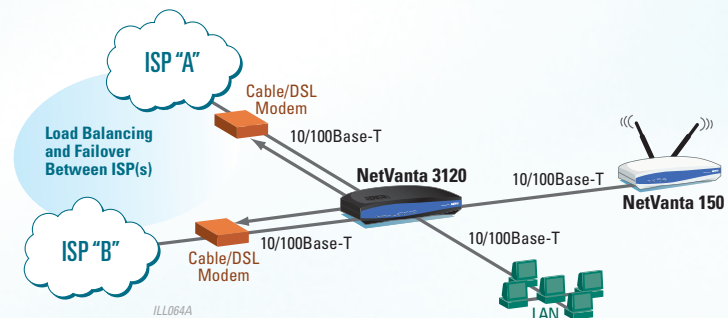
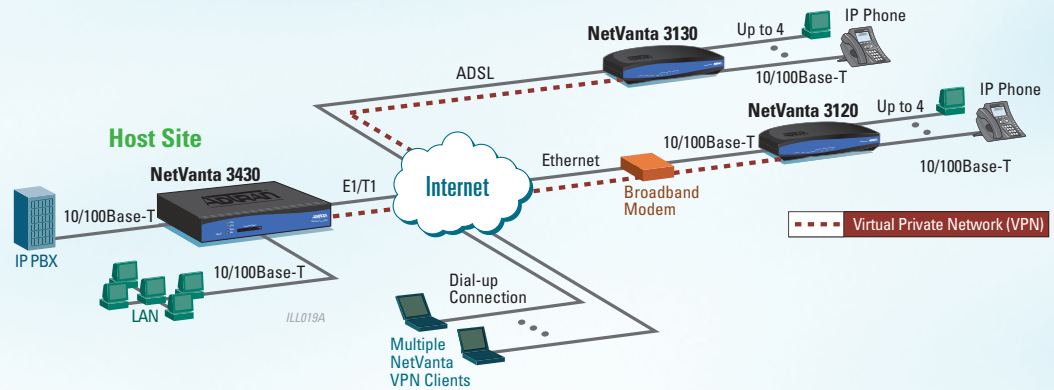


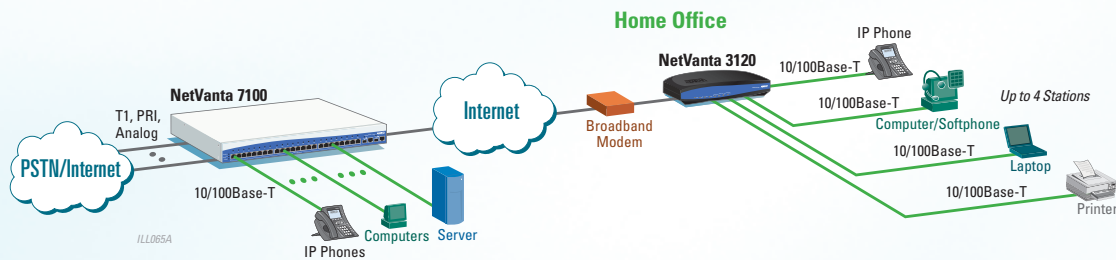
## Secure Internet Access

NetVanta Fixed-port Routers provide a robust, cost-effective, secure Internet access solution to protect corporate networks from security breaches. These broadband access products provide a first line of defense with a stateful inspection firewall and the option to communicate through a secure VPN tunnel. Together, these dedicated devices reduce recurring WAN costs, improve data security, increase network performance and availability, and simplify overall network operations.

## Equal Cost Load Balancing and Failover

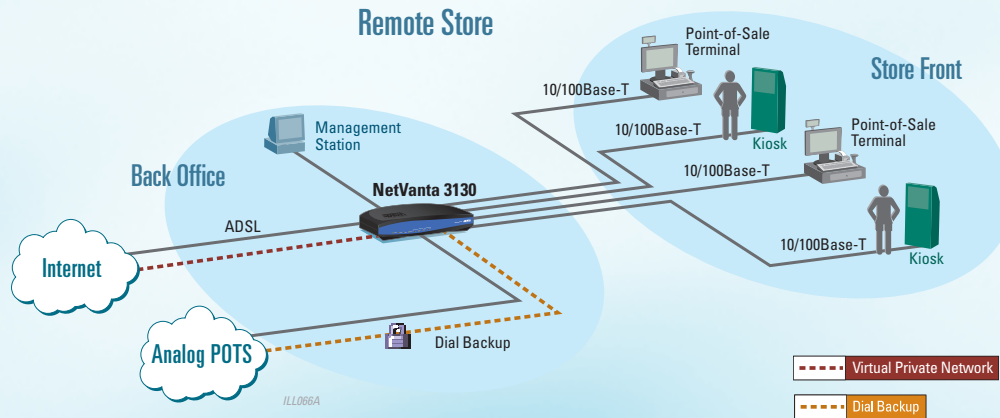
For the SMB that needs guaranteed bandwidth, the NetVanta Series can share bandwidth between two Internet Service Providers (ISPs), by using “equal cost” load balancing. This eliminates the need to purchase a rarely used, dormant backup link as a dedicated disaster recovery scheme. Data is transported to either ISP until one of the connections is lost. Then, data is automatically re-routed over the failover link, until service is restored. This maximizes bandwidth, allows for full usage of pre-paid circuits, and provides a high-speed disaster recovery scheme if needed.





### VoIP for Telecommuters

SMEs with the need for up to 100 IP phone stations can link multiple sites together using ADTRAN's industry-unique and award-winning NetVanta 7100. The NetVanta 7100 can provide centralized VoIP telephony service such as voice mail and auto attendant. The NetVanta 3120 provides connectivity that is ideal for remote telecommuters and home offices, and supports VQM for MOS, jitter, delay, and packet loss statistics.



### Higher Bandwidth with Business Continuity

Business continuity is critical to ensure a pleasant shopping experience and eliminate the possibility of lost revenue. In the event of the primary WAN circuit going down, the NetVanta Series can guarantee bandwidth for credit card transactions and inventory management by dialing around the failed connection using the built-in analog modem on the NetVanta 3130. For bandwidth-consuming applications, the ADSL link allows for higher-bandwidth and greater performance. These devices can be managed remotely, which eliminates the need for regional technical expertise.

# Delivering a variety of modules to support a breadth of network applications.



NetVanta NIM and DIM

### A single NetVanta NIM slot can house both a NIM and DIM together.

The NetVanta NIM is a *plug-in* form factor and can carry a NetVanta DIM, which is a *plug-on* form factor to the NIM.

The NetVanta wide modules are supported in the NetVanta 4305, 4430 and 5305. Both modules are field installable and remotely configurable.

### A Flexible, Modular Platform

Access slots in each NetVanta chassis support a variety of NetVanta NIMs, DIMs or Wide Modules to terminate the wide area connection.

#### NIMs

- **T1/FT1**—Terminates a full T1 or a fractional T1 for Frame Relay or PPP networks
- **T1/FT1 + DSX-1**—Offers a full T1 or fractional T1 interface, plus an additional DSX-1 interface to drop-off voice traffic to a PBX
- **ADSL**—Supports ADSL over POTS (Annex A), including ADSL2 and ADSL2+ at rates up to 25 Mbps
- **SHDSL**—Terminates a single 200 kbps to 2312 kbps G.991.2 SHDSL link for Frame Relay or PPP networks.
- **Serial**—Supports a V.35, EIA-530, or X.21 (V.11) interface for synchronous operations up to 4 Mbps
- **3G**—Supports 3G CDMA cellular service from Verizon and Sprint, and can be used as a primary WAN connection, or as a backup/disaster recovery link.
- **USB**—Supports multiple providers USB 3G modem devices for broadband access. Cellular service provided via the USB modem can act as the primary WAN connection, or as a backup/disaster recovery link.

- **E1/FE1**—Terminates a full E1 or a fractional E1 for Frame Relay or PPP networks
- **E1/FE1+ G.703**—Offers full E1 or fractional E1 interface, plus an additional G.703 interface to drop-off voice traffic to a PBX
- **Dual T1**—Terminates two individual T1s/FT1s or two T1s aggregated together using Multilink PPP or Multilink Frame Relay
- **56/64 kbps**—A WAN interface for a single 56k or 64k Digital Data System (DDS) network

#### DIMs

- **ISDN BRI S/T**—Restoral via Euro-ISDN at 64 kbps
- **ISDN BRI U**—Restoral via the PSTN at 64 kbps
- **Analog Modem**—V.90 restoral and remote dial-in configuration and management

#### Wide Modules

- **Octal T1/E1**—Terminates up to eight individual T1/E1s, or up to eight T1/E1s aggregated using Multilink PPP or Multilink Frame Relay
- **Unchannelized T3**—Provides BNC interfaces for a single unchannelized T3
- **HSSI**—Provides a single, high-speed serial interface with rates up to 44.2 Mbps DIMs



# NetVanta Access Router Product Comparison

● Supported – Not Applicable or Unavailable	Multiservice Access Routers			Modular Access Routers							Fixed-port Access Routers	
	NetVanta 3448	NetVanta 3458	NetVanta 1335	NetVanta 3200/3205	NetVanta 3305	NetVanta 3430	NetVanta 3450	NetVanta 4305	NetVanta 4430	NetVanta 5305	NetVanta 3120	NetVanta 3130
<b>Ports and Slots</b>												
Modular NIM Slot(s)	1	2	1	1	2	1	2	2	2	–	–	–
Modular Wide Slot(s)	–	–	–	–	–	–	–	1	1	6	–	–
Maximum T1/T3 Bandwidth	2 T1s	4 T1s	2 T1s	2 T1s	3 T1s	2 T1s	4 T1s	8 T1s	8 T1s	48 T1s or 2 T3s	–	–
ADSL Interface(s)	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	Optional	–	–	1
Onboard Ethernet Interface(s)	2	2	–	1	2	2	2	2	1	2	1	–
Ethernet Switch Port(s)	8	8	24	–	–	–	–	–	–	–	4	4
SFP/Gigabit Ethernet Interface(s)	–	–	2	–	–	–	–	–	2	–	–	–
<b>Features and Capabilities</b>												
Stateful Inspection Firewall	●	●	●	●	●	●	●	●	●	●	●	●
QoS	●	●	●	●	●	●	●	●	●	●	●	●
VQM	Optional	Optional	●	–	–	Optional	Optional	Optional	Optional	Optional	●	●
PoE	Optional	Optional	Optional	–	–	–	–	–	–	–	–	–
Wireless Access Controller Capable*	●	●	●	●	–	●	●	●	●	●	●	●
IPSec VPN Support	Optional	Optional	●	Optional	Optional	Optional	Optional	Optional	Optional	Optional	●	●
Maximum VPN Tunnels	100	500	100	5	100	100	500	500	1,000	2,000	10	10
IPv6 Ready	●	●	–	–	–	●	●	–	●	●	–	–
n-Command Support	●	●	●	●	●	●	●	●	●	●	●	●
SIP Transparent Proxy	●	●	●	●	●	●	●	●	●	●	●	●

\*Allows centralized management of NetVanta Wireless Access Points

# Router Management: Configure, manage, and update... our routers make it easy to manage your network.

### Familiar Command Line Interface

The NetVanta Router 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. Other management options include RADIUS, SSH, SNMP, and a Web-based GUI.

### Ease of Use, Diagnostics, and Web Security

The NetVanta Series of routers is designed to make implementation, deployment, and maintenance simple, resulting in saved time and money for your network. NetVanta routers include a Web-based GUI setup wizard with a set of pre-determined parameters to quickly prepare the unit for operation; a troubleshooting and diagnostics webpage that details any errors or problems in configuration and offers possible suggestions; and native URL filtering. Used in conjunction with the top-visited website reporting feature, administrators can easily adjust the URL filtering policies to allow or deny specific websites or categories of content.



VQM is a graphically intuitive interface offering easy-to-read dashboards to view critical statistics, including results of RTP monitoring of past and active calls.

### Voice Quality Monitoring — Supercharging Quality of Service

As voice and data networks converge into a single communications network, QoS is of the utmost importance. QoS allows a network to provide better service to selected traffic and enables the network to handle both mission-critical and best effort traffic on the same infrastructure. However, what happens

when there are problems with voice quality on this new converged network? The answer lies in VQM.

VQM moves beyond QoS and can save network administrators, value-added resellers, managed service providers and carriers time in the troubleshooting process. In essence, VQM allows the network administrator to examine the full data stream and identify problem areas down to the packet level in an easy-to-use, graphically intuitive interface. To better understand how VQM can supercharge your QoS, reduce both the time and pain associated with troubleshooting, and provide the ability to monitor trends within the network, visit [www.adtran.com/vqm](http://www.adtran.com/vqm)

### Comprehensive Network Management

For more comprehensive management of your NetVanta-based network, ADTRAN offers n-Command®. This ADTRAN-designed network management system streamlines network operation, administration, and management offering an intuitive, user-friendly, menu-driven interface.

- Manage firmware revisions
- Push firmware upgrades and configuration changes to remote sites
- Backup and restore configurations
- Restore configurations based on event
- Manage security policies and Access Control Lists (ACLs)



# Recognized and trusted: ADTRAN routers are the smart alternative for your network.

ADTRAN, Inc. is a leading global supplier of networking and communications equipment with an innovative portfolio of more than 1,700 solutions for use in the last mile of today's telecommunications networks. Widely deployed by carriers, distributed enterprises and SMB, ADTRAN solutions enable voice, data, video, and Internet communications across copper, fiber and wireless network infrastructures. Our solutions are currently in use by every major U.S. service provider and many global ones, as well as by thousands of public, private and governmental organizations worldwide.

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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 NetVanta switches, routers, multiservice access routers, VPN solutions, wireless, and Unified Communications products, it is easy to find a quality solution that is perfect for your specific network needs.

NetVanta switch products are backed by an industry-leading warranty, best-in-class technical support from our team of degreed engineers, and is eligible for free firmware upgrades. 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

### ■ Customizable Installation and Maintenance Services Program.

The ADTRAN product warranty includes a return-to-factory repair and replacement program and free technical phone support. Technical support engineers are accessible for both pre- and post-sales support. ADTRAN Custom Extended Services (ACES) is also available for an extended guarantee and rapid response time. Priority access to technical support is guaranteed with a 30-minute call back and on-site product replacement in as few as four hours, depending on the service plan selected.

### ■ 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.



**Unified Communications**  
UC Software and  
IP Communications Platforms



**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



**Fixed-port Access Router**  
NetVanta 3100



**Ethernet Switch**  
NetVanta 1200s and 1500s



**Wireless Access Point**  
NetVanta 150





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