

Nortel Networks

Access Stack Node Router (ASN)

The Nortel Networks* Access Stack Node (ASN) is an award-winning, stackable router that offers flexible, cost-effective, growth-oriented solutions to meet the connectivity needs of headquarters and remote offices. The ASN is the only router that provides seamless integration of multiple stacked units managed as a single router. The ASN router provides an aggregate system performance of up to 50,000 packets per second (pps) per ASN unit using Fast and Packet Cache (FPC). A fully configured ASN stack supports up to 48 ports and an aggregate forwarding performance of up to 200,000 pps. The ASN router's Stack Packet Exchange (SPEX-HS) provides a processor interconnect of up to 512 megabits per second (Mbps) between ASN units, and allows for the hot swap of any ASN router in a stack.

Five great reasons to choose Nortel Networks

Simplifies installation and management

- Nortel Networks Optivity* family of network management tools provides a comprehensive set of network management capabilities—down to the virtual circuit level—for HP-UX, IBM AIX, and Sun Solaris platforms.
- Bay Command Console (BCC) allows for local or remote configuration and maintenance.

- SPEX-HS system enables ASN stacks to grow and be managed as a single router.
- EZ Install and EZ Update reduce installation time and simplify ASN router management.

Optimizes network performance

- Data compression, bandwidth reservation, and bandwidth-on-demand reduce costs by maximizing efficiency of wide area network (WAN) bandwidth usage.
- Bandwidth management and QoS services, including DiffServ, allow dynamic control of network traffic to provide high quality and level of service, based on application, user, or other criteria.
- Directory and policy services enable network control through centralized or distributed databases of usage rules.
- Fast Packet Cache (FPC) further increases forwarding performance.

Enhances network availability

- Interface and router redundancy protect against failures that cause network outages.
- Hot-swap capabilities eliminate the need to schedule downtime to service or reconfigure an ASN router, or replace a unit in a stack.

- Hardware and software fault resiliency isolate failures to deliver increased availability.
- Alternate path routing and dial backup maintain WAN connectivity.
- Partial boot capability enables the ASN router to be started in the event of failed hardware and/or configuration errors.
- Redundant power provides backup.

Extends network connectivity

- Support for up to 48 network interfaces fulfills the expansion needs of network centers and regional offices.
- Comprehensive protocol support from Nortel Networks Routing Services (BayRS) for LAN protocols (IP, IPX, AppleTalk, VINES, DECnet, OSI, and XNS); Bridging (Transparent, Source Route, and Translation); WAN services (PPP, Frame Relay, SMDS, X.25, ISDN BRI, ISDN PRI, and ATM DXI), and IBM integration (DLSw, APPN, Bisynch [Sync] over TCP/IP) enables the ASN to adapt to almost any environment.
- LAN net modules offer flexible support for 10Base-T, 100Base-T, FDDI, and Token Ring.

- WAN net modules meet connectivity requirements for ISDN PRI and BRI, Channelized T1/E1, Synch/Asynch serial, and HSSI.
- Expanded IP support through scalable IPv4, OSPF, BGP-4, NAT, IP Multicast, and IPv6 increases the ASN router's functionality.

Heightens network security

- RADIUS authentication support allows only authorized ISDN dial-in links.
- WAN encryption, DES 40/56 provides the ability to protect sensitive traffic across dedicated links.
- IPSec supports industry-standard encryption and authentication for intranet and extranet. IPSec is compatible with Nortel Networks Contivity* VPN switches.

Hot buttons

- **Flexible design**—Stackable, “future-proof” design allows you to add units as your network grows.
- **Enhances network performance**—High-performance architecture supports up to 48 interfaces and forwards an aggregate of up to 200,000 pps.
- **High network availability**—High resiliency and redundancy enhance network availability.
- **Low cost of ownership**—Simple installation and management reduces cost of ownership.
- **Reduced WAN costs**—WAN optimization features such as hardware and software-based data compression, priority queuing, Uniform Traffic Filters, and bandwidth aggregation significantly reduce WAN costs.
- **Delivers enhanced IP services**—Nortel Networks leads the industry with advanced IP services such as Bandwidth Management, Policy Management, and Internetworking Services to deliver highly optimized IP networks. (BayRS provides advanced security through IPSec interoperability with Contivity, bi-directional NAT support, IPSec/NAT forwarding filters, and RADIUS enhancements for SecureID.)

- **Layer 3 solutions**—The ASN router provides fully integrated Virtual LAN (VLAN) support with all Nortel Networks switching products, delivering multiprotocol migration and WAN remote office concentration. In addition, Nortel Networks provides Differentiated Services (DiffServ) and Virtual Router Redundancy Protocol (VRRP) support.

Ordering information

Order number Description

Access Stack Node Base Units	
AF0002?11	ASN2 Redundant AC Base Unit with 8 MB DRAM
AF0002?12	ASN2 Redundant AC Base Unit with 16 MB DRAM
AF0002?13	ASN2 Redundant AC Base Unit with 32 MB DRAM
AF0002?14	ASN2 48V Base Unit with 8 MB DRAM
AF0002?15	ASN2 48V Base Unit with 16 MB DRAM
AF0002?16	ASN2 48V Base Unit with 32 MB DRAM

LAN Network Modules

34000	Dual Ethernet
34010	Single 100Base-T
34002	Dual Token Ring
AF1204001	Multimode FDDI

Order number Description

WAN Network Modules	
34001	Dual Synchronous
AF2104006	Quad Synchronous 34008 Quad ISDN BRI
34005	ISDN BRI/Dual Synchronous
34008	Quad ISDN BRI
AF2104004	Single MCE1 AF2104016 Dual MCT1
AF2104020	High Speed Serial Interface (HSSI)
AF2104007	32-Context Hardware Compression Coprocessor
AF2104012	128-Context Hardware Compression Coprocessor

Additional Components

7166	SPEX-HS Cable
34007	SPEX-HS Module
AA0004001	Fast Packet Cache

Note: The seventh character, “?”, must be replaced with the proper code to indicate desired product nationalization. Country codes are as follows: “B” includes European “Schuko” power cord common in Austria, Belgium, France, Germany, The Netherlands, Norway, and Sweden. “C” includes power cord commonly used in the United Kingdom and Ireland. “D” includes power cord commonly used in Japan. “E” includes North American power cord. “F” includes Australian power cord, also commonly used in New Zealand and the People’s Republic of China. “G” includes power cord commonly used in Denmark. “H” includes power cord commonly used in India and South Africa. “K” includes power cord commonly used in Italy. “L” includes power cord commonly used in Switzerland. “M” includes North American 10A/220 power cord. “W” includes power cord commonly used in Israel.



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