

resiliency

in the core

Nortel Networks Passport 8600 Routing Switch

The Nortel Networks Passport* 8600 Routing Switch delivers a proven and tested resilient, secure, and intelligent network solution. With the capability to deliver hundreds of millions of packets per second (Mpps) performance to the network core, the Passport 8600 Routing Switch combines resiliency and high performance with intelligence and security.

- Resiliency ensures that network resources are always available.
- Intelligence delivers bandwidth and performance for those applications that need it the most when they need it.
- Security ensures that the information traveling across your network remains secure and unaltered.

Resiliency, intelligence, and security are the basic network building blocks that allow an enterprise to use their network to grow their business and provide a solid foundation for their future network growth.

IEEE general

- 802.3 CSMA/CD Ethernet (ISO/IEC 8802-3)
- 802.3i 10BASE-T (ISO/IEC 8802-3)
- 802.3u 100BASE-T (ISO/IEC 8802-3)
- 802.3z (Gigabit Ethernet 1000BASE-SX and LX)
- 802.3ab (Gigabit Ethernet 1000BASE-T 4 pair Cat5 UTP)
- 802.1D (MAC bridges/Spanning Tree Protocol)
- IEEE 802.3ad Link Aggregation
- IEEE 802.1w Rapid Re-convergence Spanning Tree
- 802.3x (Flow Control)
- 802.1X (EAPOL)

Layer 2 features

- RFC 1490 (Multiprotocol Interconnect over Frame Relay)
- RFC 1570 (PPP LCP Extensions)
- RFC 1662 (PPP in HDLC-Like Framing)
- RFC 1990 (PPP multi-link protocol)
- RFC 1548 (PPP)
- RFC 1493 (Bridge MIB)

Layer 2 features—ATM/POS

- Bell Communications Research, SONET Transport Systems: Common Generic Criteria, GR-253-CORE, January 1999, Revision 2 (partial compliance)
- RFC 1213 (MIB-2)
- RFC 1332 (IPCP)
- RFC 1471 (LCP)
- RFC 1473 (NCP)
- RFC 1474 (Bridge NCP)
- RFC 1552 (IPXCP)
- RFC 1661 (PPP)
- RFC 1638 (BCP)
- RFC 1989 (PPP Link Quality Monitoring)
- RFC 2558 (SONET/SDH)
- RFC 2615 (PPP over SONET/SDH)

Layer 3/Layer 4 intelligence

General

- RFC 951 (BootP)
- RFC 2131 (Dynamic Host Control Protocol: DHCP)
- RFC 1812 (Router Requirements)
- RFC 1213 (TCP/IP Management Information Base)
- RFC 2391 Load Sharing Using IP Network Address Translation (load sharing)
- RFC 1519 (CIDR)
- RFC 1349 (Type of Service in Internet Protocol Suite)
- RFC 1293 (Inverse ARP)
- RFC 1631 (IP Network Address Translation)
- RFC 1256 (ICMP Router Discovery message)
- RFC 2338 (VRRP: Virtual Redundancy Router Protocol)

RIP

- RFC 1058 (RIP version 1)
- RFC 1723 (RIP version 2)
- RFC 1389 (RIP 2 Management Information Base)

OSPF

- RFC 1253 (OSPF MIB)
- RFC 1583 (OSPFv2)
- RFC 2178 (OSPF v2)
- RFC 1850 (OSPF Management Information Base)
- RFC 2178 (OSPF MD5 cryptographic authentication)

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BGP4

- RFC 1397 BGP Default Route Advertisement
- RFC 1771 A Border Gateway Protocol 4 (BGP-4)
- RFC 1772 Application of the Border Gateway Protocol in the Internet
- RFC 1773 Experience with the BGP-4 protocol
- RFC 1774 BGP-4 Protocol Analysis
- RFC 1965 Autonomous System Confederations for BGP (Updated by RFC3065)
- RFC 1966 BGP Route Reflection an alternative to full mesh IBGP
- RFC 1997 BGP Communities Attribute
- RFC 2270 Using a Dedicated AS for Sites Homed to a Single Provider
- RFC 2385 Protection of BGP Sessions via the TCP MD5 Signature Option
- RFC 2439 BGP Route Flap Damping
- RFC 2858 Multiprotocol Extensions for BGP-4 (obsoletes RFC2283)
- RFC 2918 Route Refresh Capability for BGP-4
- RFC 1745 BGP4/IDRP for IP—OSPF Interaction

IP Multicast

- RFC 1112 (IGMPv1)
- RFC 2236 (IGMPv2)
- RFC 2362 (PIM-SM)
- RFC 1123 (IGMPv1 for snooping)
- RFC 2236 (IGMPv2 for snooping)

Quality of Service

- RFC 2474 and 2475 (DiffServ)
- RFC 2597 and 2598 (DiffServ Per Hop Behavior)
- 802.1p (priority queuing) and 802.1Q (VLAN tagging and identification)

Network management

- RFC 1155 (SMI)
- RFC 1213 (MIB II)
- RFC 1215 (Traps)
- RFC 1493 (Bridge MIB)
- RFC 2096 (IP forwarding MIB)
- RFC 1573 (Interface MIB)
- RFC 1643 (Ethernet MIB)
- RFC 1757 and RFC1271 (RMON)
- RFC 1157 (SNMP)
- RFC 1907 (SNMPv2)
- RFC 2571, 2572, 2573, 2574, 2575, and 2576 (SNMPv3)
- RFC 3414 (VSM for SNMPv3)
- RFC 3415 (VACM for SNMPv3)
- RFC 2925 (MIB and Traceroute MIBs)

Ordering information

Passport 8000 chassis

- DS1402003 8003 3 slot chassis
- DS1405703 8003ACPS 100-240 VAC power supply
- DS1402004 8010co 10 slot NEBS chassis
- DS1402001 8010 10 slot chassis
- DS1402002 8006 6 slot chassis
- DS1405708 8004AC 100-240 VAC power supply
- DS1405007 8004DC 850W power supply

Passport 8000 Routing Switch Modules

- DS1404045** Alteon WSM
4-port 1000BASE-SX Gigabit or 10BASE-T/100BASE-TX Ethernet Layer 4-7 Web Switching Module.
- DS1404070** Alteon 8661 SSL Acceleration Module (SAM) for the Passport 8600
Features 3,000 SSL Sessions per second, 260 Mbps and 64,000 Concurrent connections per module
- DS1404038** Passport 8608GBE Routing Switch Module
8-port 1000 BASE GBIC (GBICs sold separately).
- DS1404059** Passport 8608GBM Routing Switch Module
8-port 1000 BASE-GBIC (GBICs sold separately). Expanded memory.
- DS1404044** Passport 8608GTE Routing Switch Module
8 port 1000BASE-T Gigabit Ethernet interface module.
- DS1404061** Passport 8608GTM Routing Switch Module
8 port 1000BASE-T Gigabit Ethernet interface module. Expanded memory.
- DS1404036** Passport 8608SXE Routing Switch Module
8 port 1000BASE-SX Gigabit Ethernet interface module.
- DS1404034** Passport 8616GTE Routing Switch Module
16 port 1000BASE-T Gigabit Ethernet interface module.
- DS1404011** Passport 8616SXE Routing Switch Module
16-port 1000BASE-SX Gigabit Ethernet interface module.
- DS1404037** Passport 8624FXE Routing Switch Module
24 port 100BASE-FX Ethernet Layer 3 switching interface module.
- DS1404024** Passport 8632TXE Routing Switch Module
32 10/100TX plus 2 GBIC interface module. Requires Release 3.1.2 or higher.
- DS1404055** Passport 8632TXM Routing Switch Module
32 10/100TX plus 2 GBIC interface module. Expanded Memory.
- DS1404035** Passport 8648TXE Routing Switch Module
48 port autosensing 10BASE-T/100BASE-TX Ethernet Layer 3 switching interface.
- DS1404056** Passport 8648TXM Routing Switch Module
48 port autosensing 10BASE-T/100BASE-TX Ethernet Layer 3 switching interface. Expanded memory.
- DS1304008** Passport 8672 ATME 2 Slot MDA Baseboard
Accepts two MDAs, supports up to eight OC-3 or two OC-12 ports.
- DS1304009** Passport 8672 ATMM 2 Slot MDA Baseboard
Accepts two MDAs, supports up to eight OC-3 or two OC-12 ports. Expanded memory.
- DS1404053** Passport 8681 XLR Single port 1310 nm LAN serial 10 gig Ethernet interface module
- DS1404052** Passport 8681 XLW Single port 1310 nm WAN serial 10 gig Ethernet interface module
- DS1404060** Passport 8683 POSM 3 Slot MDA Baseboard
Accepts three MDAs, supports up to six OC-3 or three OC-12 ports. Expanded memory.
- DS1404025** Passport 8691SF Routing Switch Module CPU/Switch Fabric module. One Passport 869x required per chassis.
- DS1404065** Passport 8692 Routing Switch Module CPU/Switch Fabric module. One Passport 869x required per chassis.

Passport 8000 Routing Switch Software

- DS1410003** Passport 8000 Routing Switch Software Kit
- DS1410015** Passport 8600 Advanced Diagnostics Tools



For more information, contact your Nortel Networks representative, or call 1-800-4 NORTEL or 1-800-466-7835 from anywhere in North America.

Nortel Networks is an industry leader and innovator focused on transforming how the world communicates and exchanges information. The company is supplying its service provider and enterprise customers with communications technology and infrastructure to enable value-added IP data, voice and multimedia services spanning Wireless Networks, Wireline Networks, Enterprise Networks, and Optical Networks. As a global company, Nortel Networks does business in more than 150 countries. More information about Nortel Networks can be found on the Web at:

www.nortelnetworks.com

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