Have feedback on QuickSpecs? We're listening

HPE Networking Comware Switch Series 5600 HI QuickSpecs

The HPE Networking Comware 5600 HI Switch Series delivers high-performing Multigigabit, PoE8, MACsec AES 256 encryption (through additional modules), link flexibility, and scalability at the access layer of medium and large enterprise campus networks.

The ports on these switches offer efficient application of these features and support add-on modules with advanced features and increased capacity.

Overview

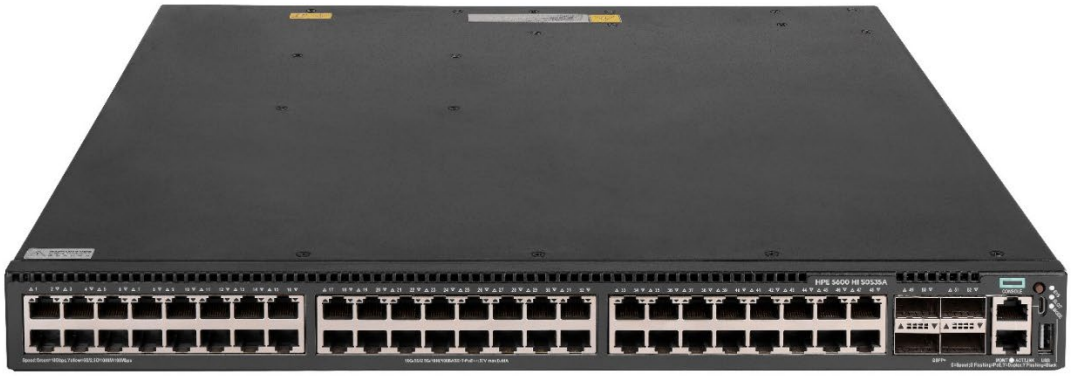
These include:

- DRNI and IRF provide improved resiliency
- Quality of service (QoS) features drive better reliability
- Intelligent Network Quality Analyzer (iNQA) helps in real-time network health performance and capacity visibility
- Hardware-based MACsec and AAA authentication enable end-to-end encrypted security
- Dual redundant power supplies with Energy Efficient Ethernet lead to improved power saving

This Switch Series also includes Smart Management Center (SmartMC) at no additional cost and combined with HPE Intelligent Management Center (IMC), provides both embedded network management and enhanced network visibility.



HPE Networking Comware 5600 HI 24P PoE8 MGig 1 Slot Sw (S0S34A)



HPE 5600 HI 48P PoE8 MGig 4QSFP+ 1s Sw (S0S35A)

Overview

Key Features

- Multigigabit 100M/1/2.5/5/10G options with PoE8. Granular, higher throughput, and switching capacity of up to 600 Mpps and 1440 Gbps, supports higher traffic rates enabling improved network performance.
- DRNI combines multiple physical switches into one virtual distributed-relay system for doubling aggregate bandwidth, faster forwarding, resiliency, and high availability.
- Industry-standard MACsec AES 256 support, higher MAC port binding, AAA authentications (including RADIUS authentication), and link group capacity for improved end-to-end network security is available with additional modules.
- iNQA measures network packet loss performance and provides visibility into real-time application performance and health.
- SmartMC provides centralized network management and maintains dispersed network edge devices at no additional cost.
- VXLAN and EVPN enable both isolation and greater scalability of L2/L3 overlay services and multicast.

Models

HPE Networking Comware Switch 24P Multigigabit 100M/1G/2.5G/5G/10GBase-T PoE8 1 Slot 5600HI	S0S34A
HPE Networking Comware Switch 48P 100M/1G/2.5G/5G/10GBase-T PoE8 4QSFP+ 1 Slot 5600HI	S0S35A

Standard Features

Multigigabit PoE8 High-Density Switches

- Provides medium and large enterprise networks with 24/48 port 1G/2.5G/5G/10GBASE-T connectivity options thereby resulting in high density and flexibility
- Supports a wide variety of applications such as virtual desktop infrastructure (VDI) or Internet of Things (IoT) thanks to 90W PoE8
- Delivers up to 240 Mpps of packet forwarding rate and up to 1440 Gbps of port switching capacity
- Supports jumbo frames with a frame size of up to 10000 bytes while improving the performance of large data transfers
- Supports equal-cost multipath that enables multiple equal-cost links in a routing environment to increase link redundancy and scale bandwidth

Highly Available and Scalable Access Layer Switches

- The HPE Networking Comware 5600 HI Switch Series uses IRF that supports virtualization of up to nine physical switches into one logical device for simpler, flatter, and more agile networks.
- DRNI, an IEEE standard-based solution, enables link aggregation from multiple switches to implement device-level link backup for node redundancy. DRNI also simplifies network topology by virtualizing two physical devices into a logical device.
- Dual, redundant, and hot-swappable power supplies maintain a dynamic and highly available network.
- Virtual Routing Redundancy Protocol (VRRP) is available where groups of two routers can dynamically back each other up to create highly available routed environments.
- VXLAN and EVPN allow greater flexibility to integrate into existing networks, better scalability without redesigning the underlay network, enhanced security to restrict attacks, and improved performance specially in spine-leaf architectures.

Rich QoS Features

- The HPE Networking Comware 5600 HI Switch Series supports operations, administration, and maintenance (OAM), MPLS, VPLS, and In-Service Software Upgrade (ISSU) for business continuity and improving manageability.
- Advanced classifier based QoS is available to group traffic using multiple match criteria based on Layer 2 and 3 information; it applies QoS policies such as setting priority level and rate limit to selected traffic on a port, VLAN, or the entire switch.
- Extensive traffic prioritization with strict priority (SP) queuing, weighted round robin (WRR), weighted deficit round robin (WDRR), SP+WDRR, and SP+WRR are supported.
- Broadcast control and limitation of broadcast traffic rate can reduce unwanted network traffic.

Comprehensive Security

- HPE Networking Comware 5600 HI Switch Series supports AAA authentication (including RADIUS authentication) and dynamic or static binding of user identifiers such as user account, IP address, MAC address, VLAN, and port number.
- Supports methods including 802.1X and MAC authentication and encryption for greater device security and policy-driven application authentication, along with per-user access control Lists (ACLs) that provide identity-driven security and access control.

Standard Features

- Dynamic ARP protection with functions such as ARP detection and ARP packet validation that block broadcasts from unauthorized hosts, prevent eavesdropping or theft of network data.

Simplified Management

- The HPE Networking Comware 5600 HI Switch Series provides thorough single-pane management via HPE IMC, maintaining comprehensive configuration, compliance, and policy management to enable end-to-end network visibility, control, and a consistent network experience.
- OpenFlow enables integration with mainstream cloud platforms or a third-party controller for flexible network customization and automated management.
- SmartMC, an embedded network management tool, supports a web-based GUI to simplify operations and facilitate centralized management at no additional cost. It offers features such as configuration backup, software version management, and seamless switch replacement.

Configuration Information

BTO Models

Switch Chassis

Description	SKU
HPE Networking Comware Switch 24P Multigigabit 100M/1G/2.5G/5G/10GBase-T PoE8 1 Slot 5600HI	S0S34A
HPE Networking Comware Switch 48P 100M/1G/2.5G/5G/10GBase-T PoE8 4QSFP+ 1 Slot 5600HI	S0S35A

Configuration Rules

Description	
Mixture of power supply models supported	
If ANY Option is integrated 0D1 to this Switch, then the Switch requires 0D1. (Box level integration is not allowed)	
The following 40G Transceivers install into this Module: (Use BTO only when adding to switch)	
HPE Networking X140 40G QSFP+ LC LR4 SM 10km 1310nm Transceiver	JG661A
HPE Networking X140 40G QSFP+ CSR4 300m Transceiver	JG709A
HPE Networking X140 40G QSFP+ MPO SR4 Transceiver	JG325B
HPE Networking X140 40G QSFP+ LC BiDi 100m MM Transceiver	JL251A
HPE Networking X140 40G QSFP+ LC LR4L 2km SM Transceiver	JL286A

Notes: OCA Only Model Selection Form - HPE Offering > HPE Aruba Networking > Switches > HPE Networking Comware > Campus: HPE Networking Comware Switch Series 5600 HI

Rack Level Integration CTO Models

Switch Chassis

Description	SKU
HPE Networking Comware Switch 24P Multigigabit 100M/1G/2.5G/5G/10GBase-T PoE8 1 Slot 5600HI	S0S34A
HPE Networking Comware Switch 48P 100M/1G/2.5G/5G/10GBase-T PoE8 4QSFP+ 1 Slot 5600HI	S0S35A

Configuration Rules

Description	
Mixture of power supply models supported	
If HPE CTO Switch Chassis is selected for Rack Level Integration, Then the Switch needs to integrate (with #0D1) to the Rack.	
The following 40G Transceivers install into this Module: (Use #0D1 or #B01 if switch is CTO)	
HPE Networking X140 40G QSFP+ LC LR4 SM 10km 1310nm Transceiver	JG661A
HPE Networking X140 40G QSFP+ CSR4 300m Transceiver	JG709A
HPE Networking X140 40G QSFP+ MPO SR4 Transceiver	JG325B
HPE Networking X140 40G QSFP+ LC BiDi 100m MM Transceiver	JL251A
HPE Networking X140 40G QSFP+ LC LR4L 2km SM Transceiver	JL286A

Configuration Information

Enter the following menu selections as integrated to the CTO Model X above if order is factory built.

Description	SKU
HPE Networking Comware Module 2-port 40G QSFP+ 5520HI/5600HI	JH155A
HPE Networking Comware Module 10GbE SFP+MACsec128 2p 5140HI/5520HI	JH157A
HPE Networking Comware Module 2p 10GBASE-T MACsec 5140/5520	R9L65A
HPE Networking Comware Module 4-port 10/100/1000Base-T 6-port SFP (2P Combo) 5140HI/5520HI/5600HI	S0T02A
HPE Networking Comware Module 8 Port SFP+ 5520HI/5600HI	S0T03A
HPE Networking Comware Module 4-port 1/10G SFP+ 5140HI/5520HI/5600HI	S0T04A
HPE Networking Comware Module 8-port 1/2.5/5/10GBASE-T 5140HI/5520HI/5600HI	S0T05A
HPE Networking Comware Module 2-port SFP28 5140HI/5520HI/5600HI	S0T06A

Transceivers

FE Transceivers

Description	SKU
HPE Networking X115 100M SFP LC BX 10-D Transceiver	JD101A
HPE Networking X115 100M SFP LC BX 10-U Transceiver	JD100A
HPE Networking X115 100M SFP LC FX Transceiver	JD102B
HPE Networking X110 100M SFP LC LX Transceiver	JD120B

SFP Transceivers

Description	SKU
HPE Networking X120 1G SFP RJ45 T Transceiver	JD089B
HPE Networking X120 1G SFP LC SX Transceiver	JD118B
HPE Networking X120 1G SFP LC LX Transceiver	JD119B
HPE Networking X120 1G SFP LC BX 10-U Transceiver	JD098B
HPE Networking X120 1G SFP LC BX 10-D Transceiver	JD099B
HPE Networking X120 1G SFP LC LH100 Transceiver	JD103A

SFP+ Transceivers

Description	SKU
HPE Networking X130 10G SFP+ LC BiDi 40km-Downlink Transceiver	JL740A
HPE Networking X130 10G SFP+ LC ER 40km Transceiver	JG234A
HPE Networking X130 10G SFP+ LC BiDi 40km-Uplink Transceiver	JL739A
HPE Networking X130 10G SFP+ LC LH 80km Transceiver	JG915A
HPE Networking X130 10G SFP+ LC SR Transceiver	JD092B
HPE Networking X130 10G SFP+ LC LR Transceiver	JD094B
HPE Networking X130 10G SFP+ LC BiDi 10km-Uplink Transceiver	JL737A
HPE Networking X130 10G SFP+ LC BiDi 10km-Downlink Transceiver	JL738A

Configuration Information

SFP+ Transceiver Cables

Description	SKU
HPE Networking X240 10G SFP+ SFP+ 0.65m DAC Cable	JD095C
HPE Networking X240 10G SFP+ SFP+ 1.2m DAC Cable	JD096C
HPE Networking X240 10G SFP+ SFP+ 3m DAC Cable	JD097C
HPE Networking X240 10G SFP+ SFP+ 5m DAC Cable	JG081C
HPE Networking X2A0 10G SFP+ to SFP+ 7m Active Optical Cable	JL290A
HPE Networking X2A0 10G SFP+ to SFP+ 10m Active Optical Cable	JL291A
HPE Networking X2A0 10G SFP+ to SFP+ 20m Active Optical Cable	JL292A

SFP28 Transceiver

Description	SKU
HPE Networking X190 25G SFP28 LC SR 100m MM Transceiver	JL293A
HPE Networking 25G SFP28 LC LR 10km SMF Transceiver	JL855A

SFP28 Transceiver Cables

Description	SKU
HPE Networking X240 25G SFP28 to SFP28 1m DAC Cable	JL294A
HPE Networking X240 25G SFP28 to SFP28 3m DAC Cable	JL295A
HPE Networking X240 25G SFP28 to SFP28 5m DAC Cable	JL296A
HPE Networking X2A0 25G SFP28 to SFP28 3m Active Optical Cable	JH955A
HPE Networking X2A0 25G SFP28 to SFP28 5m Active Optical Cable	JH956A

QSFP+ Transceivers

Description	SKU
HPE Networking X140 40G QSFP+ LC LR4 SM 10km 1310nm Transceiver	JG661A
HPE Networking X140 40G QSFP+ CSR4 300m Transceiver	JG709A
HPE Networking X140 40G QSFP+ MPO SR4 Transceiver	JG325B
HPE Networking X140 40G QSFP+ LC BiDi 100m MM Transceiver	JL251A
HPE Networking X140 40G QSFP+ LC LR4L 2km SM Transceiver	JL286A

QSFP+ Transceiver Cables

Description	SKU
HPE Networking Comware X240 40G QSFP+ QSFP+ 1m Direct Attach Copper Cable	JG326A
HPE Networking Comware X240 40G QSFP+ QSFP+ 3m Direct Attach Copper Cable	JG327A
HPE Networking Comware X240 40G QSFP+ QSFP+ 5m Direct Attach Copper Cable	JG328A
HPE Networking Comware X240 40G QSFP+ to 4x10G SFP+ 1m Direct Attach Copper Splitter Cable	JG329A
HPE Networking Comware X240 40G QSFP+ to 4x10G SFP+ 3m Direct Attach Copper Splitter Cable	JG330A
HPE Networking Comware X240 40G QSFP+ to 4x10G SFP+ 5m Direct Attach Copper Splitter Cable	JG331A
HPE Networking X2A0 40G QSFP+ to QSFP+ 7m Active Optical Cable	JL287A
HPE Networking X2A0 40G QSFP+ to QSFP+ 10m Active Optical Cable	JL288A
HPE Networking X2A0 40G QSFP+ to QSFP+ 20m Active Optical Cable	JL289A

Configuration Information

Internal Power Supplies

Description	SKU
HPE Networking X362 720W 100-240VAC to 56VDC PoE Power Supply	JG544A
HPE Networking X362 720W 100-240VAC to 56VDC PoE Power Supply	JG544A
HPE Networking X362 720W 100-240VAC to 56VDC PoE Power Supply	JG544A
HPE Networking X362 720W 100-240VAC to 56VDC PoE Power Supply	JG544A
HPE Networking X362 1110W 115-240VAC to 56VDC PoE Power Supply	JG545A
HPE Networking X362 1110W 115-240VAC to 56VDC PoE Power Supply	JG545A
HPE Networking X362 1110W 115-240VAC to 56VDC PoE Power Supply	JG545A
HPE Networking X362 1110W 115-240VAC to 56VDC PoE Power Supply	JG545A

Notes:

- Drop down under power supply should offer the following options and results:
  - Switch/Router/Power Supply to PDU Power Cord - #B2B in North America, Mexico, Taiwan, and Japan or #B2C ROW. (OCA Default B2B or B2C for Rack Level CTO)
  - Switch/Router/Power Supply to Wall Power Cord - Localized Option (OCA Default for BTO)
  - High Volt Switch/Router/Power Supply to Wall Power Cord - #B2E Option. (Offered only in North America, Mexico, Taiwan, and Japan)
  - No Power Cord Selected - #AC3 Option
- DC Power Supply does not require Localization (CLIC Rule does not require looking for Localization)
- Mixing of power supplies is supported

Accessories

Spare Items

Description	SKU
HPE Networking X721 FB Fan Tray	JL594A

Notes: The switch is fully equipped with JL594A. The fan tray modules are optional. Customers can order as many fan tray modules as needed.

Technical Specifications

HPE 5600 HI 24P PoE8 MGig 1 Slot Sw (SOS34A)	
I/O ports and slots	24 x 100M/1G/2.5G/5G/10GBASE-T (PoE8) + 1 expansion slot
Power supplies	2 power supply slots (1+1 dual hot pluggable)
Physical characteristics	
Dimensions	440 x 460 x 43.6 mm (H x W x D)
Weight	5.50kg (bare weight)
Memory and processor	2 GB SDRAM; packet buffer size: 3 MB, 1G flash
Mounting and enclosure	Mounts in an EIA standard 19-inch telco rack or equipment cabinet (hardware included)
1000 Mb Latency	< 5 µs
10 Gbps Latency	< 3 µs
40 Gbps Latency	< 1.2 µs
Throughput	240 Mpps
Routing/Switching capacity	640 Gbps
Static MAC table	1K
VLAN table	4K
MAC address table size	Max. 32K recommend 16K
Environment	
Operating temperature	23°F to 113°F (–5°C to 45°C)
Operating relative humidity	5% to 95%, noncondensing
Non-operating/storage temperature	–40°F to 158°F (–40°C to 70°C)
Non-operating/storage relative humidity	5% to 95%, noncondensing
Acoustic	Low: 48.1 dB; High: 60.7 dB
Electrical characteristics	
Frequency	50/60 Hz
Maximum heat dissipation	Ranges from 134 BTU/hour to 8137 BTU/hour depending on power supply configuration
Voltage	AC: 90 VAC to 264 VAC, DC: –36 VDC to 72 VDC
Maximum power rating	Dual AC 2385 W
Idle power	39.3 W
PoE power per port	90 W
Notes:	Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. Air is drawn in from the left, right and port sides, and exhausted out the back (power supply side).

Technical Specifications

Emissions	EMC Directive 2004/108/EC; FCC (CFR 47, Part 15) Class A; EN 61000-4-11:2004; ANSI C63.4-2009; EN 61000-3-3:2008; VCCI V-3/2012.04; EN 61000-3-2:2006+A1:2009+A2:2009; EN 61000-4-3:2006; EN 61000-4-4:2012; EN 61000-4-5:2006; EN 61000-4-6:2009; CISPR 22:2008 Class A; EN 55022:2010 Class A; EN 61000-4-29: 2000; CISPR 24:2010; EN 300 386 V1.6.1; VCCI V-3/2013.04 Class A
Safety	UL 60950-1; EN 60825-1 Safety of Laser Products-Part 1; EN 60825-2 Safety of Laser Products-Part 2; IEC 60950 1; IEC 62368-1; CAN/CSA-C22.2 No. 60950-1; EN 62368-1/A11; FDA 21 CFR Subchapter J; RoHS Compliance
Immunity	
Generic	EN 55024
ESD	EN 300 386
Management	HPE IMC; CLI; SNMP manager
Services	See the HPE website at hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, contact your local HPE sales office.

Technical Specifications

HPE 5600 HI 48P PoE8 MGig 4QSFP+ 1s Sw (S0S35A)	
I/O ports and slots	48 x 100M/1GB/2.5G/5G/10GBASE-T (PoE8) + 4 x QSFP Plus + 1 expansion slot
Power supplies	2 power supply slots (1+1 dual hot pluggable)
Physical characteristics	
Dimensions	440 x 460 x 43.6 mm (H x W x D)
Weight	6.05 kg (bare weight)
Memory and processor	2 GB SDRAM; packet buffer size: 6 MB, 1G flash
Mounting and enclosure	Mounts in an EIA standard 19-inch telco rack or equipment cabinet (hardware included)
Performance	
1000 Mb Latency	< 5 µs
10 Gbps Latency	< 3 µs
40 Gbps Latency	< 1.2 µs
Throughput	600 Mpps
Routing/Switching capacity	1440 Gbps
Static MAC table	1K
VLAN table	4K
MAC address table size	Max. 32K recommend 16K
Environment	
Operating temperature	23°F to 113°F (–5°C to 45°C)
Operating relative humidity	5% to 95%, noncondensing
Non-operating/storage temperature	–40°F to 158°F (–40°C to 70°C)
Non-operating/storage relative humidity	5% to 95%, noncondensing
Acoustic	Low: 48.1 dB; High: 60.7 dB
Electrical characteristics	
Frequency	50/60 Hz
Maximum heat dissipation	Ranges from 221 BTU/hour to 7960 BTU/hour depending on power supply configuration
Voltage	AC: 90 VAC to 264 VAC, DC: –36 VDC to 72 VDC
Maximum power rating	Dual AC 2333W
Idle power	65.1W
PoE power per port	90W
Notes:	Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports

Technical Specifications

	plugged in, and all modules populated. Air is drawn in from the left, right and port sides, and exhausted out the back (power supply side).
Emissions	EMC Directive 2004/108/EC; FCC (CFR 47, Part 15) Class A; EN 61000-4-11:2004; ANSI C63.4-2009; EN 61000-3-3:2008; VCCI V-3/2012.04; EN 61000-3-2:2006+A1:2009+A2:2009; EN 61000-4-3:2006; EN 61000-4-4:2012; EN 61000-4-5:2006; EN 61000-4-6:2009; CISPR 22:2008 Class A; EN 55022:2010 Class A; EN 61000-4-29: 2000; CISPR 24:2010; EN 300 386 V1.6.1; VCCI V-3/2013.04 Class A
Safety	UL 60950-1; EN 60825-1 Safety of Laser Products-Part 1; EN 60825-2 Safety of Laser Products-Part 2; IEC 60950 1; IEC 62368-1; CAN/CSA-C22.2 No. 60950-1; EN 62368-1/A11; FDA 21 CFR Subchapter J; RoHS Compliance
Immunity	
Generic	EN 55024
ESD	EN 300 386
Management	HPE IMC; CLI; SNMP manager
Services	See the HPE website at hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, contact your local HPE sales office.

Standards and Protocols Apply to All Products in Series

BGP

- RFC 1657 Definitions of Managed Objects for BGPv4
- RFC 1771 BGPv4
- RFC 2385 BGP Session Protection via TCP MD5
- RFC 2858 BGP-4 Multiprotocol Extensions

Device Management

- RFC 1155 Structure and Mgmt. Information (SMIv1)
- RFC 1157 SNMP v1/v2c
- RFC 1305 NTPv3
- RFC 2573 (SNMP v3 applications)
- RFC 2578-2580 SMIv2
- RFC 2819 (RMON groups alarm, event, history, and statistics only)
- RFC 3416 (SNMP Protocol Operations v2)
- RFC 3417 (SNMP Transport Mappings) HTML and Telnet management
- Multiple configuration files
- SNMP v3 and RMON RFC support
- SSHv1/SSHv2
- TACACS/TACACS+

General Protocols

- IEEE 802.1ad QinQ
- IEEE 802.1ak Multiple Registration Protocol (MRP) and Multiple VLAN Registration Protocol (MVRP)
- IEEE 802.1AE MACsec
- IEEE 802.1AX—2008 Link Aggregation
- IEEE 802.1D MAC Bridges
- IEEE 802.1p Priority
- IEEE 802.1Q (GVRP)
- IEEE 802.1Q VLANs
- IEEE 802.1s Multiple Spanning Trees
- IEEE 802.1v VLAN classification by Protocol and Port
- IEEE 802.1w Rapid Reconfiguration of Spanning Tree
- IEEE 802.1X PAE
- IEEE 802.3 Type 10BASE-T IEEE 802.3ab 1000BASE-T
- IEEE 802.3ac (VLAN Tagging Extension)
- IEEE 802.3ad Link Aggregation Group (LAG)
- IEEE 802.3ad Link Aggregation Control Protocol (LACP)
- IEEE 802.3ae 10-Gigabit Ethernet
- IEEE 802.3af Power over Ethernet
- IEEE 802.3at Power over Ethernet Plus
- IEEE 802.3az Energy Efficient Ethernet
- IEEE 802.3i 10BASE-T
- IEEE 802.3u 100BASE-X
- IEEE 802.3x Flow Control

Technical Specifications

- IEEE 802.3z 1000BASE-X
- RFC 768 UDP
- RFC 783 TFTP Protocol (revision 2)
- RFC 791 IP
- RFC 792 ICMP
- RFC 793 TCP
- RFC 826 ARP
- RFC 854 Telnet
- RFC 855 Telnet Option Specification
- RFC 894 IP over Ethernet
- RFC 925 Multi-LAN Address Resolution
- RFC 950 Internet Standard Subnetting Procedure
- RFC 951 BOOTP
- RFC 959 File Transfer Protocol (FTP)
- RFC 1027 Proxy ARP
- RFC 1042 IP Datagrams
- RFC 1058 RIPv1
- RFC 1071 Computing the Internet Checksum
- RFC 1166 IP Addresses
- RFC 1122 Requirements for Internet Hosts—Communication Layers
- RFC 1123 Requirements for Internet Hosts
- RFC 1141 Incremental updating of the Internet checksum
- RFC 1191 Path MTU discovery
- RFC 1213 Management Information Base for Network Management of TCP/IP-based Internet
- RFC 1256 ICMP Router Discovery Protocol (IRDP)
- RFC 1305 NTPv3
- RFC 1350 TFTP Protocol (revision 2)
- RFC 1519 CIDR
- RFC 1533 DHCP Options and BOOTP Vendor Extensions
- RFC 1542 BOOTP Extensions
- RFC 1591 DNS (client only)
- RFC 1643 Definitions of Managed Objects for the Ethernet-like Interface Types
- RFC 1723
- RIPv2
- RFC 1812 IPv4 Routing
- RFC 1866 Hypertext Markup Language—2.0
- RFC 1887 An Architecture for IPv6 Unicast Address Allocation
- RFC 1901 Introduction to Community-based SNMP v2
- RFC 1902-1907 SNMP v2
- RFC 2131 DHCP
- RFC 2236 IGMP Snooping
- RFC 2338 VRRP
- RFC 2375 IPv6 Multicast Address Assignments
- RFC 2462 IPv6 Stateless Address Autoconfiguration
- RFC 2474 Definition of the Differentiated Services Field (DS Field) in the IPv4 and IPv6 Headers
- RFC 2475 Architecture for Differentiated Services

Technical Specifications

- RFC 2597 Assured Forwarding PHB Group
- RFC 2616 Hypertext Transfer Protocol—HTTP/1.1
- RFC 2644 Directed Broadcast Control
- RFC 2665 Definitions of Managed Objects for the Ethernet-like Interface Types
- RFC 2668 Definitions of Managed Objects for IEEE 802.3 Medium Attachment Units (MAUs)
- RFC 2711 IPv6 Router Alert Option
- RFC 2784 Generic Routing Encapsulation (GRE)
- RFC 2865 Remote Authentication Dial In User Service (RADIUS)
- RFC 2866 RADIUS Accounting
- RFC 2868 RADIUS Attributes for Tunnel Protocol Support
- RFC 3046 DHCP Relay Agent Information Option
- RFC 3209 RSVP-TE Extensions to RSVP for LSP Tunnels
- RFC 3246 Expedited Forwarding PHB
- RFC 3410 Applicability Statements for SNMP
- RFC 3414 User-based Security Model (USM) for Version 3 of the Simple Network Management Protocol (SNMP v3)
- RFC 3415 View-based Access Control Model (VACM) for the Simple Network Management Protocol (SNMP)
- RFC 3416 Protocol Operations for SNMP
- RFC 3417 Transport Mappings for the Simple Network Management Protocol (SNMP)
- RFC 3418 Management Information Base (MIB) for the Simple Network Management
- RFC 3484 Default Address Selection for IPv6
- RFC 3493 Basic Socket Interface Extensions for IPv6
- RFC 3542 Advanced Sockets Application Program Interface (API) for IPv6
- RFC 3576 Ext to RADIUS (CoA only)
- RFC 3580 IEEE 802.1X RADIUS Usage Guidelines
- RFC 3587 IPv6 Global Unicast Address Format
- RFC 3596 DNS Extensions to Support IP Version 6
- RFC 3623 Graceful OSPF Restart
- RFC 3704 Unicast Reverse Path Forwarding (URPF)
- RFC 3768 Virtual Router Redundancy Protocol (VRRP)
- RFC 3810 Multicast Listener Discovery Version 2 (MLDv2) for IPv6
- RFC 4090 Fast Reroute Extensions to RSVP-TE for LSP Tunnels
- RFC 4113 Management Information Base for the User Datagram Protocol (UDP)
- RFC 4213 Basic IPv6 Transition Mechanisms
- RFC 4250 The SSH Protocol Assigned Numbers
- RFC 4251 The SSH Protocol Architecture
- RFC 4252 The SSH Authentication Protocol
- RFC 4253 The SSH Transport Layer Protocol
- RFC 4254 The SSH Connection Protocol
- RFC 4291 IP Version 6 Addressing Architecture
- RFC 4443 Internet Control Message Protocol (ICMPv6) for IPv6 Specification
- RFC 4541 Considerations for Internet Group Management Protocol (IGMP) and Multicast Listener Discovery (MLD) Snooping Switches
- RFC 4575 A Session Initiation Protocol (SIP) Event Package for Conference State
- RFC 4594 Configuration Guidelines for DiffServ Service Classes
- RFC 4675 RADIUS VLAN and Priority

- RFC 4750 OSPF Version 2 Management Information Base
- RFC 4762 Virtual Private LAN Service (VPLS) Using Label Distribution Protocol (LDP) Signaling
- RFC 5095 Deprecation of Type 0 Routing Headers in IPv6
- IEEE 802.1r—GARP

IP Multicast

- RFC 1112 IGMPv1
- RFC 2236 IGMPv2
- RFC 2710 Multicast Listener Discovery (MLD)
- for IPv6
- RFC 2858 Multiprotocol Extensions for BGP-4
- RFC 3376 IGMPv3
- RFC 3569 An Overview of Source-Specific
- Multicast (SSM)
- RFC 3618 Multicast Source Discovery Protocol (MSDP)
- RFC 3973 PIM Dense Mode
- RFC 4601 PIM Sparse Mode

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MIBs

- RFC 1212 Concise MIB Definitions
- RFC 1213 MIB II
- RFC 1215 A Convention for Defining Traps for use with the SNMP
- RFC 1493 Bridge MIB
- RFC 1757 Remote Network Monitoring MIB
- RFC 2096 IP Forwarding Table MIB
- RFC 2233 Interface MIB
- RFC 2571 SNMP Framework MIB
- RFC 2572 SNMP-MPD MIB
- RFC 2573 SNMP-Notification MIB
- RFC 2573 SNMP-Target MIB
- RFC 2574 SNMP USM MIB
- RFC 2618 RADIUS Authentication Client MIB
- RFC 2620 RADIUS Accounting Client MIB

Technical Specifications

- RFC 2665 Ethernet-Like-MIB
- RFC 2668 802.3 MAU MIB
- RFC 2674 Definitions of Managed Objects for
- Bridges with Traffic Classes, Multicast Filtering, and Virtual Extensions
- RFC 2737 Entity MIB (Version 2)
- RFC 2819 RMON MIB
- RFC 2863 The Interfaces Group MIB
- RFC 2925 Ping MIB
- RFC 3414 SNMP-User based-SM MIB
- RFC 3415 SNMP-View based-ACM MIB
- RFC 3418 MIB for SNMP v3
- RFC 3621 Power Ethernet MIB

MPLS

- RFC 2961 RSVP Refresh Overhead Reduction Extensions
- RFC 3031 Multiprotocol Label Switching Architecture
- RFC 3032 MPLS Label Stack Encoding
- RFC 3036 LDP Specification
- RFC 4762 VPLS Using LDP Signaling

Network Management

- IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
- RFC 1215 Convention for Defining Traps for use with the SNMP
- RFC 2579 Textual Conventions for SMIv2
- RFC 2580 Conformance Statements for SMIv2
- RFC 2818 HTTP over TLS
- RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm), and 9 (events)
- RFC 6398 IP Router Alert Considerations and Usage
- ANSI/TIA-1057 LLDP Media Endpoint
- Discovery (LLDP-MED) SNMP v1/v2c/v3

OSPF

- RFC 1587 OSPF NSSA
- RFC 1850 OSPFv2 Management Information
- Base (MIB), traps
- RFC 2328 OSPFv2
- RFC 2370 OSPF Opaque LSA Option

QoS/CoS

- RFC 2474 DS Field in the IPv4 and IPv6 Headers
- RFC 3260 New Terminology and Clarifications for DiffServ

Technical Specifications

Security

- IEEE 802.1X Port Based Network Access Control
- RFC 1492 TACACS+
- RFC 2138 RADIUS Authentication
- RFC 2139 RADIUS Accounting
- RFC 2865 RADIUS Authentication RFC 2866 RADIUS Accounting
- RFC 3260 New Terminology and Clarifications for DiffServ
- RFC 4716 SSH Public Key File Format
- Secure Sockets Layer (SSL) SSHv2

Summary of Changes

Date	Version History	Action	Description of Change
19-Oct-2026	Version 5	Changed	Survey link text was updated.
16-Feb-2026	Version 4	Changed	QuickSpecs rebranding applied to document.
04-Dec-2023	Version 3	Changed	Series name was updated.
17-Apr-2023	Version 2	Changed	Configuration Information section was updated.
06-Feb-2023	Version 1	New	New QuickSpecs

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