Overview

HPE 5500 SI Switch Series

Models

HP 5500-24G SI Switch	JD369A
HP 5500-48G SI Switch	JD370A
HP 5500-24G-PoE+ SI Switch with 2 Interface Slots	JG238A
HP 5500-48G-PoE+ SI Switch with 2 Interface Slots	JG239A

Key features

- Managed Layer 2 and Layer 3 GbE connectivity
- High performance
- Enterprise-class security features
- Application convergence capable
- Easy to use and manage

Product overview

These Gigabit Ethernet switches deliver quad-speed performance, 10/100/1000 and 10 Gigabit Ethernet, as well as advanced voice-enhanced features such as Power over Ethernet (PoE), auto-voice VLAN, and Quality of Service (QoS). As a result, they are ideal for enterprise organizations seeking to build a secure, convergence-enhanced campus network. Robust IPv6 support and 10 Gigabit Ethernet uplinks future-proof an enterprise network against obsolescence. Resilient Ring Protection Protocol (RRPP), Smart Link, and Intelligent Resilient Fabric (IRF) deliver 50 ms switchover and carrier-class reliability.

Features and benefits

Quality of Service (QoS)

- Broadcast control: allows limitation of broadcast traffic rate to cut down on unwanted broadcast traffic on the network
- Advanced classifier-based QoS: classifies traffic using multiple match criteria based on Layer 2, 3, and 4 information; applies QoS policies such as setting priority level and rate limit to selected traffic on a port, VLAN, or whole switch
- Powerful QoS feature: supports the following congestion actions: strict priority queuing (SP), weighted round robin queuing, and SP+WRR
- Traffic policing: supports Committed Access Rate (CAR) and line rate

Management

- Friendly port names: allow assignment of descriptive names to ports
- Remote configuration and management: is available through a secure Web browser or a CLI
- Manager and operator privilege levels: enable read-only (operator) and read/write (manager) access on CLI and Web browser management interfaces
- Command authorization: leverages HWTACACS to link a custom list of CLI commands to an individual network administrator's login; also provides an audit trail

Overview

- Secure Web GUI: provides a secure, easy-to-use graphical interface for configuring the module via HTTPS
- Multiple configuration files: can be stored to the flash image
- Complete session logging: provides detailed information for problem identification and resolution
- SNMPv1, v2c, and v3: facilitate centralized discovery, monitoring, and secure management of networking devices
- Remote monitoring (RMON): uses standard SNMP to monitor essential network functions; supports events, alarm, history, and statistics group plus a private alarm extension group
- IEEE 802.1AB Link Layer Discovery Protocol (LLDP): advertises and receives management information from adjacent devices on a network, facilitating easy mapping by network management applications
- sFlow (RFC 3176): provides scalable ASIC-based wirespeed network monitoring and accounting with no impact on network performance; this allows network operators to gather a variety of sophisticated network statistics and information for capacity planning and real-time network monitoring purposes
- Management VLAN: segments traffic to and from management interfaces, including CLI/Telnet, a Web browser interface, and SNMP
- Remote Intelligent Mirroring: mirrors ingress/egress ACL-selected traffic from a switch port or VLAN to a local or remote switch port anywhere on the network
- Device Link Detection Protocol (DLDP): monitors a cable between two switches and shuts down the ports on both ends if the cable is broken, preventing network problems such as loops
- IPv6 management: future-proofs networking, as the switch is capable of being managed whether the attached network is running IPv4 or IPv6; supports pingv6, tracertv6, Telnetv6, TFTPv6, DNSv6, syslogv6, FTPv6, SNMPv6, DHCPv6, and RADIUS for IPv6
- Troubleshooting: ingress and egress port monitoring enable network problem solving; virtual cable tests provide visibility into cable problems

Connectivity

- Auto-MDIX: automatically adjusts for straight-through or crossover cables on all 10/100/1000 ports
- Flow control: provides back pressure using standard IEEE 802.3x, reducing congestion in heavy traffic situations
- Ethernet operations, administration and maintenance (OAM) detects data link layer problems that occurred in the "last mile" using the IEEE 802.3ah OAM standard; monitors the status of the link between two devices
- Jumbo packet support: supports up to 9216-byte frame size to improve the performance of large data transfers
- Optional 10 GbE ports: deliver, through the use of optional modules, additional 10GbE connections, which are available for uplinks or high-bandwidth server connections; flexibly support copper, XFP, SFP+, or CX4 local connections
- IEEE 802.3at Power over Ethernet (PoE+) support: simplifies deployment and dramatically reduces installation costs by helping to eliminate the time and cost involved in supplying local power at each access point location
- High-bandwidth CX4 local stacking: when stacked using CX4 local stacking, achieves 12 Gbps per connection, allowing for up to 96 Gbps total stacking bandwidth (full duplex) in a resilient stacking configuration

Performance

- Nonblocking architecture up to 192 Gbps nonblocking switching fabric provides wire-speed switching with up to 143 million pps throughput

Overview

- Hardware-based wirespeed access control lists (ACLs)
  help provide high levels of security and ease of administration without impacting network performance with a feature-rich TCAM-based ACL implementation

Resiliency and high availability

- Separate data and control paths: keeps control separated from services and keeps service processing isolated; increases security and performance
- External redundant power supply: provides high reliability
- Smart link: allows 50 ms failover between links
- Spanning Tree/MSTP and RSTP: provide redundant links while preventing network loops
- Intelligent Resilient Fabric (IRF): creates virtual resilient switching fabrics, where two or more switches perform as a single L2 switch and L3 router; switches do not have to be co-located and can be part of a disaster recovery system; servers or switches can be attached using standard LACP for automatic load balancing and high availability; can eliminate the need for complex protocols like Spanning Tree Protocol, Equal-Cost Multipath (ECMP), or VRRP, thereby simplifying network operation
- Rapid Ring Protection Protocol (RRPP): connects multiple switches in a high-performance ring using standard Ethernet technology; traffic can be rerouted around the ring in less than 50 ms, reducing the impact on traffic and applications
- IRF capability: provides single IP address management for a resilient virtual switching fabric of up to four switches

Layer 2 switching

- 16K MAC address table: provides access to many Layer 2 devices
- VLAN support and tagging: support IEEE 802.1Q, with 4,094 simultaneous VLAN IDs
- GARP VLAN Registration Protocol: allows automatic learning and dynamic assignment of VLANs
- IEEE 802.1ad QinQ and Selective QinQ: increase the scalability of an Ethernet network by providing a hierarchical structure; connect multiple LANs on a high-speed campus or metro network
- 10GbE port aggregation
  allows grouping of ports to increase overall data throughput to a remote device
- Internet Group Management Protocol (IGMP) and Multicast Listener Discovery (MLD) protocol snooping: effectively control and manage the flooding of multicast packets in a Layer 2 network

Layer 3 services

- Address Resolution Protocol (ARP): determines the MAC address of another IP host in the same subnet
- Dynamic Host Configuration Protocol (DHCP): simplifies the management of large IP networks; supports client; DHCP Relay enables DHCP operation across subnets
- Loopback interface address: defines an address in RIP that can always be reachable, improving diagnostic capability
- User Datagram Protocol (UDP) helper function: allows User Datagram Protocol (UDP) broadcasts to be directed across router interfaces to specific IP unicast or subnet broadcast addresses and prevents server spoofing for UDP services such as DHCP
- Route maps: provide more control during route redistribution; allow filtering and altering of route metrics

Layer 3 routing

- IPv4 routing protocols: support static routes and RIP
- IPv6 routing protocols: provide routing of IPv6 at wire speed; support static routes and RIPng

Overview

Security

- Access control lists (ACLs): provide IP Layer 2 to Layer 4 traffic filtering; support global ACL, VLAN ACL, port ACL, and IPv6 ACL
- IEEE 802.1X: industry-standard method of user authentication using an IEEE 802.1X supplicant on the client in conjunction with a RADIUS server
- MAC-based authentication: authenticates the client with the RADIUS server based on the client's MAC address
- Identity-driven security and access control:
    - Per-user ACLs: permit or deny user access to specific network resources based on user identity and time of day, allowing multiple types of users on the same network to access specific network services without risking network security or providing unauthorized access to sensitive data
    - Automatic VLAN assignment: automatically assigns users to the appropriate VLAN based on their identities
- Secure management access: securely encrypts all access methods (CLI, GUI, or MIB) through SSHv2, SSL, and/or SNMPv3
- Secure FTP: allows secure file transfer to and from the switch; protects against unwanted file downloads or unauthorized copying of a switch configuration file
- Guest VLAN: provides a browser-based environment to authenticated clients that is similar to IEEE 802.1X
- Endpoint Admission Defense (EAD): provides security policies to users accessing a network
- Port security: allows access only to specified MAC addresses, which can be learned or specified by the administrator
- Port isolation: secures and adds privacy, and prevents malicious attackers from obtaining user information
- STP BPDU port protection: blocks Bridge Protocol Data Units (BPDUs) on ports that do not require BPDUs, preventing forged BPDU attacks
- STP Root Guard: protects the root bridge from malicious attacks or configuration mistakes
- DHCP protection: blocks DHCP packets from unauthorized DHCP servers, preventing denial-of-service attacks
- Dynamic ARP protection: blocks ARP broadcasts from unauthorized hosts, preventing eavesdropping or theft of network data
- IP Source Guard: helps prevent IP spoofing attacks
- RADIUS/HWTACACS: eases switch management security administration by using a password authentication server

Convergence

- IEEE 802.1AB Link Layer Discovery Protocol (LLDP): is an automated device discovery protocol that provides easy mapping of network management applications
- LLDP-MED: is a standard extension that automatically configures network devices, including LLDP-capable IP phones
- LLDP-CDP compatibility: receives and recognizes CDP packets from Cisco's IP phones for seamless interoperation
- IEEE 802.3af Power over Ethernet: provides up to 15.4 W per port to PoE-powered devices such as IP phones, wireless access points, and video cameras
- PoE allocations: support multiple methods (automatic, IEEE 802.3af class, LLDP-MED, or user specified) to allocate PoE power for more efficient energy savings
- Voice VLAN: automatically assigns VLAN and priority for IP phones, simplifying network configuration and maintenance
- IP multicast snooping (data-driven IGMP): automatically prevents flooding of IP multicast traffic
- Multicast VLAN: allows multiple VLANs to receive the same IPv4 or IPv6 multicast traffic, lessening

Overview

network bandwidth demand by reducing or eliminating multiple streams to each VLAN

Device support

- Cisco prestandard PoE support: detects and provides power to Cisco's prestandard PoE devices such as wireless LAN access points and IP phones

Additional information

- Green IT and power: use the latest advances in silicon development, shut off unused ports, and use variable-speed fans to improve power efficiency
- Green initiative support: provides support for RoHS and WEEE regulations

Warranty and support

- Limited Lifetime Warranty
  see http://www.hpe.com/networking/warrantysummary for warranty and support information included with your product purchase.
- Software releases
  to find software for your product, refer to http://www.hpe.com/networking/support; for details on the software releases available with your product purchase, refer to http://www.hpe.com/networking/warrantysummary

Configuration

Build To Order:

BTO is a standalone unit with no integration. BTO products ship standalone are not part of a CTO or Rack-Shippable solution.

Switch Chassis

HP 5500-24G SI Switch   JD369A
- 24 RJ-45 autosensing 10/100/1000 ports
- 4 dual-personality ports; PoE auto-sensing 10/100/1000Base-T or SFP
- min=0 \ max=4 SFP Transceivers
- 2 port expansion module slots
- 1U - Height

See Configuration **NOTE:**1, 3

HP 5500-24G-PoE+ SI Switch with 2 Interface Slots   JG238A
- 24 RJ-45 autosensing 10/100/1000 ports
- 4 dual-personality ports; PoE auto-sensing 10/100/1000Base-T or SFP
- min=0 \ max=4 SFP Transceivers
- 2 port expansion module slots
- 1U - Height

See Configuration **NOTE:**1, 3

HP 5500-48G SI Switch   JD370A
- 48 RJ-45 autosensing 10/100/1000 ports
- 4 dual-personality ports; PoE auto-sensing 10/100/1000Base-T or SFP
- min=0 \ max=4 SFP Transceivers
- 2 port expansion module slots
- 1U - Height

See Configuration **NOTE:**1, 3

HP 5500-48G-PoE+ SI Switch with 2 Interface Slots   JG239A
- 48 RJ-45 autosensing 10/100/1000 ports
- 4 dual-personality ports; PoE auto-sensing 10/100/1000Base-T or SFP
- min=0 \ max=4 SFP Transceivers
- 2 port expansion module slots
- 1U - Height

See Configuration **NOTE:**1, 3

Configuration Rules:

Note 1   The following Transceivers install into this Switch:

HPE X115 100M SFP LC FX Transceiver	JD102B
HPE X125 1G SFP LC LH40 1310nm Transceiver	JD061A
HPE X120 1G SFP LC LH40 1550nm Transceiver	JD062A
HPE X120 1G SFP LC SX Transceiver	JD118B
HPE X120 1G SFP LC LX Transceiver	JD119B
HPE X120 1G SFP LC BX 10-U Transceiver	JD098B
HPE X120 1G SFP LC BX 10-D Transceiver	JD099B
HPE X120 1G SFP RJ45 T Transceiver	JD089B
HPE X125 1G SFP LC LH70 Transceiver	JD063B

Configuration

Internal Power Supplies

Power Supplies included

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

Modules

User Selection (min 0 / max=2) per Chassis

HP 5500 2-port 10GbE XFP Module	JD359B
• min=0 \ max=2 XFP Transceivers	See Configuration **NOTE:**2
HP 5500 2-port 10GbE Local Connect Module	JD360B
• min=0 \ max=2 CX4 Cables	See Configuration **NOTE:**4
HP 5500 1-port 10GbE XFP Module	JD361B
• min=0 \ max=1 XFP Transceivers	See Configuration **NOTE:**2
HPE FlexNetwork 5500/5120 2-port 10GbE SFP+ Module	JD368B
• min=0 \ max=2 SFP+ Transceivers	See Configuration **NOTE:**1
HPE FlexNetwork 5500/4800 2-port GbE SFP Module	JD367A
• min=0 \ max=2 SFP Transceivers	See Configuration **NOTE:**3
HPE FlexNetwork 5500/5120 2-port 10GBASE-T Module	JG535A
• No Transceivers	

Configuration Rules:

Configuration

Note 1   The following Transceivers install into this Module:

HPE X130 10G SFP+ LC ER 40km Transceiver	JG234A
HPE X130 10G SFP+ LC SR Transceiver	JD092B
HPE X130 10G SFP+ LC LRM Transceiver	JD093B
HPE X130 10G SFP+ LC LR Transceiver	JD094B
HPE FlexNetwork X240 10G SFP+ to SFP+ 5m Direct Attach Copper Cable	JG081C
HPE FlexNetwork X240 10G SFP+ SFP+ 7m Direct Attach Copper Cable	JC784C

Note 2   The following Transceivers install into this Module:

HPE X135 10G XFP LC ER Transceiver	JD121A
HPE X130 10G XFP LC LR Single Mode 10km 1310nm Transceiver	JD108B
HPE X130 10G XFP LC SR Transceiver	JD117B
HPE X130 10G XFP LC ZR Single Mode 80km 1550nm Transceiver	JD107A

Note 3   The following Transceivers install into this Module:

HPE X115 100M SFP LC FX Transceiver	JD102B
HPE X125 1G SFP LC LH40 1310nm Transceiver	JD061A
HPE X120 1G SFP LC LH40 1550nm Transceiver	JD062A
HPE X120 1G SFP LC SX Transceiver	JD118B
HPE X120 1G SFP LC LX Transceiver	JD119B
HPE X120 1G SFP LC BX 10-U Transceiver	JD098B
HPE X120 1G SFP LC BX 10-D Transceiver	JD099B
HPE X120 1G SFP RJ45 T Transceiver	JD089B
HPE X125 1G SFP LC LH70 Transceiver	JD063B

Note 4   The following Cables install into this Module:

HPE X230 Local Connect 50cm CX4 Cable	JD363B
HPE X230 Local Connect 100cm CX4 Cable	JD364B
HPE X230 CX4 to CX4 3m Cable	JD365A

NOTE: Two JD365A - HPE X230 CX4 to CX4 3m Cable should be added by default if Module is selected.

Transceivers

SFP Transceivers

HPE X115 100M SFP LC FX Transceiver	JD102B
HPE X120 1G SFP LC SX Transceiver	JD118B
HPE X120 1G SFP LC LX Transceiver	JD119B
HPE X120 1G SFP LC LH40 1550nm Transceiver	JD062A
HPE X125 1G SFP LC LH40 1310nm Transceiver	JD061A
HPE X120 1G SFP LC BX 10-U Transceiver	JD098B
HPE X120 1G SFP LC BX 10-D Transceiver	JD099B
HPE X120 1G SFP RJ45 T Transceiver	JD089B
HPE X125 1G SFP LC LH70 Transceiver	JD063B

Configuration

SFP+ Transceivers

HPE X130 10G SFP+ LC ER 40km Transceiver	JG234A
HPE X130 10G SFP+ LC SR Transceiver	JD092B
HPE X130 10G SFP+ LC LRM Transceiver	JD093B
HPE X130 10G SFP+ LC LR Transceiver	JD094B
HPE FlexNetwork X240 10G SFP+ to SFP+ 5m Direct Attach Copper Cable	JG081C
HPE FlexNetwork X240 10G SFP+ SFP+ 7m Direct Attach Copper Cable	JC784C

XFP Transceivers

HPE X130 10G XFP LC ZR Single Mode 80km 1550nm Transceiver	JD107A
HPE X130 10G XFP LC LR Single Mode 10km 1310nm Transceiver	JD108B
HPE X130 10G XFP LC SR Transceiver	JD117B
HPE X135 10G XFP LC ER Transceiver	JD121A

Cables

Local Connect Cables

HPE X230 Local Connect 50cm CX4 Cable	JD363B
HPE X230 Local Connect 100cm CX4 Cable	JD364B
HPE X230 CX4 to CX4 3m Cable	JD365A

Multi-Mode Cables

HP LC to LC Multi-mode OM3 2-Fiber 0.5m 1-Pack Fiber Optic Cable	AJ833A
HP LC to LC Multi-mode OM3 2-Fiber 1.0m 1-Pack Fiber Optic Cable	AJ834A
HP LC to LC Multi-mode OM3 2-Fiber 2.0m 1-Pack Fiber Optic Cable	AJ835A
HP LC to LC Multi-mode OM3 2-Fiber 5.0m 1-Pack Fiber Optic Cable	AJ836A
HP LC to LC Multi-mode OM3 2-Fiber 15.0m 1-Pack Fiber Optic Cable	AJ837A
HP LC to LC Multi-mode OM3 2-Fiber 30.0m 1-Pack Fiber Optic Cable	AJ838A
HP LC to LC Multi-mode OM3 2-Fiber 50.0m 1-Pack Fiber Optic Cable	AJ839A
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 1m Cable	QK732A
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 2m Cable	QK733A
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 5m Cable	QK734A
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 15m Cable	QK735A
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 30m Cable	QK736A
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 50m Cable	QK737A

Switch Enclosure Options

External/Redundant Power Supplies

Configuration

HPE RPS 800 Redundant Power Supply
- Height = 1U
- includes 1 x c13, 800w

JD183A
See
Configuration
NOTE:2, 3, 5

HPE RPS1600 Redundant Power System
- Height = 1U
- includes 1 x c13, 1600w and Power Supply port

JG136A
See
Configuration
NOTE:2, 4, 6

HPE RPS1600 1600W AC Power Supply
- Installs into JG136A only

JG137A
See
Configuration
NOTE:1

Configuration Rules:

Note 1   If this power supply is selected, The JG136A - HPE A-RPS1600 Redundant Power System must be on order or onsite.

Note 2   Localization required.

Note 3   Supported only on the JD369A and JD370A Switches

Note 4   Supported only on the JD369A, JD370A, JG238A and JG239A Switches.

Note 5   Each switch will only support 1 JG136A and 1 JG137A Power supply systems.

Note 6   Each switch will only support 1 JD183A Power supply.

Options for External/Redundant Power Supplies

HPE X290 1000 A JD5 2m RPS Cable   JD187A
HPE X290 500 C 1m RPS Cable   JD184A

Technical Specifications

HP 5500-24G SI Switch (JD369A)

Ports	24 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only	
	4 dual-personality ports; auto-sensing 10/100/1000Base-T or SFP	
	2 port expansion module slots	
	1 RJ-45 serial console port	
	Supports a maximum of 24 autosensing 10/100/1000 ports	
Physical characteristics	Dimensions	17.32(w) x 11.81(d) x 1.72(h) in (44 x 30 x 4.36 cm) (1U height)
	Weight	9.92 lb (4.5 kg)
Memory and processor	128 MB SDRAM; Packet buffer size: 2 MB, 16 MB flash	
Mounting and enclosure	Mounts in an EIA standard 19-in. telco rack or equipment cabinet (hardware included)	
Performance	1000 Mb Latency	< 3.2 µs
	10 Gbps Latency	< 2.6 µs
	Throughput	up to 107.2 million pps
	Routing/Switching capacity	144 Gb/s
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	10% to 90%, noncondensing
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Nonoperating/Storage relative humidity	5% to 95%, noncondensing
	Acoustic	ISO 7779
Electrical characteristics	Maximum heat dissipation	273 BTU/hr (288.02 kJ/hr)
	Voltage	100 - 240 VAC, rated
	Maximum power rating	80 W
	Frequency	50/60 Hz
	Notes	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.
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; CAN/CSA-C22.2 No. 60950-1; EN 60950-1/A11; FDA 21 CFR Subchapter J; ROHS Compliance	

Technical Specifications

Emissions	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; ICES-003 Class A; ANSI C63.4 2003; ETSI EN 300 386 V1.3.3; AS/NZS CISPR22 Class A; EN 61000-3-2; EN 61000-3-3; EN 61000-4-2; EN 61000-4-3; EN 61000-4-4; EN 61000-4-5; EN 61000-4-6; EN 61000-4-11; EN 61000-3-2:2006; EN 61000-3-3:1995 +A1:2001+A2:2005; EMC Directive 2004/108/EC; FCC (CFR 47, Part 15) Class A
Management	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager
Services	Refer to the Hewlett Packard Enterprise website at: http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

HP 5500-48G SI Switch (JD370A)

Ports	48 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Media Type: Auto-MDIX; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only	
	4 dual-personality ports; auto-sensing 10/100/1000Base-T or SFP	
	2 port expansion module slots	
	1 RJ-45 serial console port	
	Supports a maximum of 48 autosensing 10/100/1000 ports	
Physical characteristics	Dimensions	17.32(w) x 11.81(d) x 1.72(h) in (44 x 30 x 4.36 cm) (1U height)
	Weight	11.02 lb (5 kg)
Memory and processor	128 MB SDRAM; Packet buffer size: 4 MB, 16 MB flash	
Mounting and enclosure	Mounts in an EIA standard 19-in. telco rack or equipment cabinet (hardware included)	
Performance	1000 Mb Latency	< 3.2 µs
	10 Gbps Latency	< 2.6 µs
	Throughput	up to 142.9 million pps
	Routing/Switching capacity	192 Gb/s
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	10% to 90%, noncondensing
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Nonoperating/Storage relative humidity	5% to 95%, noncondensing
	Acoustic	ISO 7779
Electrical characteristics	Maximum heat dissipation	410 BTU/hr (432.55 kJ/hr)
	Voltage	100 - 240 VAC, rated

Technical Specifications

	Maximum power rating	120 W
	Frequency	50/60 Hz
	Notes	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.
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; CAN/CSA-C22.2 No. 60950-1; EN 60950-1/A11; FDA 21 CFR Subchapter J; ROHS Compliance
Emissions		FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; ICES-003 Class A; ANSI C63.4 2003; ETSI EN 300 386 V1.3.3; AS/NZS CISPR22 Class A; EN 61000-3-2; EN 61000-3-3; EN 61000-4-2; EN 61000-4-3; EN 61000-4-4; EN 61000-4-5; EN 61000-4-6; EN 61000-4-11; EN 61000-3-2:2006; EN 61000-3-3:1995 +A1:2001+A2:2005; EMC Directive 2004/108/EC; FCC (CFR 47, Part 15) Class A
Management		IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager
Services		Refer to the Hewlett Packard Enterprise website at: http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

HP 5500-24G-PoE+ SI Switch with 2 Interface Slots (JG238A)

Ports		24 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+) Media Type: Auto-MDIX Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only
		4 dual-personality ports; auto-sensing 10/100/1000Base-T or SFP
		2 port expansion module slots
		1 RJ-45 serial console port
		Supports a maximum of 24 autosensing 10/100/1000 ports
Physical characteristics	Dimensions	17.32(w) x 16.54(d) x 1.72(h) in (43.99 x 42.01 x 4.37 cm) (1U height)
	Weight	13.21 lb (5.99 kg)
Memory and processor		128 MB SDRAM; Packet buffer size: 2 MB, 16 MB flash
Mounting and enclosure		Mounts in an EIA standard 19-in. telco rack or equipment cabinet (hardware included)
Performance	1000 Mb Latency	< 3.2 µs
	10 Gbps Latency	< 2.6 µs
	Throughput	up to 107.2 million pps
	Routing/Switching capacity	144 Gb/s
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)

Technical Specifications

	Operating relative humidity	10% to 90%, noncondensing
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Nonoperating/Storage relative humidity	5% to 95%, noncondensing
	Acoustic	ISO 7779
Electrical characteristics	Maximum heat dissipation	290 BTU/hr (305.95 kJ/hr)
	Voltage	100 - 240 VAC, rated
	Maximum power rating	455 W
	PoE power	370 W
	Frequency	50/60 Hz
	Notes	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. PoE power is the power supplied by the internal power supply. It is dependent on the type and quantity of power supplies and may be supplemented with the use of an external power supply (EPS).
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; CAN/CSA-C22.2 No. 60950-1; EN 60950-1/A11; FDA 21 CFR Subchapter J; ROHS Compliance
Emissions		FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; ICES-003 Class A; ANSI C63.4 2003; ETSI EN 300 386 V1.3.3; AS/NZS CISPR22 Class A; EN 61000-3-2; EN 61000-3-3; EN 61000-4-2; EN 61000-4-3; EN 61000-4-4; EN 61000-4-5; EN 61000-4-6; EN 61000-4-11; EN 61000-3-2:2006; EN 61000-3-3:1995 +A1:2001+A2:2005; EMC Directive 2004/108/EC; FCC (CFR 47, Part 15) Class A
Management		IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager
Services		Refer to the Hewlett Packard Enterprise website at: http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

HP 5500-48G-PoE+ SI Switch with 2 Interface Slots (JG239A)

Ports	48 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+) Media Type: Auto-MDIX Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only
	4 dual-personality ports; auto-sensing 10/100/1000Base-T or SFP
	2 port expansion module slots
	1 RJ-45 serial console port
	Supports a maximum of 48 autosensing 10/100/1000 ports

Technical Specifications

Physical characteristics	Dimensions	17.32(w) x 16.54(d) x 1.72(h) in (43.99 x 42.01 x 4.37 cm) (1U height)
	Weight	16.53 lb (7.5 kg)
Memory and processor	128 MB SDRAM; Packet buffer size: 4 MB, 16 MB flash	
Mounting and enclosure	Mounts in an EIA standard 19-in. telco rack or equipment cabinet (hardware included)	
Performance	1000 Mb Latency	< 3.2 µs
	10 Gbps Latency	< 2.6 µs
	Throughput	up to 142.9 million pps
	Routing/Switching capacity	192 Gb/s
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	10% to 90%, noncondensing
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Nonoperating/Storage relative humidity	5% to 95%, noncondensing
	Acoustic	ISO 7779
Electrical characteristics	Maximum heat dissipation	444 BTU/hr (468.42 kJ/hr)
	Voltage	100 - 240 VAC, rated
	Maximum power rating	870 W
	PoE power	740 W
	Frequency	50/60 Hz
	Notes	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. PoE power is the power supplied by the internal power supply. It is dependent on the type and quantity of power supplies and may be supplemented with the use of an external power supply (EPS). With AC input: the maximum power consumption is 500 W; PoE power is 370 W.
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; CAN/CSA-C22.2 No. 60950-1; EN 60950-1/A11; FDA 21 CFR Subchapter J; ROHS Compliance	
Emissions	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; ICES-003 Class A; ANSI C63.4 2003; ETSI EN 300 386 V1.3.3; AS/NZS CISPR22 Class A; EN 61000-3-2; EN 61000-3-3; EN 61000-4-2; EN 61000-4-3; EN 61000-4-4; EN 61000-4-5; EN 61000-4-6; EN 61000-4-11; EN 61000-3-2:2006; EN 61000-3-3:1995 +A1:2001+A2:2005; EMC Directive 2004/108/EC; FCC (CFR 47, Part 15) Class A	

Technical Specifications

Management	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager
Services	Refer to the Hewlett Packard Enterprise website at: http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

Standards and protocols (applies to all products in series)

Device management
RFC 1157 SNMPv1/v2c
RFC 1305 NTPv3
RFC 1901 (Community based SNMPv2)
RFC 2452 MIB for TCP6
RFC 2454 MIB for UDP6
RFC 2573 (SNMPv3 Applications)
RFC 2576 (Coexistence between SNMP V1, V2, V3)
RFC 2819 RMON
RFC 3410 (Management Framework)
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 Secure Shell

General protocols
IEEE 802.1ad Q-in-Q
IEEE 802.1D MAC Bridges
IEEE 802.1p Priority
IEEE 802.1Q (GVRP)
IEEE 802.1s (MSTP)
IEEE 802.1w Rapid Reconfiguration of Spanning Tree
IEEE 802.3ab 1000BASE-T
IEEE 802.3ad Link Aggregation (LAG)
IEEE 802.3ae 10-Gigabit Ethernet
IEEE 802.3af Power over Ethernet
IEEE 802.3i 10BASE-T
IEEE 802.3u 100BASE-X
IEEE 802.3x Flow Control
IEEE 802.3z 1000BASE-X
RFC 791 IP
RFC 792 ICMP
RFC 793 TCP
RFC 854 TELNET
RFC 925 Multi-LAN Address Resolution
RFC 950 Internet Standard Subnetting Procedure
RFC 951 BOOTP
RFC 1058 RIPv1
RFC 1122 Host Requirements
RFC 1141 Incremental updating of the Internet checksum
RFC 1213 Management Information Base for

RFC 2710 Multicast Listener Discovery (MLD) for IPv6
RFC 2893 Transition Mechanisms for IPv6 Hosts and Routers
RFC 2925 Definitions of Managed Objects for Remote Ping, Traceroute, and Lookup Operations (Ping only)
RFC 3056 Connection of IPv6 Domains via IPv4 Clouds
RFC 3162 RADIUS and IPv6
RFC 3306 Unicast-Prefix-based IPv6 Multicast Addresses
RFC 3315 DHCPv6 (client and relay)
RFC 3484 Default Address Selection for IPv6
RFC 3493 Basic Socket Interface Extensions for IPv6
RFC 3513 IPv6 Addressing Architecture
RFC 3542 Advanced Sockets API for IPv6
RFC 3587 IPv6 Global Unicast Address Format
RFC 3596 DNS Extension for IPv6
RFC 3810 MLDv2 for IPv6
RFC 4113 MIB for UDP
RFC 4443 ICMPv6

MIBs
RFC 1212 Concise MIB Definitions
RFC 1213 MIB II
RFC 1724 RIPv2 MIB
RFC 1757 Remote Network Monitoring MIB
RFC 2012 SNMPv2 MIB for TCP
RFC 2013 SNMPv2 MIB for UDP
RFC 2233 Interface MIB
RFC 2452 IPV6-TCP-MIB
RFC 2454 IPV6-UDP-MIB
RFC 2465 IPv6 MIB
RFC 2466 ICMPv6 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
RFC 2819 RMON MIB

Technical Specifications

Network Management of TCP/IP-based internets
RFC 1305 NTPv3
RFC 1350 TFTP Protocol (revision 2)
RFC 1519 CIDR
RFC 1542 BOOTP Extensions
RFC 1723 RIP v2
RFC 1812 IPv4 Routing
RFC 1887 An Architecture for IPv6 Unicast
Address
Allocation
RFC 2131 DHCP
RFC 2236 IGMP Snooping
RFC 2375 IPv6 Multicast Address Assignments
RFC 2581 TCP Congestion Control
RFC 2616 HTTP Compatibility v1.1
RFC 2644 Directed Broadcast Control
RFC 2865 Remote Authentication Dial In User
Service (RADIUS)
RFC 2866 RADIUS Accounting
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 (SNMPv3)
RFC 3415 View-based Access Control Model
(VACM) for the Simple Network Management
Protocol (SNMP)
RFC 3417 Transport Mappings for the Simple
Network Management Protocol (SNMP)
RFC 3484 Default Address Selection for Internet
Protocol version 6 (IPv6)
RFC 3493 Basic Socket Interface Extensions for
IPv6
RFC 3542 Advanced Sockets Application
Program
Interface (API) for IPv6
RFC 3587 IPv6 Global Unicast Address Format
RFC 3596 DNS Extensions to Support IP
Version 6
RFC 4113 Management Information Base for
the
User Datagram Protocol (UDP)
RFC 4213 Basic IPv6 Transition Mechanisms
RFC 4443 Internet Control Message Protocol
(ICMPv6) for the Internet Protocol Version 6
(IPv6)
Specification
802.1r - GARP Proprietary Attribute Registration
Protocol (GPRP)

IPv6
RFC 1887 IPv6 Unicast Address Allocation
Architecture
RFC 1981 IPv6 Path MTU Discovery

RFC 2925 Ping MIB
RFC 3414 SNMP-User based-SM MIB
RFC 3415 SNMP-View based-ACM MIB
RFC 4113 UDP MIB

Network management
IEEE 802.1AB Link Layer Discovery Protocol
(LLDP)
IEEE 802.1D (STP)
RFC 1157 SNMPv1
RFC 1212 Concise MIB definitions
RFC 1215 SNMP Generic traps
RFC 1757 RMON 4 groups: Stats, History,
Alarms and Events
RFC 1901 SNMPv2 Introduction
RFC 1918 Private Internet Address Allocation
RFC 2373 Remote Network Monitoring
Management Information Base for High Capacity
Networks
RFC 2571 An Architecture for Describing SNMP
Management Frameworks
RFC 2572 Message Processing and Dispatching
for the Simple Network Management Protocol
(SNMP)
RFC 2573 SNMP Applications
RFC 2573 SNMPv3 Applications
RFC 2574 SNMPv3 User-based Security Model
(USM)
RFC 2575 SNMPv3 View-based Access Control
Model (VACM)
RFC 2576 Coexistence between SNMP versions
RFC 2578 SMIv2
RFC 2581 TCP6
RFC 2819 Four groups of RMON: 1 (statistics),
2 (history), 3 (alarm) and 9 (events)
RFC 2925 Definitions of Managed Objects for
Remote Ping, Traceroute, and Lookup
Operations
RFC 3176 sFlow
RFC 3410 Introduction to Version 3 of the
Internet-standard Network Management
Framework
RFC 3414 SNMPv3 User-based Security Model
(USM)
RFC 3415 SNMPv3 View-based Access Control
Model VACM
ANSI/TIA-1057 LLDP Media Endpoint Discovery
(LLDP-MED)
SNMPv1/v2c/v3

QoS/CoS
IEEE 802.1p (CoS)
RFC 2474 DSCP DiffServ
RFC 2475 DiffServ Architecture

Technical Specifications

RFC 2080 RIPng for IPv6
RFC 2373 IPv6 Addressing Architecture
RFC 2375 IPv6 Multicast Address Assignments
RFC 2460 IPv6 Specification
RFC 2461 IPv6 Neighbor Discovery
RFC 2462 IPv6 Stateless Address Auto-configuration
RFC 2463 ICMPv6
RFC 2464 Transmission of IPv6 over Ethernet Networks
RFC 2475 IPv6 DiffServ Architecture

RFC 2597 DiffServ Assured Forwarding (AF)
RFC 2598 DiffServ Expedited Forwarding (EF)

Security
IEEE 802.1X Port Based Network Access Control
RFC 1492 TACACS+
RFC 1918 Address Allocation for Private Internets
RFC 2865 RADIUS Authentication
RFC 2866 RADIUS Accounting
Access Control Lists (ACLs)
MAC Authentication
Port Security
SSHv2 Secure Shell

Accessories

HPE 5500 SI Switch Series accessories

Modules

HP 5500 2-port 10GbE XFP Module	JD359B
HP 5500 2-port 10GbE Local Connect Module	JD360B
HP 5500 1-port 10GbE XFP Module	JD361B
HPE FlexNetwork 5500/5120 2-port 10GbE SFP+ Module	JD368B
HPE FlexNetwork 5500/4800 2-port GbE SFP Module	JD367A
HPE FlexNetwork 5500/5120 2-port 10GBASE-T Module	JG535A
HP 5130/5510 10GBASE-T 2-port Module	JH156A
HP 5130/5510 10GBASE-T 2-port Module	JH156A

Transceivers

HPE X125 1G SFP LC LH40 1310nm Transceiver	JD061A
HPE X120 1G SFP LC LH40 1550nm Transceiver	JD062A
HPE X125 1G SFP LC LH70 Transceiver	JD063B
HPE X130 10G SFP+ LC SR Transceiver	JD092B
HPE X130 10G SFP+ LC LRM Transceiver	JD093B
HPE X130 10G SFP+ LC LR Transceiver	JD094B
HPE X130 10G SFP+ LC ER 40km Transceiver	JG234A
HPE X130 10G XFP LC LR Single Mode 10km 1310nm Transceiver	JD108B
HPE X130 10G XFP LC SR Transceiver	JD117B
HPE X120 1G SFP LC SX Transceiver	JD118B
HPE X120 1G SFP LC LX Transceiver	JD119B
HPE X135 10G XFP LC ER Transceiver	JD121A
HPE FlexNetwork X240 10G SFP+ to SFP+ 0.65m Direct Attach Copper Cable	JD095C
HPE FlexNetwork X240 10G SFP+ to SFP+ 1.2m Direct Attach Copper Cable	JD096C
HPE FlexNetwork X240 10G SFP+ to SFP+ 3m Direct Attach Copper Cable	JD097C
HPE FlexNetwork X240 10G SFP+ to SFP+ 5m Direct Attach Copper Cable	JG081C
HPE FlexNetwork X240 10G SFP+ SFP+ 7m Direct Attach Copper Cable	JC784C
HPE X120 1G SFP LC BX 10-U Transceiver	JD098B
HPE X120 1G SFP LC BX 10-D Transceiver	JD099B
HPE X120 1G SFP RJ45 T Transceiver	JD089B

Cables

HPE X230 Local Connect 100cm CX4 Cable	JD364B
HPE X230 CX4 to CX4 3m Cable	JD365A
HP LC to LC Multi-mode OM3 2-Fiber 0.5m 1-Pack Fiber Optic Cable	AJ833A
HP LC to LC Multi-mode OM3 2-Fiber 1.0m 1-Pack Fiber Optic Cable	AJ834A
HP LC to LC Multi-mode OM3 2-Fiber 2.0m 1-Pack Fiber Optic Cable	AJ835A
HP LC to LC Multi-mode OM3 2-Fiber 5.0m 1-Pack Fiber Optic Cable	AJ836A
HP LC to LC Multi-mode OM3 2-Fiber 15.0m 1-Pack Fiber Optic Cable	AJ837A
HP LC to LC Multi-mode OM3 2-Fiber 30.0m 1-Pack Fiber Optic Cable	AJ838A
HP LC to LC Multi-mode OM3 2-Fiber 50.0m 1-Pack Fiber Optic Cable	AJ839A

Accessories

HP Premier Flex LC/LC Multi-mode OM4 2 fiber 1m Cable	QK732A
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 2m Cable	QK733A
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 5m Cable	QK734A
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 15m Cable	QK735A
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 30m Cable	QK736A
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 50m Cable	QK737A
HPE X230 Local Connect 50cm CX4 Cable	JD363B

Power Supply

HPE RPS 800 Redundant Power Supply [1]	JD183A
HPE RPS1600 Redundant Power System [1]	JG136A
HPE RPS1600 1600W AC Power Supply [1]	JG137A

Power Cords and Adapters

HPE X290 1000 A JD5 2m RPS Cable	JD187A
HPE X290 500 C 1m RPS Cable	JD184A

[1] Products covered by 1 year warranty. See details at
www.hpe.com/networking/warrantyquickref

Accessory Product Details

NOTE: Details are not available for all accessories. The following specifications were available at the time of publication.

HP 5500 2-port 10GbE XFP Module (JD359B)	Ports	2 XFP 10-GbE ports; Duplex: full only
	Services	Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

HP 5500 1-port 10GbE XFP Module (JD361B)	Ports	1 XFP 10-GbE port; Duplex: full only
	Services	Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

HPE FlexNetwork 5500/4800 2-port GbE SFP Module (JD367A)	Ports	2 SFP 1000 Mbps ports
	Services	Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

HPE X125 1G SFP LC LH40 1310nm Transceiver (JD061A) A small form-factor pluggable SFP Gigabit LH40 transceiver that provides a full duplex Gigabit solution up to 40km on a single-mode fiber.	Ports	1 LC 1000Base-LH port (no IEEE standard exists for 1550 nm optics)	
	Connectivity	Connector type	LC
		Wavelength	1310 nm
	Physical characteristics	Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)
		Full configuration weight	0.04 lb. (0.02 kg)
	Electrical characteristics	Power consumption typical	0.8 W
		Power consumption maximum	1.0 W
	Cabling	Cable type: Single-mode fiber optic, complying with ITU-T G.652; Maximum distance:	

Accessory Product Details

		● 40km distance
		Fiber type Single Mode
	Services	Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

HPE X120 1G SFP LC LH40 1550nm Transceiver (JD062A) A small form-factor pluggable (SFP) Gigabit LH40 transceiver that provides a full-duplex Gigabit solution up to 40 km on a single mode fiber.	Ports	1 LC 1000BASE-LH port (no IEEE standard exists for 1550 nm optics)
	Connectivity	Connector type LC
		Wavelength 1550 nm
	Physical characteristics	Dimensions 2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)
		Full configuration weight 0.04 lb. (0.02 kg)
	Electrical characteristics	Power consumption typical 0.8 W
		Power consumption maximum 1.0 W
	Cabling	Cable type: Single-mode fiber optic, complying with ITU-T G.652; Maximum distance:
		● 40km distance
		Fiber type Single Mode
	Services	Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

Accessory Product Details

HPE X125 1G SFP LC LH70 Transceiver (JD063B)	Ports	1 LC 1000BASE-LH port (no IEEE standard exists for 1550 nm optics)	
A small form-factor pluggable (SFP) Gigabit LH70 transceiver that provides a full-duplex Gigabit solution up to 70km on a single-mode fiber.	Connectivity	Connector type	LC
		Wavelength	1550 nm
	Physical characteristics	Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)
		Full configuration weight	0.04 lb. (0.02 kg)
	Electrical characteristics	Power consumption typical	0.8 W
		Power consumption maximum	1.0 W
	Cabling	Cable type: Single-mode fiber optic, complying with ITU-T G.652; Maximum distance: 70km	
		Fiber type	Single Mode
	Services	Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.	

HPE X120 1G SFP LC SX Transceiver (JD118B)	Ports	1 LC 1000BASE-SX port	
A small form-factor pluggable (SFP) Gigabit SX transceiver that provides a full-duplex Gigabit solution up to 550m on a Multimode fiber.	Connectivity	Connector type	LC
		Wavelength	850 nm
	Physical characteristics	Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)
		Full configuration weight	0.04 lb. (0.02 kg)
	Electrical characteristics	Power consumption typical	0.8 W
		Power consumption maximum	1.0 W
	Cabling	Maximum distance: FDDI Grade distance = 220m OM1 = 275m OM2 = 500m OM3 = Not Specified by standard	
		Cable length	up to 550m
		Fiber type	Multi Mode

Accessory Product Details

	Services	Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

HPE X120 1G SFP LC LX Transceiver (JD119B) A small form-factor pluggable (SFP) Gigabig LX transceiver that provides a full duplex Gigabit solution up to 550m on MMF or 10Km on SMF	Ports	1 SFP 1000BASE-LX port (IEEE 802.3z Type 1000BASE-LX)	
	Connectivity	Connector type	LC
		Wavelength	1300 nm
	Physical characteristics	Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)
		Full configuration weight	0.04 lb. (0.02 kg)
	Electrical characteristics	Power consumption typical	0.8 W
		Power consumption maximum	1.0 W
	Cabling	Cable type: Either single mode or multimode; Maximum distance: 550m for Multimode 10km for Singlemode	
		Fiber type	Both
	Services	Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.	

Accessory Product Details

HPE X120 1G SFP LC BX 10-U Transceiver (JD098B) A small form-factor pluggable (SFP) Gigabit LX-BX10-U transceiver that provides a full duplex Gigabit solution up to 10km on a single mode cable.	Ports	1 LC 1000BASE-BX10 port (IEEE 802.3ah Type 1000BASE-BX10-U); Duplex: full only	
	Connectivity	Connector type	LC
	Physical characteristics	Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)
		Full configuration weight	0.04 lb. (0.02 kg)
	Electrical characteristics	Power consumption typical	0.8 W
		Power consumption maximum	1.0 W
	Cabling	Maximum distance: 10km	
		Fiber type	Single Mode
	Notes	TX 1310nm RX 1490nm	
	Services	Refer to the Hewlett Packard Enterprise website at: http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.	

HPE X120 1G SFP LC BX 10-D Transceiver (JD099B) A small form-factor pluggable (SFP) Gigabit LX-BX10-D transceiver that provides a full duplex Gigabit solution up to 10km on a single mode cable.	Ports	1 LC 1000BASE-BX10 port (IEEE 802.3ah Type 1000BASE-BX10-D); Duplex: full only	
	Connectivity	Connector type	LC
	Physical characteristics	Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)
		Full configuration weight	0.04 lb. (0.02 kg)
	Electrical characteristics	Power consumption typical	0.8 W
		Power consumption maximum	1.0 W
	Cabling	Maximum distance: Up to 10km	
		Fiber type	Single Mode
	Notes	TX 1490nm RX 1310nm	
	Services	Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.	

Accessory Product Details

HPE X120 1G SFP RJ45 T Transceiver (JD089B) A small form factor pluggable (SFP) Gigabit 1000Base-T transceiver that provides a full duplex Gigabit solution up to 100m on a Cat-5+ cable.	Ports	1 RJ-45 1000BASE-T port (IEEE 802.3ab Type 1000BASE-T)
	Connectivity	Connector type RJ-45
	Physical characteristics	Dimensions 2.71(d) x 0.54(w) x 0.55(h) in. (6.88 x 1.37 x 1.4 cm)
		Full configuration weight 0.07 lb. (0.03 kg)
	Electrical characteristics	Power consumption typical 0.8 W
		Power consumption maximum 1.0 W
	Cabling	Cable type: 1000BASE-T: Category 5 (5E or better recommended), 100 Ù differential 4-pair unshielded twisted pair (UTP) or shielded twisted pair (STP) balanced, complying with IEEE 802.3ab 1000BASE-T; Maximum distance: 100m
	Services	Refer to the Hewlett Packard Enterprise website at: http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

HP LC to LC Multi-mode OM3 2-Fiber 0.5m 1-Pack Fiber Optic Cable (AJ833A)	Cabling	Cable type: 50/125 µm (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m Maximum distance: 10Gbps Transfer Rate (Ethernet): 300m
	Notes	Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end. - Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um - Optical glass: Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm. - Optical glass: Bandwidth: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links. - CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber and designed to work in both the 850 and 1300 nm wavelength windows. - BULK CABLE & CABLE ASSEMBLY CONFIGURATION: - Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.

Accessory Product Details

- Jacket Color: Aqua for OM3 multimode per TIA 598
- Boot Color: White
- Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters.
- Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.
- Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg

Services	Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

HP LC to LC Multi-mode OM3 2-Fiber 1.0m 1-Pack Fiber Optic Cable (AJ834A)

Cabling	Cable type: 50/125 µm (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m Maximum distance: 10Gbps Transfer Rate (Ethernet): 300m
Notes	Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um
- Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.
- Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links.
- CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows.
- BULK CABLE & CABLE ASSEMBLY CONFIGURATION:
- Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.
- Jacket Color: Aqua for OM3 multimode per TIA 598
- Boot Color: White
- Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters.
- Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.
- Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg

Accessory Product Details

	Services	Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

HP LC to LC Multi-mode OM3 2-Fiber 2.0m 1-Pack Fiber Optic Cable (AJ835A)	Cabling	Cable type: 50/125 µm (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m; Maximum distance: 10Gbps Transfer Rate (Ethernet): 300m
	Notes	Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end. • Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um • Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm. • Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links. • CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows. • BULK CABLE & CABLE ASSEMBLY CONFIGURATION: • Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic. • Jacket Color: Aqua for OM3 multimode per TIA 598 • Boot Color: White • Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters. • Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46. • Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg
	Services	Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

Accessory Product Details

HP LC to LC Multi-mode OM3 2-Fiber 5.0m 1-Pack Fiber Optic Cable (AJ836A)	Cabling	Cable type: 50/125 μm core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m; Maximum distance: 10Gbps Transfer Rate (Ethernet): 300m
	Notes	Cable Specs: This specification defines the detail requirements for a tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um
- Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.
- Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links.
- CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows.
- BULK CABLE & CABLE ASSEMBLY CONFIGURATION:
- Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.
- Jacket Color: Aqua for OM3 multimode per TIA 598
- Boot Color: White
- Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters.
- Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.
- Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg

	Services	Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

Accessory Product Details

HP LC to LC Multi-mode OM3 2-Fiber 15.0m 1-Pack Fiber Optic Cable (AJ837A)	Cabling	Cable type: 50/125 µm (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m; Maximum distance: 10Gbps Transfer Rate (Ethernet): 300m
	Notes	Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end. ● Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um ● Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm. ● Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links. ● CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows. ● BULK CABLE & CABLE ASSEMBLY CONFIGURATION: ● Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic. ● Jacket Color: Aqua for OM3 multimode per TIA 598 ● Boot Color: White ● Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters. ● Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46. ● Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg
	Services	Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

Accessory Product Details

| HP LC to LC Multi-mode OM3 2-Fiber 30.0m 1-Pack Fiber Optic Cable (AJ838A) | Cabling | Cable type:
50/125 µm (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m;

Maximum distance:
10Gbps Transfer Rate (Ethernet): 300m |
| | Notes | Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end. |

- Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um
- Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.
- Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links.
- CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows.
- BULK CABLE & CABLE ASSEMBLY CONFIGURATION:
- Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.
- Jacket Color: Aqua for OM3 multimode per TIA 598
- Boot Color: White
- Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters.
- Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.
- Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg

| | Services | Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office. |

Accessory Product Details

HP LC to LC Multi-mode OM3 2-Fiber 50.0m 1-Pack Fiber Optic Cable (AJ839A)	Cabling	Cable type: 50/125 µm (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m; Maximum distance: 10Gbps Transfer Rate (Ethernet): 300m
	Notes	Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um
- Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.
- Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links.
- CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows.
- BULK CABLE & CABLE ASSEMBLY CONFIGURATION:
- Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.
- Jacket Color: Aqua for OM3 multimode per TIA 598
- Boot Color: White
- Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters.
- Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.
- Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg

	Services	Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

Accessory Product Details

HP Premier Flex LC/LC Multi-mode OM4 2 fiber 1m Cable (QK732A)	Notes	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end. Core Diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um Bandwidth: 3000 MHz-km @ 850nm (Laser) Jacket Color: Blue Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic Boot Color: White Outer Jacket Print: HPE PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable. Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45
	Services	Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 2m Cable (QK733A)	Notes	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end. Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um Bandwidth: 3000 MHz-km @ 850nm (Laser) Jacket Color: Blue Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic Boot Color: White Outer Jacket Print: HPE PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable. Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45
	Services	Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

Accessory Product Details

HP Premier Flex LC/LC Multi-mode OM4 2 fiber 5m Cable (QK734A)	Notes	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.
		Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um Bandwidth: 3000 MHz-km @ 850nm (Laser) Jacket Color: Blue Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic Boot Color: White Outer Jacket Print: HPE PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable. Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45
	Services	Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 15m Cable (QK735A)	Notes	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.
		Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um Bandwidth: 3000 MHz-km @ 850nm (Laser) Jacket Color: Blue Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic Boot Color: White Outer Jacket Print: HPE PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable. Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45
	Services	Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

Accessory Product Details

HP Premier Flex LC/LC Multi-mode OM4 2 fiber 30m Cable (QK736A)	Notes	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end. Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um Bandwidth: 3000 MHz-km @ 850nm (Laser) Jacket Color: Blue Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic Boot Color: White Outer Jacket Print: HPE PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable. Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45
	Services	Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 50m Cable (QK737A)	Notes	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end. Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um Bandwidth: 3000 MHz-km @ 850nm (Laser) Jacket Color: Blue Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic Boot Color: White Outer Jacket Print: HPE PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable. Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45
	Services	Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

HPE RPS1600

Accessory Product Details

Redundant Power System (JG136A)			Restrictions: two -56V/25A DC(PoE); six -56V/8A DC(non-PoE)
	Physical characteristics	Dimensions	15.63(d) x 17.32(w) x 1.74(h) in. (39.7 x 44 x 4.42 cm)
		Weight	14.11 lb. (6.4 kg)
		Full configuration weight	16.75 lb. (7.6 kg)
	Environment	Operating temperature	14°F to 122°F (-10°C to 50°C)
		Operating relative humidity	5% to 95%
		Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
		Nonoperating/Storage relative humidity	5% to 95%
		Altitude	up to 13,123 ft. (4 km)
		Acoustic	Pressure: 53 dB; ISO 7779, ISO 9296
	Electrical characteristics	Voltage	100-120/200-240 VAC
		Current	30/60 A
		Idle power	38 W
		Maximum power rating	3550 W
		RPS power	3200 W
		PoE power	2800 W
		RPS	-55 V
		PoE	-55 V
		Frequency	50/60 Hz
		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. With one RPS1600 Power Supply, the PRS1600 Redundant Power System can provide 1600W power output; With two PRS1600 Power Supplies, the output power is 3200W.
	Safety		CE Labeled; UL 60950-1; IEC 60950-1; ICES-003; FCC Part 15, Subpart B; EU RoHS Compliant; EN 60950-1/A11; C-Tick; VCCI Class A; ROHS Compliance; EN 300386

Accessory Product Details

	Services		Refer to the Hewlett Packard Enterprise website at: http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.
HPE RPS1600 1600W AC Power Supply (JG137A)	Physical characteristics	Dimensions	8.19(d) x 4.96(w) x 1.63(h) in. (20.8 x 12.6 x 4.15 cm)
		Weight	3.02 lb. (1.37 kg)
	Environment	Operating temperature	14°F to 122°F (-10°C to 50°C)
		Operating relative humidity	5% to 95%
		Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
		Nonoperating/Storage relative humidity	5% to 95%
	Electrical characteristics	Voltage	100-120/200-240 VAC
		Current	15/30 A
		Maximum power rating	1600 W
		Frequency	50/60 Hz
		Notes	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.
	Services		Refer to the Hewlett Packard Enterprise website at: http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

Summary of Changes

Date	Version History	Action	Description of Change
20-May-2016	From Version 16 to 17	Changed	Edits made on Configuration and Accessories sections
25-Mar-2016	From Version 15 to 16	Changed	Product overview, Features and benefits, Configuration, Technical Specifications and Accessories updated.
01-Dec-2014	From Version 14 to 15	Changed	Warranty and support updated
11-Nov-2013	From Version 13 to 14	Changed	Notes and Cables were revised in Configuration.
30-Sep-2013	From Version 12 to 13	Changed	HP 5500/5120 2p 10GBASE-T Module was added to Modules HP X110 100M SFP LC FX Dual Mode Transceiver and HP X110 100M SFP LC LX10 Transceiver were removed from Accessories
12-Jul-2013	From Version 11 to 12	Changed	Acoustic was added to Technical Specifications Models were removed throughout
05-Jul-2013	From Version 10 to 11	Added	The Configuration section was added.
10-Jun-2013	From Version 8 to 10	Added	OM4 cables were added.
14-May-2013	From Version 7 to 8	Changed	Updated Accessories, Features and Benefits, and the weights and dimensions for each model.
07-Nov-2012	From Version 6 to 7	Changed	The product name was updated throughout the document.
30-Sep-2012	From Version 5 to 6	Added	Accessory Product Details was added.
16-Mar-2012	From Version 4 to 5	Changed	The Features and Benefits were revised.
16-Aug-2011	From Version 2 to 4	Added	Models were added.
16-Mar-2011	From Version 1 to 2	Changed	Accessories were revised.

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