Overview

Models

HP E5500-24G Switch	JE088A
HP E5500-48G Switch	JE090A
HP E5500-24G-PoE Switch	JE092A
HP E5500-48G-PoE Switch	JE094A
HP E5500-24G-SFP Switch	JE096A

Key features

- Enterprise-class features
- Priced for small to mid-sized environments
- Out-of-the-box setup when using defaults
- Optional 10 GbE uplink connections
- Convergence support for today's business

Product overview

Smart, voice-ready HP E5500G Gigabit switches deliver outstanding performance, security, and reliability for robust switching to the enterprise edge. The series consists of Layer 2/3/4 Gigabit Ethernet and PoE switches with advanced features for the most demanding applications. Stackable up to eight units high, one stack can provide up to 448 Gigabit Ethernet ports with 96 Gbps of resilient stacking bandwidth, all centrally managed with high-end enterprise chassis-class availability. The latest traffic prioritization and automatic assignment of VoIP traffic to dedicated VLANs help ensure time-sensitive traffic gets the priority necessary for optimal communications. Further expansion is possible in conjunction with other HP switch series, allowing single IP management for up to 32 devices.

Features and benefits

Quality of Service (QoS)

- Traffic prioritization (IEEE 802.1p): allows real-time traffic classification into eight priority levels mapped to eight queues
- Class of Service (CoS): sets the IEEE 802.1p priority tag based on IP address, IP Type of Service (ToS), Layer 3 protocol, TCP/UDP port number, source port, and DiffServ
- Rate limiting: sets per-port ingress enforced maximums and per-port, per-queue guaranteed minimums
- Bandwidth shaping:
  - Rate limiting: provides per-port, ingress-based enforced bandwidth maximums
  - Guaranteed minimums: provides per-port, per-queue egress-based guaranteed bandwidth minimums

Management

- Remote configuration and management: is available through a secure Web browser or a command-line interface (CLI)
- Manager and operator privilege levels: enable read-only (operator) and read-write (manager) access on CLI and Web browser management interfaces
- Management VLAN: segments traffic to and from management interfaces, including CLI/telnet, a Web browser interface, and SNMP
- RADIUS accounting support: separates RADIUS accounting server support per SSID; provides detailed session, usage, and billing information for each client activity
- IEEE 802.1ab LLDP discovery: advertises and receives management information from adjacent devices on a network

Overview

- Multiple configuration files: can be stored to the flash image
- Dual flash images: provide independent primary and secondary operating system files for backup while upgrading
- Secure Web GUI: provides a secure, easy-to-use graphical interface for configuring the module via HTTPS
- Command-line interface (CLI): provides a secure, easy-to-use command-line interface for configuring the module via SSH or a switch console; provides direct real-time session visibility
- SNMPv1, v2c, and v3: facilitate centralized discovery, monitoring, and secure management of networking devices
- 3Com-heritage Comware V3 Operating System: CLI and Web user interface in common with HP E4XXX and E55XX series switches
- Port mirroring: enables traffic on a port to be simultaneously sent to a network analyzer for monitoring

Connectivity

- Auto-MDIX: automatically adjusts for straight-through or crossover cables on all 10/100 and 10/100/1000 ports
- Built-in dual stacking ports: built-in 24 Gbps stacking ports provide wire-speed high-bandwidth resilient stacking up to 96 Gbps bandwidth full duplex, for enterprise-class performance and scalability
- Optional 10 Gigabit Ethernet ports: add 10 Gigabit Ethernet connections for uplinks or high-bandwidth server connections; flexibly support XENPAK or XFP-style 10 Gigabit transceivers
- Optional 8-port SFP module: add up to eight additional wire-speed Gigabit ports for unprecedented Gigabit density in a single 1U enclosure
- Dual-personality functionality: four 10/100/1000 ports or SFP slots for optional fiber connectivity such as Gigabit-SX, -LX, or -LH
- Upgradable IEEE 802.3af Power over Ethernet (PoE): Start with a non-PoE unit and field upgrade to PoE by installing a different power supply; provides up to 15.4 W per port to IEEE 802.3af-compliant PoE-powered devices such as IP phones, wireless access points, and security cameras
- Advanced stacking: locally connect up to eight E5500G switches using built-in stacking ports and manage as a single entity; improves resiliency by spreading aggregated links across multiple stacked units

Manageability

- RMON (remote monitoring): provides advanced monitoring and reporting capabilities for statistics, history, alarms, and events
- Dual flash images: provides independent primary and secondary operating system files for backup while upgrading
- Full-featured console: provides complete control of the switch with a familiar command-line interface (CLI)
- Web interface: allows configuration of the switch from any Web browser on the network
- Multiple configuration files: allow multiple configuration files to be stored to flash image
- Software updates: free downloads from the Web
- IEEE 802.1AB Link Layer Discovery Protocol (LLDP): automated device discovery protocol provides easy mapping using network management applications
- Virtual stacking capability: single IP address management for a virtual stack of up to 255 Comware-based 3Com legacy devices, including HP E4XXX and E55XX series switches

Layer 2 switching

- VLAN support and tagging: support IEEE 802.1Q, with 4094 simultaneous VLAN IDs
- GARP VLAN Registration Protocol (GVRP): allows automatic learning and dynamic assignment of VLANs
- Jumbo packet support: supports up to 9220-byte frame size to improve performance of large data transfers
- IEEE 802.1ad QinQ: increases the scalability of an Ethernet network by providing a hierarchical structure; connects multiple LANs on a high-speed campus or metro network

Layer 3 routing

- Routing protocols: supports static routes, RIP, RIPv2, OSPF, and BGP4
- OSPF-ECMP (Equal-Cost Multipath): enables multiple equal-cost links in OSPF environment to increase link redundancy and scale bandwidth

Overview

Security

- Access control lists (ACLs): provide IP Layer 3 filtering based on source/destination IP address/subnet and source/destination TCP/UDP port number
- RADIUS/TACACS+: eases switch management security administration by using a password authentication server
- Secure Shell (SSHv2): encrypts all transmitted data for secure, remote command-line interface (CLI) access over IP networks
- Secure Web management with HTTPS and SSL: encrypts all HTTP traffic, allowing secure access to the browser-based management GUI in the switch
- IEEE 802.1X and RADIUS network logins: control port-based access for authentication and accountability
- Port security: allows access only to specified MAC addresses, which can be learned or specified by the administrator
- MAC address lockout: prevents particular configured MAC addresses from connecting to the network
- Switch management logon security: can require either RADIUS or TACACS+ authentication for secure switch CLI logon
- Secure management access: securely encrypts all access methods (CLI, GUI, or MIB) through SSHv2, SSL, and/or SNMPv3
- Custom banner: displays security policy when users log in to the switch
- Automatic VLAN assignment: automatically assigns users to the appropriate VLAN based on their identity and location and the time of day
- IEEE 802.1X: provides port-based user authentication with support for Extensible Authentication Protocol (EAP) MD5, TLS, TTLS, and PEAP with choice of AES, TKIP, and static or dynamic WEP encryption for protecting wireless traffic between authenticated clients and the access point
- Management password: provides security so that only authorized access to the Web browser interface is allowed
- Dynamic IP lockdown: works with DHCP protection to block traffic from unauthorized hosts, preventing IP source address spoofing
- 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

Convergence

- LLDP-MED (Media Endpoint Discovery): is a standard extension of LLDP that stores values for parameters such as QoS and VLAN to automatically configure network devices such as IP phones
- IEEE 802.1AB Link Layer Discovery Protocol (LLDP): is an automated device discovery protocol for easy mapping by network management applications
- Automated voice VLAN assignment: recognizes IP phones and automatically assigns voice traffic to a dedicated VLAN for IP phones

Warranty and support

- Lifetime warranty: for as long as you own the product with advance replacement and next-business-day delivery (available in most countries)*
- Electronic and telephone support: limited electronic and telephone support is available from HP; refer to: www.hp.com/networking/warranty for details on the support provided and the period during which support is available
- Software releases: refer to: www.hp.com/networking/warranty for details on the software releases provided and the period during which software releases are available for your product(s)

* Hardware warranty replacement for as long as you own the product, with next business day advance replacement (available in most countries) with a five-year hardware warranty replacement for the disk drive included with HP AllianceONE Services zl Module, HP Threat Management Services zl Module, HP PCM+ Agent with AllianceONE Services zl Module, and HP E-MSM765 zl Mobility Controller. For details, refer to the HP Software License, Warranty, and Support booklet at: www.hp.com/networking/warranty.

HP E5500-24G Switch (JE088A)

Ports	20 auto-negotiating 10/100/1000 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, IEEE 802.3ab Type 1000Base-T)	
	4 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-TX; IEEE 802.3ab 1000Base-T Gigabit Ethernet) or as an SFP slot (for use with SFP transceivers)	
	2 stacking ports; 24Gbps each	
	1 RJ-45 serial console port	
	1 open module slot; supports a maximum of 2 10-GbE ports, or 8 GbE ports	
Physical characteristics	Dimensions	17.7(d) x 17.4(w) x 1.7(h) in. (44.96 x 44.2 x 4.32 cm) (1U height)
	Weight	15.65 lb. (7.1 kg) standard default PSU
Memory and processor	Processor	Freescale PowerPC 8245 @ 400 MHz, 64 MB RAM, 16 MB flash; packet buffer size: 32 MB
Mounting	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included)	
Performance	Latency	< 10 μs
	Throughput	136.9 million pps
	Routing/Switching capacity	184 Gbps
	Routing table size	2,000 entries
Environment	Operating temperature	32°F to 104°F (0°C to 40°C)
	Operating relative humidity	10% to 95%, non-condensing
	Non-operating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non-operating/Storage relative humidity	10% to 95%, non-condensing
Electrical characteristics	Voltage	100-240 VAC
	Frequency	50 / 60 Hz
	Notes	Customer-swappable power supply unit enables non-PoE models to be easily upgraded to PoE capability
Safety	UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03; EU RoHS Compliant	
Emissions	FCC part 15 Class A; VCCI Class A; CISPR 22 Class A; EN 55024; EN 55022 1998 Class A; EN 61000-3-2 2000, 61000-3-3; ICES-003 Class A	
Management	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB	
Notes	The slot supports a maximum of two 10-GbE ports, or eight GbE ports. Units have swappable PSU. Can upgrade from non-PoE to PoE.	
Services	3-year, 4-hour onsite, 13x5 coverage for hardware (UV918E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UV921E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UV924E) 3-year, 24x7 SW phone support, software updates (UV927E) Installation with minimum configuration, system-based pricing (UW451E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UV919E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UV922E)	

4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV925E)
4-year, 24x7 SW phone support, software updates (UV928E)
5-year, 4-hour onsite, 13x5 coverage for hardware (UV920E)
5-year, 4-hour onsite, 24x7 coverage for hardware (UV923E)
5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV926E)
5-year, 24x7 SW phone support, software updates (UV929E)
3 Yr 6 hr Call-to-Repair Onsite (UW978E)
4 Yr 6 hr Call-to-Repair Onsite (UW979E)
5 Yr 6 hr Call-to-Repair Onsite (UW980E)

Refer to the HP website at: www.hp.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 HP sales office.

Standards and protocols (applies to all products in series)

Device management
RFC 1901-1907 SNMPv2c, SMIv2 and Revised MIB-II
RFC 1908 (SNMP v1/2 Coexistence)
RFC 2576 (Coexistence between SNMP V1, V2, V3)
RFC 2578-2580 SMIv2
RFC 2579 (SMIv2 Text Conventions)
RFC 2580 (SMIv2 Conformance)
RFC 2819 (RMON groups Alarm, Event, History and Statistics only)
RFC 2819 RMON
RFC 3410 (Management Framework)
RFC 3416 (SNMP Protocol Operations v2)
RFC 3417 (SNMP Transport Mappings)
SNMP v3 and RMON RFC support

General protocols
IEEE 802.1D MAC Bridges
IEEE 802.1Q VLANs
IEEE 802.1s (MSTP)
IEEE 802.1v VLAN classification by Protocol and Port
IEEE 802.1w Rapid Reconfiguration of Spanning Tree
IEEE 802.3 Type 10BASE-T
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 768 UDP
RFC 783 TFTP Protocol (revision 2)
RFC 791 IP
RFC 792 ICMP

MIBs
RFC 1213 MIB II
RFC 1724 RIPv2 MIB
RFC 1850 OSPFv2 MIB
RFC 2021 RMONv2 MIB
RFC 2233 Interface MIB
RFC 2613 SMON MIB
RFC 2618 RADIUS Client MIB
RFC 2620 RADIUS Accounting MIB
RFC 2665 Ethernet-Like-MIB
RFC 2674 802.1p and IEEE 802.1Q Bridge MIB
RFC 4188 (Bridge MIB)

Network management
RFC 1157 SNMPv1
RFC 1757 RMON 4 groups: Stats, History, Alarms and Events
RFC 2570 SNMPv3 Overview
RFC 2571 SNMP Management Frameworks
RFC 2572 SNMPv3 Message Processing
RFC 2573 SNMPv3 Applications
RFC 2574 SNMPv3 User-based Security Model (USM)
RFC 2575 SNMPv3 View-based Access Control Model (VACM)
RFC 3414 SNMPv3 User-based Security Model (USM)
RFC 3415 SNMPv3 View-based Access Control Model VACM)

OSPF
RFC 1253 OSPFv2 MIB
RFC 1583 OSPFv2
RFC 1587 OSPF NSSA
RFC 1850 OSPFv2 Management Information Base (MIB), traps
RFC 2154 OSPF w/ Digital Signatures (Password, MD-5)

RFC 793 TCP
RFC 826 ARP
RFC 1058 RIPv1
RFC 1812 IPv4 Routing
RFC 2338 VRRP
RFC 2644 Directed Broadcast Control

IP multicast
RFC 1112 IGMP
RFC 2236 IGMPv2
RFC 2362 PIM Sparse Mode

RFC 2328 OSPFv2

QoS/CoS
IEEE 802.1P (CoS)

Security
IEEE 802.1X Port Based Network Access Control

HP E5500-48G Switch (JE090A)

Ports	44 auto-negotiating 10/100/1000 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, IEEE 802.3ab Type 1000Base-T)	
	4 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-TX; IEEE 802.3ab 1000Base-T Gigabit Ethernet) or as an SFP slot (for use with SFP transceivers)	
	2 stacking ports; 24Gbps each	
	1 RJ-45 serial console port	
	1 open module slot; supports a maximum of 2 10-GbE ports, or 8 GbE ports	
Physical characteristics	**Dimensions**	17.7(d) x 17.4(w) x 1.7(h) in. (44.96 x 44.2 x 4.32 cm) (1U height)
	Weight	16.31 lb. (7.4 kg) standard default PSU
Memory and processor	**Processor**	Freescale PowerPC 8245 @ 400 MHz, 64 MB RAM, 16 MB flash; packet buffer size: 32 MB
Mounting	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included)	
Performance	**Latency**	< 10 μs
	Throughput	172.6 million pps
	Routing/Switching capacity	232 Gbps
	Routing table size	2,000 entries
Environment	**Operating temperature**	32°F to 104°F (0°C to 40°C)
	Operating relative humidity	10% to 95%, non-condensing
	Non-operating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non-operating/Storage relative humidity	10% to 95%, non-condensing
Electrical characteristics	**Voltage**	100-240 VAC
	Frequency	50 / 60 Hz
	Notes	Customer-swappable power supply unit enables non-PoE models to be easily upgraded to PoE capability
Safety	UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03; EU RoHS Compliant	
Emissions	FCC part 15 Class A; VCCI Class A; CISPR 22 Class A; EN 55024; EN 55022 1998 Class A; EN 61000-3-2 2000, 61000-3-3; ICES-003 Class A	

Technical Specifications

Management	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB
Notes	The slot supports a maximum of two 10-GbE ports, or eight GbE ports. Units have swappable PSU. Can upgrade from non-PoE to PoE.
Services	3-year, 4-hour onsite, 13x5 coverage for hardware (UV918E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UV921E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UV924E) 3-year, 24x7 SW phone support, software updates (UV927E) Installation with minimum configuration, system-based pricing (UW451E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UV919E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UV922E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV925E) 4-year, 24x7 SW phone support, software updates (UV928E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UV920E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UV923E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV926E) 5-year, 24x7 SW phone support, software updates (UV929E) 3 Yr 6 hr Call-to-Repair Onsite (UW978E) 4 Yr 6 hr Call-to-Repair Onsite (UW979E) 5 Yr 6 hr Call-to-Repair Onsite (UW980E) Refer to the HP website at: www.hp.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 HP sales office.

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IEEE 802.3 Type 10BASE-T
IEEE 802.3ab 1000BASE-T

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IEEE 802.3af Power over Ethernet
IEEE 802.3i 10Base-T
IEEE 802.3u 100BASE-X
IEEE 802.3x Flow Control
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RFC 768 UDP
RFC 783 TFTP Protocol (revision 2)
RFC 791 IP
RFC 792 ICMP
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RFC 826 ARP
RFC 1058 RIPv1
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RFC 2338 VRRP
RFC 2644 Directed Broadcast Control

IP multicast
RFC 1112 IGMP
RFC 2236 IGMPv2
RFC 2362 PIM Sparse Mode

RFC 3415 SNMPv3 View-based Access Control Model VACM)

OSPF
RFC 1253 OSPFv2 MIB
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RFC 1850 OSPFv2 Management Information Base (MIB), traps
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QoS/CoS
IEEE 802.1P (CoS)

Security
IEEE 802.1X Port Based Network Access Control

HP E5500-24G-PoE Switch (JE092A)

Ports	20 auto-negotiating 10/100/1000 PoE ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, IEEE 802.3ab Type 1000Base-T, IEEE 802.3af PoE)	
	4 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 PoE port (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-TX; IEEE 802.3ab 1000Base-T Gigabit Ethernet, IEEE 802.3af) or as an SFP slot (for use with SFP transceivers)	
	2 stacking ports; 24Gbps each	
	1 RJ-45 serial console port	
	1 open module slot; supports a maximum of 2 10-GbE ports, or 8 GbE ports	
Physical characteristics	Dimensions	17.7(d) x 17.4(w) x 1.7(h) in. (44.96 x 44.2 x 4.32 cm) (1U height)
	Weight	16.75 lb. (7.6 kg) standard default PSU
Memory and processor	Processor	Freescale PowerPC 8245 @ 400 MHz, 64 MB RAM, 16 MB flash; packet buffer size: 32 MB
Mounting	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included)	
Performance	Latency	< 10 μs
	Throughput	136.9 million pps
	Routing/Switching capacity	184 Gbps
	Routing table size	2,000 entries
Environment	Operating temperature	32°F to 104°F (0°C to 40°C)
	Operating relative humidity	10% to 95%, non-condensing
	Non-operating/Storage temperature	-40°F to 158°F (-40°C to 70°C)

	Non-operating/Storage relative humidity	10% to 95%, non-condensing
Electrical characteristics	Voltage	100-240 VAC
	Frequency	50 / 60 Hz
	Notes	Customer-swappable power supply unit
Safety	UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03; EU RoHS Compliant	
Emissions	FCC part 15 Class A; VCCI Class A; CISPR 22 Class A; EN 55024; EN 55022 1998 Class A; EN 61000-3-2 2000, 61000-3-3; ICES-003 Class A	
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4-year, 24x7 SW phone support, software updates (UV928E)
5-year, 4-hour onsite, 13x5 coverage for hardware (UV920E)
5-year, 4-hour onsite, 24x7 coverage for hardware (UV923E)
5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV926E)
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RFC 2575 SNMPv3 View-based Access Control Model (VACM)
RFC 3414 SNMPv3 User-based Security Model (USM)
RFC 3415 SNMPv3 View-based Access Control Model VACM)

OSPF
RFC 1253 OSPFv2 MIB
RFC 1583 OSPFv2
RFC 1587 OSPF NSSA
RFC 1850 OSPFv2 Management Information Base (MIB), traps
RFC 2154 OSPF w/ Digital Signatures (Password, MD-5)
RFC 2328 OSPFv2

QoS/CoS
IEEE 802.1P (CoS)

Security
IEEE 802.1X Port Based Network Access Control

HP E5500-48G-PoE Switch (JE094A)

Ports	44 auto-negotiating 10/100/1000 PoE ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, IEEE 802.3ab Type 1000Base-T, IEEE 802.3af PoE)	
	4 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 PoE port (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-TX; IEEE 802.3ab 1000Base-T Gigabit Ethernet, IEEE 802.3af) or as an SFP slot (for use with SFP transceivers)	
	2 stacking ports; 24 Gbps each	
	1 RJ-45 serial console port	
	1 open module slot; supports a maximum of 2 10-GbE ports, or 8 GbE ports	
Physical characteristics	Dimensions	17.7(d) x 17.4(w) x 1.7(h) in. (44.96 x 44.2 x 4.32 cm) (1U height)
	Weight	17.42 lb. (7.9 kg) standard default PSU
Memory and processor	Freescale PowerPC 824 @ 400 MHz, 64 MB RAM, 16 MB flash; packet buffer size: 32 MB	
Mounting	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included)	

Technical Specifications

Performance	Latency	< 10 µs
	Throughput	172.6 million pps
	Routing/Switching capacity	232 Gbps
	Routing table size	2,000 entries
Environment	Operating temperature	32°F to 104°F (0°C to 40°C)
	Operating relative humidity	10% to 95%, non-condensing
	Non-operating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non-operating/Storage relative humidity	10% to 95%, non-condensing
Electrical characteristics	Voltage	100-240 VAC
	Frequency	50 / 60 Hz
	Notes	Customer-swappable power supply unit
Safety	UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03; EU RoHS Compliant	
Emissions	FCC part 15 Class A; VCCI Class A; CISPR 22 Class A; EN 55024; EN 55022 1998 Class A; EN 61000-3-2 2000, 61000-3-3; ICES-003 Class A	
Management	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB	
Notes	The slot supports a maximum of two 10-GbE ports, or eight GbE ports. Units have swappable PSU. Can upgrade from non-PoE to PoE.	
Services	3-year, 4-hour onsite, 13x5 coverage for hardware (UV918E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UV921E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UV924E) 3-year, 24x7 SW phone support, software updates (UV927E) Installation with minimum configuration, system-based pricing (UW451E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UV919E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UV922E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV925E) 4-year, 24x7 SW phone support, software updates (UV928E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UV920E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UV923E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV926E) 5-year, 24x7 SW phone support, software updates (UV929E) 3 Yr 6 hr Call-to-Repair Onsite (UW978E) 4 Yr 6 hr Call-to-Repair Onsite (UW979E) 5 Yr 6 hr Call-to-Repair Onsite (UW980E) Refer to the HP website at: www.hp.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 HP sales office.	

Standards and protocols (applies to all products in series)

Device management
RFC 1901-1907 SNMPv2c, SMIv2 and Revised MIB-II
RFC 1908 (SNMP v1/2 Coexistence)
RFC 2576 (Coexistence between SNMP V1, V2, V3)
RFC 2578-2580 SMIv2
RFC 2579 (SMIv2 Text Conventions)
RFC 2580 (SMIv2 Conformance)
RFC 2819 (RMON groups Alarm, Event, History and Statistics only)
RFC 2819 RMON
RFC 3410 (Management Framework)
RFC 3416 (SNMP Protocol Operations v2)
RFC 3417 (SNMP Transport Mappings)
SNMP v3 and RMON RFC support

General protocols
IEEE 802.1D MAC Bridges
IEEE 802.1Q VLANs
IEEE 802.1s (MSTP)
IEEE 802.1v VLAN classification by Protocol and Port
IEEE 802.1w Rapid Reconfiguration of Spanning Tree
IEEE 802.3 Type 10BASE-T
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 768 UDP
RFC 783 TFTP Protocol (revision 2)
RFC 791 IP
RFC 792 ICMP
RFC 793 TCP
RFC 826 ARP
RFC 1058 RIPv1
RFC 1812 IPv4 Routing
RFC 2338 VRRP
RFC 2644 Directed Broadcast Control

IP multicast
RFC 1112 IGMP
RFC 2236 IGMPv2
RFC 2362 PIM Sparse Mode

MIBs
RFC 1213 MIB II
RFC 1724 RIPv2 MIB
RFC 1850 OSPFv2 MIB
RFC 2021 RMONv2 MIB
RFC 2233 Interface MIB
RFC 2613 SMON MIB
RFC 2618 RADIUS Client MIB
RFC 2620 RADIUS Accounting MIB
RFC 2665 Ethernet-Like-MIB
RFC 2674 802.1p and IEEE 802.1Q Bridge MIB
RFC 4188 (Bridge MIB)

Network management
RFC 1157 SNMPv1
RFC 1757 RMON 4 groups: Stats, History, Alarms and Events
RFC 2570 SNMPv3 Overview
RFC 2571 SNMP Management Frameworks
RFC 2572 SNMPv3 Message Processing
RFC 2573 SNMPv3 Applications
RFC 2574 SNMPv3 User-based Security Model (USM)
RFC 2575 SNMPv3 View-based Access Control Model (VACM)
RFC 3414 SNMPv3 User-based Security Model (USM)
RFC 3415 SNMPv3 View-based Access Control Model VACM)

OSPF
RFC 1253 OSPFv2 MIB
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RFC 1850 OSPFv2 Management Information Base (MIB), traps
RFC 2154 OSPF w/ Digital Signatures (Password, MD-5)
RFC 2328 OSPFv2

QoS/CoS
IEEE 802.1P (CoS)

Security
IEEE 802.1X Port Based Network Access Control

Technical Specifications

HP E5500-24G-SFP Switch (JE096A)

Ports	20 SFP 100/1000 Mbps ports	
	4 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-TX; IEEE 802.3ab 1000Base-T Gigabit Ethernet) or as an SFP slot (for use with SFP transceivers)	
	2 stacking ports; 24Gbps each	
	1 RJ-45 serial console port	
	1 open module slot; supports a maximum of 2 10-GbE ports, or 8 GbE ports	
Physical characteristics	Dimensions	17.7(d) x 17.4(w) x 1.7(h) in. (44.96 x 44.2 x 4.32 cm) (1U height)
	Weight	15.65 lb. (7.1 kg) standard default PSU
Memory and processor	Freescale PowerPC 8245 @ 400 MHz, 64 MB RAM, 16 MB flash; packet buffer size: 32 MB	
Mounting	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included)	
Performance	Latency	< 10 μs
	Throughput	136.9 million pps
	Routing/Switching capacity	184 Gbps
	Routing table size	2,000 entries
Environment	Operating temperature	32°F to 104°F (0°C to 40°C)
	Operating relative humidity	10% to 95%, non-condensing
	Non-operating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non-operating/Storage relative humidity	10% to 95%, non-condensing
Electrical characteristics	Voltage	100-240 VAC
	Frequency	50 / 60 Hz
	Notes	Customer-swappable power supply unit
Safety	CAN/CSA-C22.2 No.60950-00/UL 60950 - Third Edition, Safety Information for Technology Equipment; UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03; EU RoHS Compliant	
Emissions	FCC part 15 Class A; VCCI Class A; CISPR 22 Class A; EN 55024; EN 55022 1998 Class A; EN 61000-3-2 2000, 61000-3-3; ICES-003 Class A	
Management	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB	
Notes	The slot supports a maximum of two 10-GbE ports, or eight GbE ports. Units have swappable PSU. Can upgrade from non-PoE to PoE.	
Services	3-year, 4-hour onsite, 13x5 coverage for hardware (UV918E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UV921E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UV924E) 3-year, 24x7 SW phone support, software updates (UV927E) Installation with minimum configuration, system-based pricing (UW451E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UV919E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UV922E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV925E) 4-year, 24x7 SW phone support, software updates (UV928E)	

5-year, 4-hour onsite, 13x5 coverage for hardware (UV920E)
5-year, 4-hour onsite, 24x7 coverage for hardware (UV923E)
5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV926E)
5-year, 24x7 SW phone support, software updates (UV929E)
3 Yr 6 hr Call-to-Repair Onsite (UW978E)
4 Yr 6 hr Call-to-Repair Onsite (UW979E)
5 Yr 6 hr Call-to-Repair Onsite (UW980E)

Refer to the HP website at: www.hp.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 HP sales office.

Standards and protocols (applies to all products in series)

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IEEE 802.3 Type 10BASE-T
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 768 UDP
RFC 783 TFTP Protocol (revision 2)
RFC 791 IP
RFC 792 ICMP
RFC 793 TCP
RFC 826 ARP

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RFC 1850 OSPFv2 MIB
RFC 2021 RMONv2 MIB
RFC 2233 Interface MIB
RFC 2613 SMON MIB
RFC 2618 RADIUS Client MIB
RFC 2620 RADIUS Accounting MIB
RFC 2665 Ethernet-Like-MIB
RFC 2674 802.1p and IEEE 802.1Q Bridge MIB
RFC 4188 (Bridge MIB)

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RFC 3415 SNMPv3 View-based Access Control Model VACM)

OSPF
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RFC 1583 OSPFv2
RFC 1587 OSPF NSSA
RFC 1850 OSPFv2 Management Information Base (MIB), traps
RFC 2154 OSPF w/ Digital Signatures (Password, MD-5)
RFC 2328 OSPFv2

RFC 1058 RIPv1
RFC 1812 IPv4 Routing
RFC 2338 VRRP
RFC 2644 Directed Broadcast Control

IP multicast
RFC 1112 IGMP
RFC 2236 IGMPv2
RFC 2362 PIM Sparse Mode

QoS/CoS
IEEE 802.1P (CoS)

Security
IEEE 802.1X Port Based Network Access Control

HP E5500G Switch Series accessories	Modules	
	HP 8-Port SFP E5500 Module	JE075A
	HP 1-Port 10-GbE XENPAK E5500-xxG Module	JE077A
	HP 2-port XFP E5500 Module	JE085A
	Transceivers	
	HP X130 SC LR XFP Transceiver	JD108B
	HP X130 LC SR XFP Transceiver	JD117B
	HP X135 LC ER XFP Transceiver	JD121A
	HP X130 CX4 XFP Transceiver	JD506A
	HP X135 SC SR XENPAK Transceiver	JD106B
	HP X135 SC ER XENPAK Transceiver	JD105A
	HP X130 CX4 XENPAK Transceiver	JD502A
	HP X130 SC LX4 XENPAK Transceiver	JD499A
	HP X125 1G SFP LC LH70 Transceiver	JD063B
	HP X124 1G SFP LC SX Transceiver	JD493A
	HP X125 1G SFP RJ45 T Transceiver	JD089B
	HP X125 1G SFP LC SX Transceiver	JD118B
	HP X120 1G SFP LC LX Transceiver	JD119B
	HP X110 100M SFP LC FX Dual Mode Transceiver	JD497A
	HP X110 100M SFP LC LX10 Transceiver	JD498A
	Cables	
	HP X250 65cm Stacking Cable	JE079A
	HP X250 1.2m Resilient Stacking Cable	JE080A
	HP X250 5m Stacking Cable	JE087A
	HP 50 cm CX4 Cable	JE054A
	HP 100 cm CX4 Cable	JE055A
	HP 300 cm CX4 Cable	JE056A
	NEW HP 0.5 m Multimode OM3 LC/LC Optical Cable	AJ833A
	NEW HP 1 m Multimode OM3 LC/LC Optical Cable	AJ834A
	NEW HP 2 m Multimode OM3 LC/LC Optical Cable	AJ835A
	NEW HP 5 m Multimode OM3 LC/LC Optical Cable	AJ836A
	NEW HP 15 m Multimode OM3 LC/LC Optical Cable	AJ837A
	NEW HP 30 m Multimode OM3 LC/LC Optical Cable	AJ838A
	NEW HP 50 m Multimode OM3 LC/LC Optical Cable	AJ839A
	NEW HP 0.5 m PremierFlex OM3+ LC/LC Optical Cable	BK837A
	Power Supply	
	HP E5500-24G-PoE EI Power Supply	JE081A
	HP E5500-48G-PoE EI Power Supply	JE082A
	HP E5500-24G EI Power Supply	JE083A
	HP E5500-48G EI Power Supply	JE084A

Accessory Product Details

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

HP X130 10G XFP CX4 Transceiver (JD506A) An XFP 10 Gigabit CX4 transceiver that provides full duplex 10G solution using CX4 cabling.	**Ports**	1 CX4 10-GbE port; Duplex: full only	
	Connectivity	**Connector type**	CX4
	Cabling	**Cable length**	15m Max CX4 cables
	Services	Refer to the HP website at: www.hp.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 HP sales office.	
HP X130 10G XENPAK CX4 Transceiver (JD502A) JD502A HP X130 CX4 XENPAK Transceiver provides full duplex 10 Gigabit CX4 connections for up to 15m over copper CX4 cable.	**Ports**	1 CX4 10-GbE port (IEEE 802.3ak Type 10GBASE-CX4); Duplex: full only	
	Connectivity	**Connector type**	CX4
	Physical characteristics	**Dimensions**	4.76(d) x 1.42(w) x 0.69(h) in. (12.1 x 3.6 x 1.74 cm)
	Environment	**Operating temperature**	32°F to 158°F (0°C to 70°C)
	Electrical characteristics	**Power consumption typical**	1.6 W
	Cabling	Maximum distance: • 15m CX4 Cable	
		Cable length	15m
	Services	Refer to the HP website at: www.hp.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 HP sales office.	
HP X130 10G XENPAK SC LX4 Transceiver (JD499A) HP X130 SC LX4 XENPAK Transceiver provides full duplex 10 Gigabit solution for up to 300m on Multimode fiber.	**Ports**	1 SC 10-GbE port; Duplex: full only	
	Connectivity	**Connector type**	SC
		Wavelength	1310 nm
	Physical characteristics	**Dimensions**	4.76(d) x 1.42(w) x 0.69(h) in. (12.1 x 3.6 x 1.74 cm)
	Electrical characteristics	**Power consumption typical**	9.0 W
	Cabling	Maximum distance: • 300M Using Multimode cable	
		Cable length	Multi Mode
	Services	Refer to the HP website at: www.hp.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 HP sales office.	

Accessory Product Details

HP X125 1G SFP LC LH70 Transceiver (JD063B) A small form-factor pluggable (SFP) Gigabit LH70 transceiver that provides a full-duplex Gigabit solution up to 70km 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: • 70km	
		Fiber type	Single Mode
	Services	Refer to the HP website at www.hp.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 HP sales office.	

HP X124 1G SFP LC SX Transceiver (JD493A) JD493A HP X124 1G SFP LC SX Transceiver that provides a full duplex Gigabit solution up to 550m on Multi Mode fiber.	**Ports**	1 LC 1000BASE-SX port	
	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 W
	Cabling	Maximum distance: • 220m-550m	
		Fiber type	Multi Mode
	Services	Refer to the HP website at: www.hp.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 HP sales office.	

Accessory Product Details

HP X125 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 HP website at: www.hp.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 HP sales office.	

HP X120 1G SFP LC SX Transceiver (JD118B) A small form-factor pluggable (SFP) Gigabit SX transceiver that provides a full-duplex Gigabit solution up to 550m on a Multimode fiber.	**Ports**	1 LC 1000BASE-SX port	
	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
	Services	Refer to the HP website at www.hp.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 HP sales office.	

Accessory Product Details

HP 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 HP website at www.hp.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 HP sales office.	
HP X110 100M SFP LC FX Dual Mode Transceiver (JD497A) A small form-factor pluggable (SFP) 100 MB/s Dual mode transceiver that provides a full duplex 100Mb/s soolution up to 2km on a multi mode fiber.	**Ports**	1 LC 100 Mbps port	
	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 length**	2km
		Fiber type	Multi Mode
	Services	Refer to the HP website at: www.hp.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 HP sales office.	

Accessory Product Details

HP X110 100M SFP LC LX10 Transceiver (JD498A) A small form-factor pluggable (SFP) 100Mb/s transceiver that provides a full duplex 100Mb/s solution for up to 10km on a single mode cable.	**Ports**	1 LC 100 Mbps port	
	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 length**	10km
		Fiber type	Single Mode
	Services	Refer to the HP website at: www.hp.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 HP sales office.	

HP 0.5 m Multimode OM3 LC/LC Optical 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. • 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 HP website at www.hp.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 HP sales office.

HP 1 m Multimode OM3 LC/LC Optical 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
	Services	Refer to the HP website at www.hp.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 HP sales office.

Accessory Product Details

HP 2 m Multimode OM3 LC/LC Optical 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 HP website at www.hp.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 HP sales office.

Accessory Product Details

HP 5 m Multimode OM3 LC/LC Optical 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 HP website at www.hp.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 HP sales office.

Accessory Product Details

HP 15 m Multimode OM3 LC/LC Optical 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 HP website at www.hp.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 HP sales office.

Accessory Product Details

HP 30 m Multimode OM3 LC/LC Optical 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 HP website at www.hp.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 HP sales office.

Accessory Product Details

HP 50 m Multimode OM3 LC/LC Optical 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 HP website at www.hp.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 HP sales office.

Accessory Product Details

HP 0.5 m PremierFlex OM3+ LC/LC Optical Cable (BK837A)	**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: HP PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL OFN FT4, ROHS. Cable also has a longitudal 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 @ 1310 nm @ 23°C as tested in accordance with EIA 455-46
	Services	Refer to the HP website at www.hp.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 HP sales office.

HP E5500-24G-PoE EI Power Supply (JE081A)	**Electrical characteristics**	**Voltage**	100-240 VAC
		Maximum power rating	560 W
		RPS power	540 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. Supports both AC and DC input from RPS
	Services	Refer to the HP website at: www.hp.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 HP sales office.	

Accessory Product Details

HP 5500-48G Power Supply (JE084A)	Electrical characteristics	Voltage	100-240 VAC
		Maximum power rating	230 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. Supports both AC as well as DC input from Redundant Power Supply.
	Services	Refer to the HP website at: www.hp.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 HP sales office.	

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