



CAROLINA ADVANCED DIGITAL, INC.
IT INFRASTRUCTURE | SECURITY | MANAGEMENT

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HP E5500G Switch Series

Data sheet

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.

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



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
- **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

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)



HP E5500G Switch Series

Specifications



HP E5500-24G Switch (JE088A)



HP E5500-48G Switch (JE090A)



HP E5500-24G-PoE Switch (JE092A)

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	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	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)	17.7(d) x 17.4(w) x 1.7(h) in. (44.96 x 44.2 x 4.32 cm) (1U height)	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	16.31 lb. (7.4 kg) standard default PSU	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	Freescale PowerPC 8245 @ 400 MHz, 64 MB RAM, 16 MB flash; packet buffer size: 32 MB	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)	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included)	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included)
Performance			
Latency	< 10 μ s	< 10 μ s	< 10 μ s
Throughput	136.9 million pps	172.6 million pps	136.9 million pps
Routing/Switching capacity	184 Gbps	232 Gbps	184 Gbps
Routing table size	2,000 entries	2,000 entries	2,000 entries
Environment			
Operating temperature	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)
Operating relative humidity	10% to 95%, non-condensing	10% to 95%, non-condensing	10% to 95%, non-condensing
Non-operating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)
Non-operating/Storage relative humidity	10% to 95%, non-condensing	10% to 95%, non-condensing	10% to 95%, non-condensing
Electrical characteristics			
Voltage	100-240 VAC	100-240 VAC	100-240 VAC
Frequency	50 / 60 Hz	50 / 60 Hz	50 / 60 Hz
Notes	Customer-swappable power supply unit enables non-PoE models to be easily upgraded to PoE capability	Customer-swappable power supply unit enables non-PoE models to be easily upgraded to PoE capability	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	UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03; EU RoHS Compliant	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	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	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	IMC - Intelligent Management Center; command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB	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.	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.	The slot supports a maximum of two 10-GbE ports, or eight GbE ports. Units have swappable PSU.

Specifications (continued)

	HP E5500-24G Switch (JE088A)	HP E5500-48G Switch (JE090A)	HP E5500-24G-PoE Switch (JE092A)
Services	<p>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)</p> <p>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.</p>	<p>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)</p> <p>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.</p>	<p>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)</p> <p>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.</p>
Standards and protocols (applies to all products in series)	<p>Device management</p> <p>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</p> <p>General protocols</p> <p>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 100BASE-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 100BASE-X RFC 768 UDP</p>	<p>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</p> <p>IP multicast</p> <p>RFC 1112 IGMP RFC 2236 IGMPv2 RFC 2362 PIM Sparse Mode</p> <p>MIBs</p> <p>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)</p> <p>Network management</p> <p>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</p>	<p>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)</p> <p>OSPF</p> <p>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</p> <p>QoS/CoS</p> <p>IEEE 802.1P (CoS)</p> <p>Security</p> <p>IEEE 802.1X Port Based Network Access Control</p>

HP E5500G Switch Series

Specifications (continued)



HP E5500-48G-PoE Switch (JE094A)



HP E5500-24G-SFP Switch (JE096A)

Ports	<p>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)</p> <p>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)</p> <p>2 stacking ports; 24 Gbps each</p> <p>1 RJ-45 serial console port</p> <p>1 open module slot; supports a maximum of 2 10-GbE ports, or 8 GbE ports</p>	<p>20 SFP 100/1000 Mbps ports</p> <p>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)</p> <p>2 stacking ports; 24Gbps each</p> <p>1 RJ-45 serial console port</p> <p>1 open module slot; supports a maximum of 2 10-GbE ports, or 8 GbE ports</p>
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)	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	15.65 lb. (7.1 kg) standard default PSU
Memory and processor		
	Freescall PowerPC 824 @ 400 MHz, 64 MB RAM, 16 MB flash; packet buffer size: 32 MB	Freescall 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)	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included)
Performance		
Latency	< 10 μ s	< 10 μ s
Throughput	172.6 million pps	136.9 million pps
Routing/Switching capacity	232 Gbps	184 Gbps
Routing table size	2,000 entries	2,000 entries
Environment		
Operating temperature	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)
Operating relative humidity	10% to 95%, non-condensing	10% to 95%, non-condensing
Non-operating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)
Non-operating/Storage relative humidity	10% to 95%, non-condensing	10% to 95%, non-condensing
Electrical characteristics		
Voltage	100-240 VAC	100-240 VAC
Frequency	50 / 60 Hz	50 / 60 Hz
Notes	Customer-swappable power supply unit	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	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	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	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.	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.

Specifications (continued)

HP E5500-48G-PoE Switch (JE094A)

HP E5500-24G-SFP Switch (JE096A)

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)

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.

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
 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 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)



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