



# HP 2530 Switch Series



## Key features

- Cost-effective, reliable, and secure fully managed Layer 2 switches
- 8, 24, or 48 Gigabit or Fast Ethernet ports with 4 Gigabit uplink ports (2 uplinks on 8-port models)
- PoE+ models for voice, video, and wireless deployments
- ACLs, EEE, and IPv4/IPv6 host support
- Includes lifetime warranty, all software releases, and technical phone support

## Product overview

The HP 2530 Switch Series consists of 12 fully managed Layer 2 edge switches that deliver cost-effective, reliable, secure, and easy-to-use connectivity to business networks. Designed for entry-level to midsize enterprise networks, these Gigabit and Fast Ethernet switches deliver full Layer 2 capabilities with optional PoE+, enhanced access security, traffic prioritization, and IPv6 host support.

The HP 2530 Switch Series offers uplink flexibility with four Gigabit Ethernet uplinks on all 24- and 48-port models. Gigabit Ethernet uplinks are four small form-factor pluggable (SFP) slots for fiber connectivity on the 24- and 48-port Gigabit Ethernet models. The Fast Ethernet 24- and 48-port models have two SFPs and two RJ-45 Gigabit uplinks. The compact and fanless 8-port switches offer additional flexibility with two dual-personality ports that can be used as either RJ-45 Gigabit Ethernet or SFP ports. For customers implementing Power over Ethernet for voice, video, or wireless

deployments, the HP 2530 PoE+ switches are IEEE 802.3af and IEEE 802.3at compliant with up to 30 W per port.

The switch series is easy to use, deploy, and manage via SNMP, CLI, and Web GUI. It offers flexible wall, table, and rack mounting; quiet operation with fanless and variable speed fan models; and improved power savings, with features such as IEEE 802.3 az (Energy Efficient Ethernet). These switches include a lifetime warranty, as well as all software releases and technical phone support.

## Features and benefits

### Quality of Service (QoS)

- **Traffic prioritization (IEEE 802.1p)**  
allows real-time traffic classification with support for eight priority levels mapped to either two or four queues; uses weighted deficit round robin (WDRR) or strict priority (SP)
- **Simplified QoS configuration**
  - **Port-based**  
prioritizes traffic by specifying a port and priority level
  - **VLAN-based**  
prioritizes traffic by specifying a VLAN and priority level
- **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 for all ingressed traffic or for broadcast, multicast, or unknown destination traffic
- **Layer 4 prioritization**  
enables prioritization based on TCP/UDP port numbers
- **Flow control**  
helps deliver reliable communication during full-duplex operation

### Management

- **Choice of management interfaces**
  - **Web graphical user interface (GUI)**  
HTML-based easy-to-use graphical interface allows configuration of the switch from any Web browser
  - **Command-line interface (CLI)**  
provides advanced configuration and diagnostics through a robust CLI
  - **Simple Network Management Protocol (SNMPv1/v2c/v3)**  
allows a switch to be managed with a variety of third-party network management applications
- **Virtual stacking**  
provides single IP address management for up to 16 switches
- **sFlow (RFC 3176)**  
delivers wire-speed traffic accounting and monitoring configured by SNMP and CLI with three terminal encrypted receivers
- **IEEE 802.1AB Link Layer Discovery Protocol (LLDP)**  
automates device discovery protocol for easy mapping by network management applications
- **Logging**  
provides local and remote logging of events via SNMP (v2c and v3) and syslog; provides log throttling and log filtering to reduce the number of log events generated

- **Port mirroring**  
allows traffic to be mirrored on any port or a network analyzer to assist with diagnostics or detecting network attacks
- **RMON (remote monitoring)**  
provides advanced monitoring and reporting capabilities for statistics, history, alarms, and events
- **Find-Fix-and-Inform**  
finds and fixes common network problems automatically, then informs the administrator
- **Friendly port names**  
allows assignment of descriptive names to ports
- **Dual flash images**  
provides independent primary and secondary operating system files for backup while upgrading
- **Multiple configuration files**  
allows multiple configuration files to be stored to a flash image
- **Front-panel LEDs**
  - **Locator LED**  
allows users to set the locator LED on a specific switch to either turn on, blink, or turn off; simplifies troubleshooting by making it easy to locate a particular switch within a rack of similar switches
  - **Per-port LEDs**  
provides an at-a-glance view of status, activity, speed, and full-duplex operation
  - **Power and fault LEDs**  
displays any issues

### Connectivity

- **IPv6**
  - **IPv6 host**  
allows the switch to be deployed and managed at the edge of an IPv6 network
  - **Dual stack (IPv4/IPv6)**  
supports connectivity for both protocols; provides a transition mechanism from IPv4 to IPv6
  - **MLD snooping**  
forwards IPv6 multicast traffic to the appropriate interface; prevents IPv6 multicast traffic from flooding the network
- **IEEE 802.3af Power over Ethernet (PoE)**  
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
- **IEEE 802.3at Power over Ethernet Plus**  
provides up to 30 W per port to IEEE 802.3 for PoE/PoE+-powered devices such as video IP phones, IEEE 802.11n wireless access points, and advanced pan/tilt/zoom security cameras (see product specifications for total PoE power available)
- **Auto-MDIX**  
adjusts automatically for straight-through or crossover cables on all ports

- **Pre-standard PoE support**  
detects and provides power to pre-standard PoE devices; see the list of supported devices in the product FAQ at [www.hp.com/networking/support](http://www.hp.com/networking/support)
- **Small form-factor pluggable (SFP) slots**  
provides fiber connectivity such as Gigabit-SX, -LX, -LH, and -BX with four SFP slots on all 24- and 48-port Gigabit Ethernet models; Fast Ethernet 24- and 48-port models have two SFP slots and two RJ-45 Gigabit uplinks; 8-port models have two dual-personality ports supporting either SFP or RJ-45 Gigabit uplinks
- **Dual-personality (RJ-45 or USB micro-B) serial console port**  
gives easy access to switch CLI with front of switch location and flexibility of using either RJ-45 or USB micro-B serial console port

## Layer 2 switching

- **VLANs**  
provides support for 512 VLANs and 4,094 VLAN IDs
- **Jumbo packet support**  
supports up to 9220-byte frame size to improve the performance of large data transfers; 8- and 24-port Fast Ethernet models automatically support up to 2000-byte frames with no configuration needed
- **16K MAC address table**  
provides access to many Layer 2 devices
- **GARP VLAN Registration Protocol**  
allows automatic learning and dynamic assignment of VLANs

## Security

- **Access control lists (ACLs)**  
accommodates IPv4/IPv6 port and VLAN-based ACLs (IPv6 ACL is supported only on Gigabit Ethernet and 48-port models)
- **Source-port filtering**  
allows only specified ports to communicate with each other
- **RADIUS/TACACS+**  
eases switch management security administration by using a password authentication server
- **Secure Sockets Layer (SSL)**  
encrypts all HTTP traffic, allowing secure access to the browser-based management GUI in the switch
- **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

- **Multiple user authentication methods**
  - **IEEE 802.1X**  
uses an IEEE 802.1X supplicant on the client in conjunction with a RADIUS server to authenticate in accordance with industry standards
  - **Web-based authentication**  
provides a browser-based environment, similar to IEEE 802.1X, to authenticate clients that do not support the IEEE 802.1X supplicant
  - **MAC-based authentication**  
authenticates the client with the RADIUS server based on the client's MAC address
- **Secure shell (SSHv2; client and server)**  
encrypts all transmitted data for secure remote CLI access over IP networks
- **Secure shell**  
encrypts all transmitted data for secure remote CLI access over IP networks
- **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
- **Secure management access**  
delivers secure encryption of all access methods (CLI, GUI, or MIB) through SSHv2 and SNMPv3
- **Custom banner**  
displays security policy when users log in to the switch
- **Secure FTP**  
allows secure file transfer to and from the switch; protects against unwanted file downloads or unauthorized copying of a switch configuration file
- **Protected ports CLI**  
offers intuitive CLI to configure the source-port filters feature by allowing specified ports to be isolated from all other ports on the switch; the protected port or ports can communicate only with the uplink or shared resources
- **Authentication flexibility**
  - **Multiple IEEE 802.1X users per port**  
provides authentication for up to eight IEEE 802.1X users per port; prevents a user from "piggybacking" on another user's IEEE 802.1X authentication
  - **Concurrent IEEE 802.1X and Web or MAC authentication schemes per port**  
allows a switch port to accept any IEEE 802.1X and either Web or MAC authentications
- **Switch management logon security**  
helps secure switch CLI logon by optionally requiring either RADIUS or TACACS+ authentication

## Convergence

- **LLDP-MED (Media Endpoint Discovery)**  
defines a standard extension of LLDP that stores values for parameters such as QoS and VLAN to automatically configure network devices such as IP phones
- **IP multicast (data-driven IGMP)**  
prevents flooding of IP multicast traffic
- **IEEE 802.1AB Link Layer Discovery Protocol (LLDP)**  
facilitates easy mapping using network management applications with LLDP automated device discovery protocol
- **PoE and PoE+ allocations**  
support multiple method (automatic, IEEE 802.3at dynamic, LLDP-MED fine grain, IEEE 802.3af device class, or user specified) to allocate and manage PoE/PoE+ power for more efficient energy use
- **Voice VLAN**  
uses LLDP-MED to automatically configure a VLAN for IP phones
- **IP multicast (data-driven IGMPv3)**  
prevents flooding of IP multicast traffic

## Resiliency and high availability

- **Port trunking and link aggregation**
  - **Trunking**  
supports up to eight links per trunk to increase bandwidth and create redundant connections; supports L2, L3, and L4 trunk load-balancing algorithm (L4 trunk load balancing is supported only on Gigabit Ethernet and 48-port models)
  - **IEEE 802.3ad Link Aggregation Protocol (LACP)**  
eases configuration of trunks through automatic configuration
- **IEEE 802.1s Multiple Spanning Tree**  
provides high link availability in multiple VLAN environments by allowing multiple spanning trees; provides legacy support for IEEE 802.1d and IEEE 802.1w

## Product architecture

- **Energy-efficient design**
  - **IEEE 802.3az**  
reduces power consumption during periods of low data activity on Gigabit Ethernet switches
  - **Port low power mode**  
allows the port to automatically go into low-power mode to conserve energy when no link is detected
  - **Fanless and variable-speed fans**  
decreases power consumption in fanless (all 8-port, 2530-24, and 2530-48 switches) and variable-speed fan switches
  - **Port LEDs**  
conserves energy by optionally turning off port link and activity LEDs
- **Switch on a chip**  
provides highly integrated, high-performance switch design with a nonblocking architecture

## Flexibility

- **Flexible mounting**
  - **Rackable**  
accommodates mounting in a standard 19-inch rack using included hardware
  - **Wall mountable**  
allows the switch to be mounted to a wall using included hardware
  - **Surface mountable**  
allows the switch to be mounted above or below a surface (such as a desk or table) with included hardware
- **Quiet operation**  
lowers noise for deployments in acoustically sensitive environments such as conference rooms and office space
- **Compact size**  
reduces space requirements (see product specifications for exact dimensions)

## 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; to reach our support centers, refer to [www.hp.com/networking/contact-support](http://www.hp.com/networking/contact-support); for details on the duration of support provided with your product purchase, refer to [www.hp.com/networking/warrantysummary](http://www.hp.com/networking/warrantysummary)
- **Software releases**  
to find software for your product, refer to [www.hp.com/networking/support](http://www.hp.com/networking/support); for details on the software releases available with your product purchase, refer to [www.hp.com/networking/warrantysummary](http://www.hp.com/networking/warrantysummary)

†HP warranty includes repair or replacement of hardware for as long as you own the product, with next business day advance replacement (available in most countries). The disk drive included with HP AllianceOne Advanced Services and Services z1 Modules, HP Threat Management Services z1 Module, HP AllianceOne Extended z1 Module with Riverbed Steelhead, HP MSM765z1 Mobility Controller and HP Survivable Branch Communication z1 Module powered by Microsoft Lync has a five-year hardware warranty. For details, refer to the Software license and hardware warranty statements at [www.hp.com/networking/warranty](http://www.hp.com/networking/warranty).

# HP 2530 Switch Series

## Specifications



	HP 2530-48G-PoE+ Switch (J9772A)	HP 2530-24G-PoE+ Switch (J9773A)	HP 2530-8G-PoE+ Switch (J9774A)
<b>Ports</b>	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 fixed Gigabit Ethernet SFP ports  1 dual-personality (RJ-45 or USB micro-B) serial console port	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 fixed Gigabit Ethernet SFP ports  1 dual-personality (RJ-45 or USB micro-B) serial console port	8 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  2 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 port (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-Tx; IEEE 802.3ab 1000Base-T Gigabit Ethernet) or as a SFP slot (for use with SFP transceivers)  1 dual-personality (RJ-45 or USB micro-B) serial console port
<b>Physical characteristics</b>	17.44(w) x 13.00(d) x 1.75(h) in (44.3 x 32.26 x 4.45 cm) (1U height) 10.4 lb (4.72 kg)	17.44(w) x 13.00(d) x 1.75(h) in (44.3 x 33.02 x 4.45 cm) (1U height) 8.7 lb (3.95 kg)	10(w) x 6.28(d) x 1.75(h) in (25.4 x 15.95 x 4.45 cm) (1U height) 2.2 lb (1 kg)
<b>Memory and processor</b>	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 3 MB dynamically allocated	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated
<b>Mounting</b>	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); horizontal surface mounting; wall mounting	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); horizontal surface mounting; wall mounting	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); horizontal surface mounting; wall mounting
<b>Performance</b>	IPv6 Ready Certified 100 Mb Latency < 7.4 μs (LIFO 64-byte packets) 1000 Mb Latency < 2.3 μs (LIFO 64-byte packets) Throughput up to 77.3 million pps (64-byte packets) Switching capacity 104 Gbps MAC address table size 16000 entries	IPv6 Ready Certified 100 Mb Latency < 7.4 μs (LIFO 64-byte packets) 1000 Mb Latency < 2.3 μs (LIFO 64-byte packets) Throughput up to 41.6 million pps (64-byte packets) Switching capacity 56 Gbps MAC address table size 16000 entries	IPv6 Ready Certified 100 Mb Latency < 7.4 μs (LIFO 64-byte packets) 1000 Mb Latency < 2.6 μs (LIFO 64-byte packets) Throughput up to 14.8 million pps (64-byte packets) Switching capacity 20 Gbps MAC address table size 16000 entries
<b>Environment</b>	Operating temperature 32°F to 113°F (0°C to 45°C) Operating relative humidity 15% to 95% @ 104°F (40°C), noncondensing Nonoperating/Storage temperature -40°F to 158°F (-40°C to 70°C) Nonoperating/Storage relative humidity 15% to 90% @ 149°F (65°C), noncondensing Altitude up to 10,000 ft (3 km) Acoustic Power: 33.6 dB, Pressure: 43.9 dB	Operating temperature 32°F to 113°F (0°C to 45°C) Operating relative humidity 15% to 95% @ 104°F (40°C), noncondensing Nonoperating/Storage temperature -40°F to 158°F (-40°C to 70°C) Nonoperating/Storage relative humidity 15% to 90% @ 149°F (65°C), noncondensing Altitude up to 10,000 ft (3 km) Acoustic Power: 39.6 dB, Pressure: 43.9 dB	Operating temperature 32°F to 113°F (0°C to 45°C) Operating relative humidity 15% to 95% @ 104°F (40°C), noncondensing Nonoperating/Storage temperature -40°F to 158°F (-40°C to 70°C) Nonoperating/Storage relative humidity 15% to 90% @ 149°F (65°C), noncondensing Altitude up to 10,000 ft (3 km) Acoustic Power: 0 dB, Pressure: 0 dB
<b>Electrical characteristics</b>	Frequency 50/60 Hz Maximum heat dissipation 236 BTU/hr (248.98 kJ/hr), (switch only: 236 BTU/hr; combined switch + max. PoE devices: 1624 BTU/hr) Voltage 100-127/200-240 VAC Current 5.8/2.9 A Maximum power rating 476 W Idle power 40.1 W PoE power 382 W Notes Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. PoE power is the total power budget available to all PoE ports.	Frequency 50/60 Hz Maximum heat dissipation 135 BTU/hr (142.42 kJ/hr), (switch only: 135 BTU/hr; combined switch + max. PoE devices: 843 BTU/hr) Voltage 100-127/200-240 VAC Current 3.2/1.6 A Maximum power rating 247 W Idle power 25.2 W PoE power 195 W Notes Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. PoE power is the total power budget available to all PoE ports.	Frequency 50/60 Hz Maximum heat dissipation 65 BTU/hr (68.58 kJ/hr), (switch only: 65 BTU/hr; combined switch + max. PoE devices: 293 BTU/hr) Voltage 100-127/200-240 VAC Current 1.4 A Maximum power rating 86 W Idle power 13.4 W PoE power 67 W Notes Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. PoE power is the total power budget available to all PoE ports.
<b>Safety</b>	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
<b>Emissions</b>	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A
<b>Immunity</b>			

# HP 2530 Switch Series

## Specifications (continued)

	HP 2530-48G-PoE+ Switch (J9772A)	HP 2530-24G-PoE+ Switch (J9773A)	HP 2530-8G-PoE+ Switch (J9774A)
Generic	EN 55024, CISPR 24	EN 55024, CISPR 24	EN 55024, CISPR 24
EN	EN 55024, CISPR 24	EN 55024, CISPR 24	EN 55024, CISPR 24
ESD	IEC 61000-4-2	IEC 61000-4-2	IEC 61000-4-2
Radiated	IEC 61000-4-3	IEC 61000-4-3	IEC 61000-4-3
EFT/Burst	IEC 61000-4-4	IEC 61000-4-4	IEC 61000-4-4
Surge	IEC 61000-4-5	IEC 61000-4-5	IEC 61000-4-5
Conducted	IEC 61000-4-6	IEC 61000-4-6	IEC 61000-4-6
Power frequency magnetic field	IEC 61000-4-8	IEC 61000-4-8	IEC 61000-4-8
Voltage dips and interruptions	IEC 61000-4-11	IEC 61000-4-11	IEC 61000-4-11
Harmonics	EN 61000-3-2, IEC 61000-3-2	EN 61000-3-2, IEC 61000-3-2	EN 61000-3-2, IEC 61000-3-2
Flicker	EN 61000-3-3, IEC 61000-3-3	EN 61000-3-3, IEC 61000-3-3	EN 61000-3-3, IEC 61000-3-3
<b>Management</b>	IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; out-of-band management (serial RS-232C or Micro USB); IEEE 802.3 Ethernet MIB; Repeater MIB; Ethernet Interface MIB	IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; out-of-band management (serial RS-232C or Micro USB); IEEE 802.3 Ethernet MIB; Repeater MIB; Ethernet Interface MIB	IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; out-of-band management (serial RS-232C or Micro USB); IEEE 802.3 Ethernet MIB; Repeater MIB; Ethernet Interface MIB
<b>Notes</b>	IEEE 802.3az applies to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply to PoE+ models only. When using SFPs with this product, SFPs with revision "B" or later (product number ends with the letter "B" or later, e.g., J4858B, J4859C) are required.	IEEE 802.3az applies to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply to PoE+ models only. When using SFPs with this product, SFPs with revision "B" or later (product number ends with the letter "B" or later, e.g., J4858B, J4859C) are required.	IEEE 802.3az applies to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply to PoE+ models only. When using SFPs with this product, SFPs with revision "B" or later (product number ends with the letter "B" or later, e.g., J4858B, J4859C) are required.
<b>Services</b>	<p>3-year, 4-hour onsite, 13x5 coverage for hardware (U4683E)</p> <p>3-year, 4-hour onsite, 24x7 coverage for hardware (U4835E)</p> <p>3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (U6321E)</p> <p>3-year, 24x7 SW phone support, software updates (UF792E)</p> <p>4-year, 4-hour onsite, 13x5 coverage for hardware (UR948E)</p> <p>4-year, 4-hour onsite, 24x7 coverage for hardware (UR949E)</p> <p>4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR950E)</p> <p>4-year, 24x7 SW phone support, software updates (UR951E)</p> <p>5-year, 4-hour onsite, 13x5 coverage for hardware (UR952E)</p> <p>5-year, 4-hour onsite, 24x7 coverage for hardware (UR953E)</p> <p>5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR954E)</p> <p>3 Yr 6 hr Call-to-Repair Onsite (UW368E)</p> <p>4 Yr 6 hr Call-to-Repair Onsite (UW369E)</p> <p>5 Yr 6 hr Call-to-Repair Onsite (UW370E)</p> <p>1-year, 4-hour onsite, 13x5 coverage for hardware (HR849E)</p> <p>1-year, 4-hour onsite, 24x7 coverage for hardware (HR850E)</p> <p>1-year, 6 hour Call-To-Repair Onsite for hardware (HR853E)</p> <p>1-year, 24x7 software phone support, software updates (HR852E)</p> <p>1-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support and software updates (HR851E)</p> <p>1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS554E)</p>	<p>3-year, 4-hour onsite, 13x5 coverage for hardware (U4683E)</p> <p>3-year, 4-hour onsite, 24x7 coverage for hardware (U4835E)</p> <p>3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (U6321E)</p> <p>3-year, 24x7 SW phone support, software updates (UF792E)</p> <p>4-year, 4-hour onsite, 13x5 coverage for hardware (UR948E)</p> <p>4-year, 4-hour onsite, 24x7 coverage for hardware (UR949E)</p> <p>4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR950E)</p> <p>4-year, 24x7 SW phone support, software updates (UR951E)</p> <p>5-year, 4-hour onsite, 13x5 coverage for hardware (UR952E)</p> <p>5-year, 4-hour onsite, 24x7 coverage for hardware (UR953E)</p> <p>5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR954E)</p> <p>3 Yr 6 hr Call-to-Repair Onsite (UW368E)</p> <p>4 Yr 6 hr Call-to-Repair Onsite (UW369E)</p> <p>5 Yr 6 hr Call-to-Repair Onsite (UW370E)</p> <p>1-year, 4-hour onsite, 13x5 coverage for hardware (HR849E)</p> <p>1-year, 4-hour onsite, 24x7 coverage for hardware (HR850E)</p> <p>1-year, 6 hour Call-To-Repair Onsite for hardware (HR853E)</p> <p>1-year, 24x7 software phone support, software updates (HR852E)</p> <p>1-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support and software updates (HR851E)</p> <p>1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS554E)</p>	<p>3-year, 4-hour onsite, 13x5 coverage for hardware (U4683E)</p> <p>3-year, 4-hour onsite, 24x7 coverage for hardware (U4835E)</p> <p>3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (U6321E)</p> <p>3-year, 24x7 SW phone support, software updates (UF792E)</p> <p>4-year, 4-hour onsite, 13x5 coverage for hardware (UR948E)</p> <p>4-year, 4-hour onsite, 24x7 coverage for hardware (UR949E)</p> <p>4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR950E)</p> <p>4-year, 24x7 SW phone support, software updates (UR951E)</p> <p>5-year, 4-hour onsite, 13x5 coverage for hardware (UR952E)</p> <p>5-year, 4-hour onsite, 24x7 coverage for hardware (UR953E)</p> <p>5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR954E)</p> <p>3 Yr 6 hr Call-to-Repair Onsite (UW368E)</p> <p>4 Yr 6 hr Call-to-Repair Onsite (UW369E)</p> <p>5 Yr 6 hr Call-to-Repair Onsite (UW370E)</p> <p>1-year, 4-hour onsite, 13x5 coverage for hardware (HR849E)</p> <p>1-year, 4-hour onsite, 24x7 coverage for hardware (HR850E)</p> <p>1-year, 6 hour Call-To-Repair Onsite for hardware (HR853E)</p> <p>1-year, 24x7 software phone support, software updates (HR852E)</p> <p>1-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support and software updates (HR851E)</p> <p>1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS554E)</p>

# HP 2530 Switch Series

## Specifications (continued)

	HP 2530-48G-PoE+ Switch (J9772A)	HP 2530-24G-PoE+ Switch (J9773A)	HP 2530-8G-PoE+ Switch (J9774A)
	<p>1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HS555E)</p> <p>3-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS556E)</p> <p>3-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS557E)</p> <p>4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS558E)</p> <p>4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS559E)</p> <p>5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS560E)</p> <p>5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS561E)</p> <p>Refer to the HP website at <a href="http://www.hp.com/networking/services">www.hp.com/networking/services</a> 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>1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HS555E)</p> <p>3-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS556E)</p> <p>3-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS557E)</p> <p>4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS558E)</p> <p>4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS559E)</p> <p>5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS560E)</p> <p>5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS561E)</p> <p>Refer to the HP website at <a href="http://www.hp.com/networking/services">www.hp.com/networking/services</a> 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>1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HS555E)</p> <p>3-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS556E)</p> <p>3-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS557E)</p> <p>4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS558E)</p> <p>4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS559E)</p> <p>5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS560E)</p> <p>5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS561E)</p> <p>Refer to the HP website at <a href="http://www.hp.com/networking/services">www.hp.com/networking/services</a> 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>
<b>Standards and protocols</b> (applies to all products in series)	<p><b>Denial of service protection</b> Network DoS Filter</p> <p><b>Device management</b> RFC 1591 DNS (client) SSHv1/SSHv2 Secure Shell</p> <p><b>General protocols</b> IEEE 802.1D MAC Bridges IEEE 802.1p Priority IEEE 802.1Q VLANs IEEE 802.1s Multiple Spanning Trees IEEE 802.1w Rapid Reconfiguration of Spanning Tree IEEE 802.3 Type 10BASE-T IEEE 802.3ab 1000BASE-T IEEE 802.3ad Link Aggregation Control Protocol (LACP) IEEE 802.3af Power over Ethernet IEEE 802.3at Power over Ethernet Plus IEEE 802.3az Energy Efficient Ethernet IEEE 802.3x Flow Control RFC 768 UDP RFC 783 TFTP Protocol (revision 2) RFC 792 ICMP RFC 793 TCP RFC 826 ARP RFC 854 TELNET RFC 868 Time Protocol RFC 951 BOOTP RFC 1350 TFTP Protocol (revision 2) RFC 1542 BOOTP Extensions RFC 2030 Simple Network Time Protocol (SNTP) v4 RFC 2131 DHCP</p>	<p><b>IP multicast</b> RFC 3376 IGMPv3 (host joins only)</p> <p><b>IPv6</b> RFC 1981 IPv6 Path MTU Discovery RFC 2460 IPv6 Specification RFC 2925 Remote Operations MIB (Ping only) RFC 3315 DHCPv6 (client only) RFC 3513 IPv6 Addressing Architecture RFC 3596 DNS Extension for IPv6 RFC 4022 MIB for TCP RFC 4113 MIB for UDP RFC 4251 SSHv6 Architecture RFC 4252 SSHv6 Authentication RFC 4252 SSHv6 Transport Layer RFC 4254 SSHv6 Connection RFC 4293 MIB for IP RFC 4419 Key Exchange for SSH RFC 4443 ICMPv6 RFC 4861 IPv6 Neighbor Discovery RFC 4862 IPv6 Stateless Address Auto-configuration</p> <p><b>MIBs</b> RFC 1213 MIB II RFC 1493 Bridge MIB RFC 2021 RMONv2 MIB RFC 2613 SMON MIB RFC 2618 RADIUS Client MIB RFC 2620 RADIUS Accounting Client MIB RFC 2665 Ethernet-Like-MIB RFC 2674 802.1p and IEEE 802.1Q Bridge MIB RFC 2688 MAU-MIB RFC 2737 Entity MIB (Version 2) RFC 2863 The Interfaces Group MIB</p>	<p><b>Network management</b> IEEE 802.1AB Link Layer Discovery Protocol (LLDP) RFC 1098 A Simple Network Management Protocol (SNMP) RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events) ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED) SNMPv1/v2c/v3</p> <p><b>QoS/CoS</b> RFC 2474 DiffServ precedence, with 4 queues per port RFC 2475 DiffServ Architecture RFC 2597 DiffServ Assured Forwarding (AF) RFC 2598 DiffServ Expedited Forwarding (EF)</p> <p><b>Security</b> IEEE 802.1X Port Based Network Access Control RFC 1492 TACACS+ RFC 2138 RADIUS Authentication RFC 2866 RADIUS Accounting Secure Sockets Layer (SSL)</p>

# HP 2530 Switch Series

## Specifications (continued)



**HP 2530-48-PoE+ Switch (J9778A)**



**HP 2530-24-PoE+ Switch (J9779A)**



**HP 2530-8-PoE+ Switch (J9780A)**

<b>Ports</b>	48 RJ-45 autosensing 10/100 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3at PoE+); Media Type: Auto-MDIX; Duplex: half or full  2 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  2 fixed Gigabit Ethernet SFP ports  1 dual-personality (RJ-45 or USB micro-B) serial console port	24 RJ-45 autosensing 10/100 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3at PoE+); Media Type: Auto-MDIX; Duplex: half or full  2 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  2 fixed Gigabit Ethernet SFP ports  1 dual-personality (RJ-45 or USB micro-B) serial console port	8 RJ-45 autosensing 10/100 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3at PoE+); Media Type: Auto-MDIX; Duplex: half or full  2 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 port (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-Tx; IEEE 802.3ab 1000Base-T Gigabit Ethernet) or as a SFP slot (for use with SFP transceivers) ports  1 dual-personality (RJ-45 or USB micro-B) serial console port
<b>Physical characteristics</b>	17.4(w) x 12.7(d) x 1.75(h) in (44.2 x 32.26 x 4.45 cm) (1U height) 10.1 lb (4.58 kg)	17.4(w) x 12.7(d) x 1.75(h) in (44.2 x 32.26 x 4.45 cm) (1U height) 8.4 lb (3.81 kg)	10(w) x 6.28(d) x 1.75(h) in (25.4 x 15.95 x 4.45 cm) (1U height) 2.0 lb (0.91 kg)
<b>Memory and processor</b>	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 3 MB dynamically allocated	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated
<b>Mounting</b>	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); horizontal surface mounting; wall mounting	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); horizontal surface mounting; wall mounting	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); horizontal surface mounting; wall mounting
<b>Performance</b>	IPv6 Ready Certified 100 Mb Latency < 6.6 µs (LIFO 64-byte packets) 1000 Mb Latency < 2.2 µs (LIFO 64-byte packets) Throughput up to 13 million pps (64-byte packets) Switching capacity 17.6 Gbps MAC address table size 16000 entries	IPv6 Ready Certified 100 Mb Latency < 1.7 µs (LIFO 64-byte packets) 1000 Mb Latency < 1.1 µs (LIFO 64-byte packets) Throughput up to 9.5 million pps (64-byte packets) Switching capacity 12.8 Gbps MAC address table size 16000 entries	IPv6 Ready Certified 100 Mb Latency < 1.3 µs (LIFO 64-byte packets) 1000 Mb Latency < 2.3 µs (LIFO 64-byte packets) Throughput up to 4.1 million pps (64-byte packets) Switching capacity 5.6 Gbps MAC address table size 16000 entries
<b>Environment</b>	Operating temperature 32°F to 113°F (0°C to 45°C) Operating relative humidity 15% to 95% @ 104°F (40°C), noncondensing Nonoperating/Storage temperature -40°F to 158°F (-40°C to 70°C) Nonoperating/Storage relative humidity 15% to 90% @ 149°F (65°C), noncondensing Altitude up to 10,000 ft (3 km) Acoustic Power: 31.8 dB, Pressure: 37.9 dB	Operating temperature 32°F to 113°F (0°C to 45°C) Operating relative humidity 15% to 95% @ 104°F (40°C), noncondensing Nonoperating/Storage temperature -40°F to 158°F (-40°C to 70°C) Nonoperating/Storage relative humidity 15% to 90% @ 149°F (65°C), noncondensing Altitude up to 10,000 ft (3 km) Acoustic Power: 31.7 dB, Pressure: 40.4 dB	Operating temperature 32°F to 113°F (0°C to 45°C) Operating relative humidity 15% to 95% @ 104°F (40°C), noncondensing Nonoperating/Storage temperature -40°F to 158°F (-40°C to 70°C) Nonoperating/Storage relative humidity 15% to 90% @ 149°F (65°C), noncondensing Altitude up to 10,000 ft (3 km) Acoustic Power: 0 dB, Pressure: 0 dB
<b>Electrical characteristics</b>	Frequency 50/60 Hz Maximum heat dissipation 170 BTU/hr (179.35 kJ/hr), (switch only: 170 BTU/hr; combined switch + max. PoE devices: 1505 BTU/hr) Voltage 100-127/200-240 VAC Current 5.2/2.6 A Maximum power rating 441 W Idle power 37.5 W PoE power 382 W Notes Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. PoE power is the total power budget available to all PoE ports.	Frequency 50/60 Hz Maximum heat dissipation 99 BTU/hr (104.45 kJ/hr), (switch only: 99 BTU/hr; combined switch + max. PoE devices: 809 BTU/hr) Voltage 100-127/200-240 VAC Current 2.8/1.4 A Maximum power rating 237 W Idle power 21.8 W PoE power 195 W Notes Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. PoE power is the total power budget available to all PoE ports.	Frequency 50/60 Hz Maximum heat dissipation 29 BTU/hr (30.6 kJ/hr), (switch only: 29 BTU/hr; combined switch + max. PoE devices: 262 BTU/hr) Voltage 100-127/200-240 VAC Current 1.4 A Maximum power rating 76.7 W Idle power 5.8 W PoE power 67 W Notes Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. PoE power is the total power budget available to all PoE ports.
<b>Safety</b>	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
<b>Emissions</b>	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A
<b>Immunity</b>			



# HP 2530 Switch Series

## Specifications (continued)

	HP 2530-48-PoE+ Switch (J9778A)	HP 2530-24-PoE+ Switch (J9779A)	HP 2530-8-PoE+ Switch (J9780A)
Generic	EN 55024, CISPR 24	EN 55024, CISPR 24	EN 55024, CISPR 24
EN	EN 55024, CISPR 24	EN 55024, CISPR 24	EN 55024, CISPR 24
ESD	IEC 61000-4-2	IEC 61000-4-2	IEC 61000-4-2
Radiated	IEC 61000-4-3	IEC 61000-4-3	IEC 61000-4-3
EFT/Burst	IEC 61000-4-4	IEC 61000-4-4	IEC 61000-4-4
Surge	IEC 61000-4-5	IEC 61000-4-5	IEC 61000-4-5
Conducted	IEC 61000-4-6	IEC 61000-4-6	IEC 61000-4-6
Power frequency magnetic field	IEC 61000-4-8	IEC 61000-4-8	IEC 61000-4-8
Voltage dips and interruptions	IEC 61000-4-11	IEC 61000-4-11	IEC 61000-4-11
Harmonics	EN 61000-3-2, IEC 61000-3-2	EN 61000-3-2, IEC 61000-3-2	EN 61000-3-2, IEC 61000-3-2
Flicker	EN 61000-3-3, IEC 61000-3-3	EN 61000-3-3, IEC 61000-3-3	EN 61000-3-3, IEC 61000-3-3
<b>Management</b>	IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; out-of-band management (serial RS-232C or Micro USB); IEEE 802.3 Ethernet MIB; Repeater MIB; Ethernet Interface MIB	IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; out-of-band management (serial RS-232C or Micro USB); IEEE 802.3 Ethernet MIB; Repeater MIB; Ethernet Interface MIB	IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; out-of-band management (serial RS-232C or Micro USB); IEEE 802.3 Ethernet MIB; Repeater MIB; Ethernet Interface MIB
<b>Notes</b>	IEEE 802.3az applies to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply to PoE+ models only. When using SFPs with this product, SFPs with revision "B" or later (product number ends with the letter "B" or later, e.g., J4858B, J4859C) are required.	IEEE 802.3az applies to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply to PoE+ models only. When using SFPs with this product, SFPs with revision "B" or later (product number ends with the letter "B" or later, e.g., J4858B, J4859C) are required.	IEEE 802.3az applies to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply to PoE+ models only. When using SFPs with this product, SFPs with revision "B" or later (product number ends with the letter "B" or later, e.g., J4858B, J4859C) are required.
<b>Services</b>	<p>3-year, 4-hour onsite, 13x5 coverage for hardware (U4683E)</p> <p>3-year, 4-hour onsite, 24x7 coverage for hardware (U4835E)</p> <p>3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (U6321E)</p> <p>3-year, 24x7 SW phone support, software updates (UF792E)</p> <p>4-year, 4-hour onsite, 13x5 coverage for hardware (UR948E)</p> <p>4-year, 4-hour onsite, 24x7 coverage for hardware (UR949E)</p> <p>4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR950E)</p> <p>4-year, 24x7 SW phone support, software updates (UR951E)</p> <p>5-year, 4-hour onsite, 13x5 coverage for hardware (UR952E)</p> <p>5-year, 4-hour onsite, 24x7 coverage for hardware (UR953E)</p> <p>5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR954E)</p> <p>3 Yr 6 hr Call-to-Repair Onsite (UW368E)</p> <p>4 Yr 6 hr Call-to-Repair Onsite (UW369E)</p> <p>5 Yr 6 hr Call-to-Repair Onsite (UW370E)</p> <p>1-year, 4-hour onsite, 13x5 coverage for hardware (HR849E)</p> <p>1-year, 4-hour onsite, 24x7 coverage for hardware (HR850E)</p> <p>1-year, 6 hour Call-To-Repair Onsite for hardware (HR853E)</p> <p>1-year, 24x7 software phone support, software updates (HR852E)</p> <p>1-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support and software updates (HR851E)</p> <p>1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS554E)</p>	<p>3-year, 4-hour onsite, 13x5 coverage for hardware (U4683E)</p> <p>3-year, 4-hour onsite, 24x7 coverage for hardware (U4835E)</p> <p>3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (U6321E)</p> <p>3-year, 24x7 SW phone support, software updates (UF792E)</p> <p>4-year, 4-hour onsite, 13x5 coverage for hardware (UR948E)</p> <p>4-year, 4-hour onsite, 24x7 coverage for hardware (UR949E)</p> <p>4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR950E)</p> <p>4-year, 24x7 SW phone support, software updates (UR951E)</p> <p>5-year, 4-hour onsite, 13x5 coverage for hardware (UR952E)</p> <p>5-year, 4-hour onsite, 24x7 coverage for hardware (UR953E)</p> <p>5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR954E)</p> <p>3 Yr 6 hr Call-to-Repair Onsite (UW368E)</p> <p>4 Yr 6 hr Call-to-Repair Onsite (UW369E)</p> <p>5 Yr 6 hr Call-to-Repair Onsite (UW370E)</p> <p>1-year, 4-hour onsite, 13x5 coverage for hardware (HR849E)</p> <p>1-year, 4-hour onsite, 24x7 coverage for hardware (HR850E)</p> <p>1-year, 6 hour Call-To-Repair Onsite for hardware (HR853E)</p> <p>1-year, 24x7 software phone support, software updates (HR852E)</p> <p>1-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support and software updates (HR851E)</p> <p>1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS554E)</p>	<p>3-year, 4-hour onsite, 13x5 coverage for hardware (U4683E)</p> <p>3-year, 4-hour onsite, 24x7 coverage for hardware (U4835E)</p> <p>3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (U6321E)</p> <p>3-year, 24x7 SW phone support, software updates (UF792E)</p> <p>4-year, 4-hour onsite, 13x5 coverage for hardware (UR948E)</p> <p>4-year, 4-hour onsite, 24x7 coverage for hardware (UR949E)</p> <p>4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR950E)</p> <p>4-year, 24x7 SW phone support, software updates (UR951E)</p> <p>5-year, 4-hour onsite, 13x5 coverage for hardware (UR952E)</p> <p>5-year, 4-hour onsite, 24x7 coverage for hardware (UR953E)</p> <p>5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR954E)</p> <p>3 Yr 6 hr Call-to-Repair Onsite (UW368E)</p> <p>4 Yr 6 hr Call-to-Repair Onsite (UW369E)</p> <p>5 Yr 6 hr Call-to-Repair Onsite (UW370E)</p> <p>1-year, 4-hour onsite, 13x5 coverage for hardware (HR849E)</p> <p>1-year, 4-hour onsite, 24x7 coverage for hardware (HR850E)</p> <p>1-year, 6 hour Call-To-Repair Onsite for hardware (HR853E)</p> <p>1-year, 24x7 software phone support, software updates (HR852E)</p> <p>1-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support and software updates (HR851E)</p> <p>1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS554E)</p>

# HP 2530 Switch Series

## Specifications (continued)

	HP 2530-48-PoE+ Switch (J9778A)	HP 2530-24-PoE+ Switch (J9779A)	HP 2530-8-PoE+ Switch (J9780A)
	<p>1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HS555E)</p> <p>3-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS556E)</p> <p>3-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS557E)</p> <p>4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS558E)</p> <p>4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS559E)</p> <p>5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS560E)</p> <p>5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS561E)</p> <p>Refer to the HP website at <a href="http://www.hp.com/networking/services">www.hp.com/networking/services</a> 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>1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HS555E)</p> <p>3-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS556E)</p> <p>3-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS557E)</p> <p>4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS558E)</p> <p>4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS559E)</p> <p>5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS560E)</p> <p>5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS561E)</p> <p>Refer to the HP website at <a href="http://www.hp.com/networking/services">www.hp.com/networking/services</a> 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>1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HS555E)</p> <p>3-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS556E)</p> <p>3-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS557E)</p> <p>4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS558E)</p> <p>4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS559E)</p> <p>5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS560E)</p> <p>5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS561E)</p> <p>Refer to the HP website at <a href="http://www.hp.com/networking/services">www.hp.com/networking/services</a> 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>
<b>Standards and protocols</b> (applies to all products in series)	<p><b>Denial of service protection</b> Network DoS Filter</p> <p><b>Device management</b> RFC 1591 DNS (client) SSHv1/SSHv2 Secure Shell</p> <p><b>General protocols</b> IEEE 802.1D MAC Bridges IEEE 802.1p Priority IEEE 802.1Q VLANs IEEE 802.1s Multiple Spanning Trees IEEE 802.1w Rapid Reconfiguration of Spanning Tree IEEE 802.3 Type 10BASE-T IEEE 802.3ab 1000BASE-T IEEE 802.3ad Link Aggregation Control Protocol (LACP) IEEE 802.3af Power over Ethernet IEEE 802.3at Power over Ethernet Plus IEEE 802.3az Energy Efficient Ethernet IEEE 802.3x Flow Control RFC 768 UDP RFC 783 TFTP Protocol (revision 2) RFC 792 ICMP RFC 793 TCP RFC 826 ARP RFC 854 TELNET RFC 868 Time Protocol RFC 951 BOOTP RFC 1350 TFTP Protocol (revision 2) RFC 1542 BOOTP Extensions RFC 2030 Simple Network Time Protocol (SNTP) v4 RFC 2131 DHCP</p>	<p><b>IP multicast</b> RFC 3376 IGMPv3 (host joins only)</p> <p><b>IPv6</b> RFC 1981 IPv6 Path MTU Discovery RFC 2460 IPv6 Specification RFC 2925 Remote Operations MIB (Ping only) RFC 3315 DHCPv6 (client only) RFC 3513 IPv6 Addressing Architecture RFC 3596 DNS Extension for IPv6 RFC 4022 MIB for TCP RFC 4113 MIB for UDP RFC 4251 SSHv6 Architecture RFC 4252 SSHv6 Authentication RFC 4252 SSHv6 Transport Layer RFC 4254 SSHv6 Connection RFC 4293 MIB for IP RFC 4419 Key Exchange for SSH RFC 4443 ICMPv6 RFC 4861 IPv6 Neighbor Discovery RFC 4862 IPv6 Stateless Address Auto-configuration</p> <p><b>MIBs</b> RFC 1213 MIB II RFC 1493 Bridge MIB RFC 2021 RMONv2 MIB RFC 2613 SMON MIB RFC 2618 RADIUS Client MIB RFC 2620 RADIUS Accounting Client MIB RFC 2665 Ethernet-Like-MIB RFC 2674 802.1p and IEEE 802.1Q Bridge MIB RFC 2688 MAU-MIB RFC 2737 Entity MIB (Version 2) RFC 2863 The Interfaces Group MIB</p>	<p><b>Network management</b> IEEE 802.1AB Link Layer Discovery Protocol (LLDP) RFC 1098 A Simple Network Management Protocol (SNMP) RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events) ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED) SNMPv1/v2c/v3</p> <p><b>QoS/CoS</b> RFC 2474 DiffServ precedence, with 4 queues per port RFC 2475 DiffServ Architecture RFC 2597 DiffServ Assured Forwarding (AF) RFC 2598 DiffServ Expedited Forwarding (EF)</p> <p><b>Security</b> IEEE 802.1X Port Based Network Access Control RFC 1492 TACACS+ RFC 2138 RADIUS Authentication RFC 2866 RADIUS Accounting Secure Sockets Layer (SSL)</p>

# HP 2530 Switch Series

## Specifications (continued)



	HP 2530-48G Switch (J9775A)	HP 2530-24G Switch (J9776A)	HP 2530-8G Switch (J9777A)
<b>Ports</b>	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); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only  4 fixed Gigabit Ethernet SFP ports  1 dual-personality (RJ-45 or USB micro-B) serial console port	24 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); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only  4 fixed Gigabit Ethernet SFP ports  1 dual-personality (RJ-45 or USB micro-B) serial console port  Supports a maximum of 28 Gigabit Ethernet ports	8 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  2 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 port (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-Tx; IEEE 802.3ab 1000Base-T Gigabit Ethernet) or as a SFP slot (for use with SFP transceivers) ports  1 dual-personality (RJ-45 or USB micro-B) serial console port
<b>Physical characteristics</b>	17.44(w) x 10.00(d) x 1.75(h) in (44.3 x 25.4 x 4.45 cm) (1U height) Weight: 6.8 lb (3.08 kg)	17.44(w) x 10.00(d) x 1.75(h) in (44.3 x 25.4 x 4.45 cm) (1U height) Weight: 6.1 lb (2.77 kg)	10(w) x 6.28(d) x 1.75(h) in (25.4 x 15.95 x 4.45 cm) (1U height) Weight: 2.0 lb (0.91 kg)
<b>Memory and processor</b>	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 3 MB dynamically allocated	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated
<b>Mounting</b>	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); horizontal surface mounting; wall mounting	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); horizontal surface mounting; wall mounting	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); horizontal surface mounting; wall mounting
<b>Performance</b>	IPv6 Ready Certified 100 Mb Latency < 7.4 μs (LIFO 64-byte packets) 1000 Mb Latency < 2.3 μs (LIFO 64-byte packets) Throughput up to 77.3 million pps (64-byte packets) Switching capacity 104 Gbps MAC address table size 16000 entries	IPv6 Ready Certified 100 Mb Latency < 7.4 μs (LIFO 64-byte packets) 1000 Mb Latency < 2.3 μs (LIFO 64-byte packets) Throughput up to 41.6 million pps (64-byte packets) Switching capacity 56 Gbps MAC address table size 16000 entries	IPv6 Ready Certified 100 Mb Latency < 7.4 μs (LIFO 64-byte packets) 1000 Mb Latency < 2.6 μs (LIFO 64-byte packets) Throughput up to 14.8 million pps (64-byte packets) Switching capacity 20 Gbps MAC address table size 16000 entries
<b>Environment</b>	Operating temperature 32°F to 113°F (0°C to 45°C) Operating relative humidity 15% to 95% @ 104°F (40°C), noncondensing Nonoperating/Storage temperature -40°F to 158°F (-40°C to 70°C) Nonoperating/Storage relative humidity 15% to 90% @ 149°F (65°C), noncondensing Altitude up to 10,000 ft (3 km) Acoustic Power: 31.0 dB, Pressure: 34.5 dB	Operating temperature 32°F to 113°F (0°C to 45°C) Operating relative humidity 15% to 95% @ 104°F (40°C), noncondensing Nonoperating/Storage temperature -40°F to 158°F (-40°C to 70°C) Nonoperating/Storage relative humidity 15% to 90% @ 149°F (65°C), noncondensing Altitude up to 10,000 ft (3 km) Acoustic Power: 26.4 dB, Pressure: 34.0 dB	Operating temperature 32°F to 113°F (0°C to 45°C) Operating relative humidity 15% to 95% @ 104°F (40°C), noncondensing Nonoperating/Storage temperature -40°F to 158°F (-40°C to 70°C) Nonoperating/Storage relative humidity 15% to 90% @ 149°F (65°C), noncondensing Altitude up to 10,000 ft (3 km) Acoustic Power: 0 dB, Pressure: 0 dB
<b>Electrical characteristics</b>	Frequency 50/60 Hz Achieved Miercom Certified Green Award Maximum heat dissipation 203 BTU/hr (214.17 kJ/hr) Voltage 100-127/200-240 VAC Current 1.2/0.7 A Maximum power rating 59.5 W Idle power 29.5 W Notes Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.	Frequency 50/60 Hz Maximum heat dissipation 164 BTU/hr (173.02 kJ/hr) Voltage 100-127/200-240 VAC Current .6/.4 A Maximum power rating 48.0 W Idle power 28.8 W Notes Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.	Frequency 50/60 Hz Maximum heat dissipation 63 BTU/hr (66.46 kJ/hr), (switch only: 63 BTU/hr) Voltage 100-127/200-240 VAC Current 0.5 A Maximum power rating 18.6 W Idle power 13.6 W Notes Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.
<b>Safety</b>	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
<b>Emissions</b>	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A
<b>Immunity</b>	Generic EN 55024, CISPR 24 EN EN 55024, CISPR 24	EN 55024, CISPR 24 EN 55024, CISPR 24	EN 55024, CISPR 24 EN 55024, CISPR 24

# HP 2530 Switch Series

## Specifications (continued)

	HP 2530-48G Switch (J9775A)	HP 2530-24G Switch (J9776A)	HP 2530-8G Switch (J9777A)
ESD	IEC 61000-4-2	IEC 61000-4-2	IEC 61000-4-2
Radiated	IEC 61000-4-3	IEC 61000-4-3	IEC 61000-4-3
EFT/Burst	IEC 61000-4-4	IEC 61000-4-4	IEC 61000-4-4
Surge	IEC 61000-4-5	IEC 61000-4-5	IEC 61000-4-5
Conducted	IEC 61000-4-6	IEC 61000-4-6	IEC 61000-4-6
Power frequency magnetic field	IEC 61000-4-8	IEC 61000-4-8	IEC 61000-4-8
Voltage dips and interruptions	IEC 61000-4-11	IEC 61000-4-11	IEC 61000-4-11
Harmonics	EN 61000-3-2, IEC 61000-3-2	EN 61000-3-2, IEC 61000-3-2	EN 61000-3-2, IEC 61000-3-2
Flicker	EN 61000-3-3, IEC 61000-3-3	EN 61000-3-3, IEC 61000-3-3	EN 61000-3-3, IEC 61000-3-3
<b>Management</b>	IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; out-of-band management (serial RS-232C or Micro USB); IEEE 802.3 Ethernet MIB; Repeater MIB; Ethernet Interface MIB	IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; out-of-band management (serial RS-232C or Micro USB); IEEE 802.3 Ethernet MIB; Repeater MIB; Ethernet Interface MIB	IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; out-of-band management (serial RS-232C or Micro USB); IEEE 802.3 Ethernet MIB; Repeater MIB; Ethernet Interface MIB
<b>Notes</b>	IEEE 802.3az applies to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply to PoE+ models only. When using SFPs with this product, SFPs with revision "B" or later (product number ends with the letter "B" or later, e.g., J4858B, J4859C) are required.	IEEE 802.3az applies to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply to PoE+ models only. When using SFPs with this product, SFPs with revision "B" or later (product number ends with the letter "B" or later, e.g., J4858B, J4859C) are required.	IEEE 802.3az applies to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply to PoE+ models only. When using SFPs with this product, SFPs with revision "B" or later (product number ends with the letter "B" or later, e.g., J4858B, J4859C) are required.
<b>Services</b>	<p>3-year, 4-hour onsite, 13x5 coverage for hardware (U4683E)</p> <p>3-year, 4-hour onsite, 24x7 coverage for hardware (U4835E)</p> <p>3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (U6321E)</p> <p>3-year, 24x7 SW phone support, software updates (UF792E)</p> <p>4-year, 4-hour onsite, 13x5 coverage for hardware (UR948E)</p> <p>4-year, 4-hour onsite, 24x7 coverage for hardware (UR949E)</p> <p>4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR950E)</p> <p>4-year, 24x7 SW phone support, software updates (UR951E)</p> <p>5-year, 4-hour onsite, 13x5 coverage for hardware (UR952E)</p> <p>5-year, 4-hour onsite, 24x7 coverage for hardware (UR953E)</p> <p>5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR954E)</p> <p>3 Yr 6 hr Call-to-Repair Onsite (UW368E)</p> <p>4 Yr 6 hr Call-to-Repair Onsite (UW369E)</p> <p>5 Yr 6 hr Call-to-Repair Onsite (UW370E)</p> <p>1-year, 4-hour onsite, 13x5 coverage for hardware (HR849E)</p> <p>1-year, 4-hour onsite, 24x7 coverage for hardware (HR850E)</p> <p>1-year, 6 hour Call-To-Repair Onsite for hardware (HR853E)</p> <p>1-year, 24x7 software phone support, software updates (HR852E)</p> <p>1-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support and software updates (HR851E)</p> <p>1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS554E)</p> <p>1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HS555E)</p>	<p>3-year, 4-hour onsite, 13x5 coverage for hardware (U4683E)</p> <p>3-year, 4-hour onsite, 24x7 coverage for hardware (U4835E)</p> <p>3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (U6321E)</p> <p>3-year, 24x7 SW phone support, software updates (UF792E)</p> <p>4-year, 4-hour onsite, 13x5 coverage for hardware (UR948E)</p> <p>4-year, 4-hour onsite, 24x7 coverage for hardware (UR949E)</p> <p>4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR950E)</p> <p>4-year, 24x7 SW phone support, software updates (UR951E)</p> <p>5-year, 4-hour onsite, 13x5 coverage for hardware (UR952E)</p> <p>5-year, 4-hour onsite, 24x7 coverage for hardware (UR953E)</p> <p>5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR954E)</p> <p>3 Yr 6 hr Call-to-Repair Onsite (UW368E)</p> <p>4 Yr 6 hr Call-to-Repair Onsite (UW369E)</p> <p>5 Yr 6 hr Call-to-Repair Onsite (UW370E)</p> <p>1-year, 4-hour onsite, 13x5 coverage for hardware (HR849E)</p> <p>1-year, 4-hour onsite, 24x7 coverage for hardware (HR850E)</p> <p>1-year, 6 hour Call-To-Repair Onsite for hardware (HR853E)</p> <p>1-year, 24x7 software phone support, software updates (HR852E)</p> <p>1-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support and software updates (HR851E)</p> <p>1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS554E)</p> <p>1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HS555E)</p>	<p>3-year, 4-hour onsite, 13x5 coverage for hardware (U4683E)</p> <p>3-year, 4-hour onsite, 24x7 coverage for hardware (U4835E)</p> <p>3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (U6321E)</p> <p>3-year, 24x7 SW phone support, software updates (UF792E)</p> <p>4-year, 4-hour onsite, 13x5 coverage for hardware (UR948E)</p> <p>4-year, 4-hour onsite, 24x7 coverage for hardware (UR949E)</p> <p>4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR950E)</p> <p>4-year, 24x7 SW phone support, software updates (UR951E)</p> <p>5-year, 4-hour onsite, 13x5 coverage for hardware (UR952E)</p> <p>5-year, 4-hour onsite, 24x7 coverage for hardware (UR953E)</p> <p>5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR954E)</p> <p>3 Yr 6 hr Call-to-Repair Onsite (UW368E)</p> <p>4 Yr 6 hr Call-to-Repair Onsite (UW369E)</p> <p>5 Yr 6 hr Call-to-Repair Onsite (UW370E)</p> <p>1-year, 4-hour onsite, 13x5 coverage for hardware (HR849E)</p> <p>1-year, 4-hour onsite, 24x7 coverage for hardware (HR850E)</p> <p>1-year, 6 hour Call-To-Repair Onsite for hardware (HR853E)</p> <p>1-year, 24x7 software phone support, software updates (HR852E)</p> <p>1-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support and software updates (HR851E)</p> <p>1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS554E)</p> <p>1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HS555E)</p>

# HP 2530 Switch Series

## Specifications (continued)

HP 2530-48G Switch (J9775A)	HP 2530-24G Switch (J9776A)	HP 2530-8G Switch (J9777A)
<p>3-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS556E)</p> <p>3-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS557E)</p> <p>4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS558E)</p> <p>4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS559E)</p> <p>5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS560E)</p> <p>5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS561E)</p> <p>Refer to the HP website at <a href="http://www.hp.com/networking/services">www.hp.com/networking/services</a> 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, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS556E)</p> <p>3-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS557E)</p> <p>4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS558E)</p> <p>4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS559E)</p> <p>5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS560E)</p> <p>5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS561E)</p> <p>Refer to the HP website at <a href="http://www.hp.com/networking/services">www.hp.com/networking/services</a> 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, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS556E)</p> <p>3-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS557E)</p> <p>4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS558E)</p> <p>4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS559E)</p> <p>5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS560E)</p> <p>5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS561E)</p> <p>Refer to the HP website at <a href="http://www.hp.com/networking/services">www.hp.com/networking/services</a> 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><b>Standards and protocols</b> (applies to all products in series)</p>	<p><b>Denial of service protection</b> Network DoS Filter</p>	<p><b>Network management</b> IEEE 802.1AB Link Layer Discovery Protocol (LLDP) RFC 1098 A Simple Network Management Protocol (SNMP)</p>
<p><b>Device management</b> RFC 1591 DNS (client) SSHv1/SSHv2 Secure Shell</p> <p><b>General protocols</b> IEEE 802.1D MAC Bridges IEEE 802.1p Priority IEEE 802.1Q VLANs IEEE 802.1s Multiple Spanning Trees IEEE 802.1w Rapid Reconfiguration of Spanning Tree IEEE 802.3 Type 10BASE-T IEEE 802.3ab 1000BASE-T IEEE 802.3ad Link Aggregation Control Protocol (LACP) IEEE 802.3af Power over Ethernet IEEE 802.3at Power over Ethernet Plus IEEE 802.3az Energy Efficient Ethernet IEEE 802.3x Flow Control RFC 768 UDP RFC 783 TFTP Protocol (revision 2) RFC 792 ICMP RFC 793 TCP RFC 826 ARP RFC 854 TELNET RFC 868 Time Protocol RFC 951 BOOTP RFC 1350 TFTP Protocol (revision 2) RFC 1542 BOOTP Extensions RFC 2030 Simple Network Time Protocol (SNTP) v4 RFC 2131 DHCP</p>	<p><b>IP multicast</b> RFC 3376 IGMPv3 (host joins only)</p> <p><b>IPv6</b> RFC 1981 IPv6 Path MTU Discovery RFC 2460 IPv6 Specification RFC 2925 Remote Operations MIB (Ping only) RFC 3315 DHCPv6 (client only) RFC 3513 IPv6 Addressing Architecture RFC 3596 DNS Extension for IPv6 RFC 4022 MIB for TCP RFC 4113 MIB for UDP RFC 4251 SSHv6 Architecture RFC 4252 SSHv6 Authentication RFC 4252 SSHv6 Transport Layer RFC 4254 SSHv6 Connection RFC 4293 MIB for IP RFC 4419 Key Exchange for SSH RFC 4443 ICMPv6 RFC 4861 IPv6 Neighbor Discovery RFC 4862 IPv6 Stateless Address Auto-configuration</p> <p><b>MIBs</b> RFC 1213 MIB II RFC 1493 Bridge MIB RFC 2021 RMONv2 MIB RFC 2613 SMON MIB RFC 2618 RADIUS Client MIB RFC 2620 RADIUS Accounting Client MIB RFC 2665 Ethernet-Like-MIB RFC 2674 802.1p and IEEE 802.1Q Bridge MIB RFC 2688 MAU-MIB RFC 2737 Entity MIB (Version 2) RFC 2863 The Interfaces Group MIB</p>	<p>RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events) ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED) SNMPv1/v2c/v3</p> <p><b>QoS/CoS</b> RFC 2474 DiffServ precedence, with 4 queues per port RFC 2475 DiffServ Architecture RFC 2597 DiffServ Assured Forwarding (AF) RFC 2598 DiffServ Expedited Forwarding (EF)</p> <p><b>Security</b> IEEE 802.1X Port Based Network Access Control RFC 1492 TACACS+ RFC 2138 RADIUS Authentication RFC 2866 RADIUS Accounting Secure Sockets Layer (SSL)</p>

# HP 2530 Switch Series

## Specifications (continued)



	HP 2530-48 Switch (J9781A)	HP 2530-24 Switch (J9782A)	HP 2530-8 Switch (J9783A)
<b>Ports</b>	<p>48 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX); Duplex: half or full</p> <p>2 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</p> <p>2 fixed Gigabit Ethernet SFP ports</p> <p>1 dual-personality (RJ-45 or USB micro-B) serial console port</p>	<p>24 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX); Duplex: half or full</p> <p>2 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</p> <p>2 fixed Gigabit Ethernet SFP ports</p> <p>1 dual-personality (RJ-45 or USB micro-B) serial console port</p>	<p>8 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX); Media Type: Auto-MDIX; Duplex: half or full</p> <p>2 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 port (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-Tx; IEEE 802.3ab 1000Base-T Gigabit Ethernet) or as a SFP slot (for use with SFP transceivers) ports</p> <p>1 dual-personality (RJ-45 or USB micro-B) serial console port</p>
<b>Physical characteristics</b>	<p>17.4(w) x 9.7(d) x 1.75(h) in (44.2 x 24.64 x 4.45 cm) (1U height)</p> <p>Weight: 6.3 lb (2.86 kg)</p>	<p>17.4(w) x 9.7(d) x 1.75(h) in (44.2 x 24.64 x 4.45 cm) (1U height)</p> <p>Weight: 5.7 lb (2.59 kg)</p>	<p>10(w) x 6.28(d) x 1.75(h) in (25.4 x 15.95 x 4.45 cm) (1U height)</p> <p>Weight: 1.8 lb (0.82 kg)</p>
<b>Memory and processor</b>	<p>Processor: ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 3 MB dynamically allocated</p>	<p>Processor: ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated</p>	<p>Processor: ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated</p>
<b>Mounting</b>	<p>Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); horizontal surface mounting; wall mounting</p>	<p>Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); horizontal surface mounting; wall mounting</p>	<p>Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); horizontal surface mounting; wall mounting</p>
<b>Performance</b>	<p>IPV6 Ready Certified</p> <p>100 Mb Latency: &lt; 6.6 μs (LIFO 64-byte packets)</p> <p>1000 Mb Latency: &lt; 2.2 μs (LIFO 64-byte packets)</p> <p>Throughput: up to 13 million pps (64-byte packets)</p> <p>Switching capacity: 17.6 Gbps</p> <p>MAC address table size: 16000 entries</p>	<p>IPV6 Ready Certified</p> <p>100 Mb Latency: &lt; 1.7 μs (LIFO 64-byte packets)</p> <p>1000 Mb Latency: &lt; 1.1 μs (LIFO 64-byte packets)</p> <p>Throughput: up to 9.5 million pps (64-byte packets)</p> <p>Switching capacity: 12.8 Gbps</p> <p>MAC address table size: 16000 entries</p>	<p>IPV6 Ready Certified</p> <p>100 Mb Latency: &lt; 1.3 μs (LIFO 64-byte packets)</p> <p>1000 Mb Latency: &lt; 1.3 μs (LIFO 64-byte packets)</p> <p>Throughput: up to 4.1 million pps (64-byte packets)</p> <p>Switching capacity: 5.6 Gbps</p> <p>MAC address table size: 16000 entries</p>
<b>Environment</b>	<p>Operating temperature: 32°F to 113°F (0°C to 45°C)</p> <p>Operating relative humidity: 15% to 95% @ 104°F (40°C), noncondensing</p> <p>Nonoperating/Storage temperature: -40°F to 158°F (-40°C to 70°C)</p> <p>Nonoperating/Storage relative humidity: 15% to 90% @ 149°F (65°C), noncondensing</p> <p>Altitude: up to 10,000 ft (3 km)</p> <p>Acoustic: Power: 0 dB, Pressure: 0 dB</p>	<p>Operating temperature: 32°F to 113°F (0°C to 45°C)</p> <p>Operating relative humidity: 15% to 95% @ 104°F (40°C), noncondensing</p> <p>Nonoperating/Storage temperature: -40°F to 158°F (-40°C to 70°C)</p> <p>Nonoperating/Storage relative humidity: 15% to 90% @ 149°F (65°C), noncondensing</p> <p>Altitude: up to 10,000 ft (3 km)</p> <p>Acoustic: Power: 0 dB, Pressure: 0 dB</p>	<p>Operating temperature: 32°F to 113°F (0°C to 45°C)</p> <p>Operating relative humidity: 15% to 95% @ 104°F (40°C), noncondensing</p> <p>Nonoperating/Storage temperature: -40°F to 158°F (-40°C to 70°C)</p> <p>Nonoperating/Storage relative humidity: 15% to 90% @ 149°F (65°C), noncondensing</p> <p>Altitude: up to 10,000 ft (3 km)</p> <p>Acoustic: Power: 0 dB, Pressure: 0 dB</p>
<b>Electrical characteristics</b>	<p>Frequency: 50/60 Hz</p> <p>Maximum heat dissipation: 102 BTU/hr (107.61 kJ/hr)</p> <p>Voltage: 100-127/200-240 VAC</p> <p>Current: 0.7/0.4 A</p> <p>Maximum power rating: 29.9 W</p> <p>Idle power: 17.1 W</p> <p>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.</p>	<p>Frequency: 50/60 Hz</p> <p>Maximum heat dissipation: 50 BTU/hr (52.75 kJ/hr)</p> <p>Voltage: 100-127/200-240 VAC</p> <p>Current: 0.3/0.2 A</p> <p>Maximum power rating: 14.7 W</p> <p>Idle power: 8.4 W</p> <p>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.</p>	<p>Frequency: 50/60 Hz</p> <p>Maximum heat dissipation: 25 BTU/hr (26.38 kJ/hr)</p> <p>Voltage: 100-127/200-240 VAC</p> <p>Current: 0.5 A</p> <p>Maximum power rating: 7.2 W</p> <p>Idle power: 4.5 W</p> <p>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.</p>
<b>Safety</b>	<p>UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1</p>	<p>UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1</p>	<p>UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1</p>
<b>Emissions</b>	<p>FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A</p>	<p>FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A</p>	<p>FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A</p>
<b>Immunity</b>	<p>Generic: EN 55024, CISPR 24</p> <p>EN: EN 55024, CISPR 24</p> <p>ESD: IEC 61000-4-2</p> <p>Radiated: IEC 61000-4-3</p>	<p>Generic: EN 55024, CISPR 24</p> <p>EN: EN 55024, CISPR 24</p> <p>ESD: IEC 61000-4-2</p> <p>Radiated: IEC 61000-4-3</p>	<p>Generic: EN 55024, CISPR 24</p> <p>EN: EN 55024, CISPR 24</p> <p>ESD: IEC 61000-4-2</p> <p>Radiated: IEC 61000-4-3</p>

# HP 2530 Switch Series

## Specifications (continued)

	HP 2530-48 Switch (J9781A)	HP 2530-24 Switch (J9782A)	HP 2530-8 Switch (J9783A)
EFT/Burst	IEC 61000-4-4	IEC 61000-4-4	IEC 61000-4-4
Surge	IEC 61000-4-5	IEC 61000-4-5	IEC 61000-4-5
Conducted	IEC 61000-4-6	IEC 61000-4-6	IEC 61000-4-6
Power frequency magnetic field	IEC 61000-4-8	IEC 61000-4-8	IEC 61000-4-8
Voltage dips and interruptions	IEC 61000-4-11	IEC 61000-4-11	IEC 61000-4-11
Harmonics	EN 61000-3-2, IEC 61000-3-2	EN 61000-3-2, IEC 61000-3-2	EN 61000-3-2, IEC 61000-3-2
Flicker	EN 61000-3-3, IEC 61000-3-3	EN 61000-3-3, IEC 61000-3-3	EN 61000-3-3, IEC 61000-3-3
<b>Management</b>	IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; out-of-band management (serial RS-232C or Micro USB); IEEE 802.3 Ethernet MIB; Repeater MIB; Ethernet Interface MIB	IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; out-of-band management (serial RS-232C or Micro USB); IEEE 802.3 Ethernet MIB; Repeater MIB; Ethernet Interface MIB	IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; out-of-band management (serial RS-232C or Micro USB); IEEE 802.3 Ethernet MIB; Repeater MIB; Ethernet Interface MIB
<b>Notes</b>	IEEE 802.3az applies to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply to PoE+ models only. When using SFPs with this product, SFPs with revision "B" or later (product number ends with the letter "B" or later, e.g., J4858B, J4859C) are required.	IEEE 802.3az applies to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply to PoE+ models only. When using SFPs with this product, SFPs with revision "B" or later (product number ends with the letter "B" or later, e.g., J4858B, J4859C) are required.	IEEE 802.3az applies to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply to PoE+ models only. When using SFPs with this product, SFPs with revision "B" or later (product number ends with the letter "B" or later, e.g., J4858B, J4859C) are required.
<b>Services</b>	<p>3-year, 4-hour onsite, 13x5 coverage for hardware (U4683E)</p> <p>3-year, 4-hour onsite, 24x7 coverage for hardware (U4835E)</p> <p>3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (U6321E)</p> <p>3-year, 24x7 SW phone support, software updates (UF792E)</p> <p>4-year, 4-hour onsite, 13x5 coverage for hardware (UR948E)</p> <p>4-year, 4-hour onsite, 24x7 coverage for hardware (UR949E)</p> <p>4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR950E)</p> <p>4-year, 24x7 SW phone support, software updates (UR951E)</p> <p>5-year, 4-hour onsite, 13x5 coverage for hardware (UR952E)</p> <p>5-year, 4-hour onsite, 24x7 coverage for hardware (UR953E)</p> <p>5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR954E)</p> <p>3 Yr 6 hr Call-to-Repair Onsite (UW368E)</p> <p>4 Yr 6 hr Call-to-Repair Onsite (UW369E)</p> <p>5 Yr 6 hr Call-to-Repair Onsite (UW370E)</p> <p>1-year, 4-hour onsite, 13x5 coverage for hardware (HR849E)</p> <p>1-year, 4-hour onsite, 24x7 coverage for hardware (HR850E)</p> <p>1-year, 6 hour Call-To-Repair Onsite for hardware (HR853E)</p> <p>1-year, 24x7 software phone support, software updates (HR852E)</p> <p>1-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support and software updates (HR851E)</p> <p>1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (H5554E)</p> <p>1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (H5555E)</p> <p>3-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (H5556E)</p>	<p>3-year, 4-hour onsite, 13x5 coverage for hardware (U4683E)</p> <p>3-year, 4-hour onsite, 24x7 coverage for hardware (U4835E)</p> <p>3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (U6321E)</p> <p>3-year, 24x7 SW phone support, software updates (UF792E)</p> <p>4-year, 4-hour onsite, 13x5 coverage for hardware (UR948E)</p> <p>4-year, 4-hour onsite, 24x7 coverage for hardware (UR949E)</p> <p>4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR950E)</p> <p>4-year, 24x7 SW phone support, software updates (UR951E)</p> <p>5-year, 4-hour onsite, 13x5 coverage for hardware (UR952E)</p> <p>5-year, 4-hour onsite, 24x7 coverage for hardware (UR953E)</p> <p>5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR954E)</p> <p>3 Yr 6 hr Call-to-Repair Onsite (UW368E)</p> <p>4 Yr 6 hr Call-to-Repair Onsite (UW369E)</p> <p>5 Yr 6 hr Call-to-Repair Onsite (UW370E)</p> <p>1-year, 4-hour onsite, 13x5 coverage for hardware (HR849E)</p> <p>1-year, 4-hour onsite, 24x7 coverage for hardware (HR850E)</p> <p>1-year, 6 hour Call-To-Repair Onsite for hardware (HR853E)</p> <p>1-year, 24x7 software phone support, software updates (HR852E)</p> <p>1-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support and software updates (HR851E)</p> <p>1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (H5554E)</p> <p>1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (H5555E)</p> <p>3-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (H5556E)</p>	<p>3-year, 4-hour onsite, 13x5 coverage for hardware (U4683E)</p> <p>3-year, 4-hour onsite, 24x7 coverage for hardware (U4835E)</p> <p>3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (U6321E)</p> <p>3-year, 24x7 SW phone support, software updates (UF792E)</p> <p>4-year, 4-hour onsite, 13x5 coverage for hardware (UR948E)</p> <p>4-year, 4-hour onsite, 24x7 coverage for hardware (UR949E)</p> <p>4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR950E)</p> <p>4-year, 24x7 SW phone support, software updates (UR951E)</p> <p>5-year, 4-hour onsite, 13x5 coverage for hardware (UR952E)</p> <p>5-year, 4-hour onsite, 24x7 coverage for hardware (UR953E)</p> <p>5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR954E)</p> <p>3 Yr 6 hr Call-to-Repair Onsite (UW368E)</p> <p>4 Yr 6 hr Call-to-Repair Onsite (UW369E)</p> <p>5 Yr 6 hr Call-to-Repair Onsite (UW370E)</p> <p>1-year, 4-hour onsite, 13x5 coverage for hardware (HR849E)</p> <p>1-year, 4-hour onsite, 24x7 coverage for hardware (HR850E)</p> <p>1-year, 6 hour Call-To-Repair Onsite for hardware (HR853E)</p> <p>1-year, 24x7 software phone support, software updates (HR852E)</p> <p>1-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support and software updates (HR851E)</p> <p>1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (H5554E)</p> <p>1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (H5555E)</p> <p>3-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (H5556E)</p>

# HP 2530 Switch Series

## Specifications (continued)

HP 2530-48 Switch (J9781A)	HP 2530-24 Switch (J9782A)	HP 2530-8 Switch (J9783A)
<p>3-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS557E)</p> <p>4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS558E)</p> <p>4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS559E)</p> <p>5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS560E)</p> <p>5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS561E)</p> <p>Refer to the HP website at <a href="http://www.hp.com/networking/services">www.hp.com/networking/services</a> 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, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS557E)</p> <p>4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS558E)</p> <p>4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS559E)</p> <p>5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS560E)</p> <p>5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS561E)</p> <p>Refer to the HP website at <a href="http://www.hp.com/networking/services">www.hp.com/networking/services</a> 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, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS557E)</p> <p>4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS558E)</p> <p>4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS559E)</p> <p>5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS560E)</p> <p>5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS561E)</p> <p>Refer to the HP website at <a href="http://www.hp.com/networking/services">www.hp.com/networking/services</a> 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><b>Standards and protocols</b> (applies to all products in series)</p>	<p><b>Denial of service protection</b> Network DoS Filter</p>	<p><b>Network management</b></p>
<p><b>Device management</b> RFC 1591 DNS (client) SSHv1/SSHv2 Secure Shell</p>	<p><b>IP multicast</b> RFC 3376 IGMPv3 (host joins only)</p>	<p>IEEE 802.1AB Link Layer Discovery Protocol (LLDP) RFC 1098 A Simple Network Management Protocol (SNMP) RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events) ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED) SNMPv1/v2c/v3</p>
<p><b>General protocols</b> IEEE 802.1D MAC Bridges IEEE 802.1p Priority IEEE 802.1Q VLANs IEEE 802.1s Multiple Spanning Trees IEEE 802.1w Rapid Reconfiguration of Spanning Tree IEEE 802.3 Type 10BASE-T IEEE 802.3ab 1000BASE-T IEEE 802.3ad Link Aggregation Control Protocol (LACP) IEEE 802.3af Power over Ethernet IEEE 802.3at Power over Ethernet Plus IEEE 802.3az Energy Efficient Ethernet IEEE 802.3x Flow Control RFC 768 UDP RFC 783 TFTP Protocol (revision 2) RFC 792 ICMP RFC 793 TCP RFC 826 ARP RFC 854 TELNET RFC 868 Time Protocol RFC 951 BOOTP RFC 1350 TFTP Protocol (revision 2) RFC 1542 BOOTP Extensions RFC 2030 Simple Network Time Protocol (SNTP) v4 RFC 2131 DHCP</p>	<p><b>IPv6</b> RFC 1981 IPv6 Path MTU Discovery RFC 2460 IPv6 Specification RFC 2925 Remote Operations MIB (Ping only) RFC 3315 DHCPv6 (client only) RFC 3513 IPv6 Addressing Architecture RFC 3596 DNS Extension for IPv6 RFC 4022 MIB for TCP RFC 4113 MIB for UDP RFC 4251 SSHv6 Architecture RFC 4252 SSHv6 Authentication RFC 4252 SSHv6 Transport Layer RFC 4254 SSHv6 Connection RFC 4293 MIB for IP RFC 4419 Key Exchange for SSH RFC 4443 ICMPv6 RFC 4861 IPv6 Neighbor Discovery RFC 4862 IPv6 Stateless Address Auto-configuration</p>	<p><b>QoS/CoS</b> RFC 2474 DiffServ precedence, with 4 queues per port RFC 2475 DiffServ Architecture RFC 2597 DiffServ Assured Forwarding (AF) RFC 2598 DiffServ Expedited Forwarding (EF)</p>
	<p><b>MIBs</b> RFC 1213 MIB II RFC 1493 Bridge MIB RFC 2021 RMONv2 MIB RFC 2613 SMON MIB RFC 2618 RADIUS Client MIB RFC 2620 RADIUS Accounting Client MIB RFC 2665 Ethernet-Like-MIB RFC 2674 802.1p and IEEE 802.1Q Bridge MIB RFC 2688 MAU-MIB RFC 2737 Entity MIB (Version 2) RFC 2863 The Interfaces Group MIB</p>	<p><b>Security</b> IEEE 802.1X Port Based Network Access Control RFC 1492 TACACS+ RFC 2138 RADIUS Authentication RFC 2866 RADIUS Accounting Secure Sockets Layer (SSL)</p>



## HP 2530 Switch Series accessories

### Transceivers

HP X121 1G SFP LC SX Transceiver (J4858C)  
HP X121 1G SFP LC LX Transceiver (J4859C)  
HP X121 1G SFP LC LH Transceiver (J4860C)  
HP X111 100M SFP LC FX Transceiver (J9054C)  
HP X112 100M SFP LC BX-D Transceiver (J9099B)  
HP X112 100M SFP LC BX-U Transceiver (J9100B)  
HP X122 1G SFP LC BX-D Transceiver (J9142B)  
HP X122 1G SFP LC BX-U Transceiver (J9143B)  
HP X121 1G SFP RJ45 T Transceiver (J8177C)

### Mounting Kit

HP X410 1U Universal 4-post Rack Mounting Kit (J9583A)

### HP 2530-8G-PoE+ Switch (J9774A)

HP X510 1U Cable Guard (J9700A)  
HP 2530 8-port Switch Power Adapter Shelf (J9820A)

### HP 2530-8-PoE+ Switch (J9780A)

HP X510 1U Cable Guard (J9700A)

HP 2530 8-port Switch Power Adapter Shelf (J9820A)  
**HP 2530-8G Switch (J9777A)**

HP X510 1U Cable Guard (J9700A)  
HP 2530 8-port Switch Power Adapter Shelf (J9820A)

### HP 2530-8 Switch (J9783A)

HP X510 1U Cable Guard (J9700A)  
HP 2530 8-port Switch Power Adapter Shelf (J9820A)



Products within this series have achieved sufficient scores in each of the rated criteria to achieve the Miercom Certified Green distinction Award. See the Specifications section of this series for more information.

Products within this series are IPv6 Ready certified. See the Specifications section of this series for more information.

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