#### Overview

Models	
HP 2530-48G-PoE+ Switch	J9772A
HP 2530-24G-PoE+ Switch	J9773A
HP 2530-8G-PoE+ Switch	J9774A
HP 2530-48-PoE+ Switch	J9778A
HP 2530-24-PoE+ Switch	J9779A
HP 2530-8-PoE+ Switch	J9780A
HP 2530-48G Switch	J9775A
HP 2530-24G Switch	J9776A
HP 2530-8G Switch	J9777A
HP 2530-48 Switch	J9781A
HP 2530-24 Switch	J9782A
HP 2530-8 Switch	J9783A

### **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

### Introduction

The HP 2530 Switch Series consists of 12 fully managed Layer 2 edge switches that deliver cost-effective, reliable, secure, and easyto-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)



#### Overview

- Simplified QoS configuration
  - Port-based

prioritize traffic by specifying a port and priority level

• VLAN-based

prioritize 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



### HP 2530 Switch Series

# QuickSpecs

#### Overview

provides an at-a-glance view of status, activity, speed, and full-duplex operation

• **Power and fault LEDs** display any issues

#### Connectivity

- IPv6
  - O 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 list of supported devices in the product FAQ at 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 dualpersonality 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+



### **HP 2530 Switch Series**

# QuickSpecs

#### Overview

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
  - O 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

 $\circ\,$  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
  - O 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

 $\,\circ\,\,$  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

#### Overview

• 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

prevents hooding of iF matticast the

#### 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

O 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

o Fans

decreases power consumption in fanless (all 8-port, 2530-24, and 2530-48 switches) and variable-speed fan switches

O 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

O 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



### Overview

• 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

- 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; for details on the duration of support provided with your product purchase, refer to
   www.hp.com/networking/warrantysummary
- Software releases

to find software for your product, refer to www.hp.com/networking/support; for details on the software releases available with your product purchase, refer to 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 zl Modules, HP Threat Management Services zl Module, HP AllianceOne Extended zl Module with Riverbed Steelhead, HP MSM765zl Mobility Controller and HP Survivable Branch Communication zl 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.



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

<ul> <li>HP 2530-8 Switch</li> <li>8 RJ-45 autosensing 10/100 ports</li> <li>2 dual-personality ports; RJ-45 10/100/1000 or SFP slot (Min 0 // Max 2 SFP)</li> <li>Power Supply Included</li> <li>1U - Height</li> </ul>	J9783A See Configuration Note:1, 3
HP 2530-8-PoE+ Switch • 8 RJ-45 autosensing 10/100 PoE+ports • 2 dual-personality ports; RJ-45 10/100/1000 or SFP slot (Min 0 // Max 2 SFP) • Power Supply Included • 1U - Height	J9780A See Configuration Note:1, 3
<ul> <li>HP 2530-8G Switch</li> <li>8 RJ-45 autosensing 10/100/1000 ports</li> <li>2 dual-personality ports; RJ-45 10/100/1000 or SFP slot (Min 0 // Max 2 SFP)</li> <li>Power Supply Included</li> <li>1U - Height</li> </ul>	J9777A See Configuration Note:1, 3
<ul> <li>HP 2530-8G-PoE+ Switch</li> <li>8 RJ-45 autosensing 10/100/1000 PoE+ ports</li> <li>2 dual-personality ports; RJ-45 10/100/1000 or SFP slot (Min 0 // Max 2 SFP)</li> <li>Power Supply Included</li> <li>1U - Height</li> </ul>	J9774A See Configuration Note:1, 3
<ul> <li>HP 2530-24 Switch</li> <li>24 RJ-45 autosensing 10/100 ports</li> <li>2 fixed Gigabit Ethernet SFP ports (Min 0 // Max 2 SFP)</li> <li>2 RJ-45 autosensing 10/100/1000 ports</li> <li>Power Supply Included</li> <li>1U - Height</li> </ul>	J9782A See Configuration Note:1, 2
<ul> <li>C15 PDU NA</li> <li>C15 to C14 Jumper Cord (NA)</li> </ul>	J9782A#B2B
<ul> <li>C15 PDU ROW</li> <li>C15 to C14 Jumper Cord (ROW)</li> </ul>	J9782A#B2C
HP 2530-24-PoE+ Switch	J9779A



Configuration	
<ul> <li>24 RJ-45 autosensing 10/100 PoE+ ports</li> <li>2 fixed Gigabit Ethernet SFP ports (Min 0 // Max 2 SFP)</li> <li>2 RJ-45 autosensing 10/100/1000 ports</li> <li>Power Supply Included</li> <li>1U - Height</li> </ul>	See Configuration Note:1, 2
C15 PDU NA	J9779A#B2B
• C15 to C14 Jumper Cord (NA)	
C15 PDU ROW	J9779A#B2C
• C15 to C14 Jumper Cord (ROW)	
HP 2530-24G Switch	J9776A
<ul> <li>24 RJ-45 autosensing 10/100/1000 ports</li> <li>4 fixed Gigabit Ethernet SFP ports (Min 0 // Max 4 SFP)</li> <li>Power Supply Included</li> <li>1U - Height</li> </ul>	See Configuration Note:1, 2
C15 PDU NA	J9776A#B2B
• C15 to C14 Jumper Cord (NA)	
C15 PDU ROW	J9776A#B2C
• C15 to C14 Jumper Cord (ROW)	
HP 2530-24G-PoE+ Switch	J9773A
<ul> <li>24 RJ-45 autosensing 10/100/1000 PoE+ ports</li> <li>4 fixed Gigabit Ethernet SFP ports (Min 0 // Max 4 SFP)</li> <li>Power Supply Included</li> <li>1U - Height</li> </ul>	See Configuration Note:1, 2
C15 PDU NA	J9773A#B2B
• C15 to C14 Jumper Cord (NA)	
C15 PDU ROW	J9773A#B2C
• C15 to C14 Jumper Cord (ROW)	
HP 2530-48 Switch	J9781A
<ul> <li>48 RJ-45 autosensing 10/100 ports</li> <li>2 fixed Gigabit Ethernet SFP ports (Min 0 // Max 2 SFP)</li> <li>2 RJ-45 autosensing 10/100/1000 ports</li> <li>Power Supply Included</li> <li>1U - Height</li> </ul>	See Configuration Note:1, 2
C15 PDU NA	J9781A#B2B

• C15 to C14 Jumper Cord (NA)



### Configuration

<ul> <li>C15 PDU ROW</li> <li>C15 to C14 Jumper Cord (ROW)</li> </ul>	J9781A#B2C
HP 2530-48-PoE+ Switch • 48 RJ-45 autosensing 10/100 PoE+ ports • 2 fixed Gigabit Ethernet SFP ports (Min 0 // Max 2 SFP) • 2 RJ-45 autosensing 10/100/1000 ports • Power Supply Included • 1U - Height	J9778A See Configuration Note:1, 2
<ul> <li>C15 PDU NA</li> <li>C15 to C14 Jumper Cord (NA)</li> </ul>	J9778A#B2B
<ul> <li>C15 PDU ROW</li> <li>C15 to C14 Jumper Cord (ROW)</li> </ul>	J9778A#B2C
HP 2530-48G Switch • 48 RJ-45 autosensing 10/100/1000 ports • 4 fixed Gigabit Ethernet SFP ports (Min 0 // Max 4 SFP) • Power Supply Included • 1U - Height	J9775A See Configuration Note:1, 2
<ul> <li>C15 PDU NA</li> <li>C15 to C14 Jumper Cord (NA)</li> </ul>	J9775A#B2B
<ul> <li>C15 PDU ROW</li> <li>C15 to C14 Jumper Cord (ROW)</li> </ul>	J9775A#B2C
HP 2530-48G-PoE+ Switch • 48 RJ-45 autosensing 10/100/1000 PoE+ ports • 4 fixed Gigabit Ethernet SFP ports (Min 0 // Max 4 SFP) • Power Supply Included • 1U - Height	J9772A See Configuration Note:1, 2
<ul><li>C15 PDU NA</li><li>C15 to C14 Jumper Cord (NA)</li></ul>	J9772A#B2B
<ul> <li>C15 PDU ROW</li> <li>C15 to C14 Jumper Cord (ROW)</li> </ul>	J9772A#B2C



### Configuration

**Configuration Rules:** 

Note 1	The following Transceivers install into this switch:	
	HP X121 1G SFP LC SX Transceiver	J4858C
	HP X121 1G SFP LC LX Transceiver	J4859C
	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 X121 1G SFP LC LH Transceiver	J4860C
	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
Note 2	Localization Or PDU cable required. (See Remarks Below)	
Note 3	Localization cable required. No B2x options	
Remarks:		
	Drop down under power supply should offer the following options and results: Switch to Wall Power Cord - Should leave existing Localized Option (See Localization Menu for list.) Switch to PDU Power Cord - Should replace localized option with #B2B or #B2C in AMS, AP, J, C. #B2C added to localized option in EMEA.	

### **Rack Level Integration CTO Models**

HP 2530-24 Switch 24 RJ-45 autosensing 10/100 ports 2 fixed Gigabit Ethernet SFP ports (Min 0 // Max 2 SFP) 2 RJ-45 autosensing 10/100/1000 ports Power Supply Included 1U - Height	J9782A See Configuration Note:1, 2, 3, 4
<ul> <li>C15 PDU NA</li> <li>C15 to C14 Jumper Cord (NA)</li> </ul>	J9782A#B2B
<ul> <li>C15 PDU ROW</li> <li>C15 to C14 Jumper Cord (ROW)</li> </ul>	J9782A#B2C
HP 2530-24-PoE+ Switch	J9779A



Configuration	
<ul> <li>24 RJ-45 autosensing 10/100 PoE+ ports</li> <li>2 fixed Gigabit Ethernet SFP ports (Min 0 // Max 2 SFP)</li> <li>2 RJ-45 autosensing 10/100/1000 ports</li> <li>Power Supply Included</li> <li>1U - Height</li> </ul>	See Configuration Note:1, 2, 3, 4
C15 PDU NA	J9779A#B2B
C15 to C14 Jumper Cord (NA)	
C15 PDU ROW	J9779A#B2C
• C15 to C14 Jumper Cord (ROW)	
HP 2530-24G Switch	J9776A
<ul> <li>24 RJ-45 autosensing 10/100/1000 ports</li> <li>4 fixed Gigabit Ethernet SFP ports (Min 0 // Max 4 SFP)</li> <li>Power Supply Included</li> <li>1U - Height</li> </ul>	See Configuration Note:1, 2, 3, 4
C15 PDU NA	J9776A#B2B
• C15 to C14 Jumper Cord (NA)	
C15 PDU ROW	J9776A#B2C
• C15 to C14 Jumper Cord (ROW)	
HP 2530-24G-PoE+ Switch	J9773A
<ul> <li>24 RJ-45 autosensing 10/100/1000 PoE+ ports</li> <li>4 fixed Gigabit Ethernet SFP ports (Min 0 // Max 4 SFP)</li> <li>Power Supply Included</li> <li>1U - Height</li> </ul>	See Configuration Note:1, 2, 3, 4
C15 PDU NA	J9773A#B2B
• C15 to C14 Jumper Cord (NA)	
C15 PDU ROW	J9773A#B2C
• C15 to C14 Jumper Cord (ROW)	
HP 2530-48 Switch	J9781A
<ul> <li>48 RJ-45 autosensing 10/100 ports</li> <li>2 fixed Gigabit Ethernet SFP ports (Min 0 // Max 2 SFP)</li> <li>2 RJ-45 autosensing 10/100/1000 ports</li> <li>Power Supply Included</li> <li>111 Height</li> </ul>	See Configuration Note:1, 2, 3, 4

• 1U - Height



### Configuration

C15 PDU NA	J9781A#B2B
• C15 to C14 Jumper Cord (NA)	
C15 PDU ROW	J9781A#B2C
• C15 to C14 Jumper Cord (ROW)	
HP 2530-48-PoE+ Switch	J9778A
<ul> <li>48 RJ-45 autosensing 10/100 PoE+ ports</li> <li>2 fixed Gigabit Ethernet SFP ports (Min 0 // Max 2 SFP)</li> <li>2 RJ-45 autosensing 10/100/1000 ports</li> <li>Power Supply Included</li> <li>1U - Height</li> </ul>	See Configuration Note:1, 2, 3, 4
C15 PDU NA	J9778A#B2B
• C15 to C14 Jumper Cord (NA)	
C15 PDU ROW	J9778A#B2C
• C15 to C14 Jumper Cord (ROW)	
HP 2530-48G Switch	J9775A
<ul> <li>48 RJ-45 autosensing 10/100/1000 ports</li> <li>4 fixed Gigabit Ethernet SFP ports (Min 0 // Max 4 SFP)</li> <li>Power Supply Included</li> <li>1U - Height</li> </ul>	See Configuration Note:1, 2, 3, 4
C15 PDU NA	J9775A#B2B
• C15 to C14 Jumper Cord (NA)	
C15 PDU ROW	J9775A#B2C
• C15 to C14 Jumper Cord (ROW)	
HP 2530-48G-PoE+ Switch	J9772A
<ul> <li>48 RJ-45 autosensing 10/100/1000 PoE+ ports</li> <li>4 fixed Gigabit Ethernet SFP ports (Min 0 // Max 4 SFP)</li> <li>Power Supply Included</li> <li>1U - Height</li> </ul>	See Configuration Note:1, 2, 3, 4
C15 PDU NA	J9772A#B2B
C15 to C14 Jumper Cord (NA)	



### Configuration

C15 PDU ROW

• C15 to C14 Jumper Cord (ROW)

J9772A#B2C

#### **Configuration Rules:**

Note 1	The following Transceivers install into this switch:	
	HP X121 1G SFP LC SX Transceiver	J4858C
	HP X121 1G SFP LC LX Transceiver	J4859C
	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 X121 1G SFP LC LH Transceiver	J4860C
	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
Note 2 Note 3	If this switch is factory installed in any HP Universal Racks, Then the J9583A#0D1 is required. Localization required on orders without #B2B or #B2C options.	
Note 3	#B2B is required in AMS, and #B2C in APJ and EMEA. (Only when Factory Racked)	
Note 4	If HP CTO Switch Chassis is selected to be Rack Level Integration, Then the CTO Switch Chassis needs to integrate (with #0D1) to the HP Networking Universal Rack.	
Remarks:		
	Drop down under power supply should offer the following options and res Switch to PDU Power Cord - replace localized option with #B2B in AMS or ‡ Switch to Wall Power Cord - Should leave existing Localized Option (no #B	B2C in APJ and EMEA.

Configuration

### **Internal Power Supplies**

Internal Power supplies included

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

### Transceivers

#### **SFP Transceivers**

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

### Cables

#### **Multi-Mode Cables**

HP .5m Multi-mode OM3 LC/LC FC Cable	AJ833A
HP 1m Multi-mode OM3 LC/LC FC Cable	AJ834A
HP 2 m Multimode OM3 LC/LC FC Cable	AJ835A
HP 5 m Multimode OM3 LC/LC FC Cable	AJ836A
HP 15 m Multimode OM3 LC/LC FC Cable	AJ837A
HP 30 m Multimode OM3 LC/LC FC Cable	AJ838A
HP 50 m Multimode OM3 LC/LC FC Cable	AJ839A

### **Switch Enclosure Options**

#### **Cable Guard**

HP X510 1U Cable Guard

J9700A See Configuration Note:1



### Configuration

**Configuration Rules:** 

Note 1	This Cable Guard is supported only on the J	This Cable Guard is supported only on the J9783A, J9780A, J9777A and J9774A.	
Option Mounting Ki	t		
HP 2530 8-port Swit	ch Pwr Adptr Shelf	J9820A	
		See Configuration Note:1	
Configuration Rules:			
Note 1	This Power Adapter Shelf is supported only on the J9783A, J9780A, J9777A and J9774A.		
Rack Mount Kit			
HP X410 1U Univ 4-ፑ	oost Rack Mnt Kit	J9583A	
		See Configuration Note:1, 2	
Configuration Rules:			
Note 1	If this Mounting Kit is order with #0D1 th	If this Mounting Kit is order with #0D1 then it integrates to the HP Universal Rack. (not the switch)	
Note 2	"The J9583A cannot be ordered with opt	If the J9583A is ordered in EMEA fire the following UNBUILDABLE error: "The J9583A cannot be ordered with option integrated to the Rack in the EMEA region. The Rack Mount kit must be ordered as BTO using supplier 80CZ."	

#### **Technical Specifications**

HP 2530-48G-PoE+ Switch Ports 48 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at (J9772A) 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 17.44(w) x 13.00(d) x 1.75(h) in (44.3 x 32.26 x **Physical characteristics** Dimensions 4.45 cm) (1U height) 10.4 lb (4.72 kg) Weight Memory and processor Processor ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM: packet buffer size: 3 MB dynamically allocated Mounting Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rackmounting kit available); horizontal surface mounting; wall mounting Performance **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 Environment **Operating temperature** 32°F to 113°F (0°C to 45°C) **Operating relative** 15% to 95% @ 104°F (40°C), noncondensing humidity -40°F to 158°F (-40°C to 70°C) Non-operating/ Storage temperature Non-operating/Storage 15% to 90% @ 149°F (65°C), noncondensing relative humidity Altitude up to 10,000 ft (3 km) Acoustic Power: 33.6 dB, Pressure: 43.9 dB **Electrical characteristics** Frequency 50/60 Hz Maximum heat 236 BTU/hr (248.98 kJ/hr), (switch only: 236 BTU/hr; combined switch + max. PoE devices: dissipation 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



### HP 2530 Switch Series

### **Technical Specifications**

		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.
Safety	UL 60950-1; CAN/CSA 2	22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
Emissions	FCC Class A; EN 55022/	CISPR-22 Class A; VCCI Class A
Immunity	Generic	EN 55024, CISPR 24
	EN	EN 55024, CISPR 24
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	configuration menu; ou	ement Center; command-line interface; Web browser; it-of-band management (serial RS-232C or Micro USB); B; Repeater MIB; Ethernet Interface MIB
Notes	apply to PoE+ models of	o Gigabit models only; IEEE 802.3at and IEEE 802.3af only. When using SFPs with this product, SFPs with oduct number ends with the letter "B" or later, e.g., quired.
Services	3-year, 4-hour onsite, 3 3-year, 4-hour onsite, 3 and SWupdates (U6321	
	-	e support, software updates (UF792E) 13x5 coverage for hardware (UR948E)
	•	24x7 coverage for hardware (UR949E)
	(UR950E)	24x7 coverage for hardware, 24x7 software phone
		e support, software updates (UR951E) 13x5 coverage for hardware (UR952E)
	-	24x7 coverage for hardware (UR953E)
	5-year, 4-hour onsite, a (UR954E)	24x7 coverage for hardware, 24x7 software phone
	3 Yr 6 hr Call-to-Repair	
	4 Yr 6 hr Call-to-Repair 5 Yr 6 hr Call-to-Repair	
	•	13x5 coverage for hardware (HR849E)
	1-year, 4-hour onsite, 2	24x7 coverage for hardware (HR850E)
	1-year, 6 hour Call-To-	Repair Onsite for hardware (HR853E)



Technical Specificatio	ns		
		1-year, 4-hour onsite, 24x support and software upda 1-year, 24x7 software pho Hardware Exchange (HS55 1-year, 24x7 software pho exchange (HS555E) 3-year, 24x7 software pho Hardware Exchange (HS55 3-year, 24x7 software pho Exchange (HS557E) 4-year, 24x7 software pho Hardware Exchange (HS55 4-year, 24x7 software pho Exchange (HS559E) 5-year, 24x7 software pho Hardware Exchange (HS55	one support, software updates + Next Business Day (4E) one support, software updates + 4 hour hardware one support, software updates + Next Business Day (6E) one support, software updates + 4 hour Hardware one support, software updates + Next Business Day (8E) one support, software updates + 4 hour Hardware one support, software updates + 4 hour Hardware
		the service-level description	www.hp.com/networking/services for details on ons and product numbers. For details about services r area, please contact your local HP sales office.
<b>HP 2530-24G-PoE+ Switch</b> (J9773A)	Ports	24 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3a PoE+); Media Type: Auto-MDIX; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only	
		4 fixed Gigabit Ethernet SF	P ports
		1 dual-personality (RJ-45 or USB micro-B) serial console port	
	Physical characteristics	Dimensions	17.44(w) x 13.00(d) x 1.75(h) in (44.3 x 33.02 x 4.45 cm) (1U height)
		Weight	8.7 lb (3.95 kg)
	Memory and processor	Processor	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated
	Mounting	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack- mounting kit available); horizontal surface mounting; wall mounting	
	Performance	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
	Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
		- Per and temperature	



### HP 2530 Switch Series

Technical Specifications		
	Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non-operating/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
Electrical characteristic	s 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.
Safety	UL 60950-1; CAN/CSA 22.	2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
Emissions	FCC Class A; EN 55022/CI	SPR-22 Class A; VCCI Class A
Immunity	Generic	EN 55024, CISPR 24
	EN	EN 55024, CISPR 24
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flieben	



Flicker

EN 61000-3-3, IEC 61000-3-3

<b>Technical Specifica</b>	tions	
	Management	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
	Notes	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.
	Services	<ul> <li>3-year, 4-hour onsite, 13x5 coverage for hardware (U4835E)</li> <li>3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SWupdates (U6321E)</li> <li>3-year, 24x7 SW phone support, software updates (UF792E)</li> <li>4-year, 4-hour onsite, 13x5 coverage for hardware (UR948E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware (UR949E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR950E)</li> <li>4-year, 24x7 SW phone support, software updates (UR951E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware (UR952E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware (UR952E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware (UR953E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware (UR953E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware (UR953E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware (UR954E)</li> <li>3 Yr 6 hr Call-to-Repair Onsite (UW368E)</li> <li>4 Yr 6 hr Call-to-Repair Onsite (UW369E)</li> <li>5 Yr 6 hr Call-to-Repair Onsite for hardware (HR849E)</li> <li>1-year, 4-hour onsite, 24x7 coverage for hardware (HR850E)</li> <li>1-year, 4-hour onsite, 24x7 coverage for hardware (HR852E)</li> <li>1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS555E)</li> <li>3-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HS557E)</li> <li>3-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS557E)</li> <li>3-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS558E)</li> <li>3-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS557E)</li> <li>3-year, 24x</li></ul>
		and response times in your area, please contact your local HP sales office.



### **Technical Specifications**

<b>HP 2530-8G-PoE+ Switch</b> (J9774A)	Ports	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 c	or USB micro-B) serial console port
	Physical characteristics	Dimensions	10(w) x 6.28(d) x 1.75(h) in (25.4 x 15.95 x 4.45 cm) (1U height)
		Weight	2.2 lb (1 kg)
	Memory and processor	Processor	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated
	Mounting		19-inch telco rack or equipment cabinet (rack- rizontal surface mounting; wall mounting
	Performance	IPv6 Ready Certified	
		100 Mb Latency	< 7.4µs (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
	Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
		Operating relative humidity	15% to 95% @ 104°F (40°C), non-condensing
		Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)
		Non-operating/ 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	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.



### **Technical Specifications**

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Safety Emissions		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. 2.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1 ISPR-22 Class A; VCCI Class A	
Immunity	Generic	EN 55024, CISPR 24	
initiality	EN	EN 55024, CISPR 24	
	ESD	IEC 61000-4-2	
	Radiated	IEC 61000-4-3	
	EFT/Burst	IEC 61000-4-4	
	Surge	IEC 61000-4-5	
	Conducted	IEC 61000-4-6	
	Power frequency	IEC 61000-4-8	
	magnetic field		
	Voltage dips and interruptions	IEC 61000-4-11	
	Harmonics	EN 61000-3-2, IEC 61000-3-2	
	Flicker	EN 61000-3-3, IEC 61000-3-3	
Management	configuration menu; out	ment Center; command-line interface; Web browser; -of-band management (serial RS-232C or Micro USB); Repeater MIB; Ethernet Interface MIB	
Notes	apply to PoE+ models on revision "B" or later (proc	Gigabit models only; IEEE 802.3at and IEEE 802.3af Ily. When using SFPs with this product, SFPs with duct number ends with the letter "B" or later, e.g., uired.	
Services	3-year, 4-hour onsite, 24 3-year, 4-hour onsite, 24 and SWupdates (U6321E 3-year, 24x7 SW phone s 4-year, 4-hour onsite, 13 4-year, 4-hour onsite, 24 (UR950E) 4-year, 24x7 SW phone s 5-year, 4-hour onsite, 13 5-year, 4-hour onsite, 24 (UR954E) 3 Yr 6 hr Call-to-Repair C 4 Yr 6 hr Call-to-Repair C	4-year, 24x7 SW phone support, software updates (UR951E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UR952E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UR953E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone	



Technical Specificatio	ons			
		<ul> <li>1-year, 4-hour onsite, 13x5 coverage for hardware (HR849E)</li> <li>1-year, 4-hour onsite, 24x7 coverage for hardware (HR850E)</li> <li>1-year, 6 hour Call-To-Repair Onsite for hardware (HR853E)</li> <li>1-year, 24x7 software phone support, software updates (HR852E)</li> <li>1-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support and software updates (HR851E)</li> <li>1-year, 24x7 software phone support, software updates + Next Business Datadware Exchange (HS554E)</li> <li>1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HS555E)</li> <li>3-year, 24x7 software phone support, software updates + Next Business Datadware Exchange (HS556E)</li> <li>3-year, 24x7 software phone support, software updates + A hour Hardware Exchange (HS557E)</li> <li>4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS557E)</li> <li>4-year, 24x7 software phone support, software updates + Next Business Datadware Exchange (HS558E)</li> <li>4-year, 24x7 software phone support, software updates + Next Business Datadware Exchange (HS558E)</li> <li>5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS558E)</li> <li>5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS559E)</li> <li>5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS556E)</li> <li>5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS560E)</li> <li>5-year, 24x7 software phone support, software updates + Next Business Datadware Exchange (HS560E)</li> <li>5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS561E)</li> <li>Refer to the HP website at www.hp.com/networking/services for details of the service-level descriptions and product numbers. For details about service and response times in your area, please contact your local HP sales office.</li> </ul>		
<b>HP 2530-48-PoE+ Switch</b> (J9778A)	Ports	48 RJ-45 autosensing 10/100 PoE+ ports (IEEE 802.3 Type 10BASE-T, 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 80 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		
			or USB micro-B) serial console port	
	Physical characteristics	Dimensions	17.4(w) x 12.7(d) x 1.75(h) in (44.2 x 32.26 x 4.45 cm) (1U height)	
		Weight	10.1 lb (4.58 kg)	
	Memory and processor	Processor	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 3 MB dynamically allocat	
	Mounting		l 19-inch telco rack or equipment cabinet (rack- orizontal surface mounting; wall mounting	
	Performance	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	



### HP 2530 Switch Series

### **Technical Specifications**

	MAC address table size	16000 entries
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non-operating/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
<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.
Safety	UL 60950-1; CAN/CSA 22.2	No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
Emissions	FCC Class A; EN 55022/CISF	PR-22 Class A; VCCI Class A
Immunity	Generic	EN 55024, CISPR 24
	EN	EN 55024, CISPR 24
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11



### **Technical Specifications**

	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Managamant		
Management	configuration menu; out-o	ient Center; command-line interface; Web browser; of-band management (serial RS-232C or Micro USB); Repeater MIB; Ethernet Interface MIB
Notes	apply to PoE+ models only	gabit models only; IEEE 802.3at and IEEE 802.3af y. When using SFPs with this product, SFPs with uct number ends with the letter "B" or later, e.g., ired.
Services	3-year, 4-hour onsite, 24x 3-year, 4-hour onsite, 24x and SWupdates (U6321E)	k5 coverage for hardware (U4683E) k7 coverage for hardware (U4835E) k7 coverage for hardware, 24x7 SW phone support upport, software updates (UF792E)
		<pre>coverage for hardware (UR948E)</pre>
	• · · · · · · · · · · · · · · · · · · ·	<pre>&lt;7 coverage for hardware (UR949E)</pre>
	(UR950E)	7 coverage for hardware, 24x7 software phone
		ipport, software updates (UR951E)
	• · · · · · · · · · · · · · · · · · · ·	(5 coverage for hardware (UR952E)
	-	<pre>&lt;7 coverage for hardware (UR953E)</pre>
	(UR954E)	x7 coverage for hardware, 24x7 software phone
	3 Yr 6 hr Call-to-Repair Or	nsite (IIW368F)
	4 Yr 6 hr Call-to-Repair Or	
	5 Yr 6 hr Call-to-Repair Or	
		<pre>k5 coverage for hardware (HR849E)</pre>
	-	<pre>&lt;7 coverage for hardware (HR850E)</pre>
	1-year, 6 hour Call-To-Re	pair Onsite for hardware (HR853E)
	-	one support, software updates (HR852E)
	1-year, 4-hour onsite, 24x support and software upd	<7 coverage for hardware, 24x7 software phone ates (HR851E)
	1-year, 24x7 software ph Hardware Exchange (HS5	one support, software updates + Next Business Day 54E)
	1-year, 24x7 software ph exchange (HS555E)	one support, software updates + 4 hour hardware
	3-year, 24x7 software ph Hardware Exchange (HS5	one support, software updates + Next Business Day 56E)
	3-year, 24x7 software ph Exchange (HS557E)	one support, software updates + 4 hour Hardware
	4-year, 24x7 software ph Hardware Exchange (HS5	one support, software updates + Next Business Day 58E)
	4-year, 24x7 software pho Exchange (HS559E)	one support, software updates + 4 hour Hardware
		one support, software updates + Next Business Day 50E)
	-	one support, software updates + 4 hour Hardware
	Refer to the HP website at	<b>www.hp.com/networking/services</b> for details on



Technical Specification	ons			
			ons and product numbers. For details about services r area, please contact your local HP sales office.	
<b>HP 2530-24-PoE+ Switch</b> (J9779A)	Ports	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 Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BAS T/100BASE-TX: half or full; 1000BASE-T: full only		
		2 fixed Gigabit Ethernet SF	P ports	
		1 dual-personality (RJ-45	or USB micro-B) serial console port	
	Physical characteristics	Dimensions	17.4(w) x 12.7(d) x 1.75(h) in (44.2 x 32.26 x 4.45 cm) (1U height)	
		Weight	8.4 lb (3.81 kg)	
	Memory and processor	Processor	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 equipm mounting kit available); horizontal surface mounting; w			
	Performance	IPv6 Ready Certified		
		100 Mb Latency	< 1.7 µs (LIFO 64-byte packets)	
		1000 Mb Latency	< 1.1µs (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	
	Environment	Operating temperature	32°F to 113°F (0°C to 45°C)	
		Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing	
		Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)	
		Non-operating/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	
	<b>Electrical characteristics</b>	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	



HP 2530	Switch	Series
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Technical Specifications		
	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.
Safety	UL 60950-1; CAN/CSA	22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
Emissions	FCC Class A; EN 55022	/CISPR-22 Class A; VCCI Class A
Immunity	Generic	EN 55024, CISPR 24
	EN	EN 55024, CISPR 24
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	configuration menu; o	gement Center; command-line interface; Web browser; ut-of-band management (serial RS-232C or Micro USB); IB; Repeater MIB; Ethernet Interface MIB
Notes	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.	
Services	3-year, 4-hour onsite, 13x5 coverage for hardware (U4683E) 3-year, 4-hour onsite, 24x7 coverage for hardware (U4835E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone suppo and SWupdates (U6321E) 3-year, 24x7 SW phone support, software updates (UF792E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UR948E)	
	4-year, 4-hour onsite, (UR950E)	24x7 coverage for hardware (UR949E) 24x7 coverage for hardware, 24x7 software phone
		e support, software updates (UR951E) 13x5 coverage for hardware (UR952E)
	-	24x7 coverage for hardware (UR953E)
	-	24x7 coverage for hardware, 24x7 software phone



Technical Specificati	ons		
		<ul> <li>(UR954E)</li> <li>3 Yr 6 hr Call-to-Repair Onsite (UW368E)</li> <li>4 Yr 6 hr Call-to-Repair Onsite (UW370E)</li> <li>5 Yr 6 hr Call-to-Repair Onsite (UW370E)</li> <li>1-year, 4-hour onsite, 13x5 coverage for hardware (HR849E)</li> <li>1-year, 4-hour onsite, 24x7 coverage for hardware (HR850E)</li> <li>1-year, 6 hour Call-To-Repair Onsite for hardware (HR853E)</li> <li>1-year, 24x7 software phone support, software updates (HR852E)</li> <li>1-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support and software updates (HR851E)</li> <li>1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS554E)</li> <li>1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HS555E)</li> <li>3-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS556E)</li> <li>3-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS557E)</li> <li>4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS557E)</li> <li>4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS558E)</li> <li>4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS558E)</li> <li>4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS556E)</li> <li>5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS556E)</li> <li>5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS560E)</li> <li>5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS560E)</li> <li>5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS560E)</li> <li>5-year, 24x7 software phone support, software updates + A hour Hardware Exchange (HS561E)</li> <li>Refer to the HP website at www.hp.com/networking/services for details on the service-leve</li></ul>	
<b>HP 2530-8-PoE+ Switch</b> (J9780A)	Ports	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	
		10/100/1000 port (I	orts; each port can be used as either an RJ-45 EEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-Tx; ase-T Gigabit Ethernet) or as a SFP slot (for use with SFP
		1 dual-personality (F	RJ-45 or USB micro-B) serial console port
	Physical characteristics	Dimensions	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)
	Memory and processor	Processor	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated
	Mounting		ndard 19-inch telco rack or equipment cabinet (rack- le); horizontal surface mounting; wall mounting
Performance IPv6 Ready Certified		d	



### HP 2530 Switch Series

Technical Specifications		
	100 Mb Later	<b>icy</b> < 1.3 μs (LIFO 64-byte packets)
	1000 Mb Late	ency < 2.3µs (LIFO 64-byte packets)
	Throughput	up to 4.1 million pps (64-byte packets)
	Switching ca	pacity 5.6 Gbps
	MAC address	table size 16000 entries
Environment	Operating te	<b>mperature</b> 32°F to 113°F (0°C to 45°C)
	Operating re humidity	lative 15% to 95% @ 104°F (40°C), noncondensing
	Non-operatiı Storage temj	-
	Non-operatiı relative hum	
	Altitude	up to 10,000 ft (3 km)
	Acoustic	Power: 0 dB, Pressure: 0 dB
Electrical cha	racteristics Frequency	50/60 Hz
	Maximum he dissipation	at 29 BTU/hr (30.6 kJ/hr), (switch only: 29 BTU/hr; combined switch + max. PoE devices: 262 TU/hr)
	Voltage	100-127/200-240 VAC
	Current	1.4 A
	Maximum po	wer 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.
Safety	UL 60950-1; (	CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
Emissions	FCC Class A; E	N 55022/CISPR-22 Class A; VCCI Class A
Immunity	Generic	EN 55024, CISPR 24
	EN	EN 55024, CISPR 24
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6



### HP 2530 Switch Series

Fechnical Specifications		
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	configuration menu; o	gement Center; command-line interface; Web browser; out-of-band management (serial RS-232C or Micro USB) IIB; Repeater MIB; Ethernet Interface MIB
Notes	apply to PoE+ models	o Gigabit models only; IEEE 802.3at and IEEE 802.3af only. When using SFPs with this product, SFPs with roduct number ends with the letter "B" or later, e.g., equired.
Services	<ul> <li>3-year, 4-hour onsite,</li> <li>3-year, 4-hour onsite,</li> <li>3-year, 4-hour onsite,</li> <li>and SWupdates (U632</li> <li>3-year, 24x7 SW phon</li> <li>4-year, 4-hour onsite,</li> <li>4-year, 4-hour onsite,</li> <li>4-year, 4-hour onsite,</li> <li>4-year, 4-hour onsite,</li> <li>5-year, 4-hour onsite,</li> <li>1-year, 6 hour Call-To</li> <li>1-year, 24x7 software</li> <li>1-year, 24x7 software</li> <li>1-year, 24x7 software</li> <li>4-year, 24x7 software</li> <li>4-year, 24x7 software</li> <li>5-year, 24x7 software</li> <li>4-year, 24x7 software</li> </ul>	13x5 coverage for hardware (U4683E) 24x7 coverage for hardware, 24x7 SW phone support 24x7 coverage for hardware, 24x7 SW phone support 11E) es support, software updates (UF792E) 13x5 coverage for hardware (UR948E) 24x7 coverage for hardware (UR949E) 24x7 coverage for hardware, 24x7 software phone es support, software updates (UR951E) 13x5 coverage for hardware (UR952E) 24x7 coverage for hardware (UR952E) 24x7 coverage for hardware, 24x7 software phone ir Onsite (UW368E) ir Onsite (UW368E) ir Onsite (UW369E) 13x5 coverage for hardware (HR849E) 24x7 coverage for hardware (HR850E) -Repair Onsite for hardware (HR850E) -Repair Onsite for hardware (HR850E) -Repair Onsite for hardware (HR852E) 24x7 coverage for hardware (HR853E) phone support, software updates (HR852E) 24x7 coverage for hardware (HR850E) -Repair Onsite for hardware (HR850E) -Repair Onsite for hardware (HR850E) -Repair Onsite for hardware (HR853E) phone support, software updates + Next Business Day 15554E) phone support, software updates + Next Business Day 15554E) phone support, software updates + 4 hour hardware e phone support, software updates + Next Business Day 15558E) e phone support, software updates + Next Business Day



Technical Specificat	tions			
		5-year, 24x7 software pho Exchange (HS561E)	one support, software updates + 4 hour Hardware	
		the service-level descripti	<b>www.hp.com/networking/services</b> for details on ons and product numbers. For details about services ir area, please contact your local HP sales office.	
<b>HP 2530-48G Switch</b> (J9775A)	Ports	48 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); 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		
	Physical characteristics	Dimensions	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)	
	Memory and processor	Processor	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 3 MB dynamically allocated	
	Mounting	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack- mounting kit available); horizontal surface mounting; wall mounting		
	Performance	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	
	Environment	Operating temperature	32°F to 113°F (0°C to 45°C)	
		Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing	
		Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)	
		Non-operating/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	
	Electrical characteristics	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	



Technical Specifications		
	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.
Safety	UL 60950-1; CAN/CSA	22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
Emissions	FCC Class A; EN 55022	/CISPR-22 Class A; VCCI Class A
Immunity	Generic	EN 55024, CISPR 24
	EN	EN 55024, CISPR 24
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	<ul> <li>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</li> <li>IEEE 802.3 az applies to Gigabit models only; IEEE 802.3 at and IEEE 802.3 af 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.</li> <li>3-year, 4-hour onsite, 13x5 coverage for hardware (U4683E)</li> <li>3-year, 4-hour onsite, 24x7 coverage for hardware (U4835E)</li> <li>3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SWupdates (U6321E)</li> <li>3-year, 4-hour onsite, 13x5 coverage for hardware (UR948E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware (UR951E)</li> <li>5-year, 4-hour onsite, 13x5 coverage for hardware, 24x7 software phone (UR950E)</li> <li>4-year, 24x7 SW phone support, software updates (UR951E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware (UR952E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware (UR951E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware (UR952E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware (UR953E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware (UR953E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR954E)</li> <li>3 Yr 6 hr Call-to-Repair Onsite (UW368E)</li> <li>4 Yr 6 hr Call-to-Repair Onsite (UW369E)</li> <li>5 Yr 6 hr Call</li></ul>	
Notes		
Services		



Technical Specifica <sup>-</sup>	tions		
		1-year, 4-hour onsite, 24> 1-year, 6 hour Call-To-Rey 1-year, 24x7 software pho 1-year, 24x7 software pho 1-year, 24x7 software upd 1-year, 24x7 software pho Hardware Exchange (HS55) 3-year, 24x7 software pho Hardware Exchange (HS55) 3-year, 24x7 software pho Hardware Exchange (HS55) 4-year, 24x7 software pho Hardware Exchange (HS55) 4-year, 24x7 software pho Hardware Exchange (HS55) 5-year, 24x7 software pho Exchange (HS559E) 5-year, 24x7 software pho Exchange (HS559E) 5-year, 24x7 software pho Exchange (HS559E) 5-year, 24x7 software pho Exchange (HS556) 8-year, 24x7 software pho Exchange (HS561E) 7 Refer to the HP website at	one support, software updates + Next Business Day 54E) one support, software updates + 4 hour hardware one support, software updates + Next Business Day 56E) one support, software updates + 4 hour Hardware one support, software updates + Next Business Day 58E) one support, software updates + 4 hour Hardware one support, software updates + Next Business Day 50E) one support, software updates + Next Business Day 50E) one support, software updates + Next Business Day 50E)
		•	ons and product numbers. For details about services ır area, please contact your local HP sales office.
<b>HP 2530-24G Switch</b> (J9776A)	Ports	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: 10BAS T/100BASE-TX: half or full; 1000BASE-T: full only	
		4 fixed Gigabit Ethernet S	FP ports
		1 dual-personality (RJ-45 or USB micro-B) serial console port Supports a maximum of 28 Gigabit Ethernet ports	
	Physical characteristics	Dimensions	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)
	Memory and processor	Processor	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated
	Mounting	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack- mounting kit available); horizontal surface mounting; wall mounting	
	Performance	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



### HP 2530 Switch Series

Technical Specifications		
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non-operating/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
Electrical characteristics	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.
Safety	UL 60950-1; CAN/CSA 22.	2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
Emissions	FCC Class A; EN 55022/CIS	PR-22 Class A; VCCI Class A
Immunity	Generic	EN 55024, CISPR 24
	EN	EN 55024, CISPR 24
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	configuration menu; Out-	nent Center; command-line interface; Web browser; of-band management (serial RS-232C or MicroUSB); Repeater MIB; Ethernet Interface MIB



Technical Specifica	ations		
Notes	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.		
	Services	<ul> <li>3-year, 4-hour onsite, 13x5 coverage for hardware (U4683E)</li> <li>3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SWupdates (U6321E)</li> <li>3-year, 24x7 SW phone support, software updates (UF792E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware (UR948E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware (UR951E)</li> <li>5-year, 4-hour onsite, 13x5 coverage for hardware (UR952E)</li> <li>5-year, 4-hour onsite, 13x5 coverage for hardware (UR952E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware (UR952E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware (UR953E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware (UR953E)</li> <li>5-year, 4-hour onsite, 13x5 coverage for hardware (UR953E)</li> <li>5-year, 4-hour onsite, 13x5 coverage for hardware (HR849E)</li> <li>1 -year, 4-hour onsite, 13x5 coverage for hardware (HR849E)</li> <li>1 -year, 4-hour onsite, 13x5 coverage for hardware (HR850E)</li> <li>1 -year, 4-hour onsite, 24x7 coverage for hardware (HR852E)</li> <li>1 -year, 4-hour onsite, 24x7 coverage for hardware (HR852E)</li> <li>1 -year, 4-hour onsite, 24x7 coverage for hardware (HR852E)</li> <li>1 -year, 4-hour onsite, 24x7 coverage for hardware (HR852E)</li> <li>1 -year, 24x7 software phone support, software updates (HR852E)</li> <li>1 -year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS556E)</li> <li>3 -year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS555E)</li> <li>3 -year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS558E)</li> <li>4 -year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS558E)</li> <li>4 -year, 24x7 software phone support, software updates + Next</li></ul>	
		Exchange (HS561E) Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.	
HP 2530-8G Switch (J9777A)	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:	



Technical Specifications		
	Auto-MDIX; Duplex: 10BAS 1000BASE-T: full only	E-T/100BASE-TX: half or full;
	2 dual-personality ports; e 10/100/1000 port (IEEE 80	ach port can be used as either an RJ-45 )2.3 Type 10Base-T; IEEE 802.3u Type 100Base-Tx; Gigabit Ethernet) or as a SFP slot (for use with SFP
	1 dual-personality (RJ-45 d	or USB micro-B) serial console port
Physical characteristics	Dimensions	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)
Memory and processor	Processor	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated
Mounting		19-inch telco rack or equipment cabinet (rack- rizontal surface mounting; wall mounting
Performance	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
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non-operating/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
Electrical characteristics	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.
Safety	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1	
Emissions	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A	
Immunity	Generic	EN 55024, CISPR 24
	EN	EN 55024, CISPR 24
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency	IEC 61000-4-8
	magnetic field	
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	IMC - Intelligent Manac	gement Center; command-line interface; Web browser;
-	configuration menu; O	ut-of-band management (serial RS-232C or MicroUSB); IB; Repeater MIB; Ethernet Interface MIB
Notes	apply to PoE+ models revision "B" or later (pr	o Gigabit models only; IEEE 802.3at and IEEE 802.3af only. When using SFPs with this product, SFPs with roduct number ends with the letter "B" or later, e.g., equired.
Services	<ul> <li>J4858B, J4859C) are required.</li> <li>3-year, 4-hour onsite, 13x5 coverage for hardware (U4683E)</li> <li>3-year, 4-hour onsite, 24x7 coverage for hardware (U4835E)</li> <li>3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SWupdates (U6321E)</li> <li>3-year, 24x7 SW phone support, software updates (UF792E)</li> <li>4-year, 4-hour onsite, 13x5 coverage for hardware (UR948E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware (UR949E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware (UR949E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR950E)</li> <li>4-year, 24x7 SW phone support, software updates (UR951E)</li> <li>5-year, 4-hour onsite, 13x5 coverage for hardware (UR952E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware (UR953E)</li> <li>5 yra 6 hr Call-to-Repair Onsite (UW368E)</li> <li>4 Yr 6 hr Call-to-Repair Onsite (UW369E)</li> <li>5 Yr 6 hr Call-to-Repair Onsite (UW370E)</li> <li>1-year, 4-hour onsite, 24x7 coverage for hardware (HR849E)</li> <li>1-year, 6 hour Call-To-Repair Onsite for hardware (HR853E)</li> <li>1-year, 6 hour Call-To-Repair Onsite for hardware (HR853E)</li> <li>1-year, 4-hour onsite, 24x7 coverage for hardware (HR852E)</li> <li>1-year, 4-hour onsite, 24x7 coverage for hardware (HR853E)</li> </ul>	
	1-year, 24x7 software	phone support, software updates + Next Business Day



Technical Specifica	tions		
l echnical Specifica	tions	exchange (HS555E) 3-year, 24x7 software pho Hardware Exchange (HS55 3-year, 24x7 software pho Exchange (HS557E) 4-year, 24x7 software pho Hardware Exchange (HS55 4-year, 24x7 software pho Exchange (HS559E) 5-year, 24x7 software pho Hardware Exchange (HS56 5-year, 24x7 software pho	one support, software updates + 4 hour hardware one support, software updates + Next Business Day 56E) one support, software updates + 4 hour Hardware one support, software updates + Next Business Day 58E) one support, software updates + 4 hour Hardware one support, software updates + Next Business Day
		the service-level descripti	www.hp.com/networking/services for details on ons and product numbers. For details about services ir area, please contact your local HP sales office.
<b>HP 2530-48 Switch</b> (J9781A)	Ports	48 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3 Type 100BASE-TX); Duplex: half or full	
		-	00 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u D2.3ab Type 1000BASE-T); Duplex: 10BASE- l; 1000BASE-T: full only
		2 fixed Gigabit Ethernet SI	FP ports
		1 dual-personality (RJ-45	or USB micro-B) serial console port
	Physical characteristics	Dimensions	17.4(w) x 9.7(d) x 1.75(h) in (44.2 x 24.64 x 4.45 cm) (1U height)
		Weight	6.3 lb (2.86 kg)
	Memory and processor	Processor	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 3 MB dynamically allocated
	Mounting	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack- mounting kit available); horizontal surface mounting; wall mounting	
	Performance	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
	Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
		Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing
		Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)



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	Non-operating/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	102 BTU/hr (107.61 kJ/hr)
	Voltage	100-127/200-240 VAC
	Current	0.7/0.4 A
	Maximum power rating	29.9 W
	Idle power	17.1 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.
Safety	UL 60950-1; CAN/CSA 22.2	No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
Emissions	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A	
Immunity	Generic	EN 55024, CISPR 24
	EN	EN 55024, CISPR 24
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	configuration menu; Out-of	ent Center; command-line interface; Web browser; f-band management (serial RS-232C or MicroUSB); epeater MIB; Ethernet Interface MIB
Notes	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.	
Services	3-year, 4-hour onsite, 24x7	5 coverage for hardware (U4683E) 7 coverage for hardware (U4835E) 7 coverage for hardware, 24x7 SW phone support



Technical Specifica	itions	
		and SWupdates (U6321E) 3-year, 24x7 SW phone support, software updates (UF792E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UR948E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UR949E) 4-year, 24x7 SW phone support, software updates (UR951E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UR952E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UR952E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UR953E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UR953E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR954E) 3 Yr 6 hr Call-to-Repair Onsite (UW368E) 4 Yr 6 hr Call-to-Repair Onsite (UW368E) 1-year, 4-hour onsite, 13x5 coverage for hardware (HR849E) 1-year, 4-hour onsite, 13x5 coverage for hardware (HR850E) 1-year, 4-hour onsite, 24x7 coverage for hardware (HR852E) 1-year, 24x7 software phone support, software updates (HR852E) 1-year, 24x7 software phone support, software updates (HR852E) 1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HS555E) 3-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HS555E) 3-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS555E) 3-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS555E) 4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS558E) 4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS556E) 5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS556E) 5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS556E) 5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS556E) 5-year, 2
 HP 2530-24 Switch	Ports	the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office. 24 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u
(J9782A)	FUILS	Type 100BASE-TX); 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



Physical characteristics	Dimensions	17.4(w) x 9.7(d) x 1.75(h) in (44.2 x 24.64 x 4.45 cm) (1U height)
	Weight	5.7 lb (2.59 kg)
Memory and processor	Processor	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated
Mounting	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack- mounting kit available); horizontal surface mounting; wall mounting	
Performance	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
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non-operating/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	50 BTU/hr (52.75 kJ/hr)
	Voltage	100-127/200-240 VAC
	Current	0.3/0.2 A
	Maximum power rating	14.7 W
	Idle power	8.4 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.
Safety	UL 60950-1; CAN/CSA 22.2	No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
Emissions	FCC Class A; EN 55022/CIS	PR-22 Class A; VCCI Class A
Immunity	Generic	EN 55024, CISPR 24
	EN	EN 55024, CISPR 24
	ESD	IEC 61000-4-2



	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency	IEC 61000-4-8
	magnetic field	
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	configuration menu; Out-	nent Center; command-line interface; Web browser; of-band management (serial RS-232C or MicroUSB); Repeater MIB; Ethernet Interface MIB
Notes	apply to PoE+ models onl	igabit models only; IEEE 802.3at and IEEE 802.3af y. When using SFPs with this product, SFPs with uct number ends with the letter "B" or later, e.g., ired.
	<ul> <li>J4858B, J4859C) are required.</li> <li>3-year, 4-hour onsite, 13x5 coverage for hardware (U4683E)</li> <li>3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SWupdates (U6321E)</li> <li>3-year, 24x7 SW phone support, software updates (UF792E)</li> <li>4-year, 24x7 SW phone support, software updates (UR948E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware (UR948E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware (UR949E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware (UR949E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR950E)</li> <li>4-year, 24x7 SW phone support, software updates (UR951E)</li> <li>5-year, 4-hour onsite, 13x5 coverage for hardware (UR952E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware (UR952E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware (UR953E)</li> <li>5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR954E)</li> <li>3 Yr 6 hr Call-to-Repair Onsite (UW368E)</li> <li>4 Yr 6 hr Call-to-Repair Onsite (UW368E)</li> <li>4 Yr 6 hr Call-to-Repair Onsite (UW368E)</li> <li>1-year, 4-hour onsite, 24x7 coverage for hardware (HR849E)</li> <li>1-year, 4-hour onsite, 24x7 coverage for hardware (HR850E)</li> <li>1-year, 4-hour onsite, 24x7 coverage for hardware (HR852E)</li> <li>1-year, 4-hour onsite, 24x7 coverage for hardware (HR852E)</li> <li>1-year, 4-hour onsite, 24x7 coverage for hardware (HR852E)</li> <li>1-year, 24x7 software phone support, software updates (HR852E)</li> <li>1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS554E)</li> <li>1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HS555E)</li> </ul>	
	Hardware Exchange (HS5 3-year, 24x7 software ph Exchange (HS557E)	56E) one support, software updates + 4 hour Hardware



Technical Specifica	ations		
		Hardware Exchange (HS5 4-year, 24x7 software phy Exchange (HS559E) 5-year, 24x7 software phy Hardware Exchange (HS56 5-year, 24x7 software phy Exchange (HS561E) Refer to the HP website at the service-level descripti	one support, software updates + 4 hour Hardware one support, software updates + Next Business Day 60E) one support, software updates + 4 hour Hardware t <b>www.hp.com/networking/services</b> for details on ions and product numbers. For details about services
		and response times in you	ur area, please contact your local HP sales office.
<b>HP 2530-8 Switch</b> (J9783A)	Ports	8 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3 Type 100BASE-TX); 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 100B IEEE 802.3ab 1000Base-T Gigabit Ethernet) or as a SFP slot (for use w transceivers) ports	
		1 dual-personality (RJ-45	or USB micro-B) serial console port
	Physical characteristics	Dimensions	10(w) x 6.28(d) x 1.75(h) in (25.4 x 15.95 x 4.45 cm) (1U height)
		Weight	1.8 lb (0.82 kg)
	Memory and processor	Processor	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated
	Mounting	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack- mounting kit available); horizontal surface mounting; wall mounting	
	Performance	IPv6 Ready Certified	
		100 Mb Latency	< 1.3 µs (LIFO 64-byte packets)
		1000 Mb Latency	< 1.3 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
	Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
		Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing
		Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)
		Non-operating/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	25 BTU/hr (26.38 kJ/hr)
	Voltage	100-127/200-240 VAC
	Current	0.5 A
	Maximum power rating	7.2 W
	Idle power	4.5 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.
Safety	UL 60950-1; CAN/CSA 22.2	No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
Emissions	FCC Class A; EN 55022/CISI	PR-22 Class A; VCCI Class A
Immunity	Generic	EN 55024, CISPR 24
	EN	EN 55024, CISPR 24
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	configuration menu; Out-o	ent Center; command-line interface; Web browser; f-band management (serial RS-232C or MicroUSB); epeater MIB; Ethernet Interface MIB
Notes	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.	
Services	<ul> <li>3-year, 4-hour onsite, 13x5 coverage for hardware (U4683E)</li> <li>3-year, 4-hour onsite, 24x7 coverage for hardware (U4835E)</li> <li>3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SWupdates (U6321E)</li> <li>3-year, 24x7 SW phone support, software updates (UF792E)</li> <li>4-year, 4-hour onsite, 13x5 coverage for hardware (UR948E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware (UR949E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware (UR949E)</li> <li>4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR950E)</li> </ul>	



4-year, 24x7 SW phone support, softwa 5-year, 4-hour onsite, 13x5 coverage fo 5-year, 4-hour onsite, 24x7 coverage fo	•
5-year, 4-hour onsite, 13x5 coverage fo	•
	JI HAIUWAI E (UK952E)
5-year, 4-hour onsite, 24x7 coverage fo (UR954E)	
3 Yr 6 hr Call-to-Repair Onsite (UW368E	Ξ)
4 Yr 6 hr Call-to-Repair Onsite (UW369E	
5 Yr 6 hr Call-to-Repair Onsite (UW370E	
1-year, 4-hour onsite, 13x5 coverage fo	or hardware (HR849E)
1-year, 4-hour onsite, 24x7 coverage fo	or hardware (HR850E)
1-year, 6 hour Call-To-Repair Onsite for	r hardware (HR853E)
1-year, 24x7 software phone support, s	software updates (HR852E)
1-year, 4-hour onsite, 24x7 coverage fo	or hardware, 24x7 software phone
support and software updates (HR851E	
1-year, 24x7 software phone support, s	software updates + Next Business Day
Hardware Exchange (HS554E)	
1-year, 24x7 software phone support, s exchange (HS555E)	software updates + 4 hour hardware
3-year, 24x7 software phone support, s Hardware Exchange (HS556E)	software updates + Next Business Day
3-year, 24x7 software phone support, s Exchange (HS557E)	software updates + 4 hour Hardware
4-year, 24x7 software phone support, s Hardware Exchange (HS558E)	software updates + Next Business Day
4-year, 24x7 software phone support, s Exchange (HS559E)	software updates + 4 hour Hardware
5-year, 24x7 software phone support, s	software undates + Next Business Dav
Hardware Exchange (HS560E)	······································
5-year, 24x7 software phone support, s	software updates + 4 hour Hardware
Exchange (HS561E)	
Refer to the HP website at www.hp.com	
the service-level descriptions and produ and response times in your area, please	

<b>Standards and protocols</b> (applies to all products in series)		Network DoS Filter
	Device management	RFC 1591 DNS (client) SSHv1/SSHv2 Secure Shell
	General protocols	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 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
IP multicast	RFC 3376 IGMPv3 (host joins only)
IPv6	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 Authentication RFC 4253 SSHv6 Connection 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
MIBs	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
Network management	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



QoS/CoS	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)
Security	IEEE 802.1X Port Based Network Access Control
	RFC 1492 TACACS+
	RFC 2138 RADIUS Authentication
	RFC 2866 RADIUS Accounting
	Secure Sockets Layer (SSL)



Accessories

#### HP 2530 Switch Series accessories

(J9783A)	HP 2530 8-port Switch Power Adapter Shelf	J9820A
HP 2530-8 Switch	HP X510 1U Cable Guard	J9700A
(J9777A)	HP 2530 8-port Switch Power Adapter Shelf	J9820A
HP 2530-8G Switch	HP X510 1U Cable Guard	J9700A
(J9780A)	HP 2530 8-port Switch Power Adapter Shelf	J9820A
HP 2530-8-PoE+ Switch	HP X510 1U Cable Guard	J9700A
(J9774A)	HP 2530 8-port Switch Power Adapter Shelf	J9820A
	HP X510 1U Cable Guard	J9700A
Mounting Kit	HP X410 1U Universal 4-post Rack Mounting Kit	J9583A
	HP X121 1G SFP RJ45 T Transceiver	J8177C
	HP X122 1G SFP LC BX-U Transceiver	J9143B
	HP X122 1G SFP LC BX-D Transceiver	J9142B
	HP X112 100M SFP LC BX-U Transceiver	J9100B
	HP X112 100M SFP LC BX-D Transceiver	J9099B
	HP X121 10 SFP LC EN Transceiver	J4860C J9054C
	HP X121 1G SFP LC LH Transceiver	J4859C J4860C
Transceivers	HP X121 1G SFP LC SX Transceiver HP X121 1G SFP LC LX Transceiver	J4858C J4859C



#### Accessory Product Details

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

HP X111 100M SFP LC FX Transceiver (J9054C)	Ports Physical characteristics Environment Cabling	Dimensions: 2.7(d) x 0.54(k Weight: 0.06 lb. (0.03 kg) Operating temperature: 32 Operating relative humidit Nonoperating/Storage tem Nonoperating/Storage relat Altitude: up to 10,000 ft. (3 Type: • 62.5/125 µm or 50/ metal content, mult	y: 5% to 95% 1perature: -40ºF to 185ºF (-40ºC to 85ºC) ative humidity: 5% to 85%
		Maximum distance:	
	Notes	<ul> <li>2 km (full duplex) or 412 m (half duplex)</li> <li>Transmitter wavelength: 1310nm</li> <li>Power consumption is 1.1 watt maximum.</li> <li>For supported platforms and minimum software requirements to support this product, see the document titled "Support for the J9054B 100-FX SFP-LC Transceiver" on the "HP Mini-GBICs and SFPs" Manuals Web page.</li> <li>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.</li> </ul>	
	Services		
HP X112 100M SFP LC BX- Transceiver (J9099B)	D Ports	1 LC 100BASE-BX10 port (IEEE 802.3ah Type 100BASE-BX10-D); Duplex: full only	
A small form-factor	Physical characteristics	Dimensions	2.7(d) x 0.55(w) x 0.48(h) in. (6.86 x 1.39 x 1.22 cm)
pluggable (SFP) 100-		Weight	0.04 lb. (0.03 kg)
Megabit BX (bi-directional) "downstream" transceiver		Operating temperature	32°F to 158°F (0°C to 70°C)
that provides 100 Mbps full-duplex connectivity up to 10 km on one strand of singlemode fiber. The J9099B connects to the J9100B "upstream" transceiver, or to any IEEE- standard 100BASE-BX10-L		Operating relative humidity	0% to 95%, noncondensing
		Nonoperating/Storage temperature	-40ºF to 185ºF (-40ºC to 85ºC)
	Cabling	Туре:	
		Single-mode fiber optic, complying with ITU-T G.652;	
("upstream") device.		Maximum distance:	
		• 0.5-10,000 m (singl	le-mode fiber)
	Notes	Transmit wavelength: 155	0 nm. Receive wavelength: 1310 nm.



#### **Accessory Product Details**

	Power consumption is 1.1 watt maximum. For supported platforms and minimum software requirements to support this product, see the document titled "Support for the HP BX Transceivers" on the "HP Mini-GBICs and SFPs" Manuals Web page. The J9099B connects to the J9100B "upstream" transceiver, or to any IEEE- standard 100BASE-BX10-U ("upstream") device. (A 100-BX-D transceiver can only connect to a 100-BX-U product. You cannot connect two 100-BX-D transceivers together.)
Services	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.

HP X112 100M SFP LC BX-U Ports Transceiver (J9100B)		1 LC 100BASE-BX10 port (IEEE 802.3ah Type 100BASE-BX10-U); Duplex: full only	
A small form-factor	Physical characteristics	Dimensions	2.7(d) x 0.55(w) x 0.48(h) in. (6.86 x 1.39 x 1.22 cm)
pluggable (SFP) 100- Megabit BX (bi-directional)		Weight	0.07 lb. (.03 kg)
"upstream" transceiver	Environment	Operating temperature	32ºF to 158ºF (0ºC to 70ºC)
that provides 100 Mbps full-duplex connectivity up		Operating relative humidity	0% to 95%, noncondensing
to 10 km on one strand of singlemode fiber. The J9100B connects to the		Nonoperating/Storage temperature	-40ºF to 185ºF (-40ºC to 85ºC)
J9099B "downstream"	Cabling	Туре:	
transceiver, or to any IEEE- standard 100BASE-BX10-D ("downstream")		Single-mode fiber optic, co	omplying with ITU-T G.652;
device.		Maximum distance:	
		• 0.5-10,000 m (singl	le-mode fiber)
	Notes	For supported platforms and minimum software requirements to support this product, see the document titled "Support for the HP BX Transceivers" on the "HP Mini-GBICs and SFPs" Manuals Web page. The J9100B connects to the J9099B "downstream" transceiver, or to any IEEE- standard 100BASE-BX10- D ("downstream") device. (A 100-BX-U transceiver can only connect to a 100-BX-D product. You cannot connect two 100-BX-U transceivers together.) Transmit wavelength: 1310 nm. Receive wavelength: 1550 nm. Power consumption is 1.1 watts maximum.	
	Services	the service-level description	www.hp.com/networking/services for details on ons and product numbers. For details about services ar area, please contact your local HP sales office.



Accessory Product De	etails	
HP X121 1G SFP LC SX Transceiver (J4858C)	Ports Physical characteristics	1 LC 1000BASE-SX port; Duplex: full only Dimensions: 2.24(d) x 0.54(w) x 0.48(h) in. (5.69 x 1.37 x 1.22 cm)
A small form-factor pluggable (SFP) Gigabit SX transceiver that provides a full-duplex Gigabit solution up to 550 m on multimode		Weight: 0.04 lb. (0.02 kg) Transceiver form factor: SFP Operating temperature: 32°F to 158°F (0°C to 70°C) Operating relative humidity: 5% to 85%, noncondensing Nonoperating/Storage temperature: -40°F to 203°F (-40°C to 85°C) Altitude: up to 10,000 ft. (3 km)
fiber.	Electrical characteristics	Power consumption typical: 0.4 W Power consumption maximum: 0.7 W
	Cabling	Type:
		<ul> <li>62.5/125 μm or 50/125 μm (core/cladding) diameter, graded-index, low metal content, multimode fiber optic, complying with ITU-T G.651 and ISO/IEC 793-2 Type A1b or A1a, respectively;</li> </ul>
		Maximum distance:
		<ul> <li>2-220 m (62.5 μm core diameter, 160 MHz*km bandwidth</li> <li>2-275 m (62.5 μm core diameter, 200 MHz*km bandwidth</li> <li>2-500 m (50 μm core diameter, 400 MHz*km bandwidth)</li> <li>2-550 m (50 μm core diameter, 500 MHz*km bandwidth)</li> <li>Cable length: 2-550m</li> </ul>
	Services	Fiber type: Multi Mode Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.
HP X121 1G SFP LC LX	Ports	1 LC 1000BASE-LX port (IEEE 802.3z Type 1000BASE-LX); Duplex: full only
Transceiver (J4859C)	Physical characteristics	Dimensions: 2.24(d) x 0.54(w) x 0.486(h) in. (5.69 x 1.37 x 1.23 cm) Weight:0.04 lb. (0.02 kg)
HP X121 1G SFP LC LX	Environment	Operating temperature: 32°F to 158°F (0°C to 70°C)
Transceiver: An SFP format gigabit transceiver with LC connectors using LX technology.		Operating relative humidity: 0% to 85%, noncondensing Nonoperating/Storage temperature: -40°F to 212°F (-40°C to 100°C) Altitude: up to 10,000 ft. (3 km)
	Cabling	Туре:
		<ul> <li>Either single mode or multimode; 62.5/125 μm or 50/125 μm (core/cladding) diameter, graded-index, low metal content, multimode fiber optic, complying with ITU-T G.651 and ISO/IEC 793-2 Type A1b or A1a, respectively; Low metal content, single-mode fiber-optic, complying with ITU-T G.652 and ISO/IEC 793-2 Type B1;</li> </ul>
		Maximum distance:
		<ul> <li>2-550 m (multimode 62.5 μm core diameter, 500 MHz*km bandwidth)</li> <li>2-550 m (multimode 50 μm core diameter, 400 MHz*km bandwidth)</li> <li>2-550 m (multimode 50 μm core diameter, 500 MHz*km bandwidth)</li> </ul>

- 2-550 m (multimode 50 µm core diameter, 500 MHz\*km bandwidth)
- 2-10,000 m (single-mode fiber)



Accessory Product De	etails			
	Notes	A mode conditioning patch cord may be needed in some multimode fiber installations. Wavelength: 1310nm Power Consumption: < 500mW Typical		
	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.		
HP X121 1G SFP LC LH Transceiver (J4860C)	Ports	1 LC 1000BASE-LH port (no IEEE standard exists for 1550 nm optics); Duplex: full only		
A small form-factor	Physical characteristics	Dimensions: 2.17(d) x 0.60(w) x 0.46(h) in. (5.5 x 1.53 x 1.18 cm) Weight: 0.04 lb. (0.02 kg)		
pluggable (SFP) Gigabit LH transceiver that provides a full-duplex Gigabit solution up to 70 km on single- mode fiber.	Environment	Operating temperature: -40°F to 185°F (-40°C to 85°C) Operating relative humidity: 0% to 95% @ 77°F (25°C), noncondensing Nonoperating/Storage temperature: -40°F to 185°F (-40°C to 85°C) Altitude: up to 10,000 ft. (3 km)		
mode fiber.	Cabling	Cable type:		
		<ul> <li>Low metal content, single-mode fiber-optic, complying with ITU-T G.652 and ISO/IEC 793-2 Type B1;</li> </ul>		
		Maximum distance:		
		• 10-70,000 m (single-mode fiber)		
	Notes	Power consumption is 0.8 watts typical with 1 watt maximum at 100% utilization.		
		For distances less than 20 km, a 10 dB attenuator must be used. For distances between 20 km and 40 km, a 5 dB attenuator must be used. Attenuators can be purchased from most cable vendors.		
	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.		



**Accessory Product Details** 

HP X122 1G SFP LC BX-D Transceiver (J9142B)	Ports	1 LC 1000BASE-BX10 port full only	: (IEEE 802.3ah Type 1000BASE-BX10-D); Duplex:
A small form-factor	Physical characteristics	Dimensions	2.19(d) x 0.54(w) x 0.46(h) in. (5.57 x 1.37 x 1.18 cm)
pluggable (SFP) Gigabit-BX (bi-directional)		Weight	0.04 lb. (0.02 kg)
"downstream" transceiver	Environment	Operating temperature	32ºF to 158ºF (0ºC to 70ºC)
that provides a full-duplex Gigabit solution up to 10		Operating relative humidity	0% to 95%, non-condensing
km on one strand of single-mode fiber. The J9142B connects to the		Non-operating/ Storage temperature	–40ºF to 185ºF –40ºC to 85ºC)
J9143B "upstream" transceiver, or to any IEEE-		Type: Single-mode fiber optic, c	omplying with ITU-T G.652;
standard 1000BASE-BX10- U ("upstream") device.	-	Maximum distance:	
		• 0.5-10,000 m (singl	le-mode fiber)
	Notes	Power consumption is 1 w For supported platforms a product, see the documen "HP Mini-GBICs and SFPs" The J9142B connects to th	and minimum software requirements to support this It titled "Support for the HP BX Transceivers" on the
		can only connect to a 1000-BX-U product. You cannot connect two 1000-BX-D transceivers together.)	
	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.	
	Ports	1   C 1000BASE-BX10 port (IEEE 802 3ab Type 1000BASE-BX10-II): Duplex:	

HP X122 1G SFP LC BX-U Transceiver (J9143B)	Ports	1 LC 1000BASE-BX10 port (IEEE 802.3ah Type 1000BASE-BX10-U); Duplex: full only	
A small form-factor	Physical characteristics	Dimensions	2.19(d) x 0.54(w) x 0.46(h) in. (5.57 x 1.37 x 1.18 cm)
pluggable (SFP) Gigabit-BX (bi-directional) "upstream"		Weight	0.04 lb. (0.02 kg)
transceiver that provides a		Operating temperature	32ºF to 158ºF (0ºC to 70ºC)
full-duplex Gigabit solution up to 10 km on one strand of single-mode fiber. The J9143B connects to the J9142B "downstream" transceiver, or to any IEEE standard 1000BASE-BX10- D ("downstream") device.		Operating relative humidity	0% to 95%, non-condensing
		Non-operating/ Storage temperature	–40ºF to 185ºF –40ºC to 85ºC)
		Type: Single-mode fiber optic, co Maximum distance:	omplying with ITU-T G.652;
	Notes	• 0.5-10,000 m (singl Transmit wavelength: 131	le-mode fiber) 0 nm. Receive wavelength: 1490 nm.

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#### Accessory Product Details

HP X410 1U Universal 4-	post Rack Mounting Kit (J958	33A)	
Notes	The rack mounting kit supports the 1U, full width switches in the following switch series and the power supply: V1810 Series, E2510 Series, E2520 Series, E2610 Series, E2810 Series, E2910 Series, E3500 Series, and the E620 Power Supply This universal rack mounting kit is design to fit the following racks: HP 10K 10642, HP 10K 10842, Panduit CN, Panduit CS, Wrightline Vantage S2, APC Netshelter 600mm, and APC Netshelter 800mm. It may well fit many other brands and models too.		
Services	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 descripti and product numbers. For details about services and response times in your area, please contact your HP sales office.		
HP 2530 8-port Switch Power Adapter Shelf	Physical characteristics		6.75(w) x 5.25(d) x 1.75(h) in (17.15 x 13.34 x 4.45 cm) (1U height)
(J9820A)		Weight	0.6 lb (0.27 kg)
	Notes	The HP 2530 8-Port Switch Power Adapter Shelf is an accessory for the HP 2530 8-port switches. The shelf mounts on the back of the switch providing a place to hold the external power adapter.	
	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.	

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