Overview

HP 2530 Switch Series

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
HP 2530-48G-PoE+-2SFP+ Switch	J9853A
HP 2530-24G-PoE+-2SFP+ Switch	J9854A
HP 2530-48G-2SFP+ Switch	J9855A
HP 2530-24G-2SFP+ Switch	J9856A
HP 2530-8-PoE+ Internal Power Supply Switch	JL070A

Key features

- Cost-effective, reliable, secure, and fully managed L2 switches
- 8, 24, or 48 Gigabit or Fast Ethernet ports with up to four Gigabit or two 10 Gigabit uplink ports
- PoE+ models for voice, video, and wireless deployments
- Access control lists (ACLs), EEE, and IPv4/IPv6 host support
- Limited Lifetime Warranty 2.0 with 3 years 24x7 phones support

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Introduction

The HP 2530 Switch Series consists of 17 fully managed L2 edge switches that deliver cost-effective, reliable, secure, and easy-to-use connectivity to business networks. Designed for entry-level to midsize enterprise networks, these Gigabit and Fast Ethernet switches deliver full L2 capabilities with optional Power over Ethernet (PoE), enhanced access security, traffic prioritization, and IPv6 host support.

The HP 2530 Switch Series offers uplink flexibility with either four Gigabit or two 10 Gigabit Ethernet uplinks on some 24- and 48-port models. The Gigabit 24- and 48-port models have either two small form-factor pluggable plus (SFP+) or four small form-factor pluggable (SFP) slots for fiber connectivity. The Fast Ethernet 24- and 48-port models have two SFPs and two RJ-45 Gigabit uplinks. The compact and fan-less 8-port switches offer additional flexibility with two dual-personality ports that can be used as either RJ-45 Gigabit Ethernet or SFP ports. Moreover, the HP 2530 PoE+ Switches are IEEE 802.3af and IEEE 802.3at compliant with up to 30 W per port, making them suitable for voice, video, or wireless deployments with PoE+.

The switch series is easy to use, deploy, and manage via the SNMP, CLI, and Web GUI. It offers flexible wall, table, and rack mounting options; quiet operation with fan-less and variable-speed fan models; and improved power savings with features such as IEEE 802.3az energy-efficient Ethernet. And it includes Limited Lifetime Warranty 2.0 with 3 years 24x7 phone support and includes all software releases.

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, and uses weighted deficit round robin (WDRR) or strict priority
- **Simplified QoS configuration**
  - **Port-based**
    prioritizes traffic by specifying a port and priority level
  - **VLAN-based**
    prioritizes traffic by specifying a VLAN and priority level
- **Class of Service (CoS)**
  sets the IEEE 802.1p priority tag based on IP address, IP Type of Service (ToS), Layer 3 protocol, TCP/UDP port number, source port, and DiffServ
- **Rate limiting**
  establishes 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**
  - **HTML-based easy-to-use Web GUI**
    allows configuration of the switch from any Web browser
  - **Robust CLI**
    provides advanced configuration and diagnostics
  - **Simple network management protocol (SNMPv1/v2c/v3)**
    allows the 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

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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
- **Remote monitoring (RMON)**
  provides advanced monitoring and reporting capabilities for statistics, history, alarms, and events
- **Find, fix, and inform**
  finds and fixes common network problems automatically, and 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**
  are easily stored with a flash image
- **Front-panel LEDs**
  - **Locator LEDs**
    allows users to set the locator LED on a specific switch to turn on, blink, or turn off; and simplifies troubleshooting by making it easy to locate a particular switch within a rack of similar switches
  - **Per-port LEDs**
    provides an at-a-glance view of the status, activity, speed, and full-duplex operation
  - **Power and fault LEDs**
    display issues, if any
- **Comware CLI**
  - **Comware-compatible CLI**
    bridges the experience of HP Comware CLI users who are using the HP ProVision software CLI
  - **Display and fundamental Comware CLI commands**
    are embedded in the switch CLI as native commands; display output is formatted as on Comware-based switches, and
    fundamental commands provide a Comware-familiar initial switch setup
  - **Configuration Comware CLI commands**
    when Comware commands are entered, CLI help is elicited to formulate the correct ProVision software CLI command
- **Download Software via DHCP**
  adds the option to specify the location of switch software via DHCP
- **TR-069 support**
  enables zero-touch configuration for switches

Connectivity

- **IPv6**
  - **IPv6 host**
    allows the switch to be deployed and managed at the edge of an IPv6 network
  - **Dual stack (IPv4/IPv6)**
    supports connectivity for both protocols; provides a transition mechanism from IPv4 to IPv6
  - **MLD snooping**
    f orwards IPv6 multicast traffic to appropriate interface; prevents IPv6 multicast traffic from flooding the network
  - **IPv6 ACL/QoS**
    supports ACL & QoS for IPv6 network traffic on Gigabit & 48 port 10/100 models
  - **Security**
    RA Guard, DHCPv6 Protection, Dynamic IPv6 Lockdown (YA only)

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- **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 PoE+**
  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 (refer to the product specifications for the total PoE power availability)
- **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 (refer to the list of supported devices in the product FAQs, which can be accessed at http://www.hp.com/networking/support)
- **SFP slots**
  provides fiber connectivity such as Gigabit-SX, -LX, -LH, and -BX with four SFP slots on all 24- and 48-port Gigabit Ethernet models. Fast Ethernet 24- and 48-port models have two SFP slots and two RJ-45 Gigabit uplinks; 8-port models have two dual-personality ports supporting either SFP or RJ-45 Gigabit uplinks
- **Dual-personality (RJ-45 or USB micro-B) serial console port**
  gives easy access to switch CLI with front-of-switch location and the flexibility of using either an 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 9,220-byte frame size to improve the performance of large data transfers; 8- and 24-port Fast Ethernet models automatically support up to 2,000-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
- **Rapid Per-VLAN Spanning Tree (RPVST+)**
  allows each VLAN to build a separate spanning tree to improve link bandwidth usage; is compatible with PVST+

Security

- **ACLs**
  accommodates IPv4/IPv6 port and VLAN-based ACLs (IPv6 ACL is supported only on Gigabit Ethernet and 48-port models.)
- **Source-port filtering**
  allows only specified ports to communicate with each other
- **RADIUS/TACACS+**
  eases switch management security administration by using a password authentication server
- **Secure Sockets Layer (SSL)**
  encrypts all HTTP traffic, allowing secure access to the browser-based management GUI in the switch
- **Port security**
  allows access only to specified MAC addresses, which can be learned or specified by the administrator
- **MAC address lockout**
  prevents particular configured MAC addresses from connecting to the network
- **Multiple user authentication methods**
  - **IEEE 802.1X**
    uses an IEEE 802.1X supplicant on the client in conjunction with a RADIUS server to authenticate in accordance with industry standards
  - **Web-based authentication**

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provides a browser-based environment, similar to IEEE 802.1X, to authenticate clients that do not support the IEEE 802.1X supplicant
    - **MAC-based authentication**
      authenticates the client with the RADIUS server based on the client's MAC address
- **Secure shell (SSH) v2**
  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 filter feature, by allowing specified ports to be isolated from all other ports on the switch; the protected port or ports can communicate only with the uplink or shared resources
- **Authentication flexibility**
    - **Multiple IEEE 802.1X users per port**
      provides authentication for up to eight IEEE 802.1X users per port; prevents a user from "piggybacking" on another user's IEEE 802.1X authentication
    - **Concurrent IEEE 802.1X and Web or MAC authentication schemes per port**
      allows a switch port to accept any IEEE 802.1X and either Web or MAC authentications
- **Switch management logon security**
  helps secure switch CLI logon by optionally requiring either RADIUS or TACACS+ authentication
- **DHCP protection**
  blocks DHCP packets from unauthorized DHCP servers, preventing denial-of-service attacks
- **Dynamic ARP protection:**
  blocks ARP broadcasts from unauthorized hosts, preventing eavesdropping or theft of network data
- **Dynamic IP lockdown**
  works with DHCP protection to block traffic from unauthorized hosts, preventing IP source address spoofing

Convergence

- **LLDP-MED (Media Endpoint Discovery)**
  defines a standard extension of LLDP that stores values for parameters such as QoS and VLAN to automatically configure network devices such as IP phones
- **IP multicast (data-driven IGMP)**
  prevents flooding of IP multicast traffic
- **IEEE 802.1AB Link Layer Discovery Protocol (LLDP)**
  facilitates easy mapping using network management applications with LLDP automated device discovery protocol
- **PoE and PoE+ allocations**
  support multiple methods—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
- **LLDP-CDP compatibility**

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receives and recognizes CDP packets from Cisco's IP phones for seamless interoperation

- **Local MAC Authentication**
  assigns attributes such as VLAN and QoS using locally configured profile that can be a list of MAC prefixes

Unified Wired and Wireless

- **HTTP redirect function**
  supports HP Intelligent Management Center (IMC) bring your own device (BYOD) solution

Resiliency and high availability

- **Port trunking and link aggregation**
  - **Trunking**
    supports up to eight links per trunk to increase bandwidth and create redundant connections; and 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 Control 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
- **SmartLink**
  provides easy-to-configure link redundancy of active and standby links

Product Architecture

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

Flexibility

- **Flexible mounting**
  - **Rack mountable**
    allows the switch to be mounted on a standard 19-inch rack, with the hardware included
  - **Wall mountable**
    allows the switch to be mounted on a wall, using the hardware included
  - **Surface mountable**
    allows the switch to be mounted above or below a surface (such as a desk or table), using the hardware included
- **Quiet operation**
  lowers noise, making it suitable for deployments in acoustically sensitive environments such as conference rooms and office spaces
- **Compact size**

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reduces space requirements (refer to the product specifications for the exact dimensions)

Warranty and support

- **Limited Lifetime Warranty v2.0**
  Advance hardware replacement with next-business-day delivery (available in most countries). See www.hp.com/networking/warrantysummary for duration details.
- **Electronic and telephone support (for Limited Lifetime Warranty 2.0)**
  limited 24x7 telephone support is available from HP for the first 3 years; limited electronic and business hours telephone support is available from HP for the entire warranty period; 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

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Configuration

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

HP 2530-8 Switch — J9783A

- 8 RJ-45 autosensing 10/100 ports
- 2 dual-personality ports; RJ-45 10/100/1000 or SFP slot (Min 0 // Max 2 SFP)
- Power Supply Included
- 1U - Height

See Configuration Note:1, 3

HP 2530-8-PoE+ Switch — J9780A

- 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

See Configuration Note:1, 3

HP 2530-8-PoE+ Internal Power Supply Switch — JL070A

- 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

See Configuration Note:1, 2

PDU Cable NA/MEX/TW/JP — JL070A#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW — JL070A#B2C

- C15 PDU Jumper Cord (ROW)

HP 2530-8G Switch — J9777A

- 8 RJ-45 autosensing 10/100/1000 ports
- 2 dual-personality ports; RJ-45 10/100/1000 or SFP slot (Min 0 // Max 2 SFP)
- Power Supply Included
- 1U - Height

See Configuration Note:1, 3

HP 2530-8G-PoE+ Switch — J9774A

- 8 RJ-45 autosensing 10/100/1000 PoE+ ports
- 2 dual-personality ports; RJ-45 10/100/1000 or SFP slot (Min 0 // Max 2 SFP)
- Power Supply Included
- 1U - Height

See Configuration Note:1, 3

HP 2530-24 Switch — J9782A

- 24 RJ-45 autosensing 10/100 ports
- 2 fixed Gigabit Ethernet SFP ports (Min 0 // Max 2 SFP)

See Configuration Note:1, 2

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Configuration

- 2 RJ-45 autosensing 10/100/1000 ports
- Power Supply Included
- 1U - Height

PDU CABLE NA/MEX/TW/JP — J9782A#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU CABLE ROW — J9782A#B2C

- C15 PDU Jumper Cord (ROW)

HP 2530-24-PoE+ Switch — J9779A

- 24 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

See Configuration Note:1, 2

PDU CABLE NA/MEX/TW/JP — J9779A#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU CABLE ROW — J9779A#B2C

- C15 PDU Jumper Cord (ROW)

HP 2530-24G Switch — J9776A

- 24 RJ-45 autosensing 10/100/1000 ports
- 4 fixed Gigabit Ethernet SFP ports (Min 0 // Max 4 SFP)
- Power Supply Included
- 1U - Height

See Configuration Note:1, 2

PDU CABLE NA/MEX/TW/JP — J9776A#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU CABLE ROW — J9776A#B2C

- C15 PDU Jumper Cord (ROW)

HP 2530-24G-2SFP+ Switch — J9856A

- 24 RJ-45 autosensing 10/100/1000 ports

See Configuration Note: 2,

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Configuration

- 2 SFP+ ports (Min 0 // Max 2 SFP+) — 4
- Power Supply Included
- 1U - Height

PDU Cable NA/MEX/TW/JP — J9856A#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW — J9856A#B2C
- C15 PDU Jumper Cord (ROW)

HP 2530-24G-PoE+ Switch — J9773A
- 24 RJ-45 autosensing 10/100/1000 PoE+ ports — See Configuration Note:1, 2
- 4 fixed Gigabit Ethernet SFP ports (Min 0 // Max 4 SFP)
- Power Supply Included
- 1U - Height

PDU CABLE NA/MEX/TW/JP — J9773A#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU CABLE ROW — J9773A#B2C
- C15 PDU Jumper Cord (ROW)

HP 2530-24G-PoE+-2SFP+ Switch — J9854A
- 24 RJ-45 autosensing 10/100/1000 PoE+ ports — See Configuration Note: 2, 4
- 2 SFP+ ports (Min 0 // Max 2 SFP+)
- Power Supply Included
- 1U - Height

PDU Cable NA/MEX/TW/JP — J9854A#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW — J9854A#B2C
- C15 PDU Jumper Cord (ROW)

HP 2530-48 Switch — J9781A
- 48 RJ-45 autosensing 10/100 ports — See Configuration Note:1, 2
- 2 fixed Gigabit Ethernet SFP ports (Min 0 // Max 2 SFP)

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Configuration

- 2 RJ-45 autosensing 10/100/1000 ports
- Power Supply Included
- 1U - Height

PDU CABLE NA/MEX/TW/JP J9781A#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU CABLE ROW J9781A#B2C

- C15 PDU Jumper Cord (ROW)

HP 2530-48-PoE+ Switch J9778A

- 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

See Configuration Note:1, 2

PDU CABLE NA/MEX/TW/JP J9778A#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU CABLE ROW J9778A#B2C

- C15 PDU Jumper Cord (ROW)

HP 2530-48G Switch J9775A

- 48 RJ-45 autosensing 10/100/1000 ports
- 4 fixed Gigabit Ethernet SFP ports (Min 0 // Max 4 SFP)
- Power Supply Included
- 1U - Height

See Configuration Note:1, 2

PDU CABLE NA/MEX/TW/JP J9775A#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU CABLE ROW J9775A#B2C

- C15 PDU Jumper Cord (ROW)

HP 2530-48G-2SFP+ Switch J9855A

- 48 RJ-45 autosensing 10/100/1000 ports

See Configuration Note: 2,

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Configuration

- 2 SFP+ ports (Min 0 // Max 2 SFP+) — 4
- Power Supply Included
- 1U - Height

PDU Cable NA/MEX/TW/JP — J9855A#B2B
C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW — J9855A#B2C
C15 PDU Jumper Cord (ROW)

HP 2530-48G-PoE+ Switch — J9772A
- 48 RJ-45 autosensing 10/100/1000 PoE+ ports — See Configuration Note:1, 2
- 4 fixed Gigabit Ethernet SFP ports (Min 0 // Max 4 SFP)
- Power Supply Included
- 1U - Height

PDU CABLE NA/MEX/TW/JP — J9772A#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU CABLE ROW — J9772A#B2C
- C15 PDU Jumper Cord (ROW)

HP 2530-48G-PoE+-2SFP+ Switch — J9853A
- 48 RJ-45 autosensing 10/100/1000 ports — See Configuration Note: 2, 4
- 2 SFP+ ports (Min 0 // Max 2 SFP+)
- Power Supply Included
- 1U - Height

PDU Cable NA/MEX/TW/JP — J9853A#B2B
C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW — J9853A#B2C
C15 PDU Jumper Cord (ROW)

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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

Configuration

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 required on orders without #B2B, #B2C or #B2E options.

Note 3 Localization cable required. No B2x options

Note 4 The following Transceivers install into this Switch:

HP X121 1G SFP LC SX Transceiver	J4858C
HP X121 1G SFP LC LX Transceiver	J4859C
HP X121 1G SFP LC LH Transceiver	J4860C
HP X121 1G SFP RJ45 T Transceiver	J8177C
HP X122 1G SFP LC BX-D Transceiver	J9142B
HP X122 1G SFP LC BX-U Transceiver	J9143B
HP X132 10G SFP+ LC ER Transceiver	J9153A
HP X132 10G SFP+ LC SR Transceiver	J9150A
HP X132 10G SFP+ LC LR Transceiver	J9151A
HP X132 10G SFP+ LC LRM Transceiver	J9152A
HP X242 10G SFP+ to SFP+ 1m Direct Attach Copper Cable	J9281B
HP X242 10G SFP+ to SFP+ 3m Direct Attach Copper Cable	J9283B
HP X242 10G SFP+ to SFP+ 7m Direct Attach Copper Cable	J9285B
HP X244 10G XFP to SFP+ 1m Direct Attach Copper Cable	J9300A
HP 10G X244 XFP to SFP+ 3m Direct Attach Copper Cable	J9301A
HP 10G X244 XFP to SFP+ 5m Direct Attach Copper Cable	J9302A

Remarks:

Drop down under power supply should offer the following options and results:

Switch/Router/Power Supply to PDU Power Cord - #B2B in North America, Mexico, Taiwan, and Japan or #B2C ROW. (Watson Default B2B or B2C for Rack Level CTO)

Switch/Router/Power Supply to Wall Power Cord - Localized Option (Watson Default for BTO and Box Level CTO)

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Rack Level Integration CTO Models

HP 2530-24 Switch J9782A

- 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

See Configuration Note:1, 2, 3, 4

Configuration

PDU CABLE NA/MEX/TW/JP — J9782A#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU CABLE ROW — J9782A#B2C

- C15 PDU Jumper Cord (ROW)

HP 2530-24-PoE+ Switch — J9779A

- 24 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

See Configuration Note:1, 2, 3, 4

PDU CABLE NA/MEX/TW/JP — J9779A#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU CABLE ROW — J9779A#B2C

- C15 PDU Jumper Cord (ROW)

HP 2530-24G Switch — J9776A

- 24 RJ-45 autosensing 10/100/1000 ports
- 4 fixed Gigabit Ethernet SFP ports (Min 0 // Max 4 SFP)
- Power Supply Included
- 1U - Height

See Configuration Note:1, 2, 3, 4

PDU CABLE NA/MEX/TW/JP — J9776A#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU CABLE ROW — J9776A#B2C

- C15 PDU Jumper Cord (ROW)

HP 2530-24G-2SFP+ Switch — J9856A

- 24 RJ-45 autosensing 10/100/1000 ports
- 2 SFP+ ports (Min 0 // Max 2 SFP+)
- Power Supply Included
- 1U - Height

See Configuration Note: 2, 3, 4, 5

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Configuration

PDU Cable NA/MEX/TW/JP J9856A#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW J9856A#B2C

- C15 PDU Jumper Cord (ROW)

HP 2530-24G-PoE+ Switch J9773A

- 24 RJ-45 autosensing 10/100/1000 PoE+ ports
- 4 fixed Gigabit Ethernet SFP ports (Min 0 // Max 4 SFP)
- Power Supply Included
- 1U - Height

See Configuration Note:1, 2, 3, 4

PDU CABLE NA/MEX/TW/JP J9773A#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU CABLE ROW J9773A#B2C

- C15 PDU Jumper Cord (ROW)

HP 2530-24G-PoE+-2SFP+ Switch J9854A

- 24 RJ-45 autosensing 10/100/1000 PoE+ ports
- 2 SFP+ ports (Min 0 // Max 2 SFP+)
- Power Supply Included
- 1U - Height

See Configuration Note: 2, 3, 4, 5

PDU Cable NA/MEX/TW/JP J9854A#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW J9854A#B2C

- C15 PDU Jumper Cord (ROW)

HP 2530-48 Switch J9781A

- 48 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

See Configuration Note:1, 2, 3, 4

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Configuration

PDU CABLE NA/MEX/TW/JP J9781A#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU CABLE ROW J9781A#B2C

- C15 PDU Jumper Cord (ROW)

HP 2530-48-PoE+ Switch J9778A

- 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

See Configuration Note:1, 2, 3, 4

PDU CABLE NA/MEX/TW/JP J9778A#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU CABLE ROW J9778A#B2C

- C15 PDU Jumper Cord (ROW)

HP 2530-48G Switch J9775A

- 48 RJ-45 autosensing 10/100/1000 ports
- 4 fixed Gigabit Ethernet SFP ports (Min 0 // Max 4 SFP)
- Power Supply Included
- 1U - Height

See Configuration Note:1, 2, 3, 4

PDU CABLE NA/MEX/TW/JP J9775A#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU CABLE ROW J9775A#B2C

- C15 PDU Jumper Cord (ROW)

HP 2530-48G-2SFP+ Switch J9855A

- 48 RJ-45 autosensing 10/100/1000 ports
- 2 SFP+ ports (Min 0 // Max 2 SFP+)
- Power Supply Included
- 1U - Height

See Configuration Note: 2, 3, 4, 5

PDU Cable NA/MEX/TW/JP J9855A#B2B

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Configuration

C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW J9855A#B2C
C15 PDU Jumper Cord (ROW)

HP 2530-48G-PoE+ Switch J9772A
- 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

See Configuration Note:1, 2, 3, 4

PDU CABLE NA/MEX/TW/JP J9772A#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU CABLE ROW J9772A#B2C
- C15 PDU Jumper Cord (ROW)

HP 2530-48G-PoE+-2SFP+ Switch J9853A
- 48 RJ-45 autosensing 10/100/1000 ports
- 2 SFP+ ports (Min 0 // Max 2 SFP+)
- Power Supply Included
- 1U - Height

See Configuration Note: 2, 3, 4, 5

PDU Cable NA/MEX/TW/JP J9853A#B2B
C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW J9853A#B2C
C15 PDU Jumper Cord (ROW)

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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

Configuration

Note 2 If this switch is factory installed in any HP Universal Racks, Then the J9583A#0D1 is required.

Note 3 Localization (Wall Power Cord) required on orders without #B2B, #B2C (PDU Power Cord) . (See Localization Menu)

REMARK: When Switches/Routers are Factory Racked, Then #B2B, or #B2C should be the Defaulted Power Cable option on the Switches/Routers.

Note 4 If HP CTO Switch Chassis is selected forRack Level Integration, Then the CTO Switch Chassis needs to integrate (with #0D1) to the HP Networking Universal Rack.

Note 5 The following Transceivers install into this Switch:

HP X121 1G SFP LC SX Transceiver	J4858C
HP X121 1G SFP LC LX Transceiver	J4859C
HP X121 1G SFP LC LH Transceiver	J4860C
HP X121 1G SFP RJ45 T Transceiver	J8177C
HP X122 1G SFP LC BX-D Transceiver	J9142B
HP X122 1G SFP LC BX-U Transceiver	J9143B
HP X132 10G SFP+ LC ER Transceiver	J9153A
HP X132 10G SFP+ LC SR Transceiver	J9150A
HP X132 10G SFP+ LC LR Transceiver	J9151A
HP X132 10G SFP+ LC LRM Transceiver	J9152A
HP X242 10G SFP+ to SFP+ 1m Direct Attach Copper Cable	J9281B
HP X242 10G SFP+ to SFP+ 3m Direct Attach Copper Cable	J9283B
HP X242 10G SFP+ to SFP+ 7m Direct Attach Copper Cable	J9285B
HP X244 10G XFP to SFP+ 1m Direct Attach Copper Cable	J9300A
HP 10G X244 XFP to SFP+ 3m Direct Attach Copper Cable	J9301A
HP 10G X244 XFP to SFP+ 5m Direct Attach Copper Cable	J9302A

Remarks:

Drop down under power supply should offer the following options and results:

Switch/Router/Power Supply to PDU Power Cord - #B2B in North America, Mexico, Taiwan, and Japan or #B2C ROW. (Watson Default B2B or B2C for Rack Level CTO)

Switch/Router/Power Supply to Wall Power Cord - Localized Option (Watson Default for BTO and Box Level CTO)

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.

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Configuration

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

SFP+ Transceivers

HP X132 10G SFP+ LC ER Transceiver	J9153A
HP X132 10G SFP+ LC SR Transceiver	J9150A
HP X132 10G SFP+ LC LR Transceiver	J9151A
HP X132 10G SFP+ LC LRM Transceiver	J9152A
HP X242 10G SFP+ to SFP+ 1m Direct Attach Copper Cable	J9281B
HP X242 10G SFP+ to SFP+ 3m Direct Attach Copper Cable	J9283B
HP X242 10G SFP+ to SFP+ 7m Direct Attach Copper Cable	J9285B
HP X244 10G XFP to SFP+ 1m Direct Attach Copper Cable	J9300A
HP 10G X244 XFP to SFP+ 3m Direct Attach Copper Cable	J9301A
HP 10G X244 XFP to SFP+ 5m Direct Attach Copper Cable	J9302A

Cables

Multi-Mode Cables

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

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Configuration

Switch Enclosure Options

Cable Guard

HP X510 1U Cable Guard J9700A
See Configuration Note:1

Configuration Rules:

Note 1 This Cable Guard is supported only on the J9783A, J9780A, JL070A, J9777A and J9774A.

Option Mounting Kit

HP 2530 8-port Switch Power Adapter 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 Universal 4-post Rack Mounting Kit J9583A
See Configuration Note:1, 2

Configuration Rules:

Note 1 If this Mounting Kit is order with #0D1 then it integrates to the HP Universal Rack. (not the switch)

Note 2 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 8OCZ."

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Technical Specifications

HP 2530-48G-PoE+ Switch (J9772A)	**I/O ports and slots**	48 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Media Type: Auto-MDIX; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only	
		4 fixed Gigabit Ethernet SFP ports	
	Additional ports and slots	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 32.26 x 4.45 cm) (1U height)
		Weight	10.4 lb (4.72 kg)
	Memory and processor	**Processor**	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 3 MB dynamically allocated, 256 MB DDR3 DIMM
	Mounting and enclosure	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 Mpps (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: 43.6 dB, Pressure: 33.6 dB
	Electrical characteristics	**Frequency**	50/60 Hz
		Maximum heat dissipation	236 BTU/hr (248.98 kJ/hr), (switch only: 236 BTU/hr; combined switch + max. PoE devices: 1624 BTU/hr)
		Voltage	100 - 127 / 200 - 240 VAC, rated (depending on power supply chosen)
		Current	5.8/2.9 A
		Maximum power rating	476 W
		Idle power	40.1 W
		PoE power	382 W
		Notes	Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. PoE power is the total power budget

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Technical Specifications

		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	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	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 2530-24G-PoE+ Switch (J9773A)	**I/O ports and slots**	24 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Media Type: Auto-MDIX; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only	
		4 fixed Gigabit Ethernet SFP ports	
	Additional ports and slots	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; Packet buffer size: 1.5 MB dynamically allocated, 256 MB DDR3 DIMM
	Mounting and enclosure	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 Mpps (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)

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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: 43.9 dB, Pressure: 39.6 dB
Electrical characteristics	**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, rated (depending on power supply chosen)
	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/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	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	

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			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		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-PoE+ Switch (J9774A)	**I/O ports and slots**		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)
	Additional ports and slots		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	2.2 lb (1 kg)
	Memory and processor	**Processor**	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5 MB dynamically allocated, 256 MB DDR3 DIMM
	Mounting and enclosure		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	< 7.4µs (LIFO 64-byte packets)
		1000 Mb Latency	< 2.6 µs (LIFO 64-byte packets)
		Throughput	up to 14.8 Mpps (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
	Electrical characteristics	**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, rated (depending on power supply chosen)
		Current	1.4 A
		Maximum power rating	86 W

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		Idle power	13.4 W
		PoE power	67 W
		Notes	Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. PoE power is the total power budget available to all PoE ports.
	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	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	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 2530-48-PoE+ Switch (J9778A)	**I/O ports and slots**	48 RJ-45 autosensing 10/100 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3at PoE+) Media Type: Auto-MDIX Duplex: half or full 2 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T) Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only 2 fixed Gigabit Ethernet SFP ports	
	Additional ports and slots	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

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Technical Specifications

		4.45 cm) (1U height)
	Weight	10.1 lb (4.58 kg)
Memory and processor	**Processor**	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 3 MB dynamically allocated, 256 MB DDR3 DIMM
Mounting and enclosure	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 Mpps (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)
	Non-operating/Storage relative humidity	15% to 90% @ 149°F (65°C), noncondensing
	Altitude	up to 10,000 ft (3 km)
	Acoustic	Power: 37.9 dB, Pressure: 31.8 dB
Electrical characteristics	**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, rated (depending on power supply chosen)
	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/CISPR-22 Class A; VCCI Class A	
Immunity	**Generic**	EN 55024, CISPR 24
	EN	EN 55024, CISPR 24
	ESD	IEC 61000-4-2

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Technical Specifications

		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		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		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 2530-24-PoE+ Switch (J9779A)	**I/O ports and slots**		24 RJ-45 autosensing 10/100 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3at PoE+); Media Type: Auto-MDIX; Duplex: half or full 2 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only 2 fixed Gigabit Ethernet SFP ports
	Additional ports and slots		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; Packet buffer size: 1.5 MB dynamically allocated, 256 MB DDR3 DIMM
	Mounting and enclosure		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	< 1.1µs (LIFO 64-byte packets)
		Throughput	up to 9.5 Mpps (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/	-40°F to 158°F (-40°C to 70°C)

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Technical Specifications

	Storage temperature	
	Non-operating/Storage relative humidity	15% to 90% @ 149°F (65°C), noncondensing
	Altitude	up to 10,000 ft (3 km)
	Acoustic	Power: 40.4 dB, Pressure: 31.7 dB
Electrical characteristics	**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, rated (depending on power supply chosen)
	Current	2.8/1.4 A
	Maximum power rating	237 W
	Idle power	21.8 W
	PoE power	195 W
	Notes	Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. PoE power is the total power budget available to all PoE ports.
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	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.	

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Technical Specifications

	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 2530-8-PoE+ Switch (J9780A)	**I/O ports and slots**	8 RJ-45 autosensing 10/100 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3at PoE+); Media Type: Auto-MDIX; Duplex: half or full	
		2 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 port (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-Tx; IEEE 802.3ab 1000Base-T Gigabit Ethernet) or as a SFP slot (for use with SFP transceivers) ports	
	Additional ports and slots	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	2.0 lb (0.91 kg)
	Memory and processor	**Processor**	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5 MB dynamically allocated, 256 MB DDR3 DIMM
	Mounting and enclosure	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	< 2.3µs (LIFO 64-byte packets)
		Throughput	up to 4.1 Mpps (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
	Electrical characteristics	**Frequency**	50/60 Hz
		Maximum heat dissipation	29 BTU/hr (30.6 kJ/hr), (switch only: 29 BTU/hr; combined switch + max. PoE devices: 262 TU/hr)
		Voltage	100 - 127 / 200 - 240 VAC, rated (depending on power supply chosen)
		Current	1.4 A
		Maximum power rating	76.7 W
		Idle power	5.8 W
		PoE power	67 W
		Notes	Idle power is the actual power consumption of the device with no ports connected.

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			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		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		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 2530-48G Switch (J9775A)	**I/O ports and slots**		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
	Additional ports and slots		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; Packet buffer size: 3 MB dynamically allocated, 256 MB DDR3 DIMM
	Mounting and enclosure		Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); horizontal surface mounting; wall mounting

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Technical Specifications

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 Mpps (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: 34.5 dB, Pressure: 31.0 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, rated (depending on power supply chosen)
	Current	1.2/0.7 A
	Maximum power rating	59.5 W
	Idle power	29.5 W
	Notes	Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.
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

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Technical Specifications

	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		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 2530-24G Switch (J9776A)	**I/O ports and slots**		24 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T) Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only 4 fixed Gigabit Ethernet SFP ports
	Additional ports and slots		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	6.1 lb (2.77 kg)
	Memory and processor	**Processor**	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5 MB dynamically allocated, 256 MB DDR3 DIMM
	Mounting and enclosure		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 Mpps (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)
		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: 34.0 dB, Pressure: 26.4 dB
	Electrical characteristics	**Frequency**	50/60 Hz
		Maximum heat dissipation	164 BTU/hr (173.02 kJ/hr)
		Voltage	100 - 127 / 200 - 240 VAC, rated (depending on power supply chosen)
		Current	.6/.4 A
		Maximum power rating	48.0 W
		Idle power	28.8 W

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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.
	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		IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; Out-of-band management (serial RS-232C or MicroUSB); 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		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)	**I/O ports and slots**		8 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Media Type: Auto-MDIX; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only 2 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 port (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-Tx; IEEE 802.3ab 1000Base-T Gigabit Ethernet) or as a SFP slot (for use with SFP transceivers) ports
	Additional ports and slots		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	2.0 lb (0.91 kg)
	Memory and processor	**Processor**	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5 MB dynamically allocated, 256 MB

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Technical Specifications

		DDR3 DIMM
Mounting and enclosure	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	< 2.6 µs (LIFO 64-byte packets)
	Throughput	up to 14.8 Mpps (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, rated (depending on power supply chosen)
	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 magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11

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Technical Specifications

		Harmonics	EN 61000-3-2, IEC 61000-3-2
		Flicker	EN 61000-3-3, IEC 61000-3-3
	Management		IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; Out-of-band management (serial RS-232C or MicroUSB); 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		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 2530-48 Switch (J9781A)	**I/O ports and slots**		48 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u 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
	Additional ports and slots		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; Packet buffer size: 3 MB dynamically allocated, 256 MB DDR3 DIMM
	Mounting and enclosure		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 Mpps (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)
		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	102 BTU/hr (107.61 kJ/hr)
		Voltage	100 - 127 / 200 - 240 VAC, rated (depending on power supply chosen)

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		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	IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; Out-of-band management (serial RS-232C or MicroUSB); 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	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 2530-24 Switch (J9782A)	**I/O ports and slots**	24 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u 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	
	Additional ports and slots	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)

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Memory and processor	**Processor**	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5 MB dynamically allocated, 256 MB DDR3 DIMM
Mounting and enclosure	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 Mpps (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
Electrical characteristics	**Frequency**	50/60 Hz
	Maximum heat dissipation	50 BTU/hr (52.75 kJ/hr)
	Voltage	100 - 127 / 200 - 240 VAC, rated (depending on power supply chosen)
	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/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

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		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 Management Center; command-line interface; Web browser; configuration menu; Out-of-band management (serial RS-232C or MicroUSB); 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		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 2530-8 Switch (J9783A)	**I/O ports and slots**		8 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX); Media Type: Auto-MDIX; Duplex: half or full 2 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 port (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-Tx; IEEE 802.3ab 1000Base-T Gigabit Ethernet) or as a SFP slot (for use with SFP transceivers) ports
	Additional ports and slots		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; Packet buffer size: 1.5 MB dynamically allocated, 256 MB DDR3 DIMM
	Mounting and enclosure		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 Mpps (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
	Electrical characteristics	**Frequency**	50/60 Hz
		Maximum heat dissipation	25 BTU/hr (26.38 kJ/hr)

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		Voltage	100 - 127 / 200 - 240 VAC, rated (depending on power supply chosen)
		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/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	IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; Out-of-band management (serial RS-232C or MicroUSB); 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	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 2530-48G-PoE+-2SFP+ Switch (J9853A)	**I/O ports and slots**	48 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Media Type: Auto-MDIX; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only 2 SFP+ fixed 1000/10000 SFP+ ports	
	Additional ports and slots	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 32.26 x 4.45 cm) (1U height)

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	Weight	10.4 lb (4.72 kg)
Memory and processor	**Processor**	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 3 MB dynamically allocated, 256 MB DDR3 DIMM
Mounting and enclosure	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	< 7.3 µs (LIFO 64-byte packets)
	1000 Mb Latency	< 2.7 µs (LIFO 64-byte packets)
	10 Gbps Latency	< 4.0 µs (LIFO 64-byte packets)
	Throughput	up to 101 Mpps (64-byte packets)
	Switching capacity	136 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: 36.4 dB, Pressure: 30.1 dB
Electrical characteristics	**Frequency**	50/60 Hz
	Maximum heat dissipation	215 BTU/hr (226.83 kJ/hr), (switch only: 215 BTU/hr; combined switch + max. PoE devices: 1499 BTU/hr)
	Voltage	100 - 127 / 200 - 240 VAC, rated (depending on power supply chosen)
	Current	5.6/2.8 A
	Maximum power rating	439 W
	Idle power	40.2 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/CISPR-22 Class A; VCCI Class A	
Immunity	**Generic**	EN 55024, CISPR 24
	EN	EN 55024, CISPR 24
	ESD	IEC 61000-4-2

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		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		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. SFPs with revision "B" or later (e.g., J4858B, J4859C) are required with this product. This product supports only 1 Gigabit SFP & 10 Gigabit SFP+ transceivers, as well as 10 Gigabit Direct Attach Cables.
	Services		Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.
HP 2530-24G-PoE+-2SFP+ Switch (J9854A)	**I/O ports and slots**		24 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Media Type: Auto-MDIX; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only
			2 SFP+ fixed 1000/10000 SFP+ ports
	Additional ports and slots		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	8.6 lb (3.9 kg)
	Memory and processor	**Processor**	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5 MB dynamically allocated, 256 MB DDR3 DIMM
	Mounting and enclosure		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	< 7.3 µs (LIFO 64-byte packets)
		1000 Mb Latency	< 2.7 µs (LIFO 64-byte packets)
		10 Gbps Latency	< 4.0 µs (LIFO 64-byte packets)
		Throughput	up to 65.4 Mpps (64-byte packets)
		Switching capacity	88 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/	-40°F to 158°F (-40°C to 70°C)

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	Storage temperature	
	Non-operating/Storage relative humidity	15% to 90% @ 149°F (65°C), noncondensing
	Altitude	up to 10,000 ft (3 km)
	Acoustic	Power: 31.3 dB, Pressure: 24 dB
Electrical characteristics	**Frequency**	50/60 Hz
	Maximum heat dissipation	118 BTU/hr (124.49 kJ/hr), (switch only: 118 BTU/hr; combined switch + max. PoE devices: 757 BTU/hr)
	Voltage	100 - 127 / 200 - 240 VAC, rated (depending on power supply chosen)
	Current	2.9/1.4 A
	Maximum power rating	222.2 W
	Idle power	24.7 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/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	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. SFPs with revision "B" or later (e.g., J4858B, J4859C) are required with this product. This product supports only 1 Gigabit SFP & 10 Gigabit SFP+ transceivers, as	

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		well as 10 Gigabit Direct Attach Cables.	
	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.	
HP 2530-48G-2SFP+ Switch (J9855A)	**I/O ports and slots**	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	
		2 SFP+ fixed 1000/10000 SFP+ ports	
	Additional ports and slots	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	7.1 lb (3.08 kg)
	Memory and processor	**Processor**	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 3 MB dynamically allocated, 256 MB DDR3 DIMM
	Mounting and enclosure	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	< 7.3 µs (LIFO 64-byte packets)
		1000 Mb Latency	< 2.7 µs (LIFO 64-byte packets)
		10 Gbps Latency	< 4.0 µs (LIFO 64-byte packets)
		Throughput	up to 101 Mpps (64-byte packets)
		Switching capacity	136 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: 32.2 dB, Pressure: 25.6 dB
	Electrical characteristics	**Frequency**	50/60 Hz Achieved Miercom Certified Green Award
		Maximum heat dissipation	189 BTU/hr (199.4 kJ/hr)
		Voltage	100 - 127 / 200 - 240 VAC, rated (depending on power supply chosen)
		Current	0.9/0.5 A
		Maximum power rating	55.1 W
		Idle power	33.3 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

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			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		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. SFPs with revision "B" or later (e.g., J4858B, J4859C) are required with this product. This product supports only 1 Gigabit SFP & 10 Gigabit SFP+ transceivers, as well as 10 Gigabit Direct Attach Cables.
	Services		Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.
HP 2530-24G-2SFP+ Switch (J9856A)	**I/O ports and slots**		24 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only 2 SFP+ fixed 1000/10000 SFP+ ports
	Additional ports and slots		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	6.2 lb (2.81 kg)
	Memory and processor	**Processor**	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5 MB dynamically allocated, 256 MB DDR3 DIMM
	Mounting and enclosure		Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); horizontal surface mounting; wall mounting

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Performance	**IPv6 Ready Certified**	
	100 Mb Latency	< 7.3 µs (LIFO 64-byte packets)
	1000 Mb Latency	< 2.7 µs (LIFO 64-byte packets)
	10 Gbps Latency	< 2.2 µs (LIFO 64-byte packets)
	Throughput	up to 65.4 Mpps (64-byte packets)
	Switching capacity	88 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: 29.4 dB, Pressure: 22.3 dB
Electrical characteristics	**Frequency**	50/60 Hz
	Maximum heat dissipation	189 BTU/hr (199.4 kJ/hr)
	Voltage	100 - 127 / 200 - 240 VAC, rated (depending on power supply chosen)
	Current	0.7/0.5 A
	Maximum power rating	31 W
	Idle power	20.5 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. 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

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Technical Specifications

		Harmonics	EN 61000-3-2, IEC 61000-3-2
		Flicker	EN 61000-3-3, IEC 61000-3-3
	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. SFPs with revision "B" or later (e.g., J4858B, J4859C) are required with this product. This product supports only 1 Gigabit SFP & 10 Gigabit SFP+ transceivers, as well as 10 Gigabit Direct Attach Cables.
	Services		Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.
HP 2530-8-PoE+ Internal PS Switch (JL070A)	**I/O ports and slots**		8 RJ-45 autosensing 10/100 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3at PoE+); Media Type: Auto-MDIX; Duplex: half or full 2 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 port (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-Tx; IEEE 802.3ab 1000Base-T Gigabit Ethernet) or as a SFP slot (for use with SFP transceivers) ports
	Additional ports and slots		1 dual-personality (RJ-45 or USB micro-B) serial console port
	Physical characteristics	**Dimensions**	10(w) x 9.68(d) x 1.75(h) in (25.4 x 24.59 x 4.45 cm) (1U height)
		Weight	4.65 lb (2.11 kg)
	Memory and processor	**Processor**	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5 MB dynamically allocated, 256 MB DDR3 DIMM
	Mounting and enclosure		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)
		10 Gbps Latency	
		Throughput	up to 4.1 Mpps (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
	Electrical characteristics	**Frequency**	50/60 Hz

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		Maximum heat dissipation	29 BTU/hr (30.6 kJ/hr), (switch only: 29 BTU/hr; combined switch + max. PoE devices: 239 BTU/hr)
		Voltage	100 - 127 / 200 - 240 VAC, rated (depending on power supply chosen)
		Current	0.9/0.5 A
		Maximum power rating	70.2 W
		Idle power	5.3 W
		PoE Power	67 W PoE
		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	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	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.	
Standards and protocols (applies to all products in	**Denial of service protection**	Network DoS Filter	

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Technical Specifications

series)

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 Plus IEEE 802.3az Energy Efficient Ethernet IEEE 802.3x Flow Control RFC 768 UDP RFC 783 TFTP Protocol (revision 2) RFC 792 ICMP RFC 793 TCP RFC 826 ARP RFC 854 TELNET RFC 868 Time Protocol RFC 951 BOOTP RFC 1350 TFTP Protocol (revision 2) RFC 1542 BOOTP Extensions RFC 1918 Address Allocation for Private Internet RFC 2030 Simple Network Time Protocol (SNTP) v4 RFC 2131 DHCP RFC 3411 An Architecture for Describing Simple Network Management Protocol (SNMP) Management Frameworks RFC 3412 Message Processing and Dispatching for the Simple Network Management Protocol (SNMP) RFC 3413 Simple Network Management Protocol (SNMP) Applications RFC 3414 User-based Security Model (USM) for version 3 of the Simple Network Management Protocol (SNMPv3) RFC 3415 View-based Access Control Model (VACM) for the Simple Network Management Protocol (SNMP) RFC 3416 Protocol Operations for SNMP
IP multicast	RFC 3376 IGMPv3 (host joins only)
IPv6	RFC 1981 IPv6 Path MTU Discovery RFC 2460 IPv6 Specification RFC 2464 Transmission of IPv6 over Ethernet Networks RFC 2925 Remote Operations MIB (Ping only) RFC 3315 DHCPv6 (client only) RFC 3484 Default Address Selection for IPv6 RFC 3513 IPv6 Addressing Architecture RFC 3596 DNS Extension for IPv6 RFC 3810 Multicast Listener Discovery Version 2 (MLDv2) for IPv6 RFC 4022 MIB for TCP RFC 4113 MIB for UDP RFC 4251 SSHv6 Architecture RFC 4252 SSHv6 Authentication RFC 4252 SSHv6 Transport Layer RFC 4254 SSHv6 Connection RFC 4291 IP Version 6 Addressing Architecture RFC 4293 MIB for IP

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	RFC 4419 Key Exchange for SSH RFC 4443 ICMPv6 RFC 4861 IPv6 Neighbor Discovery RFC 4862 IPv6 Stateless Address Auto-configuration RFC 5095 Deprecation of Type 0 Routing Headers in IPv6
MIBs	RFC 1155 Structure & ID of Mgmt Info for TCP/IP Internets RFC 1212 Concise MIB Definitions RFC 1213 MIB II RFC 1493 Bridge MIB RFC 2021 RMONv2 MIB RFC 2578 Structure of Management Information Version 2 (SMIv2) RFC 2579 Textual Conventions for SMIv2 RFC 2613 SMON MIB RFC 2618 RADIUS Client MIB RFC 2620 RADIUS Accounting Client MIB RFC 2665 Ethernet-Like-MIB RFC 2668 802.3 MAU MIB RFC 2674 802.1p and IEEE 802.1Q Bridge MIB RFC 2737 Entity MIB (Version 2) RFC 2863 The Interfaces Group MIB RFC 4836 Managed Objects for 802.3 Medium Attachment Units (MAU)
Network management	IEEE 802.1AB Link Layer Discovery Protocol (LLDP) RFC 1098 A Simple Network Management Protocol (SNMP) RFC 1155 Structure of Management Information RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events) RFC 5424 Syslog Protocol 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)

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Accessories

HP 2530 Switch Series accessories

Transceivers	HP X111 100M SFP LC FX Transceiver	J9054C
	HP X121 1G SFP LC SX Transceiver	J4858C
	HP X121 1G SFP LC LX Transceiver	J4859C
	HP X121 1G SFP LC LH Transceiver	J4860C
	HP 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
	HP X122 1G SFP LC BX-U Transceiver	J9143B
	HP X121 1G SFP RJ45 T Transceiver	J8177C
Mounting Kit	HP X410 1U Universal 4-post Rack Mounting Kit	J9583A
HP 2530-8G-PoE+ Switch (J9774A)	HP X510 1U Cable Guard	J9700A
	HP 2530 8-port Switch Power Adapter Shelf	J9820A
HP 2530-8-PoE+ Switch (J9780A)	HP X510 1U Cable Guard	J9700A
	HP 2530 8-port Switch Power Adapter Shelf	J9820A
HP 2530-8G Switch (J9777A)	HP X510 1U Cable Guard	J9700A
	HP 2530 8-port Switch Power Adapter Shelf	J9820A
HP 2530-8 Switch (J9783A)	HP X510 1U Cable Guard	J9700A
	HP 2530 8-port Switch Power Adapter Shelf	J9820A
HP 2530-48G-PoE+-2SFP+ Switch_PL (J9853A)	HP X132 10G SFP+ LC SR Transceiver	J9150A
	HP X132 10G SFP+ LC LR Transceiver	J9151A
	HP X132 10G SFP+ LC LRM Transceiver	J9152A
	HP X132 10G SFP+ LC ER Transceiver	J9153A
	HP X242 10G SFP+ to SFP+ 1m Direct Attach Copper Cable	J9281B
	HP X242 10G SFP+ to SFP+ 3m Direct Attach Copper Cable	J9283B
	HP X242 10G SFP+ to SFP+ 7m Direct Attach Copper Cable	J9285B
	HP X244 10G XFP to SFP+ 1m Direct Attach Copper Cable	J9300A
	HP 10G X244 XFP to SFP+ 3m Direct Attach Copper Cable	J9301A
	HP 10G X244 XFP to SFP+ 5m Direct Attach Copper Cable	J9302A
HP 2530-24G-PoE+-2SFP+ Switch_PL (J9854A)	HP X132 10G SFP+ LC SR Transceiver	J9150A
	HP X132 10G SFP+ LC LR Transceiver	J9151A
	HP X132 10G SFP+ LC LRM Transceiver	J9152A
	HP X132 10G SFP+ LC ER Transceiver	J9153A
	HP X242 10G SFP+ to SFP+ 1m Direct Attach Copper Cable	J9281B
	HP X242 10G SFP+ to SFP+ 3m Direct Attach Copper Cable	J9283B
	HP X242 10G SFP+ to SFP+ 7m Direct Attach Copper Cable	J9285B
	HP X244 10G XFP to SFP+ 1m Direct Attach Copper Cable	J9300A
	HP 10G X244 XFP to SFP+ 3m Direct Attach Copper Cable	J9301A
	HP 10G X244 XFP to SFP+ 5m Direct Attach Copper Cable	J9302A

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Accessories

HP 2530-48G-2SFP+ Switch_PL (J9855A)	HP X132 10G SFP+ LC SR Transceiver	J9150A
	HP X132 10G SFP+ LC LR Transceiver	J9151A
	HP X132 10G SFP+ LC LRM Transceiver	J9152A
	HP X132 10G SFP+ LC ER Transceiver	J9153A
	HP X242 10G SFP+ to SFP+ 1m Direct Attach Copper Cable	J9281B
	HP X242 10G SFP+ to SFP+ 3m Direct Attach Copper Cable	J9283B
	HP X242 10G SFP+ to SFP+ 7m Direct Attach Copper Cable	J9285B
	HP X244 10G XFP to SFP+ 1m Direct Attach Copper Cable	J9300A
	HP 10G X244 XFP to SFP+ 3m Direct Attach Copper Cable	J9301A
	HP 10G X244 XFP to SFP+ 5m Direct Attach Copper Cable	J9302A
HP 2530-24G-2SFP+ Switch_PL (J9856A)	HP X132 10G SFP+ LC SR Transceiver	J9150A
	HP X132 10G SFP+ LC LR Transceiver	J9151A
	HP X132 10G SFP+ LC LRM Transceiver	J9152A
	HP X132 10G SFP+ LC ER Transceiver	J9153A
	HP X242 10G SFP+ to SFP+ 1m Direct Attach Copper Cable	J9281B
	HP X242 10G SFP+ to SFP+ 3m Direct Attach Copper Cable	J9283B
	HP X242 10G SFP+ to SFP+ 7m Direct Attach Copper Cable	J9285B
	HP X244 10G XFP to SFP+ 1m Direct Attach Copper Cable	J9300A
	HP 10G X244 XFP to SFP+ 3m Direct Attach Copper Cable	J9301A
	HP 10G X244 XFP to SFP+ 5m Direct Attach Copper Cable	J9302A
HP 2530-8-PoE+ Internal PS Switch (JL070A)	HP X510 1U Cable Guard	J9700A

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Accessory Product Details

NOTE: 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**	1 LC 100BASE-FX port (IEEE 802.3u Type 100BASE-FX); Duplex: half or full
	Physical characteristics	Dimensions: 2.7(d) x 0.54(w) x 0.48(h) in. (6.86 x 1.38 x 1.22 cm) Weight: 0.06 lb. (0.03 kg)
	Environment	Operating temperature: 32ºF to 158ºF (0ºC to 70ºC) Operating relative humidity: 5% to 95% Nonoperating/Storage temperature: -40ºF to 185ºF (-40ºC to 85ºC) Nonoperating/Storage relative humidity: 5% to 85% Altitude: up to 10,000 ft. (3 km)
	Cabling	Type: • 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 Maximum distance: • 2 km (full duplex) or 412 m (half duplex)
	Notes	Transmitter wavelength: 1310nm 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 J9054C 100-FX SFP-LC Transceiver" on the "HP Mini-GBICs and SFPs" Manuals Web page.
	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 X112 100M SFP LC BX-D Transceiver (J9099B) A small form-factor pluggable (SFP) 100-Megabit BX (bi-directional) "downstream" transceiver 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-U ("upstream") device.	**Ports**	1 LC 100BASE-BX10 port (IEEE 802.3ah Type 100BASE-BX10-D); Duplex: full only	
	Physical characteristics	**Dimensions**	2.7(d) x 0.55(w) x 0.48(h) in. (6.86 x 1.39 x 1.22 cm)
		Weight	0.04 lb. (0.03 kg)
	Environment	**Operating temperature**	32ºF to 158ºF (0ºC to 70ºC)
		Operating relative humidity	0% to 95%, noncondensing
		Nonoperating/Storage temperature	-40ºF to 185ºF (-40ºC to 85ºC)
	Cabling	Type: Single-mode fiber optic, complying with ITU-T G.652; Maximum distance: • 0.5-10,000 m (single-mode fiber)	
	Notes	Transmit wavelength: 1550 nm. Receive wavelength: 1310 nm.	

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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 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 X112 100M SFP LC BX-U Transceiver (J9100B) A small form-factor pluggable (SFP) 100-Megabit BX (bi-directional) "upstream" transceiver that provides 100 Mbps full-duplex connectivity up to 10 km on one strand of singlemode fiber. The J9100B connects to the J9099B "downstream" transceiver, or to any IEEE-standard 100BASE-BX10-D ("downstream") device.	**Ports**		1 LC 100BASE-BX10 port (IEEE 802.3ah Type 100BASE-BX10-U); Duplex: full only
	Physical characteristics	**Dimensions**	2.7(d) x 0.55(w) x 0.48(h) in. (6.86 x 1.39 x 1.22 cm)
		Weight	0.07 lb. (.03 kg)
	Environment	**Operating temperature**	32ºF to 158ºF (0ºC to 70ºC)
		Operating relative humidity	0% to 95%, noncondensing
		Nonoperating/Storage temperature	-40ºF to 185ºF (-40ºC to 85ºC)
	Cabling		Type: Single-mode fiber optic, complying with ITU-T G.652; Maximum distance: • 0.5-10,000 m (single-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		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 SX Transceiver (J4858C) A small form-factor pluggable (SFP) Gigabit SX transceiver that provides a full-duplex Gigabit	**Ports**		1 LC 1000BASE-SX port; Duplex: full only
	Physical characteristics		Dimensions: 2.24(d) x 0.54(w) x 0.48(h) in. (5.69 x 1.37 x 1.22 cm) Weight: 0.04 lb. (0.02 kg) Transceiver form factor: SFP
	Environment		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)

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Accessory Product Details

solution up to 550 m on multimode fiber.		Altitude: up to 10,000 ft. (3 km)
	Electrical characteristics	Power consumption typical: 0.4 W Power consumption maximum: 0.7 W
	Cabling	Type: • 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; Maximum distance: • 2-220 m (62.5 µm core diameter, 160 MHz*km bandwidth • 2-275 m (62.5 µm core diameter, 200 MHz*km bandwidth • 2-500 m (50 µm core diameter, 400 MHz*km bandwidth) • 2-550 m (50 µm core diameter, 500 MHz*km bandwidth) Cable length: 2-550m Fiber type: Multi Mode
	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.
HP X121 1G SFP LC LX Transceiver (J4859C) HP X121 1G SFP LC LX Transceiver: An SFP format gigabit transceiver with LC connectors using LX technology.	**Ports**	1 LC 1000BASE-LX port (IEEE 802.3z Type 1000BASE-LX); Duplex: full only
	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)
	Environment	Operating temperature: 32°F to 158°F (0°C to 70°C) 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	Type: • 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; Maximum distance: • 2-550 m (multimode 62.5 µm core diameter, 500 MHz*km bandwidth) • 2-550 m (multimode 50 µm core diameter, 400 MHz*km bandwidth) • 2-550 m (multimode 50 µm core diameter, 500 MHz*km bandwidth) • 2-10,000 m (single-mode fiber)
	Notes	A mode conditioning patch cord may be needed in some multimode fiber installations. Wavelength: 1310nm

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		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) A small form-factor pluggable (SFP) Gigabit LH transceiver that provides a full-duplex Gigabit solution up to 70 km on single-mode fiber.	**Ports**	1 LC 1000BASE-LH port (no IEEE standard exists for 1550 nm optics); Duplex: full only
	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)
	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)
	Cabling	Cable type: • Low metal content, single-mode fiber-optic, complying with ITU-T G.652 and ISO/IEC 793-2 Type B1; 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.

HP X122 1G SFP LC BX-D Transceiver (J9142B) A small form-factor pluggable (SFP) Gigabit-BX (bi-directional) "downstream" transceiver that provides a full-duplex Gigabit solution up to 10 km on one strand of single-mode fiber. The J9142B connects to the J9143B "upstream" transceiver, or to any IEEE-standard 1000BASE-BX10-U ("upstream") device.	**Ports**	1 LC 1000BASE-BX10 port (IEEE 802.3ah Type 1000BASE-BX10-D); Duplex: full only	
	Physical characteristics	**Dimensions**	2.19(d) x 0.54(w) x 0.46(h) in. (5.57 x 1.37 x 1.18 cm)
		Weight	0.04 lb. (0.02 kg)
	Environment	**Operating temperature**	32ºF to 158ºF (0ºC to 70ºC)
		Operating relative humidity	0% to 95%, non-condensing
		Non-operating/ Storage temperature	–40ºF to 185ºF –40ºC to 85ºC)
	Cabling	Type: Single-mode fiber optic, complying with ITU-T G.652; Maximum distance: • 0.5-10,000 m (single-mode fiber)	
	Notes	Transmit wavelength: 1490 nm. Receive wavelength: 1310 nm.	

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Accessory Product Details

		Power consumption is 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 J9142B connects to the J9143B "upstream" transceiver, or to any IEEE-standard 1000BASE-BX10-U ("upstream") device. (A 1000-BX-D transceiver 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.
HP X122 1G SFP LC BX-U Transceiver (J9143B) A small form-factor pluggable (SFP) Gigabit-BX (bi-directional) "upstream" transceiver that provides a 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.	**Ports**	1 LC 1000BASE-BX10 port (IEEE 802.3ah Type 1000BASE-BX10-U); Duplex: full only
	Physical characteristics	**Dimensions** 2.19(d) x 0.54(w) x 0.46(h) in. (5.57 x 1.37 x 1.18 cm) **Weight** 0.04 lb. (0.02 kg)
	Environment	**Operating temperature** 32ºF to 158ºF (0ºC to 70ºC) **Operating relative humidity** 0% to 95%, non-condensing **Non-operating/ Storage temperature** –40ºF to 185ºF –40ºC to 85ºC)
	Cabling	Type: Single-mode fiber optic, complying with ITU-T G.652; Maximum distance: • 0.5-10,000 m (single-mode fiber)
	Notes	Transmit wavelength: 1310 nm. Receive wavelength: 1490 nm. 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 J9143B connects to the J9142B "downstream" transceiver, or to any IEEE-standard 1000BASE-BX10-D ("downstream") device. (A 1000-BX-U transceiver can only connect to a 1000-BX-D product. You cannot connect two 1000-BX-U transceivers together.) Power consumption is 1 watt maximum.
	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 RJ45 T Transceiver (J8177C) A small form-factor pluggable (SFP) Gigabit copper transceiver that provides a full-duplex	**Ports**	1 RJ-45 1000BASE-T port (IEEE 802.3ab Type 1000BASE-T); Duplex: full only
	Physical characteristics	Dimensions: 0.54(w) x 2.71(d) x 0.55(h) in (1.37 x 6.88 x 1.4 cm) Weight: 0.06 lb (0.03 kg)
	Environment	Operating temperature: 32°F to 158°F (0°C to 70°C); with 100 LFM airflow over the SFP module Operating relative humidity: 0% to 95% @ 75°F (25°C), noncondensing

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Gigabit solution up to 100 m on Category 5 or better cable		Nonoperating/Storage temperature: -40°F to 185°F (-40°C to 85°C) Nonoperating/Storage relative humidity: 0% to 95% @ 77°F (25°C), noncondensing Altitude: up to 10,000 ft. (3000 km)
	Cabling	Cable type: 1000BASE-T: Category 5 (5E or better recommended), 100 Ù differential 4-pair unshielded twisted pair (UTP) or shielded twisted pair (STP) balanced, complying with IEEE 802.3ab 1000BASE-T; Maximum distance: • 100 m
	Notes	Power consumption is nominally 1 watt. For supported platforms and minimum software requirements to support this product, see the document titled "Support for the J8177C 1000Base-T Mini-GBIC" on the "HP Mini-GBICs and SFPs" Manuals Web page. The J8177C Gigabit copper mini-GBIC is not supported on dual-personality ports. The J8177C is capable of 100 Mb operation. This is supported on only the HP ProCurve Switch 8200zl, 5400zl, and 6200yl Series using software version K.12.21 or later. Use the "auto-100" port setting to enable 100 Mb operation. Important: Important: The earlier J8177B does not support 100 Mb operation. When used in the ProCurve Switch gl 20-Port 10/100/1000 Module (J4908A), the J8177C mini-GBIC can be installed in either the upper or lower mini-GBIC port, but will block access to the other port.

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

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: 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 8-port Switch Power Adapter Shelf (J9820A)	**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)
		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.	

Accessory Product Details

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Summary of Changes

Date	Version History	Action	Description of Change:
30-Mar-2015	From Version 8 to 9	Added	Added new SKU: • JL070A
		Changed	Changes made in the Overview, Technical Specifications, and Accessories sections.
01-Dec-2014	From Version 7 to 8	Changed	Updated Warranty and support, updated technical specifications
18-Aug-2014	From Version 6 to 7	Added	Added 4 new models: J9856A, J9854A, J9855A, J9853A
		Changed	Changes made on the entire QS.
09-Dec-2013	From Version 5 to 6	Changed	Changes made in the Overview, Technical Specifications, and Accessories sections.
12-Nov-2013	From Version 4 to 5	Changed	Build to Order, Rack Level Integration CTO Models, and Cables were revised.
27-Sep-2013	From Version 3 to 4	Changed	Change made to the Configuration Section - Rack Mount Kit
17-Sep-2013	From Version 2 to 3	Changed	Corrected an issue with the EMEA HTML file.
10-Jun-2013	From Version 1 to 2	Changed	Changes made to the following: Added several new models Updated Accessories Added the new Configuration section Updated Features and Benefits

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Summary of Changes

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