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

## **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
- Lifetime warranty, all software releases, and technical phone support

## Introduction

The HP 2530 Switch Series consists of 16 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 a lifetime warranty, all software releases, and technical phone support.

## **Features and Benefits**

Quality of Service (QoS)

Traffic prioritization (IEEE 802.1p)
 allows real-time traffic classification with support for eight priority levels mapped to either two or four queues; uses weighted deficit round robin (WDRR) or strict priority (SP)





## Overview

### Simplified QoS configuration

Port-based

prioritize traffic by specifying a port and priority level

VLAN-based

prioritize traffic by specifying a VLAN and priority level

#### Class of Service (CoS)

sets the IEEE 802.1p priority tag based on IP address, IP Type of Service (ToS), Layer 3 protocol, TCP/UDP port number, source port, and DiffServ

#### Rate limiting

sets per-port ingress enforced maximums for all ingressed traffic or for broadcast, multicast, or unknown destination traffic

#### • Layer 4 prioritization

enables prioritization based on TCP/UDP port numbers

Flow control

helps deliver reliable communication during full-duplex operation

## Management

### • Choice of management interfaces

Web graphical user interface (GUI)

HTML-based easy-to-use graphical interface allows configuration of the switch from any Web browser

Command-line interface (CLI)

provides advanced configuration and diagnostics through a robust CLI

Simple Network Management Protocol (SNMPv1/v2c/v3)

allows a switch to be managed with a variety of third-party network management applications

### Virtual stacking

provides single IP address management for up to 16 switches

• sFlow (RFC 3176)

delivers wire-speed traffic accounting and monitoring configured by SNMP and CLI with three terminal encrypted receivers

• IEEE 802.1AB Link Layer Discovery Protocol (LLDP)

automates device discovery protocol for easy mapping by network management applications

Logging

provides local and remote logging of events via SNMP (v2c and v3) and syslog; provides log throttling and log filtering to reduce the number of log events generated

## Port mirroring

allows traffic to be mirrored on any port or a network analyzer to assist with diagnostics or detecting network attacks

### RMON (remote monitoring)

provides advanced monitoring and reporting capabilities for statistics, history, alarms, and events

#### • Find-Fix-and-Inform

finds and fixes common network problems automatically, then informs the administrator

## • Friendly port names

allows assignment of descriptive names to ports

## • Dual flash images

provides independent primary and secondary operating system files for backup while upgrading

## • Multiple configuration files

allows multiple configuration files to be stored to a flash image

## Front-panel LEDs

### Locator LED

allows users to set the locator LED on a specific switch to either turn on, blink, or turn off; simplifies troubleshooting by making it easy to locate a particular switch within a rack of similar switches

#### Per-port LEDs

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

### Power and fault LEDs

display any issues

### Comware CLI

#### o 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





## Overview

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

## **Connectivity**

- IPv6
  - IPv6 host

allows the switch to be deployed and managed at the edge of an IPv6 network

Dual stack (IPv4/IPv6)

supports connectivity for both protocols; provides a transition mechanism from IPv4 to IPv6

MLD snooping

forwards IPv6 multicast traffic to the appropriate interface; prevents IPv6 multicast traffic from flooding the network

IEEE 802.3af Power over Ethernet (PoE)

provides up to 15.4 W per port to IEEE 802.3af-compliant PoE-powered devices such as IP phones, wireless access points, and security cameras

• IEEE 802.3at Power over Ethernet Plus

provides up to 30 W per port to IEEE 802.3 for PoE/PoE+-powered devices such as video IP phones, IEEE 802.11n wireless access points, and advanced pan/tilt/zoom security cameras (see product specifications for total PoE power available)

Auto-MDIX

adjusts automatically for straight-through or crossover cables on all ports

• Pre-standard PoE support

detects and provides power to pre-standard PoE devices; see list of supported devices in the product FAQ at www.hp.com/networking/support

• Small form-factor pluggable (SFP) slots

provides fiber connectivity such as Gigabit-SX, -LX, -LH, and -BX with four SFP slots on all 24- and 48-port Gigabit Ethernet models; Fast Ethernet 24- and 48-port models have two SFP slots and two RJ-45 Gigabit uplinks; 8-port models have two dual-personality ports supporting either SFP or RJ-45 Gigabit uplinks

Dual-personality (RJ-45 or USB micro-B) serial console port

gives easy access to switch CLI with front of switch location and flexibility of using either RJ-45 or USB micro-B serial console port

## Layer 2 switching

VLANs

provides support for 512 VLANs and 4,094 VLAN IDs

Jumbo packet support

supports up to 9220-byte frame size to improve the performance of large data transfers; 8- and 24-port Fast Ethernet models automatically support up to 2000-byte frames with no configuration needed

• 16K MAC address table

provides access to many Layer 2 devices

• GARP VLAN Registration Protocol

allows automatic learning and dynamic assignment of VLANs

• 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

Access control lists (ACLs)

accommodates IPv4/IPv6 port and VLAN-based ACLs (IPv6 ACL is supported only on Gigabit Ethernet and 48-port models)

Source-port filtering

allows only specified ports to communicate with each other

RADIUS/TACACS+

eases switch management security administration by using a password authentication server



## Overview

### Secure Sockets Layer (SSL)

encrypts all HTTP traffic, allowing secure access to the browser-based management GUI in the switch

#### Port security

allows access only to specified MAC addresses, which can be learned or specified by the administrator

#### MAC address lockout

prevents particular configured MAC addresses from connecting to the network

### • Multiple user authentication methods

#### • IEEE 802.1X

uses an IEEE 802.1X supplicant on the client in conjunction with a RADIUS server to authenticate in accordance with industry standards

#### Web-based authentication

provides a browser-based environment, similar to IEEE 802.1X, to authenticate clients that do not support the IEEE 802.1X supplicant

#### MAC-based authentication

authenticates the client with the RADIUS server based on the client's MAC address

#### Secure shell (SSHv2; client and server)

encrypts all transmitted data for secure, remote CLI access over IP networks

#### Secure shell

encrypts all transmitted data for secure remote CLI access over IP networks

### • STP BPDU port protection

blocks Bridge Protocol Data Units (BPDUs) on ports that do not require BPDUs, preventing forged BPDU attacks

#### STP root guard

protects the root bridge from malicious attacks or configuration mistakes

## • Secure management access

delivers secure encryption of all access methods (CLI, GUI, or MIB) through SSHv2 and SNMPv3

#### Custom banner

displays security policy when users log in to the switch

#### Secure FTP

allows secure file transfer to and from the switch; protects against unwanted file downloads or unauthorized copying of a switch configuration file

## Protected ports CLI

offers intuitive CLI to configure the source-port filters feature by allowing specified ports to be isolated from all other ports on the switch; the protected port or ports can communicate only with the uplink or shared resources

## • Authentication flexibility

## • Multiple IEEE 802.1X users per port

provides authentication for up to eight IEEE 802.1X users per port; prevents a user from "piggybacking" on another user's IEEE 802.1X authentication

## • Concurrent IEEE 802.1X and Web or MAC authentication schemes per port

allows a switch port to accept any IEEE 802.1X and either Web or MAC authentications

## • Switch management logon security

helps secure switch CLI logon by optionally requiring either RADIUS or TACACS+ authentication

## 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





## Overview

#### • PoE and PoE+ allocations

support multiple method (automatic, IEEE 802.3at dynamic, LLDP-MED fine grain, IEEE 802.3af device class, or user specified) to allocate and manage PoE/PoE+ power for more efficient energy use

Voice VLAN

uses LLDP-MED to automatically configure a VLAN for IP phones

• IP multicast (data-driven IGMPv3)

prevents flooding of IP multicast traffic

LLDP-CDP compatibility

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

## Resiliency and high availability

## · Port trunking and link aggregation

Trunking

supports up to eight links per trunk to increase bandwidth and create redundant connections; supports L2, L3, and L4 trunk load-balancing algorithm (L4 trunk load balancing is supported only on Gigabit Ethernet and 48-port models)

IEEE 802.3ad Link Aggregation Protocol (LACP)
 eases configuration of trunks through automatic configuration

## • IEEE 802.1s Multiple Spanning Tree

provides high link availability in multiple VLAN environments by allowing multiple spanning trees; provides legacy support for IEEE 802.1d and IEEE 802.1w

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

allows the port to automatically go into low-power mode to conserve energy when no link is detected

Fans

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

Port LEDs

conserves energy by optionally turning off port link and activity LEDs

## • Switch on a chip

provides highly integrated, high-performance switch design with a nonblocking architecture

#### **Flexibility**

## Flexible mounting

Rackable

accommodates mounting in a standard 19-inch rack using included hardware

• Wall mountable

allows the switch to be mounted to a wall using included hardware

Surface mountable

allows the switch to be mounted above or below a surface (such as a desk or table) with included hardware

Quiet operation

lowers noise for deployments in acoustically sensitive environments such as conference rooms and office space

Compact size

reduces space requirements (see product specifications for exact dimensions)

## **Warranty and support**

## Lifetime Warranty 2.0

advance hardware replacement for as long as you own the product with next-business-day delivery (available in most countries)†



## Overview

- Electronic and telephone support (for 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

tHP warranty includes repair or replacement of hardware for as long as you own the product, with next business day advance replacement (available in most countries). The disk drive included with HP AllianceOne Advanced Services and Services zl Modules, HP Threat Management Services zl Module, HP AllianceOne Extended zl Module with Riverbed Steelhead, HP MSM765zl Mobility Controller and HP Survivable Branch Communication zl Module powered by Microsoft Lync has a five-year hardware warranty. For details, refer to the Software license and hardware warranty statements at www.hp.com/networking/warranty.





## 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 See Configuration Note:1, 3

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

HP 2530-8-PoE+ Switch J9780A

- 8 RJ-45 autosensing 10/100 PoE+ports See Configuration Note:1, 3
- 2 dual-personality ports; RJ-45 10/100/1000 or SFP slot (Min 0 // Max 2 SFP)
- Power Supply Included
- 1U Height

HP 2530-8G Switch J9777A

- 8 RJ-45 autosensing 10/100/1000 ports See Configuration Note:1, 3
- 2 dual-personality ports; RJ-45 10/100/1000 or SFP slot (Min 0 // Max 2 SFP)
- Power Supply Included
- 1U Height

HP 2530-8G-PoE+ Switch J9774A

- 8 RJ-45 autosensing 10/100/1000 PoE+ ports See Configuration Note:1, 3
- 2 dual-personality ports; RJ-45 10/100/1000 or SFP slot (Min 0 // Max 2 SFP)
- Power Supply Included
- 1U Height

HP 2530-24 Switch J9782A

- 24 RJ-45 autosensing 10/100 ports See Configuration Note:1, 2
- 2 fixed Gigabit Ethernet SFP ports (Min 0 // Max 2 SFP)
- 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 See Configuration Note:1, 2
- 2 fixed Gigabit Ethernet SFP ports (Min 0 // Max 2 SFP)
- 2 RJ-45 autosensing 10/100/1000 ports
- Power Supply Included
- 1U Height

PDU CABLE NA/MEX/TW/JP J9779A#B2B

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



## Configuration

PDU CABLE ROW J9779A#B2C

C15 PDU Jumper Cord (ROW)

HP 2530-24G Switch J9776A

• 24 RJ-45 autosensing 10/100/1000 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 J9776A#B2B

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

PDU CABLE ROW J9776A#B2C

C15 PDU Jumper Cord (ROW)

HP 2530-24G-25FP+ Switch J9856A

• 24 RJ-45 autosensing 10/100/1000 ports See Configuration Note: 2,

• 2 SFP+ ports (Min 0 // Max 2 SFP+)

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,

2 SFP+ ports (Min 0 // Max 2 SFP+)

## Configuration

- 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 See Configuration Note:1, 2

- 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

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 See Configuration Note:1, 2

- 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

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
See Configuration Note:1, 2

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

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)



## Configuration

HP 2530-48G-2SFP+ Switch J9855A

• 48 RJ-45 autosensing 10/100/1000 ports See Configuration Note: 2,

2 SFP+ ports (Min 0 // Max 2 SFP+)

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,

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)

**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





## Configuration

HP X112 100M SFP LC BX-D Transceiver	J9099B
HP X112 100M SFP LC BX-U Transceiver	J9100B
HP X121 1G SFP LC LH Transceiver	J4860C
HP X122 1G SFP LC BX-D Transceiver	J9142B
HP X122 1G SFP LC BX-U Transceiver	J9143B
HP X121 1G SFP RJ45 T Transceiver	J8177C

Note 2 Localization 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)

## **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

See Configuration Note:1, 2, 3, 4

2 fixed Gigabit Ethernet SFP ports (Min 0 // Max 2 SFP)

• 2 RJ-45 autosensing 10/100/1000 ports

Power Supply Included

• 1U - Height

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

See Configuration Note:1,

4 fixed Gigabit Ethernet SFP ports (Min 0 // Max 4 SFP)
 2, 3, 4

Power Supply Included

• 1U - Height

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,

3, 4, 5

2 SFP+ ports (Min 0 // Max 2 SFP+)

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,



## Configuration

4 fixed Gigabit Ethernet SFP ports (Min 0 // Max 4 SFP)
 2, 3, 4

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, 3, 4, 5

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 fixed Gigabit Ethernet SFP ports (Min 0 // Max 2 SFP) 2, 3, 4

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 See Configuration Note:1,

• 2 fixed Gigabit Ethernet SFP ports (Min 0 // Max 2 SFP) 2, 3, 4

• 2 RJ-45 autosensing 10/100/1000 ports

Power Supply Included

• 1U - Height

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

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



## Configuration

PDU CABLE ROW J9778A#B2C

C15 PDU Jumper Cord (ROW)

HP 2530-48G Switch J9775A

• 48 RJ-45 autosensing 10/100/1000 ports See Configuration Note:1,

• 4 fixed Gigabit Ethernet SFP ports (Min 0 // Max 4 SFP) 2, 3, 4

Power Supply Included

• 1U - Height

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,

3, 4, 5

2 SFP+ ports (Min 0 // Max 2 SFP+)

....

• 1U - Height

Power Supply Included

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,

4 fixed Gigabit Ethernet SFP ports (Min 0 // Max 4 SFP)
 2, 3, 4

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,

3, 4, 5

2 SFP+ ports (Min 0 // Max 2 SFP+)

Power Supply Included



## Configuration

• 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)

## **Configuration Rules:**

N	ote 1 1	he f	ol	lowing	Fransceivers	instal	ll i	nto t	his sw	itch:

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

Note 2 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 for Rack 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





## Configuration

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.

## **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



## Configuration

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

## **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, 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:**



## Configuration

Note 1 If this Mounting Kit is order with #OD1 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 80CZ."



## **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, 256 MB

DDR3 DIMM; packet buffer size: 3 MB

dynamically allocated

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)</th>1000 Mb Latency< 2.3 μs (LIFO 64-byte packets)</th>Throughput77.3 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/ -40°F to 158°F (-40°C to 70°C)

Storage temperature

Non-operating/Storage relative 15% to 90% @ 149°F (65°C), noncondensing

humidity

Altitude up to 10,000 ft (3 km)

**Acoustic** Power: 43.6 dB, Pressure: 33.6 dB

Electrical characteristics Frequency 50/60 H

Maximum heat dissipation 236 BTU/hr (248.98 kJ/hr), (switch only: 236

BTU/hr; combined switch + max. PoE devices:

1624 BTU/hr)

**AC voltage** 100 - 127 / 200 - 240 VAC

Current5.8/2.9 AMaximum power rating476 WIdle power40.1 WPoE power382 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.



HP 2530-24G-PoE+ Switch (J9773A)

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-2	2 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 fie	ld 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
-		enter; command-line interface; Web browser; nd management (serial RS-232C or Micro USB); ter MIB; Ethernet Interface MIB
	apply to PoE+ models only. Wh	models only; IEEE 802.3at and IEEE 802.3af en using SFPs with this product, SFPs with imber ends with the letter "B" or later, e.g.,
	the service-level descriptions a	v.hp.com/networking/services for details on nd product numbers. For details about services a, please contact your local HP sales office.
I/O ports and slots	IEEE 802.3u Type 100BASE-1	0/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at IX; Duplex: 10BASE-T/100BASE-TX: half or full;
	IEEE 802.3u Type 100BASE-T PoE+); Media Type: Auto-MD 1000BASE-T: full only 4 fixed Gigabit Ethernet SFP	TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at IX; Duplex: 10BASE-T/100BASE-TX: half or full; ports
	IEEE 802.3u Type 100BASE-T PoE+); Media Type: Auto-MD 1000BASE-T: full only 4 fixed Gigabit Ethernet SFP	TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at IX; Duplex: 10BASE-T/100BASE-TX: half or full;
	IEEE 802.3u Type 100BASE-T PoE+); Media Type: Auto-MD 1000BASE-T: full only 4 fixed Gigabit Ethernet SFP 5 1 dual-personality (RJ-45 or Dimensions	TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at IX; Duplex: 10BASE-T/100BASE-TX: half or full; ports
Additional ports and slot	IEEE 802.3u Type 100BASE-TP0E+); Media Type: Auto-MD 1000BASE-T: full only 4 fixed Gigabit Ethernet SFP 1 dual-personality (RJ-45 or <b>Dimensions</b>	TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at IX; Duplex: 10BASE-T/100BASE-TX: half or full; ports USB micro-B) serial console port 17.44(w) x 13.00(d) x 1.75(h) in (44.3 x 33.02 x
Additional ports and slot	IEEE 802.3u Type 100BASE-TP0E+); Media Type: Auto-MD 1000BASE-T: full only 4 fixed Gigabit Ethernet SFP 1 dual-personality (RJ-45 or Dimensions  Weight Processor	TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at IX; Duplex: 10BASE-T/100BASE-TX: half or full; ports USB micro-B) serial console port 17.44(w) x 13.00(d) x 1.75(h) in (44.3 x 33.02 x 4.45 cm) (1U height)
Additional ports and slot Physical characteristics	IEEE 802.3u Type 100BASE-TP0E+); Media Type: Auto-MD 1000BASE-T: full only 4 fixed Gigabit Ethernet SFP 1 dual-personality (RJ-45 or Dimensions  Weight Processor  Mounts in an EIA-standard 19	TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at IX; Duplex: 10BASE-T/100BASE-TX: half or full; ports  USB micro-B) serial console port  17.44(w) x 13.00(d) x 1.75(h) in (44.3 x 33.02 x 4.45 cm) (1U height)  8.7 lb (3.95 kg)  ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically
Additional ports and slot Physical characteristics Memory and processor	IEEE 802.3u Type 100BASE-TP0E+); Media Type: Auto-MD 1000BASE-T: full only 4 fixed Gigabit Ethernet SFP 1 dual-personality (RJ-45 or Dimensions  Weight Processor  Mounts in an EIA-standard 19	TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at IX; Duplex: 10BASE-T/100BASE-TX: half or full; ports  USB micro-B) serial console port  17.44(w) x 13.00(d) x 1.75(h) in (44.3 x 33.02 x 4.45 cm) (1U height)  8.7 lb (3.95 kg)  ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated  9-inch telco rack or equipment cabinet (rack-
Additional ports and slot Physical characteristics Memory and processor Mounting and enclosure	IEEE 802.3u Type 100BASE-PoE+); Media Type: Auto-MD 1000BASE-T: full only 4 fixed Gigabit Ethernet SFP 1 dual-personality (RJ-45 or Dimensions  Weight Processor  Mounts in an EIA-standard 1 mounting kit available); horizing the standard 1 mounting kit available (RJ-45 or Dimensions)	TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at IX; Duplex: 10BASE-T/100BASE-TX: half or full; ports  USB micro-B) serial console port  17.44(w) x 13.00(d) x 1.75(h) in (44.3 x 33.02 x 4.45 cm) (1U height)  8.7 lb (3.95 kg)  ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated  9-inch telco rack or equipment cabinet (rack-
Additional ports and slot Physical characteristics Memory and processor Mounting and enclosure	IEEE 802.3u Type 100BASE-TP0E+); Media Type: Auto-MD 1000BASE-T: full only 4 fixed Gigabit Ethernet SFP 1 dual-personality (RJ-45 or Dimensions  Weight Processor  Mounts in an EIA-standard 19 mounting kit available); horiz IPv6 Ready Certified 100 Mb Latency	TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at IX; Duplex: 10BASE-T/100BASE-TX: half or full; ports  USB micro-B) serial console port  17.44(w) x 13.00(d) x 1.75(h) in (44.3 x 33.02 x 4.45 cm) (1U height)  8.7 lb (3.95 kg)  ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated  9-inch telco rack or equipment cabinet (rack-zontal surface mounting; wall mounting
Additional ports and slot Physical characteristics Memory and processor Mounting and enclosure	IEEE 802.3u Type 100BASE-TP0E+); Media Type: Auto-MD 1000BASE-T: full only 4 fixed Gigabit Ethernet SFP 1 dual-personality (RJ-45 or Dimensions  Weight Processor  Mounts in an EIA-standard 1 mounting kit available); horist IPv6 Ready Certified 100 Mb Latency 1000 Mb Latency	TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at IX; Duplex: 10BASE-T/100BASE-TX: half or full; ports  USB micro-B) serial console port  17.44(w) x 13.00(d) x 1.75(h) in (44.3 x 33.02 x 4.45 cm) (1U height)  8.7 lb (3.95 kg)  ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated 9-inch telco rack or equipment cabinet (rack-zontal surface mounting; wall mounting
Additional ports and slot Physical characteristics Memory and processor Mounting and enclosure	IEEE 802.3u Type 100BASE-TP0E+); Media Type: Auto-MD 1000BASE-T: full only 4 fixed Gigabit Ethernet SFP 1 dual-personality (RJ-45 or Dimensions  Weight Processor  Mounts in an EIA-standard 19 mounting kit available); horist IPv6 Ready Certified 100 Mb Latency 1000 Mb Latency Throughput Switching capacity	TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at IX; Duplex: 10BASE-T/100BASE-TX: half or full; ports  USB micro-B) serial console port  17.44(w) x 13.00(d) x 1.75(h) in (44.3 x 33.02 x 4.45 cm) (1U height)  8.7 lb (3.95 kg)  ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated  9-inch telco rack or equipment cabinet (rack-zontal surface mounting; wall mounting  < 7.4 µs (LIFO 64-byte packets)  < 2.3 µs (LIFO 64-byte packets)
Additional ports and slot Physical characteristics Memory and processor Mounting and enclosure	IEEE 802.3u Type 100BASE-TP0E+); Media Type: Auto-MD 1000BASE-T: full only 4 fixed Gigabit Ethernet SFP 1 dual-personality (RJ-45 or Dimensions  Weight Processor  Mounts in an EIA-standard 19 mounting kit available); hori: IPv6 Ready Certified 100 Mb Latency 1000 Mb Latency Throughput Switching capacity	TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at IX; Duplex: 10BASE-T/100BASE-TX: half or full; ports  USB micro-B) serial console port  17.44(w) x 13.00(d) x 1.75(h) in (44.3 x 33.02 x 4.45 cm) (1U height)  8.7 lb (3.95 kg)  ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated  9-inch telco rack or equipment cabinet (rack-zontal surface mounting; wall mounting  < 7.4 µs (LIFO 64-byte packets)  < 2.3 µs (LIFO 64-byte packets)
Additional ports and slot Physical characteristics Memory and processor Mounting and enclosure	IEEE 802.3u Type 100BASE-TP0E+); Media Type: Auto-MD 1000BASE-T: full only 4 fixed Gigabit Ethernet SFP 1 dual-personality (RJ-45 or Dimensions  Weight Processor  Mounts in an EIA-standard 1: mounting kit available); horiz IPv6 Ready Certified 100 Mb Latency 1000 Mb Latency Throughput Switching capacity MAC address table size Operating temperature	TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at IX; Duplex: 10BASE-T/100BASE-TX: half or full; ports  USB micro-B) serial console port  17.44(w) x 13.00(d) x 1.75(h) in (44.3 x 33.02 x 4.45 cm) (1U height)  8.7 lb (3.95 kg)  ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated 9-inch telco rack or equipment cabinet (rack-zontal surface mounting; wall mounting  < 7.4 µs (LIFO 64-byte packets)  < 2.3 µs (LIFO 64-byte packets)  41.6 Mpps (64-byte packets)
Additional ports and slot Physical characteristics Memory and processor Mounting and enclosure Performance	IEEE 802.3u Type 100BASE-TP0E+); Media Type: Auto-MD 1000BASE-T: full only 4 fixed Gigabit Ethernet SFP 1 dual-personality (RJ-45 or Dimensions  Weight Processor  Mounts in an EIA-standard 19 mounting kit available); horiz IPv6 Ready Certified 100 Mb Latency 1000 Mb Latency Throughput Switching capacity MAC address table size Operating temperature	TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at IX; Duplex: 10BASE-T/100BASE-TX: half or full; ports  USB micro-B) serial console port  17.44(w) x 13.00(d) x 1.75(h) in (44.3 x 33.02 x 4.45 cm) (1U height)  8.7 lb (3.95 kg)  ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated  9-inch telco rack or equipment cabinet (rack-zontal surface mounting; wall mounting  < 7.4 µs (LIFO 64-byte packets)  < 2.3 µs (LIFO 64-byte packets)  41.6 Mpps (64-byte packets)  56 Gbps  16000 entries





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: 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)

**AC voltage** 100-127/200-240 VAC

Current 3.2/1.6 A
Maximum power rating 247 W
Idle power 25.2 W
PoE power 195 W

**Notes** Idle power is the actual power consumption of

the device with no ports connected.

Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if

equipped), 100% traffic, all ports plugged in, and

all modules populated.

PoE power is the total power budget available to

all PoE ports.

**Safety** UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1

Emissions FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A

ImmunityGenericEN 55024, CISPR 24ENEN 55024, CISPR 24

ESD IEC 61000-4-2

Radiated IEC 61000-4-3

EFT/Burst IEC 61000-4-4

Surge IEC 61000-4-5

Conducted IEC 61000-4-6

Power frequency IEC 61000-4-8

magnetic field

Voltage dips and IEC 61000-4-11

interruptions

**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





	e.

HP 2530-8G-PoE+ Switch	I/O ports and slots
------------------------	---------------------

(J9774A)

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

ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 Processor

DIMM; packet buffer size: 1.5 MB dynamically

allocated

Mounting and enclosure

Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rackmounting kit available); horizontal surface mounting; wall mounting

**Performance IPv6 Ready Certified** 

> 100 Mb Latency < 7.4µs (LIFO 64-byte packets) 1000 Mb Latency < 2.6 µs (LIFO 64-byte packets) **Throughput** 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

15% to 90% @ 149°F (65°C), noncondensing

Non-operating/ -40°F to 158°F (-40°C to 70°C)

Storage temperature

Non-operating/

Storage relative humidity

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)

**AC** voltage 100-127/200-240 VAC

Current 1.4 A Maximum power rating 86 W Idle power 13.4 W PoE power 67 W

Notes Idle power is the actual power consumption of

the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if





equipped), 100% traffic, all ports plugged in, and

all modules populated.

PoE power is the total power budget available to

all PoE ports.

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** EN 55024, CISPR 24 Generic

EN

EN 55024, CISPR 24 **ESD** IEC 61000-4-2 Radiated IEC 61000-4-3 EFT/Burst IEC 61000-4-4 IEC 61000-4-5 Surge Conducted IEC 61000-4-6 **Power frequency** IEC 61000-4-8

magnetic field

Voltage dips and IEC 61000-4-11

interruptions

**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

IEEE 802.3az applies to Gigabit models only; IEEE 802.3at and IEEE 802.3af **Notes** 

> 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.

Refer to the HP website at www.hp.com/networking/services for details on Services

> 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 I/O ports and slots

(J9778A)

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

4.45 cm) (1U height)

Weight 10.1 lb (4.58 kg)

ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 Memory and processor Processor

DIMM; packet buffer size: 3 MB dynamically

allocat

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	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	
<b>Electrical characteristics</b>	Frequency	50/60 Hz	
	Maximum heat dissipation	170 BTU/hr (179.35 kJ/hr), (switch only: 170 BTU/hr; combined switch + max. PoE devices: 1505 BTU/hr)	
	AC voltage	100 - 127 / 200 - 240 VAC	
	Current	5.2/2.6 A	
	Maximum power rating	441 W	
	Idle power	37.5 W	
	PoE power	382 W	
	Notes	Idle power is the actual power consumption of the device with no ports connected.  Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.  PoE power is the total power budget available to all PoE ports.	
Safety	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1		
Emissions	FCC Class A; EN 55022/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	

 Harmonics
 EN 61000-3-2, IEC 61000-3-2

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

IEC 61000-4-11

Management IMC - Intelligent Management Center; command-line interface; Web browser;

Voltage dips and

interruptions

## **Technical Specifications**

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 I/O ports and slots

(J9779A)

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, 256 MB DDR3

DIMM; packet buffer size: 1.5 MB dynamically

**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 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

-40°F to 158°F (-40°C to 70°C)

Non-operating/ Storage temperature

Non-operating/Storage

relative humidity

up to 10,000 ft (3 km)

Acoustic Power: 40.4 dB, Pressure: 31.7 dB

**Electrical characteristics** Frequency 50/60 Hz

Altitude

Maximum heat dissipation 99 BTU/hr (104.45 kJ/hr), (switch only: 99

BTU/hr; combined switch + max. PoE devices:

15% to 90% @ 149°F (65°C), noncondensing

809 BTU/hr)

100 - 127 / 200 - 240 VAC AC voltage

Current 2.8/1.4 A





Maximum power rating237 WIdle power21.8 WPoE power195 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 IEC 61000-4-8

magnetic field

Voltage dips and IEC 61000-4-11

interruptions

**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 2530-8-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**  $10(w) \times 6.28(d) \times 1.75(h)$  in  $(25.4 \times 15.95 \times 4.45)$ 





		cm) (111 hoight)	
	Waight	cm) (1U height) 2.0 lb (0.91 kg)	
Mamanu and processor	Weight Processor		
Memory and processor	Processor	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated	
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	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	
<b>Electrical characteristics</b>	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)	
	AC voltage	100-127/200-240 VAC	
	Current	1.4 A	
	Maximum power rating	76.7 W	
	Idle power	5.8 W	
	PoE power	67 W	
	Notes	Idle power is the actual power consumption of the device with no ports connected.  Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.  PoE power is the total power budget available to all PoE ports.	
Safety	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1		
Emissions	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A		
Immunity	Generic	EN 55024, CISPR 24	
	EN	EN 55024, CISPR 24	
	ESD	IEC 61000-4-2	
	Radiated	IEC 61000-4-3	
	EFT/Burst	IEC 61000-4-4	
	Surge	IEC 61000-4-5	





**Conducted** IEC 61000-4-6 **Power frequency** IEC 61000-4-8

magnetic field

**Voltage dips and** IEC 61000-4-11

interruptions

 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**  $17.44(w) \times 10.00(d) \times 1.75(h)$  in  $(44.3 \times 25.4 \times 10.00(d) \times 1.75(h)$ 

4.45 cm) (1U height)

**Weight** 6.8 lb (3.08 kg)

Memory and processor Processor ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3

DIMM; packet buffer size: 3 MB dynamically

allocated

Mounting 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 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/ -40°F to 158°F (-40°C to 70°C)
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: 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) AC voltage 100 - 127 / 200 - 240 VAC

Current 1.2/0.7 A Maximum power rating 59.5 W Idle power 29.5 W

Notes Idle power is the actual power consumption of

> the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if

equipped), 100% traffic, all ports plugged in, and

all modules populated.

Safety UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1

**Emissions** FCC Class A: EN 55022/CISPR-22 Class A: VCCI Class A **Immunity** Generic EN 55024, CISPR 24 EN EN 55024, CISPR 24

**ESD** IEC 61000-4-2 Radiated IEC 61000-4-3 **EFT/Burst** IEC 61000-4-4 Surge IEC 61000-4-5 Conducted IEC 61000-4-6 Power frequency IEC 61000-4-8

magnetic field

Voltage dips and IEC 61000-4-11

interruptions

**Harmonics** EN 61000-3-2, IEC 61000-3-2 Flicker EN 61000-3-3, IEC 61000-3-3

IMC - Intelligent Management Center; command-line interface; Web browser; Management

configuration menu; out-of-band management (serial RS-232C or Micro

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

17.44(w) x 10.00(d) x 1.75(h) in (44.3 x 25.4 x Physical characteristics **Dimensions** 

4.45 cm) (1U height)

Weight 6.1 lb (2.77 kg)





Memory and processor	Processor	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated	
Mounting 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	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	
<b>Electrical characteristics</b>	Frequency	50/60 Hz	
	Maximum heat dissipation	164 BTU/hr (173.02 kJ/hr)	
	AC voltage	100-127/200-240 VAC	
	Current	.6/.4 A	
	Maximum power rating	48.0 W	
	Idle power	28.8 W	
	Notes	Idle power is the actual power consumption of the device with no ports connected.  Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.	
Safety	UL 60950-1; CAN/CSA 22.2	No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1	
Emissions	FCC Class A; EN 55022/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	

## **Technical Specifications**

HP 2530-8G Switch

(J9777A)

		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 <a href="https://www.hp.com/networking/services">www.hp.com/networking/services</a> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.		
	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		
	${\bf Additional\ ports\ and\ slots}$	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, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated	
	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	14.8 Mpps (64-byte packets)	
		Switching capacity	20 Gbps	
	Environment	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 Acoustic		Altitude	up to 10,000 ft (3 km)	
		Acoustic	Power: 0 dB, Pressure: 0 dB	
	Electrical characteristics Frequency 50/60 Hz		50/60 Hz	
		Maximum heat dissipation	63 BTU/hr (66.46 kJ/hr), (switch only: 63 BTU/hr)	
		AC voltage	100-127/200-240 VAC	
		Current	0.5 A	





Maximum power rating 18.6 W Idle power 13.6 W

**Notes** Idle power is the actual power consumption of

the device with no ports connected.

Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the

infrastructure with fully loaded PoE (if

equipped), 100% traffic, all ports plugged in, and

all modules populated

**Safety** UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1

Emissions FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A Immunity Generic EN 55024, CISPR 24

EN EN 55024, CISPR 24

ESD IEC 61000-4-2

Radiated IEC 61000-4-3

EFT/Burst IEC 61000-4-4

Surge IEC 61000-4-5

Conducted IEC 61000-4-6

Power frequency IEC 61000-4-8

magnetic field

**Voltage dips and** IEC 61000-4-11

interruptions

**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, 256 MB DDR3

DIMM; packet buffer size: 3 MB dynamically

allocated



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)</th>1000 Mb Latency< 2.2 μs (LIFO 64-byte packets)</th>Throughput13 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/ -40°F to 158°F (-40°C to 70°C)
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: 0 dB, Pressure: 0 dB

**Electrical characteristics** Frequency 50/60 Hz

 Maximum heat dissipation
 102 BTU/hr (107.61 kJ/hr)

 AC voltage
 100 - 127 / 200 - 240 VAC

Current0.7/0.4 AMaximum power rating29.9 WIdle power17.1 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 55024, CISPR 24
EN EN 55024, CISPR 24
ESD IEC 61000-4-2
Radiated IEC 61000-4-3
EFT/Burst IEC 61000-4-4

 Radiated
 IEC 61000-4-3

 EFT/Burst
 IEC 61000-4-4

 Surge
 IEC 61000-4-5

 Conducted
 IEC 61000-4-6

 Power frequency
 IEC 61000-4-8

magnetic field

Voltage dips and IEC 61000-4-11

interruptions

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);



## **Technical Specifications**

		IEEE 802.3 Ethernet MIB; Re	peater MIB; Ethernet Interface MIB	
	Notes	IEEE 802.3az applies to Gigabit models only; IEEE 802.3at and IEEE 802.3 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 <a href="https://www.hp.com/networking/services">www.hp.com/networking/services</a> for detail the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sa office.		
<b>HP 2530-24 Switch</b> (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, IEEI Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BA! 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)	
	Memory and processor	Processor	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated	
	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	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		
		AC voltage	100 - 127 / 200 - 240 VAC	
		Current	0.3/0.2 A	
		Maximum power rating	14.7 W	
		Idle power	8.4 W	
		Notes	Idle power is the actual power consumption of the device with no ports connected.	

Maximum power rating and maximum heat



dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if

equipped), 100% traffic, all ports plugged in, and

all modules populated.

**Safety** UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1

Emissions FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A

Immunity Generic EN 55024, CISPR 24

EN EN 55024, CISPR 24

EN EN 55024, CISPR 24

ESD IEC 61000-4-2

Radiated IEC 61000-4-3

EFT/Burst IEC 61000-4-4

Surge IEC 61000-4-5

Conducted IEC 61000-4-6

Power frequency IEC 61000-4-8

magnetic field

Voltage dips and IEC 61000-4-11

interruptions

**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**  $10(w) \times 6.28(d) \times 1.75(h)$  in  $(25.4 \times 15.95 \times 4.45)$ 

cm) (1U height)

**Weight** 1.8 lb (0.82 kg)

Memory and processor Processor ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3

DIMM; packet buffer size: 1.5 MB dynamically

allocated

Mounting 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** 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

Non-operating/

humidity

-40°F to 158°F (-40°C to 70°C)

Storage temperature

Non-operating/Storage

relative humidity

15% to 90% @ 149°F (65°C), noncondensing

15% to 95% @ 104°F (40°C), noncondensing

**Altitude** up to 10,000 ft (3 km) Acoustic Power: 0 dB, Pressure: 0 dB

Electrical characteristics 50/60 Hz Frequency

> Maximum heat dissipation 25 BTU/hr (26.38 kJ/hr) 100 - 127 / 200 - 240 VAC **AC** voltage

Current 0.5 AMaximum 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** EN 55024, CISPR 24 Generic EN EN 55024, CISPR 24 **ESD** IEC 61000-4-2 Radiated IEC 61000-4-3

**EFT/Burst** IEC 61000-4-4 IEC 61000-4-5 Surge Conducted IEC 61000-4-6 **Power frequency** IEC 61000-4-8

magnetic field

Voltage dips and IEC 61000-4-11

interruptions

**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

IEEE 802.3az applies to Gigabit models only; IEEE 802.3at and IEEE 802.3af **Notes** 

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.,





HP 2530-48G-PoE+-2SFP+ Switch (J9853A)

		J4858B, J4859C) are require	d.	
	Services	Refer to the HP website at <a href="https://www.hp.com/networking/services">www.hp.com/networking/services</a> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.		
)	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 SF	•	
	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, 256 MB DDR3 DIMM; packet buffer size: 3 MB dynamically allocated	
	Mounting and enclosure	Inting and enclosure Mounts in an EIA-standard 19-inch telco rack or equi mounting kit available); horizontal surface 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	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	
	<b>Electrical characteristics</b>	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)	
		AC voltage	100 - 127 / 200 - 240 VAC	
		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 discipation are the worst-case theoretical	



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.

EN 55024, CISPR 24

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

FN

ESD IEC 61000-4-2
Radiated IEC 61000-4-3
EFT/Burst IEC 61000-4-4
Surge IEC 61000-4-5
Conducted IEC 61000-4-6
Power frequency IEC 61000-4-8

magnetic field

Voltage dips and IEC 61000-4-11

interruptions

**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**  $17.44(w) \times 13.00(d) \times 1.75(h)$  in  $(44.3 \times 33.02 \times 10.00)$ 

4.45 cm) (1U height)

**Weight** 8.6 lb (3.9 kg)

Memory and processor Processor ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3

DIMM; packet buffer size: 1.5 MB dynamically

allocated

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
 1000 Mb Latency
 2.7 μs (LIFO 64-byte packets)
 10 Gbps Latency
 4.0 μs (LIFO 64-byte packets)
 Throughput
 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

-40°F to 158°F (-40°C to 70°C)

Non-operating/ Storage temperature

Non-operating/Storage

15% to 90% @ 149°F (65°C), noncondensing

relative humidity
Altitude up to 10,000 ft (3 km)

Acoustic Power: 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)

**AC voltage** 100 - 127 / 200 - 240 VAC

Current2.9/1.4 AMaximum power rating222.2 WIdle power24.7 WPoE Power195 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

EmissionsFCC Class A; EN 55022/CISPR-22 Class A; VCCI Class AImmunityGenericEN 55024, CISPR 24ENEN 55024, CISPR 24ESDIEC 61000-4-2

ESD IEC 61000-4-2

Radiated IEC 61000-4-3

EFT/Burst IEC 61000-4-4

Surge IEC 61000-4-5

Conducted IEC 61000-4-6

Power frequency IEC 61000-4-8

magnetic field

**Voltage dips and** IEC 61000-4-11 **interruptions** 

**Harmonics** EN 61000-3-2, IEC 61000-3-2



HP 2530-48G-2SFP+ Switch (J9855A)

	Flicker	EN 61000-3-3, IEC 61000-3-3	
Management	configuration menu; out-of-	nt Center; command-line interface; Web browser; -band management (serial RS-232C or Micro IIB; 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 i	1 Gigahit SED & 10 Gigahit SED+ transcoivors, as	
	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 <a href="https://www.hp.com/networking/services">www.hp.com/networking/services</a> for details of the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.		
I/O ports and slots	48 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 1 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); T/100BASE-TX: half or full; 1000BASE-T: full only		
	2 SFP+ fixed 1000/10000 SI	•	
	•	r 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, 256 MB DDR3 DIMM; packet buffer size: 3 MB dynamically allocated	
Mounting and enclosure		unts in an EIA-standard 19-inch telco rack or equipment cabinet (rack- unting kit available); horizontal surface mounting; wall mounting	
Performance	<b>IPv6 Ready Certified</b>		
	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	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	
<b>Electrical characteristics</b>	Frequency	50/60 Hz	
	_	Achieved Miercom Certified Green Award	
	Maximum heat dissipation		
	AC voltage	100 - 127 / 200 - 240 VAC	
	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 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 61000-4-2

EFT/Burst IEC 61000-4-4

Surge IEC 61000-4-5

Conducted IEC 61000-4-6

Power frequency IEC 61000-4-8

magnetic field

Voltage dips and IEC 61000-4-11

interruptions

**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**  $17.44(w) \times 10.00(d) \times 1.75(h)$  in  $(44.3 \times 25.4 \times 10.00(d) \times 1.75(h))$ 

4.45 cm) (1U height)

**Weight** 6.2 lb (2.81 kg)

Memory and processor Processor ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3





DIMM; packet buffer size: 1.5 MB dynamically

15% to 95% @ 104°F (40°C), noncondensing

15% to 90% @ 149°F (65°C), noncondensing

allocated

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)</td>

 1000 Mb Latency
 < 2.7 μs (LIFO 64-byte packets)</td>

 10 Gbps Latency
 < 2.2 μs (LIFO 64-byte packets)</td>

 Throughput
 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

-40°F to 158°F (-40°C to 70°C)

Non-operating/ Storage temperature

Non-operating/Storage relative humidity

up to 10,000 ft (3 km)

**Acoustic** Power: 29.4 dB, Pressure: 22.3 dB

**Electrical characteristics** Frequency 50/60 Hz

Altitude

Maximum heat dissipation 189 BTU/hr (199.4 kJ/hr)
AC voltage 100 - 127 / 200 - 240 VAC

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 IEC 61000-4-8

magnetic field

**Voltage dips and** IEC 61000-4-11





interruptions

**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.

**Standards and protocols** (applies to all products in series)

Denial of service protection

**Device management** 

Network DoS Filter

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 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 2925 Remote Operations MIB (Ping only)

RFC 3315 DHCPv6 (client only)

RFC 3513 IPv6 Addressing Architecture RFC 3596 DNS Extension for IPv6

RFC 4022 MIB for TCP
RFC 4113 MIB for UDP
RFC 4251 SSHv6 Architecture
RFC 4252 SSHv6 Authentication
RFC 4252 SSHv6 Transport Layer
RFC 4254 SSHv6 Connection

RFC 4293 MIB for IP

RFC 4419 Key Exchange for SSH

RFC 4443 ICMPv6

RFC 4861 IPv6 Neighbor Discovery

RFC 4862 IPv6 Stateless Address Auto-configuration

MIBs 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

**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)

ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED)

SNMPv1/v2c/v3

**QoS/CoS** RFC 2474 DiffServ precedence, with 4 queues per port

RFC 2475 DiffServ Architecture

RFC 2597 DiffServ Assured Forwarding (AF) RFC 2598 DiffServ Expedited Forwarding (EF)

Security IEEE 802.1X Port Based Network Access Control

RFC 1492 TACACS+

RFC 2138 RADIUS Authentication RFC 2866 RADIUS Accounting Secure Sockets Layer (SSL)





## Accessories

### **HP 2530 Switch Series accessories**

Transceivers	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 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 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
Mounting Kit	HP X410 1U Universal 4-post Rack Mounting Kit	J9583A
HP 2530-8G-PoE+ Switch	HP X510 1U Cable Guard	J9700A
(J9774A)	HP 2530 8-port Switch Power Adapter Shelf	J9820A
HP 2530-8-PoE+ Switch	HP X510 1U Cable Guard	J9700A
(J9780A)	HP 2530 8-port Switch Power Adapter Shelf	J9820A
HP 2530-8G Switch	HP X510 1U Cable Guard	J9700A
(J9777A)	HP 2530 8-port Switch Power Adapter Shelf	J9820A
HP 2530-8 Switch	HP X510 1U Cable Guard	J9700A
(J9783A)	HP 2530 8-port Switch Power Adapter Shelf	J9820A





#### **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

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: 32°F to 158°F (0°C to 70°C)

Operating relative humidity: 5% to 95%

Nonoperating/Storage temperature: -40°F to 185°F (-40°C to 85°C)

Nonoperating/Storage relative humidity: 5% to 85%

Altitude: up to 10,000 ft. (3 km)

Cabling Type:

**Physical characteristics** 

• 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 J9054B 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- Ports

Megabit BX (bi-directional)

full-duplex connectivity up

to 10 km on one strand of

that provides 100 Mbps

singlemode fiber. The

J9100B "upstream" transceiver, or to any IEEE-

J9099B connects to the

standard 100BASE-BX10-U ("upstream") device.

"downstream" transceiver Environment

D Transceiver (J9099B)

A small form-factor

pluggable (SFP) 100-

**Physical characteristics** 

Cabling

1 LC 100BASE-BX10 port (IEEE 802.3ah Type 100BASE-BX10-D); Duplex: full

only

**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)

> Operating temperature 32ºF to 158ºF (0ºC to 70ºC) 0% to 95%, noncondensing

Operating relative humidity

Nonoperating/Storage

temperature

-40°F to 185°F (-40°C to 85°C)

Type:

Single-mode fiber optic, complying with ITU-T G.652;

Maximum distance:

0.5-10,000 m (single-mode fiber)

Transmit wavelength: 1550 nm. Receive wavelength: 1310 nm. **Notes** 

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.



# QuickSpecs

#### **Accessory Product Details**

The J9099B connects to the J9100B "upstream" transceiver, or to any IEEEstandard 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- Ports **U Transceiver** (J9100B)

Megabit BX (bi-directional)

full-duplex connectivity up

to 10 km on one strand of

standard 100BASE-BX10-D

"upstream" transceiver

that provides 100 Mbps

singlemode fiber. The

J9100B connects to the

J9099B "downstream" transceiver, or to any IEEE-

("downstream")

device.

A small form-factor

pluggable (SFP) 100-

**Environment** 

1 LC 100BASE-BX10 port (IEEE 802.3ah Type 100BASE-BX10-U); Duplex: full

**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)

Operating relative

32°F to 158°F (0°C to 70°C) 0% to 95%, noncondensing

humidity

Nonoperating/Storage

Operating temperature

-40°F to 185°F (-40°C to 85°C)

temperature

Cabling

Type:

Single-mode fiber optic, complying with ITU-T G.652;

Maximum distance:

Notes

• 0.5-10,000 m (single-mode fiber)

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 solution up to 550 m on multimode fiber.

**Ports** 

**Physical characteristics** 

1 LC 1000BASE-SX port; Duplex: full only

Dimensions: 2.24(d) x 0.54(w) x 0.48(h) in. (5.69 x 1.37 x 1.22 cm)

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)

Altitude: up to 10,000 ft. (3 km) **Electrical characteristics** Power consumption typical: 0.4 W

Power consumption maximum: 0.7 W

Cabling Type:





#### **Accessory Product Details**

• 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

1 LC 1000BASE-LX port (IEEE 802.3z Type 1000BASE-LX); Duplex: full only

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** 

**Physical characteristics** 

**Environment** 

Cabling

Weight: 0.04 lb. (0.02 kg) 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)

Dimensions: 2.24(d) x 0.54(w) x 0.486(h) in. (5.69 x 1.37 x 1.23 cm)

Altitude: up to 10,000 ft. (3 km)

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 fiberoptic, 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

Power Consumption: < 500mW Typical

Services

Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

HP X121 1G SFP LC LH Transceiver (J4860C)

**Ports** 

1 LC 1000BASE-LH port (no IEEE standard exists for 1550 nm optics); Duplex: full only

# QuickSpecs

#### **Accessory Product Details**

A small form-factor pluggable (SFP) Gigabit LH transceiver that provides a full-duplex Gigabit solution up to 70 km on singlemode fiber.

**Physical characteristics** 

**Environment** 

Cabling

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)

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)

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 Ports

"downstream" transceiver **Environment** 

Transceiver (J9142B)

A small form-factor

(bi-directional)

pluggable (SFP) Gigabit-BX

that provides a full-duplex

Gigabit solution up to 10

km on one strand of

J9143B "upstream"

single-mode fiber. The

J9142B connects to the

U ("upstream") device.

transceiver, or to any IEEEstandard 1000BASE-BX101 LC 1000BASE-BX10 port (IEEE 802.3ah Type 1000BASE-BX10-D); Duplex:

0% to 95%, non-condensing

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)

**Operating temperature** 32°F to 158°F (0°C to 70°C)

Operating relative

humidity

Non-operating/ -40°F to 185°F -40°C to 85°C)

Storage temperature

**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.

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.



# QuickSpecs

#### **Accessory Product Details**

HP X122 1G SFP LC BX-U Transceiver (J9143B)

A small form-factor pluggable (SFP) Gigabit-BX (bi-directional) "upstream" transceiver that provides a **Environment** full-duplex Gigabit solution up to 10 km on one strand of single-mode fiber. The J9143B connects

to the J9142B "downstream" transceiver, Cabling 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

**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)

Operating temperature 32°F to 158°F (0°C to 70°C) Operating relative 0% to 95%, non-condensing

humidity

Non-operating/ -40°F to 185°F -40°C to 85°C)

Storage temperature

Type:

**Physical characteristics** 

Single-mode fiber optic, complying with ITU-T G.652;

Maximum distance:

0.5-10,000 m (single-mode fiber)

Transmit wavelength: 1310 nm. Receive wavelength: 1490 nm. **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 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 Gigabit solution up to 100 m on Category 5 or better cable

**Ports** 

**Physical characteristics** 

1 RJ-45 1000BASE-T port (IEEE 802.3ab Type 1000BASE-T); Duplex: full only

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 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 4pair unshielded twisted pair (UTP) or shielded twisted pair (STP) balanced,

complying with IEEE 802.3ab 1000BASE-T;

Maximum distance:

• 100 m

Power consumption is nominally 1 watt. Notes

> For supported platforms and minimum software requirements to support this product, see the document titled "Support for the J8177C 1000Base-T





#### **Accessory Product Details**

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**  $6.75(w) \times 5.25(d) \times 1.75(h)$  in  $(17.15 \times 13.34 \times 1.75(h))$ 

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.





## **Summary of Changes**

Date	Version History	Action	Description of Change:
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

To learn more, visit hp.com/networking

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