# QuickSpecs

## **Overview**

## **Aruba 2530 Switch Series**

The Aruba 2530 Switch Series provides cost-effective, reliable and secure access layer connectivity for enterprises, branch offices and small and midsize businesses.

These fully managed switches deliver Layer 2 capabilities with enhanced access security, traffic prioritization, sFlow, and IPv6 host support. Right size deployment is available with a range of Gigabit and Fast Ethernet models including compact and fanless models which are ideal for use in quiet work spaces. PoE+ models deliver up 370W to power access points, IP phones and cameras.

The Aruba 2530 Switch Series is easy to deploy, use and manage using Aruba AirWave or Aruba Central. Aruba ClearPass offers network access control (NAC) and external captive portal support. The switches include a Limited Lifetime Warranty.



## **Aruba 2530 Switch Series**

Models	
Aruba 2530 48G PoE+ Switch	J9772A
Aruba 2530 24G PoE+ Switch	J9773A
Aruba 2530 8G PoE+ Switch	J9774A
Aruba 2530 24 PoE+ Switch	J9779A
Aruba 2530 8 PoE+ Switch	J9780A
Aruba 2530 48G Switch	J9775A
Aruba 2530 24G Switch	J9776A
Aruba 2530 8G Switch	J9777A
Aruba 2530 48 Switch	J9781A
Aruba 2530 24 Switch	J9782A
Aruba 2530 8 Switch	J9783A
Aruba 2530 8 PoE+ Internal PS Switch	JL070A

# **Standard Features**

## **Key features**

- Cost-effective, reliable and secure Aruba Layer 2 switch series
- Flexible Management via Aruba AirWave, Aruba Central, and Aruba ClearPass Policy Manager
- Right size deployment with choice of 8, 24 and 48 port Gigabit and Fast Ethernet models
- Up to 370W PoE+ to power IoT, APs and cameras
- REST API support
- Simple deployment with Zero Touch Provisioning

## Standard Features

#### **Enhanced Features**

#### Wired and Wireless

#### • Switch auto-configuration

automatically configures switch for different settings such as VLAN, CoS, PoE max power, and PoE priority when an Aruba access point is detected

#### Local user role

defines a set of switch-based policies in areas such as security, authentication, and QoS. A user role can be assigned to a group of users or devices, using local switch configuration (YA releases only).

#### **Quality of Service (QoS)**

## Traffic prioritization (IEEE 802.1p)

allows for real-time traffic classification. Supports eight priority levels mapped to either two or four queues, and uses weighted deficit round robin (WDRR) or strict priority

## • Simplified QoS configuration

Port-based

traffic prioritization by specifying a port and priority level

VLAN-based

traffic prioritization by specifying a VLAN and priority level

#### Class of Service (CoS)

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

## Rate limiting

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

## Layer 4 prioritization

enables priorities based on TCP/UDP port numbers

## Flow control

delivers reliable communication during full-duplex operation

## **Simplified Configuration and Management**

## Aruba Central cloud-based management platform

offers a simple, secure and cost effective way to manage switches. Complies with RFC 7030 for encryption key enrollment

## Zero-Touch ProVisioning (ZTP)

simplifies installation of the switch infrastructure using DHCP-based process with AirWave

## Choice of management interfaces

## HTML-based easy-to-use Web GUI

allows configuration of the switch from any Web browser

#### Robust CLI

provides advanced configuration and diagnostics

#### Simple network management protocol (SNMPv1/v2c/v3)

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

#### Flexible management

supports both cloud-based Central and on-premise AirWave without ripping and replacing switching infrastructure

## • Virtual stacking

provides single IP address management for up to 16 switches individually

## • 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

## Provides local and remote logging of events

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

# Port mirroring

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

#### Remote monitoring (RMON)

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

## Standard Features

## • Find, fix, and inform

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

## Friendly port names

allows assignment of descriptive names to ports

## Dual flash images

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

## • Multiple configuration files

are easily stored with a flash image

#### • Front-panel LEDs

#### Locator LEDs

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

## Per-port LEDs

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

#### Power and fault LEDs

display issues, if any

## Connectivity

#### Compact and fanless 8-port models

offer quiet operation for acoustically sensitive areas and uplink flexibility with two dual-personality ports that can be used as either RJ-45 Gigabit Ethernet or SFP ports.

## • Four built-in Gigabit Ethernet uplinks on 24- and 48- port models

Gigabit models have small form factor pluggable (SFP) for fiber connectivity and Fast Ethernet models have two SFP and two RJ-45 Gigabit uplinks.

## 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 appropriate interface; prevents IPv6 multicast traffic from flooding the network

## IPv6 ACL/QoS

supports ACL & QoS for IPv6 network traffic on Gigabit & 48 port 10/100 models

#### Security

RA Guard, DHCPv6 Protection, Dynamic IPv6 Lockdown (YA only)

#### • IEEE 802.3at Power over Ethernet (PoE+)

provides up to 30 W per port that allows support of the latest PoE+ capable devices such as IP phones, wireless access points, and security cameras, as well as any IEEE 802.3af compliant end device; eliminates the cost of additional electrical cabling and circuits that would otherwise be necessary in IP phone and WLAN deployments

## 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

#### SFP slots

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

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

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

## Layer 2 switching

## VLANs

supports 512 VLANs and 4,094 VLAN IDs

## • Jumbo packet support

improves the performance of large data transfers; supports frame size of up to 9,220 bytes

## Standard Features

## • 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)

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

## Source-port filtering

allows only specified ports to communicate with each other

#### RADIUS/TACACS+

eases switch management security administration by using a password authentication server

#### Secure Sockets Layer (SSL)

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

#### Port security

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

#### MAC address lockout

prevents particular configured MAC addresses from connecting to the network

## Multiple user authentication methods

## - IEEE 802.1X

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

#### Web-based authentication

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

## Supports MAC-based authentication

using the client's MAC address

#### Secure shell (SSH) v2

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

# • STP BPDU port protection

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

## STP root guard

protects the root bridge from malicious attacks or configuration mistakes

#### Secure management access

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

#### Custom banner

displays security policy when users log in to the switch

## Secure FTP

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

## Protected ports CLI

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

## Authentication flexibility

## Multiple IEEE 802.1X users per port

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

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

allows a switch port to accept 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

## Standard Features

## • 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

#### MAC Pinning

allows non-chatty legacy devices to stay authenticated by pinning client MAC addresses to the port until the clients logoff or get disconnected

#### 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

## • IEEE 802.1AB Link Layer Discovery Protocol (LLDP)

facilitates easy mapping using network management applications with LLDP automated device discovery protocol

#### PoE and PoE+ allocations

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

#### Voice VLAN

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

## • IP multicast (IGMP)

prevents flooding of IP multicast traffic

#### LLDP-CDP compatibility

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

#### • Local MAC Authentication

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

## Resiliency and high availability

## • Port trunking and link aggregation

## Trunking

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

# IEEE 802.3ad Link Aggregation Control Protocol (LACP)

eases configuration of trunks through automatic configuration

#### • IEEE 802.1s Multiple Spanning Tree

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

## • SmartLink

provides easy-to-configure link redundancy of active and standby links

#### **Product Architecture**

## Power savings with energy-efficient design

## IEEE 802.3az

reduces power consumption during periods of low data activity on Gigabit Ethernet switches

## Port low power mode

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

## Fanless and variable-speed fans

decrease power consumption in fanless (all 8-port, 2530-24, and 2530-48 PoE+ switches) as well as variable-speed fan switches

#### Port LEDs

conserves energy by optionally turning off port link and activity LEDs

#### Switch on a chip

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

#### **Flexibility**

#### Flexible mounting

#### Rack mountable

allows the switch to be mounted on a standard 19-inch rack, with the hardware included

## **Standard Features**

#### Wall mountable

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

Surface mountable

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

#### Quiet operation

lowers noise, making it suitable for deployments in acoustically sensitive environments such as conference rooms and office spaces

## Compact size

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

## Warranty and support

## Limited Lifetime Warranty

see <a href="http://www.hpe.com/networking/warrantysummary">http://www.hpe.com/networking/warrantysummary</a> for warranty and support information included with your product purchase.

## • Software releases

to find software for your product, refer to <a href="http://www.hpe.com/networking/support">http://www.hpe.com/networking/support</a>; for details on the software releases available with your product purchase, refer to <a href="http://www.hpe.com/networking/warrantysummary">http://www.hpe.com/networking/warrantysummary</a>

# **Configuration Information**

1U - Height

**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.

SKU Rule # **Description** 1, 3 J9783A Aruba 2530 8 Switch • 8 RJ-45 autosensing 10/100 ports 2 dual-personality ports; RJ-45 10/100/1000 or SFP slot (Min 0 // Max 2 SFP) Power Supply Included 1U - Height Aruba 2530 8 Switch J9783A#AC3 No Localized Power Cord Selected J9780A 1, 3 Aruba 2530 8 PoE+ Switch 8 RJ-45 autosensing 10/100 PoE+ports 2 dual-personality ports; RJ-45 10/100/1000 or SFP slot (Min 0 // Max 2 SFP) Power Supply Included 1U - Height J9780A#AC3 Aruba 2530 8 PoE+ Switch No Localized Power Cord Selected 1, 2 Aruba 2530 8 PoE+ Internal PS Switch JL070A • 8 RJ-45 autosensing 10/100 PoE+ports 2 dual-personality ports; RJ-45 10/100/1000 or SFP slot (Min 0 // Max 2 SFP) Power Supply Included 1U - Height JL070A#B2B Aruba 2530 8 PoE+ Internal PS Switch PDU NA, JP or TW C15 PDU Jumper Cord (NA/MEX/TW/JP) JL070A#B2C Aruba 2530 8 PoE+ Internal PS Switch PDU ROW • C15 PDU Jumper Cord (ROW) 1, 3 Aruba 2530 8G Switch J9777A • 8 RJ-45 autosensing 10/100/1000 ports 2 dual-personality ports; RJ-45 10/100/1000 or SFP slot (Min 0 // Max 2 SFP) Power Supply Included 1U - Height Aruba 2530 8G Switch J9777A#AC3 No Localized Power Cord Selected 1, 3 Aruba 2530 8G PoE+ Switch J9774A • 8 RJ-45 autosensing 10/100/1000 PoE+ ports 2 dual-personality ports; RJ-45 10/100/1000 or SFP slot (Min 0 // Max 2 SFP) Power Supply Included 1U - Height Aruba 2530 8G PoE+ Switch J9774A#AC3 No Localized Power Cord Selected 1.2 Aruba 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

# **Configuration Information**

Rule #	Description	SKU
Rule #	Aruba 2530 24 Switch PDU NA, JP or TW	J9782A#B2B
	C15 PDU Jumper Cord (NA/MEX/TW/JP)	3770274#626
	Aruba 2530 24 Switch PDU ROW	J9782A#B2C
	C15 PDU Jumper Cord (ROW)	J7702A#B2C
	Aruba 2530 24 Switch	J9782A#AC3
	No Localized Power Cord Selected	377027(117(03
1, 2	Aruba 2530 24 PoE+ Switch	J9779A
Ξ, Ζ	<ul> <li>24 RJ-45 autosensing 10/100 PoE+ ports</li> <li>2 fixed Gigabit Ethernet SFP ports (Min 0 // Max 2 SFP)</li> <li>2 RJ-45 autosensing 10/100/1000 ports</li> <li>Power Supply Included</li> <li>1U - Height</li> </ul>	377771
	Aruba 2530 24 PoE+ Switch PDU NA, JP or TW	J9779A#B2B
	<ul> <li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	
	Aruba 2530 24 PoE+ Switch PDU ROW	J9779A#B2C
	C15 PDU Jumper Cord (ROW)	
	Aruba 2530 24 PoE+ Switch	J9779A#AC3
	No Localized Power Cord Selected	
1, 2	Aruba 2530 24G Switch	J9776A
	<ul> <li>24 RJ-45 autosensing 10/100/1000 ports</li> <li>4 fixed Gigabit Ethernet SFP ports (Min 0 // Max 4 SFP)</li> <li>Power Supply Included</li> <li>1U - Height</li> </ul>	
	Aruba 2530 24G Switch PDU NA, JP or TW	J9776A#B2B
	<ul> <li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	
	Aruba 2530 24G Switch PDU ROW	J9776A#B2C
	C15 PDU Jumper Cord (ROW)	
1, 2	Aruba 2530 24G PoE+ Switch	J9773A
	<ul> <li>24 RJ-45 autosensing 10/100/1000 PoE+ ports</li> <li>4 fixed Gigabit Ethernet SFP ports (Min 0 // Max 4 SFP)</li> <li>Power Supply Included</li> <li>1U - Height</li> </ul>	
	Aruba 2530 24G PoE+ Switch PDU NA, JP or TW	J9773A#B2B
	• C15 PDU Jumper Cord (NA/MEX/TW/JP)	
	Aruba 2530 24G PoE+ Switch PDU ROW	J9773A#B2C
	C15 PDU Jumper Cord (ROW)	
1, 2	Aruba 2530 48 Switch	J9781A
	<ul> <li>48 RJ-45 autosensing 10/100 ports</li> <li>2 fixed Gigabit Ethernet SFP ports (Min 0 // Max 2 SFP)</li> <li>2 RJ-45 autosensing 10/100/1000 ports</li> <li>Power Supply Included</li> <li>1U - Height</li> </ul>	
	Aruba 2530 48 Switch PDU NA, JP or TW	J9781A#B2B
	C15 PDU Jumper Cord (NA/MEX/TW/JP)	
	Aruba 2530 48 Switch PDU ROW	J9781A#B2C

# **Configuration Information**

• C15 PDU Jumper Cord (ROW)

	• C15 PDU Jumper Cord (ROW)	
Rule #	Description	SKU
	Aruba 2530 48 Switch	J9781A#AC3
	No Localized Power Cord Selected	
1, 2	Aruba 2530 48 PoE+ Switch	J9778A
	<ul> <li>48 RJ-45 autosensing 10/100 PoE+ ports</li> <li>2 fixed Gigabit Ethernet SFP ports (Min 0 // Max 2 SFP)</li> <li>2 RJ-45 autosensing 10/100/1000 ports</li> <li>Power Supply Included</li> <li>1U - Height</li> </ul>	
	Aruba 2530 48 PoE+ Switch PDU NA, JP or TW	J9778A#B2B
	<ul> <li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	
	Aruba 2530 48 PoE+ Switch PDU ROW	J9778A#B2C
	C15 PDU Jumper Cord (ROW)	
	Aruba 2530 48 PoE+ Switch	J9778A#AC3
	No Localized Power Cord Selected	
1, 2	Aruba 2530 48G Switch	J9775A
	<ul> <li>48 RJ-45 autosensing 10/100/1000 ports</li> <li>4 fixed Gigabit Ethernet SFP ports (Min 0 // Max 4 SFP)</li> <li>Power Supply Included</li> <li>1U - Height</li> </ul>	
	Aruba 2530 48G Switch PDU NA, JP or TW	J9775A#B2B
	<ul> <li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	
	Aruba 2530 48G Switch PDU ROW	J9775A#B2C
	C15 PDU Jumper Cord (ROW)	
1, 2	Aruba 2530 48G PoE+ Switch	J9772A
	<ul> <li>48 RJ-45 autosensing 10/100/1000 PoE+ ports</li> <li>4 fixed Gigabit Ethernet SFP ports (Min 0 // Max 4 SFP)</li> <li>Power Supply Included</li> <li>1U - Height</li> </ul>	
	Aruba 2530 48G PoE+ Switch PDU NA, JP or TW	J9772A#B2B
	<ul> <li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	
	Aruba 2530 48G PoE+ Switch PDU ROW	J9772A#B2C
	C15 PDU Jumper Cord (ROW)	
	Configuration Rules	
Rule #	Description	SKU
1	The following Transceivers install into this switch:	
	Aruba 1G SFP LC SX 500m OM2 MMF Transceiver	J4858D
	Aruba 1G SFP LC LX 10km SMF Transceiver	J4859D
	Aruba 1G SFP LC LH 70km SMF Transceiver	J4860D
	Aruba 1G SFP RJ45 T 100m Cat5e Transceiver	J8177D
	Aruba 100M SFP LC FX 2km MMF Transceiver	J9054D

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

2

# **Configuration Information**

3 Localization cable required. No B2x options

• C15 PDU Jumper Cord (ROW)

**1. 2. 3. 4** Aruba 2530 24G PoE+ Switch

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 Leve	l Integration CTO Models	
Rule #	Description	SKU
1, 2, 3, 4	Aruba 2530 24 Switch	J9782A
	<ul> <li>24 RJ-45 autosensing 10/100 ports</li> <li>2 fixed Gigabit Ethernet SFP ports (Min 0 // Max 2 SFP)</li> <li>2 RJ-45 autosensing 10/100/1000 ports</li> <li>Power Supply Included</li> <li>1U - Height</li> </ul>	:
	Aruba 2530 24 Switch PDU NA, JP or TW	J9782A#B2B
	<ul> <li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	
	Aruba 2530 24 Switch PDU ROW	J9782A#B2C
	C15 PDU Jumper Cord (ROW)	
	Aruba 2530 24 Switch	J9782A#AC3
	No Localized Power Cord Selected	
1, 2, 3, 4	Aruba 2530 24 PoE+ Switch	J9779A
	<ul> <li>24 RJ-45 autosensing 10/100 PoE+ ports</li> <li>2 fixed Gigabit Ethernet SFP ports (Min 0 // Max 2 SFP)</li> <li>2 RJ-45 autosensing 10/100/1000 ports</li> <li>Power Supply Included</li> <li>1U - Height</li> </ul>	
	Aruba 2530 24 PoE+ Switch PDU NA, JP or TW	J9779A#B2B
	<ul> <li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	
	Aruba 2530 24 PoE+ Switch PDU ROW	J9779A#B2C
	C15 PDU Jumper Cord (ROW)	
	Aruba 2530 24 PoE+ Switch	J9779A#AC3
	No Localized Power Cord Selected	
1, 2, 3, 4	Aruba 2530 24G Switch	J9776A
	<ul> <li>24 RJ-45 autosensing 10/100/1000 ports</li> <li>4 fixed Gigabit Ethernet SFP ports (Min 0 // Max 4 SFP)</li> <li>Power Supply Included</li> <li>1U - Height</li> </ul>	
	Aruba 2530 24G Switch PDU NA, JP or TW	J9776A#B2B
	<ul> <li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	
	Aruba 2530 24G Switch PDU ROW	J9776A#B2C

J9773A

# **Configuration Information**

• 24 RJ-45 autosensing 10/100/1000 PoE+ ports

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

Power Supply Included

• 1U - Height

Rule # Description

Aruba 2530 24G PoE+ Switch PDU NA, JP or TW

J9773A#B2B

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

Aruba 2530 24G PoE+ Switch PDU ROW J9773A#B2C

• C15 PDU Jumper Cord (ROW)

**1, 2, 3, 4** Aruba 2530 48 Switch

• 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

Aruba 2530 48 Switch PDU NA, JP or TW J9781A#B2B

• C15 PDU Jumper Cord (NA/MEX/TW/JP)

Aruba 2530 48 Switch PDU ROW J9781A#B2C

• C15 PDU Jumper Cord (ROW)

Aruba 2530 48 Switch J9781A#AC3

No Localized Power Cord Selected

**1, 2, 3, 4** Aruba 2530 48 PoE+ Switch

48 RJ-45 autosensing 10/100 PoE+ ports

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

2 RJ-45 autosensing 10/100/1000 ports

Power Supply Included

1U - Height

Aruba 2530 48 PoE+ Switch PDU NA, JP or TW J9778A#B2B

• C15 PDU Jumper Cord (NA/MEX/TW/JP)

Aruba 2530 48 PoE+ Switch PDU ROW J9778A#B2C

• C15 PDU Jumper Cord (ROW)

Aruba 2530 48 PoE+ Switch
J9778A#AC3

• No Localized Power Cord Selected

**1, 2, 3, 4** Aruba 2530 48G Switch

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

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

• Power Supply Included

1U - Height

Aruba 2530 48G Switch PDU NA, JP or TW J9775A#B2B

• C15 PDU Jumper Cord (NA/MEX/TW/JP)

Aruba 2530 48G Switch PDU ROW J9775A#B2C

• C15 PDU Jumper Cord (ROW)

**1, 2, 3, 4** Aruba 2530 48G PoE+ Switch

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

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

Power Supply Included

• 1U - Height

SKU

# **Configuration Information**

Aruba 2530 48G PoE+ Switch PDU NA, JP or TW J9772A#B2B

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

J9772A#B2C Aruba 2530 48G PoE+ Switch PDU ROW

• C15 PDU Jumper Cord (ROW)

Aruba 100M SFP LC FX 2km MMF Transceiver

## **Configuration Rules**

Rule #	Rule # Description			
1	The following Transceivers install into this switch:			
	Aruba 1G SFP LC SX 500m OM2 MMF Transceiver	J4858D		
	Aruba 1G SFP LC LX 10km SMF Transceiver	J4859D		
	Aruba 1G SFP LC LH 70km SMF Transceiver	J4860D		
	Aruba 1G SFP RJ45 T 100m Cat5e Transceiver	J8177D		

- 2 If this switch is factory installed in any HPE Universal Racks, Then the J9583A#0D1 is required.
- 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.
- 4 If HPE CTO Switch Chassis is selected for Rack Level Integration, Then the CTO Switch Chassis needs to integrate (with #0D1) to the HPE Networking Universal Rack.

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

## **Internal Power Supplies**

Internal Power supplies included

Level CTO)

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

## **Transceivers**

#### SFP Transceivers

Aruba 100M SFP LC FX 2km MMF Transceiver	J9054D
Aruba 1G SFP LC SX 500m OM2 MMF Transceiver	J4858D
Aruba 1G SFP LC LX 10km SMF Transceiver	J4859D
Aruba 1G SFP LC LH 70km SMF Transceiver	J4860D
Aruba 1G SFP RJ45 T 100m Cat5e Transceiver	J8177D

#### Cables

## **Console Cables**

(std 0 // max 99) User Selection (min 0 // max 99) per switch

J9054D

# **Configuration Information**

Aruba X2C2 RJ45 to DB9 Console Cable

JL448A

Switch En	closure Options	
	Cable Guard	
1	Aruba X510 1U Cable Guard	J9700A
	Configuration Rules	
Rule #	Description	SKU
1	This Cable Guard is supported only on the J9783A, J9780A, JL070A, J9777A and J9774A.	
	Option Mounting Kit	
1	Aruba 2530 8-port Switch Pwr Adptr Shelf	J9820A
	Configuration Rules	
Rule #	Description	SKU
1	This Power Adapter Shelf is supported only on the J9783A, J9780A, J9777A and J9774A.	
	Rack Mount Kit	
1	HPE X410 1U Universal 4-post Rackmount Kit	J9583A
	Configuration Rules	
Rule #	Description	SKU
1	If this Mounting Kit is order with #0D1 then it integrates to the HPE Network Rack. (not the switch)	

Aruba 2530 Switch Series QuickSpecs

# **Accessory Product Details**

**Aruba 2530 48G PoE+ Switch (**J9772A)

48 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type I/O ports and slots

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

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

slots

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)

ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 3 MB Memory and processor Processor

dynamically allocated, 256 MB DDR3 DIMM

Mounting and enclosure Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available);

Horizontal surface mounting; Wall mounting

Performance **IPv6 Ready Certified** 

> 100 Mb Latency  $< 7.4 \mu s$  (LIFO 64-byte packets) 1000 Mb Latency  $< 2.3 \mu s$  (LIFO 64-byte packets) **Throughput** up to 77.3 Mpps (64-byte packets)

Switching capacity 104 Gbps MAC address table size 16000 entries

**Environment** 32°F to 113°F (0°C to 45°C) Operating temperature

> 15% to 95% @ 104°F (40°C), noncondensing Operating relative humidity

Non-operating/

Storage temperature

Non-operating/Storage

relative humidity

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

-40°F to 158°F (-40°C to 70°C)

Altitude up to 10,000 ft (3 km)

Acoustic Power: 43.6 dB, Pressure: 33.6 dB

**Electrical characteristics Frequency** 50/60 Hz

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

> > switch + max. PoE devices: 1624 BTU/hr)

100 - 127 / 200 - 240 VAC, rated Voltage

Current 5.8/2.9 A Maximum power rating 476 W Idle power 40.1 W PoE power 382 W

**NOTES:** Idle power is the actual power consumption of the device with no

> ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules

populated.

PoE power is the total power budget available to all PoE ports.

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

Aruba 2530 Switch Series QuickSpecs

## **Technical Specifications**

ΕN 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 IEC 61000-4-8

Power frequency magnetic

field

Voltage dips and IEC 61000-4-11

interruptions

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

IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; out-Management

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 Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.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 Hewlett Packard Enterprise sales office.

#### **Aruba 2530 24G PoE+ Switch (**J9773A)

24 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type I/O ports and slots

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

**Dimensions** 17.44(w) x 13.00(d) x 1.75(h) in (44.3 x 33.02 x 4.45 cm) (1U height) Physical characteristics

> 8.7 lb (3.95 kg) Weight

**Processor** ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5 MB dynamically Memory and processor

allocated, 256 MB DDR3 DIMM

Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); Mounting and enclosure

Horizontal surface mounting; Wall mounting

**Performance IPv6 Ready Certified** 

> 100 Mb Latency  $< 7.4 \mu s$  (LIFO 64-byte packets) 1000 Mb Latency  $< 2.3 \mu s$  (LIFO 64-byte packets) **Throughput** up to 41.6 Mpps (64-byte packets)

Switching capacity 56 Gbps MAC address table size 16000 entries

**Environment** 32°F to 113°F (0°C to 45°C) Operating temperature

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

# **Technical Specifications**

**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 135 BTU/hr (142.42 kJ/hr), (switch only: 135 BTU/hr; combined switch +

**dissipation** max. PoE devices: 843 BTU/hr) **Voltage** 100 - 127 / 200 - 240 VAC, rated

Current3.2/1.6 AMaximum power rating247 WIdle power25.2 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 Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.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 Hewlett Packard Enterprise sales office.

## **Aruba 2530 8G PoE+ Switch (J9774A)**

I/O ports and slots 8 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type

100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Media Type: Auto-MDIX;

Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only

# **Technical Specifications**

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** 10.00(w) x 6.28(d) x 1.75(h) in (25.4 x 15.95 x 4.45 cm) (1U height)

**Weight** 2.2 lb (1 kg)

Memory and processor Processor ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5 MB dynamically

allocated, 256 MB DDR3 DIMM

Mounting and enclosure Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available);

horizontal surface mounting; wall mounting

Performance IPv6 Ready Certified

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/  $-40^{\circ}\text{F} \text{ to } 158^{\circ}\text{F} (-40^{\circ}\text{C to } 70^{\circ}\text{C})$ 

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** 65 BTU/hr (68.58 kJ/hr), (switch only: 65 BTU/hr; combined switch + max.

**dissipation** PoE devices: 293 BTU/hr)

**Voltage** 100 - 127 / 200 - 240 VAC, rated

Current1.4 AMaximum power rating86 WIdle power13.4 WPoE power67 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

## **Technical Specifications**

 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 Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.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 Hewlett Packard Enterprise sales office.

## **Aruba 2530 48 PoE+ Switch (**J9778A)

I/O ports and slots 48 RJ-45 autosensing 10/100 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-

TX, IEEE 802.3at PoE+) Media Type: Auto-MDIX Duplex: half or full

2 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T) Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only

2 fixed Gigabit Ethernet SFP ports

Additional ports and slots 1 dual-personality (RJ-45 or USB micro-B) serial console port

Physical characteristics Dimensions  $17.40(w) \times 12.70(d) \times 1.75(h)$  in  $(44.2 \times 32.26 \times 4.45 \text{ cm})$  (1U height)

**Weight** 10.1 lb (4.58 kg)

Memory and processor Processor ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 3 MB dynamically

allocated, 256 MB DDR3 DIMM

Mounting and enclosure Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available);

Horizontal surface mounting; Wall mounting

Performance IPv6 Ready Certified

100 Mb Latency< 6.6  $\mu$ s (LIFO 64-byte packets)1000 Mb Latency< 2.2  $\mu$ s (LIFO 64-byte packets)Throughputup to 13 Mpps (64-byte packets)

**Switching capacity** 17.6 Gbps **MAC address table size** 16000 entries

**Environment** Operating temperature 32°F to 113°F (0°C to 45°C)

Operating relative

humidity

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

**Non-operating/**  $-40^{\circ}\text{F to }158^{\circ}\text{F }(-40^{\circ}\text{C to }70^{\circ}\text{C})$ 

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: 37.9 dB, Pressure: 31.8 dB

# **Technical Specifications**

**Electrical characteristics** Frequency 50/60 Hz

Maximum heat 170 BTU/hr (179.35 kJ/hr), (switch only: 170 BTU/hr; combined switch +

**dissipation** max. PoE devices: 1505 BTU/hr) **Voltage** 100 - 127 / 200 - 240 VAC, rated

Current5.2/2.6 AMaximum power rating441 WIdle power37.5 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.

**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 Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.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 Hewlett Packard Enterprise sales office.

## **Aruba 2530 24 PoE+ Switch** (J9779A)

I/O ports and slots 24 RJ-45 autosensing 10/100 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3at PoE+); Media Type: Auto-MDIX; Duplex: half or full

2 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full

only

2 fixed Gigabit Ethernet SFP ports

# **Technical Specifications**

Additional ports and slots 1 dual-personality (RJ-45 or USB micro-B) serial console port

**Physical characteristics Dimensions** 17.40(w) x 12.70(d) x 1.75(h) in (44.2 x 32.26 x 4.45 cm) (1U height)

**Weight** 8.4 lb (3.81 kg)

**Memory and processor** Processor ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5 MB dynamically

allocated, 256 MB DDR3 DIMM

Mounting and enclosure Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available);

Horizontal surface mounting; Wall mounting

Performance IPv6 Ready Certified

**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: 40.4 dB, Pressure: 31.7 dB

Electrical characteristics Frequency 50/60 Hz

Maximum heat 99 BTU/hr (104.45 kJ/hr), (switch only: 99 BTU/hr; combined switch +

**dissipation** max. PoE devices: 809 BTU/hr)

**Voltage** 100 - 127 / 200 - 240 VAC, rated

Current2.8/1.4 AMaximum 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 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

# **Technical Specifications**

**Power frequency** magnetic field

IEC 61000-4-8

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; configuration menu; out-Management

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 apply to PoE+ models **NOTES:** 

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 Hewlett Packard Enterprise website at http://www.hpe.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 Hewlett Packard Enterprise sales office.

**Aruba 2530 8 PoE+ Switch (J9780A)** 

8 RJ-45 autosensing 10/100 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-I/O ports and slots

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

10.00(w) x 6.28(d) x 1.75(h) in (25.4 x 15.95 x 4.45 cm) (1U height)

slot (for use with SFP transceivers) ports

Additional ports and

Physical characteristics

slots

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

Weight 2.0 lb (0.91 kg)

ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5 MB dynamically Memory and processor **Processor** 

allocated, 256 MB DDR3 DIMM

Mounting and enclosure Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available);

horizontal surface mounting; wall mounting

**Performance IPv6 Ready Certified** 

> 100 Mb Latency  $< 1.3 \mu s$  (LIFO 64-byte packets) 1000 Mb Latency  $< 1.3 \mu s$  (LIFO 64-byte packets) up to 4.1 Mpps (64-byte packets) **Throughput**

Switching capacity 5.6 Gbps MAC address table size 16000 entries

32°F to 113°F (0°C to 45°C) **Environment** Operating temperature

Operating relative

humidity

**Dimensions** 

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)

Power: 0 dB. Pressure: 0 dB Acoustic

**Electrical characteristics Frequency** 50/60 Hz

# **Technical Specifications**

Maximum heat 29 BTU/hr (30.6 kJ/hr), (switch only: 29 BTU/hr; combined switch + max.

**dissipation** PoE devices: 262 TU/hr)

**Voltage** 100 - 127 / 200 - 240 VAC, rated

Current1.4 AMaximum power rating76.7 WIdle power5.8 WPoE power67 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 Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.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 Hewlett Packard Enterprise sales office.

Aruba 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  $(44.3 \times 25.4 \times 4.45 \text{ cm})$  (1U height)

**Weight** 6.8 lb (3.08 kg)

# **Technical Specifications**

Memory and processor **Processor** ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 3 MB dynamically allocated, 256 MB DDR3 DIMM Mounting and enclosure Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); Horizontal surface mounting; Wall mounting **Performance IPv6 Ready Certified** 100 Mb Latency  $< 7.4 \mu s$  (LIFO 64-byte packets) 1000 Mb Latency  $< 2.3 \mu s$  (LIFO 64-byte packets) up to 77.3 Mpps (64-byte packets) **Throughput** 104 Gbps Switching capacity MAC address table size 16000 entries 32°F to 113°F (0°C to 45°C) Environment Operating temperature Operating relative 15% to 95% @ 104°F (40°C), noncondensing humidity Non-operating/ -40°F to 158°F (-40°C to 70°C) 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: 34.5 dB. Pressure: 31.0 dB **Electrical characteristics** 50/60 Hz **Frequency** Achieved Miercom Certified Green Award Maximum heat 203 BTU/hr (214.17 kJ/hr) dissipation 100 - 127 / 200 - 240 VAC, rated Voltage Current 1.2/0.7 A 59.5 W Maximum power rating 29.5 W Idle power **NOTES:** Idle power is the actual power consumption of the device with no ports Maximum power rating and maximum heat dissipation are the worstcase theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1 Safety **Emissions** FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A **Immunity** Generic EN 55024, CISPR 24 ΕN 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 IEC 61000-4-6 Conducted **Power frequency** IEC 61000-4-8 magnetic field

IEC 61000-4-11

Voltage dips and

interruptions

# **Technical Specifications**

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

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

Management IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; out-

f-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 Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.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 Hewlett Packard Enterprise sales office.

**Aruba 2530 24G Switch (**J9776A)

I/O ports and slots 24 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type

100BASE-TX, IEEE 802.3ab Type 1000BASE-T)

Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only

4 fixed Gigabit Ethernet SFP ports

Additional ports and slots 1 dual-personality (RJ-45 or USB micro-B) serial console port

**Physical characteristics Dimensions** 17.44(w) x 10.00(d) x 1.75(h) in (44.3 x 25.4 x 4.45 cm) (1U height)

**Weight** 6.1 lb (2.77 kg)

**Memory and processor** Processor ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5 MB dynamically

allocated, 256 MB DDR3 DIMM

Mounting and enclosure Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available);

Horizontal surface mounting; Wall mounting

Performance IPv6 Ready Certified

**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

32 1 10 113 1 (0 6 10 13 6)

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: 34.0 dB, Pressure: 26.4 dB

Electrical characteristics Frequency 50/60 Hz

Maximum heat 164 BTU/hr (173.02 kJ/hr)

dissipation

**Voltage** 100 - 127 / 200 - 240 VAC, rated

Current .6/.4 A

Maximum power rating 48.0 W

Idle power 28.8 W

# **Technical Specifications**

**NOTES:** Idle power is the actual power consumption of the device with no ports

connected.

Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports

plugged in, and all modules populated.

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

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

**Immunity Generic** EN 55024, CISPR 24

**EN** EN 55024, CISPR 24

 ESD
 IEC 61000-4-2

 Radiated
 IEC 61000-4-3

 EFT/Burst
 IEC 61000-4-4

 Surge
 IEC 61000-4-5

 Conducted
 IEC 61000-4-6

 Power frequency
 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 Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.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 Hewlett Packard Enterprise sales office.

#### **Aruba 2530 8G Switch (**J9777A)

I/O ports and slots 8 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-

TX, IEEE 802.3ab Type 1000BASE-T); Media Type: Auto-MDIX; Duplex: 10BASE-T/100BASE-TX: half

or full;

1000BASE-T: full only

2 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 port (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 10Base-Tx; IEEE 802.3ab 1000Base-T Gigabit Ethernet) or as a

SFP slot (for use with SFP transceivers) ports

Additional ports and slots 1 dual-personality (RJ-45 or USB micro-B) serial console port

**Physical characteristics Dimensions** 10(w) x 6.28(d) x 1.75(h) in (25.4 x 15.95 x 4.45 cm) (1U height)

**Weight** 2.0 lb (0.91 kg)

Memory and processor Processor ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5 MB dynamically

allocated, 256 MB DDR3 DIMM

Mounting and enclosure Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available);

horizontal surface mounting; wall mounting

Performance IPv6 Ready Certified

**100 Mb Latency** <  $7.4 \mu s$  (LIFO 64-byte packets)

# **Technical Specifications**

1000 Mb Latency  $< 2.6 \mu s$  (LIFO 64-byte packets)

**Throughput** up to 14.8 Mpps (64-byte packets)

Switching capacity 20 Gbps 16000 entries MAC address table size

**Environment** 32°F to 113°F (0°C to 45°C) Operating temperature

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

63 BTU/hr (66.46 kJ/hr), (switch only: 63 BTU/hr)

Voltage 100 - 127 / 200 - 240 VAC, rated

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 worstcase theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports

plugged in, and all modules populated

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

**Emissions** FCC Class A: EN 55022/CISPR-22 Class A: VCCI Class A

EN 55024, CISPR 24 **Immunity** Generic

> ΕN EN 55024, CISPR 24

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

magnetic field

Voltage dips and IEC 61000-4-11

interruptions

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

IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; Out-Management

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.

# **Technical Specifications**

**Services** Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.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 Hewlett Packard Enterprise sales office.

Aruba 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** 17.40(w) x 9.70(d) x 1.75(h) in (44.2 x 24.64 x 4.45 cm) (1U height)

**Weight** 6.3 lb (2.86 kg)

Memory and processor Processor ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 3 MB dynamically

allocated, 256 MB DDR3 DIMM

Mounting and enclosure Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available);

Horizontal surface mounting; Wall mounting

Performance IPv6 Ready Certified

100 Mb Latency $< 6.6 \mu s$  (LIFO 64-byte packets)1000 Mb Latency $< 2.2 \mu s$  (LIFO 64-byte packets)Throughputup to 13 Mpps (64-byte packets)

**Switching capacity** 17.6 Gbps **MAC address table size** 16000 entries

**Environment** Operating temperature 32°F to 113°F (0°C to 45°C)

Operating relative

Non-operating/

humidity

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

-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)

**Voltage** 100 - 127 / 200 - 240 VAC, rated

Current 0.7/0.4 A

Maximum power rating 29.9 W

Idle power 17.1 W

**NOTES:** Idle power is the actual power consumption of the device with no ports

connected.

Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports

plugged in, and all modules populated.

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

Aruba 2530 Switch Series QuickSpecs

# **Technical Specifications**

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

**Immunity** Generic EN 55024, CISPR 24

> ΕN EN 55024, CISPR 24

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

magnetic field

Voltage dips and IEC 61000-4-11

interruptions

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

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 Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.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 Hewlett Packard Enterprise sales office.

Aruba 2530 24 Switch (J9782A)

I/O ports and slots 24 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX);

Duplex: half or full

2 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full

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** 17.40(w) x 9.70(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 ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5 MB **Processor** 

dynamically allocated, 256 MB DDR3 DIMM

Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); Mounting and enclosure

Horizontal surface mounting; Wall mounting

Performance **IPv6 Ready Certified** 

> 100 Mb Latency  $< 1.7 \mu s$  (LIFO 64-byte packets) 1000 Mb Latency  $< 1.1 \,\mu s$  (LIFO 64-byte packets) up to 9.5 Mpps (64-byte packets) **Throughput**

Switching capacity 12.8 Gbps 16000 entries MAC address table size

32°F to 113°F (0°C to 45°C) **Environment** Operating temperature

Operating relative

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

humidity

Page 29

# **Technical Specifications**

**Non-operating/**  $-40^{\circ}\text{F to } 158^{\circ}\text{F } (-40^{\circ}\text{C to } 70^{\circ}\text{C})$ 

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: 0 dB, Pressure: 0 dB

**Electrical characteristics** Frequency 50/60 Hz

Maximum heat50 BTU/hr (52.75 kJ/hr)

dissipation

**Voltage** 100 - 127 / 200 - 240 VAC, rated

Current0.3/0.2 AMaximum power rating14.7 WIdle power8.4 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 worstcase 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 Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.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 Hewlett Packard Enterprise sales office.

#### **Aruba 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

# **Technical Specifications**

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** 10.00(w) x 6.28(d) x 1.75(h) in (25.4 x 15.95 x 4.45 cm) (1U height)

**Weight** 1.8 lb (0.82 kg)

Memory and processor Processor ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5 MB

dynamically allocated, 256 MB DDR3 DIMM

Mounting and enclosure Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available);

horizontal surface mounting; wall mounting

Performance IPv6 Ready Certified

**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

-40°F to 158°F (-40°C to 70°C)

Non-operating/ Storage temperature

relative humidity

Non-operating/Storage

age 15%

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

Altitude up to 10,000 ft (3 km)

Acoustic Power: 0 dB, Pressure: 0 dB

**Electrical characteristics** Frequency 50/60 Hz

Maximum heat

dissipation

25 BTU/hr (26.38 kJ/hr)

**Voltage** 100 - 127 / 200 - 240 VAC, rated

**NOTES:** Idle power is the actual power consumption of the device with no ports

connected.

IEC 61000-4-5

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

Surge

 EN
 EN 55024, CISPR 24

 ESD
 IEC 61000-4-2

 Radiated
 IEC 61000-4-3

 EFT/Burst
 IEC 61000-4-4

Page 31

## **Technical Specifications**

**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 Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.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 Hewlett Packard Enterprise sales office.

#### Aruba 2530 8 PoE+ Internal PS Switch (JL070A)

I/O ports and slots 8 RJ-45 autosensing 10/100 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-

TX, IEEE 802.3at PoE+); Media Type: Auto-MDIX; Duplex: half or full

2 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 port (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 10Base-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  $10(w) \times 9.68(d) \times 1.75(h)$  in  $(25.4 \times 24.59 \times 4.45 \text{ cm})$  (1U height)

**Weight** 4.65 lb (2.11 kg)

Memory and processor Processor ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5 MB dynamically

allocated, 256 MB DDR3 DIMM

Mounting and enclosure Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available);

Horizontal surface mounting; Wall mounting

Performance IPv6 Ready Certified

**100 Mb Latency** < 1.3  $\mu$ s (LIFO 64-byte packets) **1000 Mb Latency** < 1.3  $\mu$ s (LIFO 64-byte packets)

10 Gbps Latency

**Throughput** up to 4.1 Mpps (64-byte packets)

**Switching capacity** 5.6 Gbps **MAC address table size** 16000 entries

**Environment** Operating temperature 32°F to 113°F (0°C to 45°C)

Operating relative

humidity

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

Non-operating/  $-40^{\circ}\text{F} \text{ to } 158^{\circ}\text{F} (-40^{\circ}\text{C to } 70^{\circ}\text{C})$ 

Storage temperature

relative humidity

Non-operating/Storage

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

# **Technical Specifications**

Maximum heat 29 BTU/hr (30.6 kJ/hr), (switch only: 29 BTU/hr; combined switch + max.

**dissipation** PoE devices: 239 BTU/hr)

**Voltage** 100 - 127 / 200 - 240 VAC, rated

Current0.9/0.5 AMaximum power rating70.2 WIdle power5.3 WPoE Power67 W PoE

**NOTES:** Idle power is the actual power consumption of the device with no ports

connected.

Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports

plugged in, and all modules populated.

PoE power is the total power budget available to all PoE ports.

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

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

**Immunity Generic** EN 55024, CISPR 24

**EN** EN 55024, CISPR 24

 ESD
 IEC 61000-4-2

 Radiated
 IEC 61000-4-3

 EFT/Burst
 IEC 61000-4-4

 Surge
 IEC 61000-4-5

 Conducted
 IEC 61000-4-6

 Power frequency
 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); leee 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 Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.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 Hewlett Packard Enterprise sales office.

Standards and protocols (applies to all products in series)

## **Denial of service protection**

Network DoS Filter

## **Device Management**

RFC 1591 DNS (client)

# **Technical Specifications**

- RFC 2576 (Coexistence between SNMP V1, V2, V3)
- RFC 2579 (SMIv2 Text Conventions)
- RFC 2580 (SMIv2 Conformance)
- RFC 3416 (SNMP Protocol Operations v2)
- RFC 3417 (SNMP Transport Mappings)
- SSHv1/SSHv2 Secure Shell

## **General Protocols**

- IEEE 802.1D MAC Bridges
- IEEE 802.1p Priority
- IEEE 802.1Q VLANs
- IEEE 802.1s Multiple Spanning Trees
- IEEE 802.1w Rapid Reconfiguration of Spanning Tree
- IEEE 802.3 Type 10BASE-T
- IEEE 802.3ab 1000BASE-T
- IEEE 802.3ad Link Aggregation Control Protocol (LACP)
- IEEE 802.3af Power over Ethernet
- IEEE 802.3at Power over Ethernet Plus
- IEEE 802.3az Energy Efficient Ethernet
- IEEE 802.3x Flow Control
- RFC 768 UDP
- RFC 783 TFTP Protocol (revision 2)
- RFC 792 ICMP
- RFC 793 TCP
- RFC 826 ARP
- RFC 854 TELNET
- RFC 868 Time Protocol
- RFC 951 BOOTP
- RFC 1350 TFTP Protocol (revision 2)
- RFC 1542 BOOTP Extensions
- RFC 1918 Address Allocation for Private Internet
- RFC 2030 Simple Network Time Protocol (SNTP) v4
- RFC 2131 DHCP
- RFC 3411 An Architecture for Describing Simple Network Management Protocol (SNMP) Management Frameworks
- RFC 3412 Message Processing and Dispatching for the Simple Network Management Protocol (SNMP)
- RFC 3413 Simple Network Management Protocol (SNMP) Applications
- RFC 3414 User-based Security Model (USM) for version 3 of the Simple Network Management Protocol (SNMPv3)
- RFC 3415 View-based Access Control Model (VACM) for the Simple Network Management Protocol (SNMP)
- RFC 3416 Protocol Operations for SNMP
- RFC 3575 IANA Considerations for RADIUS
- RFC 5905 Network Time Protocol Version 4: Protocol and Algorithms Specification

#### **IP Multicast**

RFC 2236 IGMPv2

#### IPv6

- RFC 1981 IPv6 Path MTU Discovery
- RFC 2460 IPv6 Specification
- RFC 2464 Transmission of IPv6 over Ethernet Networks

# **Technical Specifications**

- RFC 2925 Remote Operations MIB (Ping only)
- RFC 3315 DHCPv6 (client only)
- RFC 3484 Default Address Selection for IPv6
- RFC 3513 IPv6 Addressing Architecture
- RFC 3596 DNS Extension for IPv6
- RFC 3810 Multicast Listener Discovery Version 2 (MLDv2) for IPv6
- RFC 4022 MIB for TCP
- RFC 4113 MIB for UDP
- RFC 4251 SSHv6 Architecture
- RFC 4252 SSHv6 Authentication
- RFC 4252 SSHv6 Transport Layer
- RFC 4254 SSHv6 Connection
- RFC 4291 IP Version 6 Addressing Architecture
- RFC 4293 MIB for IP
- RFC 4419 Key Exchange for SSH
- RFC 4443 ICMPv6
- RFC 4861 IPv6 Neighbor Discovery
- RFC 4862 IPv6 Stateless Address Auto-configuration
- RFC 5095 Deprecation of Type 0 Routing Headers in IPv6

#### **MIBs**

- RFC 1155 Structure & ID of Mgmt Info for TCP/IP Internets
- RFC 1212 Concise MIB Definitions
- RFC 1213 MIB II
- RFC 1493 Bridge MIB
- RFC 2021 RMONv2 MIB
- RFC 2578 Structure of Management Information Version 2 (SMIv2)
- RFC 2579 Textual Conventions for SMIv2
- RFC 2613 SMON MIB
- RFC 2618 RADIUS Client MIB
- RFC 2620 RADIUS Accounting Client MIB
- RFC 2665 Ethernet-Like-MIB
- RFC 2668 802.3 MAU MIB
- RFC 2674 802.1p and IEEE 802.1Q Bridge MIB
- RFC 2737 Entity MIB (Version 2)
- RFC 2863 The Interfaces Group MIB
- RFC 4836 Managed Objects for 802.3 Medium Attachment Units (MAU)

## **Network Management**

- IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
- RFC 1098 A Simple Network Management Protocol (SNMP)
- RFC 1155 Structure of Management Information
- RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events)
- RFC 3411 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 3418 Management Information Base (MIB) for the Simple Network Management Protocol (SNMP)
- RFC 5424 Syslog Protocol

# **Technical Specifications**

- 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)

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

HPF	<b>X111</b>	100M	SEPIC	Ports
IIFL	<b>711</b>	TOOL	JIF L	FULIS

FX Transceiver (J9054C) Physical characteristics

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:

62.5/125 μm or 50/125 μm (core/cladding) diameter, graded-index, low metal content, multimode fiber optic, complying with ITU-T G.651 and ISO/IEC 793-2 Type A1b or A1a, respectively

## Maximum distance:

• 2 km (full duplex) or 412 m (half duplex)

**NOTES:** Transmitter wavelength: 1310nm

Power consumption is 1.1 watt maximum.

For supported platforms and minimum software requirements to support this product, see the document titled "Support for the J9054C 100-FX SFP-LC Transceiver" on the "HPE Mini-GBICs and SFPs" Manuals Web page.

**Services** Refer to the Hewlett Packard Enterprise website at

http://www.hpe.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 Hewlett Packard Enterprise sales

office.

**HPE X112 100M SFP LC Ports** 

**BX-D Transceiver** 

pluggable (SFP) 100-

Megabit BX (bi-

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

full only

(J9099B) **Physical characteristics** A small form-factor

stics Dimensions

2.7(d) x 0.55(w) x 0.48(h) in. (6.86 x 1.39 x 1.22

cm)

**Weight** 0.04 lb. (0.03 kg)

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

Page 36

# Technical Specifications

directional) "downstream" transceiver that provides 100 Mbps full-duplex connectivity up to 10 km on one strand of sinalemode fiber. The J9099B connects to the

J9100B "upstream" transceiver, or to any IEEE-standard 100BASE- NOTES: BX10-U ("upstream")

device

Cabling

**Services** 

Operating relative

0% to 95%, noncondensing

humidity

Nonoperating/Storage

-40°F to 185°F (-40°C to 85°C)

temperature

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.

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 HPE BX Transceivers" on the "HPE Mini-GBICs and SFPs" Manuals Web page. The J9099B connects to the J9100B "upstream" transceiver, or to any IEEE-standard 100BASE-BX10-U ("upstream") device. (A 100-BX-D transceiver can only connect to a 100-BX-U product. You cannot connect

two 100-BX-D transceivers together.)

Refer to the Hewlett Packard Enterprise website at

<u>http://www.hpe.com/networking/services</u> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

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

## HPE X112 100M SFP LC Ports

**BX-U Transceiver** 

(J9100B)

A small form-factor pluggable (SFP) 100-

Megabit BX (bidirectional) "upstream" transceiver that provides 100 Mbps full-duplex connectivity up to 10 km on one strand of singlemode fiber. The

J9100B connects to the J9099B "downstream" transceiver, or to any IFFF-standard 100BASF-BX10-D ("downstream")

device.

Physical characteristics

**Environment** 

Cabling

**NOTES:** 

**Services** 

**Dimensions** 

2.7(d) x 0.55(w) x 0.48(h) in. (6.86 x 1.39 x

1.22 cm)

0.07 lb. (.03 kg)

Weight

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

humidity

full only

Nonoperating/Storage

-40°F to 185°F (-40°C to 85°C)

temperature

Type:

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

Maximum distance:

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 HPE BX Transceivers" on the "HPE 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.

Refer to the Hewlett Packard Enterprise website at

http://www.hpe.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 Hewlett Packard Enterprise sales office.

Page 37

# **Technical Specifications**

**HPE X121 1G SFP LC SX Ports** 

Transceiver (J4858C) A small form-factor pluggable (SFP) Gigabit SX

**Environment** transceiver that provides a full-duplex Gigabit solution up to 550 m on multimode fiber.

**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

**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:

 $62.5/125 \mu m$  or  $50/125 \mu m$  (core/cladding) diameter, gradedindex, 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  $\mu$ m core diameter, 160 MHz\*km bandwidth

2-275 m (62.5  $\mu$ m core diameter, 200 MHz\*km bandwidth

2-500 m (50 µm core diameter, 400 MHz\*km bandwidth)

2-550 m (50  $\mu$ m core diameter, 500 MHz\*km bandwidth)

Cable length: 2-550m Fiber type: Multi Mode

Refer to the Hewlett Packard Enterprise website at

http://www.hpe.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 Hewlett Packard Enterprise sales

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

office.

**HPE X121 1G SFP LC LX Ports** 

Transceiver (J4859C)

HP X121 1G SFP LC LX Transceiver: An SFP format

gigabit transceiver with LC connectors using LX technology.

Physical characteristics

**Environment** 

Cabling

**Services** 

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

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

Type:

Either single mode or multimode; 62.5/125  $\mu$ m or 50/125  $\mu$ m (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, singlemode fiber-optic, complying with ITU-T G.652 and ISO/IEC 793-2 Type B1:

#### Maximum distance:

- 2-550 m (multimode 62.5  $\mu$ m core diameter, 500 MHz\*km bandwidth)
- 2-550 m (multimode 50  $\mu$ m core diameter, 400 MHz\*km bandwidth)
- 2-550 m (multimode 50  $\mu$ m core diameter, 500 MHz\*km bandwidth)
- 2-10,000 m (single-mode fiber)

# **Technical Specifications**

**NOTES:** A mode conditioning patch cord may be needed in some multimode fiber

installations.

Wavelength: 1310nm

Power Consumption: < 500mW Typical

Refer to the Hewlett Packard Enterprise website at Services

> http://www.hpe.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 Hewlett Packard Enterprise sales

office.

#### **HPE X121 1G SFP LC LH Ports**

Transceiver (J4860C)

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

**Physical characteristics** 

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

Duplex: full only

**Dimensions:** 2.17(d) x 0.60(w) x 0.46(h) in. (5.5 x 1.53 x 1.18 cm)

**Weight:** 0.04 lb. (0.02 kg)

**Environment Operating temperature:** -40°F to 185°F (-40°C to 85°C)

> **Operating relative humidity:** 0% to 95% @ 77°F (25°C), noncondensing Nonoperating/Storage temperature: -40°F to 185°F (-40°C to 85°C)

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

Cabling Cable type:

Low metal content, single-mode fiber-optic, complying with ITU-T

G.652 and ISO/IEC 793-2 Type B1;

Maximum distance:

10-70,000 m (single-mode fiber)

**NOTES:** Power consumption is 0.8 watts typical with 1 watt maximum at 100%

utilization.

For distances less than 20 km, a 10 dB attenuator must be used.

For distances between 20 km and 40 km, a 5 dB attenuator must be used.

Attenuators can be purchased from most cable vendors.

Services Refer to the Hewlett Packard Enterprise website at

> http://www.hpe.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 Hewlett Packard Enterprise sales

office.

## HPE X121 1G SFP RJ45 Ports

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

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

only

**Physical characteristics** 

**Dimensions:** 0.54(w) x 2.71(d) x 0.55(h) in (1.37 x 6.88 x 1.4 cm)

**Weight:** 0.06 lb (0.03 kg)

**Environment** Operating temperature: 32°F to 158°F (0°C to 70°C); with 100 LFM

airflow over the SFP module

**Operating relative humidity:** 0% to 95% @ 75°F (25°C), noncondensing Nonoperating/Storage temperature: -40°F to 185°F (-40°C to 85°C) Nonoperating/Storage relative humidity: 0% to 95% @ 77°F (25°C),

noncondensing

**Altitude:** up to 10,000 ft. (3000 km)

Cabling Cable type:

> 1000BASE-T: Category 5 (5E or better recommended), 100 Ù differential 4-pair unshielded twisted pair (UTP) or shielded twisted pair (STP)

balanced, complying with IEEE 802.3ab 1000BASE-T;

Maximum distance:

100 m

**NOTES:** Power consumption is nominally 1 watt.

# **Technical Specifications**

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

HPE X410 1U Universal NOTES: 4-post Rackmount Kit

(J9583A)

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: HPE 10K 10642, HPE 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 Hewlett Packard Enterprise website at:

http://www.hpe.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 Hewlett Packard Enterprise

sales office.

Aruba 2530 8-port Switch Pwr Adptr Shelf

(J9820A)

Physical characteristics Dimensions:

6.75(w) x 5.25(d) x 1.75(h) in (17.15 x 13.34 x 4.45 cm) (1U height)

Weight

0.6 lb (0.27 kg)

NOTES: The HPE 2530 8-Port Switch Power Adapter Shelf is an accessory for the

HPE 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 Hewlett Packard Enterprise website at

http://www.hpe.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 Hewlett Packard Enterprise sales

office.

# **Summary of Changes**

Date	Version History	Action	Description of Change
01-Jul-2019	Version 19	Changed	Overview, Standard Features and Configuration Information sections were updated.
			SKU descriptions were updated.
03-Dec-2018	Version 18	Changed	Features and Benefits updated
02-Jul-2018	Version 17	Changed	Software feature update
05-Feb-2018	Version 16	Changed	Updates made on Technical Specifications and Configuration
08-Jan-2018	Version 15	Changed	Software feature update
03-Jul-2017	Version 14	Added	SKU added: JL448A
01-Aug-2016	Version 13	Changed	Adding #AC3 Option on Configuration Menu
06-Jun-2016	Version 12	Changed	Overview, Features and Benefits, Technical Specifications, and Accessories
			updated. SKU descriptions updated.
08-Jan-2016	Version 11	Changed	URLs updated
01-Dec-2015	Version 10	Changed	QuickSpecs name changed to Aruba 2530 Switch Series
			Overview, Features and Benefits, Accessories updated
30-Mar-2015	Version 9	Changed	Added new SKU:JL070A
			Changes made in the Overview, Technical Specifications, and Accessories
			sections.
01-Dec-2014	Version 8	Changed	Updated Warranty and support, updated technical specifications
18-Aug-2014	Version 7	Added	Added 4 new models: J9856A, J9854A, J9855A, J9853A
-		Changed	Changes made on the entire QS.
09-Dec-2013	Version 6	Changed	Changes made in the Overview, Technical Specifications, and Accessories
			sections.
12-Nov-2013	Version 5	Changed	Build to Order, Rack Level Integration CTO Models, and Cables were
			revised.
27-Sep-2013	Version 4	Changed	Change made to the Configuration Section - Rack Mount Kit
17-Sep-2013	Version 3	Changed	Corrected an issue with the EMEA HTML file.
10-Jun-2013	Version 2	Changed	Changes made to the following:
			Added several new models
			Updated Accessories
			Added the new Configuration section
			Updated Features and Benefits
10-Jun-2013	Version 2	Changed	Changes made to the following:
			Added several new models
			Updated Accessories
			Added the new Configuration section
		1	Updated Features and Benefits
04-Dec-2012	Version 1	New	New QuickSpecs

# **Summary of Changes**







To learn more, visit <a href="http://www.hpe.com/networking">http://www.hpe.com/networking</a>

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