# 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



#### QuickSpecs

### Overview

### Models

Aruba 2530 48G PoE+ Switch	J9772A
Aruba Central Managed 2530 48G PoE+ Switch	J9772ACM
Aruba 2530 24G PoE+ Switch	J9773A
Aruba Central Managed 2530 24G PoE+ Switch	J9773ACM
Aruba 2530 8G PoE+ Switch	J9774A
Aruba Central Managed 2530 8G PoE+ Switch	J9774ACM
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

#### **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

#### **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

#### 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
- **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+

#### Warranty and support

Limited Lifetime Warranty

see **<u>http://www.hpe.com/networking/warrantysummary</u>** for warranty and support information included with your product purchase.

#### Software releases

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

#### **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

- 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

#### 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

#### 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

• 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

### 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 variablespeed fan switches
- Port LEDs

conserves energy by optionally turning off port link and activity LEDs

Switch on a chip

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

### Flexibility

- Flexible mounting
  - Rack mountable

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

Wall mountable

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

Surface mountable

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

Quiet operation

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

• **Compact size** reduces space requirements (refer to the product specifications for the exact dimensions)



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

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

Rule #	Description	SKU
1, 2	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>114 Unight</li> </ul>	
	• 1U - Height Aruba 2530 24 Switch PDU NA, JP or TW	J9782A#B2B
		J970ZA#DZD
	C15 PDU Jumper Cord (NA/MEX/TW/JP)  Aruba 2530 24 Switch PDU ROW	J9782A#B2C
		J978ZA#BZC
	C15 PDU Jumper Cord (ROW)  Aruba 2530 24 Switch	J9782A#AC3
		J9782A#AC3
1, 2	No Localized Power Cord Selected  Aruba 2530 24 PoE+ Switch	J9779A
<b>Ι</b> , 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>	AA11AE
	Aruba 2530 24 PoE+ Switch PDU NA, JP or TW	J9779A#B2B
	C15 PDU Jumper Cord (NA/MEX/TW/JP)	
	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
	C15 PDU Jumper Cord (NA/MEX/TW/JP)	
	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)	

Rule #	Description	SKU
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
	C15 PDU Jumper Cord (ROW)	
	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
	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	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
	C15 PDU Jumper Cord (NA/MEX/TW/JP)	
	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
	C15 PDU Jumper Cord (NA/MEX/TW/JP)	
	Aruba 2530 48G PoE+ Switch PDU ROW yC15 PDU Jumper Cord (ROW)	J9772A#B2C

Rule #	Description	SKU
2, 4, 5	Aruba Central Managed 2530 48G PoE+ Switch	J9772ACM
	<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>	
	<ul> <li>Aruba Central Managed 2530 8 PoE+ Internal PS Switch PDU NA, JP or TW</li> <li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	J9772ACM#B2B
	Aruba Central Managed 2530 48G PoE+ Switch	J9772ACM#AC3
	No Localized Power Cord Selected	
2, 4, 5	Aruba Central Managed 2530 24G PoE+ Switch	J9773ACM
	<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 Central Managed 2530 24G PoE+ Switch PDU NA, JP or TW	J9773ACM#B2B
	C15 PDU Jumper Cord (NA/MEX/TW/JP)	
	Aruba Central Managed 2530 24G PoE+ Switch	J9773ACM#AC3
	No Localized Power Cord Selected	
3, 4, 5	Aruba Central Managed 2530 8G PoE+ Switch	J9774ACM
	<ul> <li>8 RJ-45 autosensing 10/100/1000 PoE+ ports</li> <li>2 dual-personality ports; RJ-45 10/100/1000 or SFP slot (Min 0 // Max 2 SFP)</li> <li>Power Supply Included</li> <li>1U - Height</li> </ul>	
	Aruba Central Managed 2530 8G PoE+ Switch PDU NA, JP or TW	J9774ACM#B2B
	C15 PDU Jumper Cord (NA/MEX/TW/JP)	
	Aruba Central Managed 2530 8G PoE+ Switch	J9774ACM#AC3
	No Localized Power Cord Selected	
	Configuration Rules	
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
2	Localization required on orders without #B2B, #B2C or #B2E options.	
3	Localization cable required. No B2x options	
	Central Direct Switch Chassis are available in the US, and Canada only.	
	The following Transceivers install into this Switch:	
	Aruba CM 1G SFP LC SX 500m OM2 MMF Transceiver	J4858DCM
	Aruba CM 1G SFP LC LX 10km SMF Transceiver	J4859DCM
	Aruba CM 1G SFP LC LH 70km SMF Transceiver	J4860DCM
	Aruba CM 1G SFP RJ45 T 100m Cat5e Transceiver	J8177DCM

	Aruba CM 100M SFP LC FX 2km MMF Transceiver	J9054DCM
Notes:	<ul> <li>Drop down under power supply should offer the following options and results:</li> <li>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)</li> <li>Switch/Router/Power Supply to Wall Power Cord - Localized Option (Watson Default for</li> </ul>	570512511
	BTO and Box Level CTO)	
Rackle	vel 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
	C15 PDU Jumper Cord (NA/MEX/TW/JP)	
	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
	C15 PDU Jumper Cord (NA/MEX/TW/JP)	
	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
	C15 PDU Jumper Cord (NA/MEX/TW/JP)	
	Aruba 2530 24G Switch PDU ROW	J9776A#B2C
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1, 2, 3, 4	Aruba 2530 24G PoE+ Switch	J9773A
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Rule #	Description	SKU
	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	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
	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	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
	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	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
	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	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
	C15 PDU Jumper Cord (NA/MEX/TW/JP)	



	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
2	If this switch is factory installed in any HPE Universal Racks, Then the J9583A#0D1 is required.	
3	<ul> <li>Localization (Wall Power Cord) required on orders without #B2B, #B2C (PDU Power Cord) (See Localization Menu)</li> </ul>	
	<ul> <li>Notes: When Switches/Routers are Factory Racked, Then #B2B, or #B2C should be the Defaulted Power Cable option on the Switches/Routers.</li> </ul>	
4	If HPE CTO Switch Chassis is selected forRack Level Integration, Then the CTO Switch Chassis needs to integrate (with #0D1) to the HPE Networking Universal Rack.	
Notes:	<ul> <li>Drop down under power supply should offer the following options and results:</li> <li>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)</li> <li>Switch/Router/Power Supply to Wall Power Cord - Localized Option (Watson Default for BTO and Box Level CTO)</li> </ul>	

#### Transceivers

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

	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
1	Aruba CM 100M SFP LC FX 2km MMF Transceiver	J9054DCM
1	Aruba CM 1G SFP LC SX 500m OM2 MMF Transceiver	J4858DCM
1	Aruba CM 1G SFP LC LX 10km SMF Transceiver	J4859DCM
1	Aruba CM 1G SFP LC LH 70km SMF Transceiver	J4860DCM
1	Aruba CM 1G SFP RJ45 T 100m Cat5e Transceiver	J8177DCM
Notes:	1: Only for Central Managed Switches	

### **Internal Power Supplies**

Internal Power supplies included

Cables		
Rule #	Description	SKU
	Console Cables	
	(std 0 // max 99) User Selection (min 0 // max 99) per switch	
	Aruba X2C2 RJ45 to DB9 Console Cable	JL448A
Notes:	Option not available for Central Managed Switch Configuration; Can be ordered Separately if needed.	
Switch I	Enclosure Options	
	Cable Guard	
	Aruba X510 1U Cable Guard	J9700A
Notes:	This Cable Guard is supported only on the J9783A, J9780A, JL070A, J9777A and J9774A.	
	Aruba Central Managed X510 1U Cable Guard	J9700ACM
Notes:	This Cable Guard is supported only on the J9774ACM.	
	Option Mounting Kit	
	Aruba 2530 8-port Switch Pwr Adptr Shelf	J9820A
Notes:	This Power Adapter Shelf is supported only on the J9783A, J9780A, J9777A and J9774A.	
	Aruba Central Managed 2530 8-port Sw Pwr Adptr Shelf	J9820ACM
Notes:	This Cable Guard is supported only on the J9774ACM.	
	Rack Mount Kit	

	Ar	uba X414 1U Universal 4-post Rack Mount Kit	J9583B
HPE X410 1U Universal 4-post Rackmount Kit			J9583A
Notes:		If this Mounting Kit is order with #0D1 then it integrates to the HPE Network Rack. (not the switch) Option not available for Central Managed Switch Configuration; Can be ordered Separately if needed.	

I/O ports and slots	48 RJ-45 autosensing 10,	/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type	
•		ab Type 1000BASE-T, IEEE 802.3at PoE+); Media Type: Auto-MDIX;	
		ASE-TX: half or full; 1000BASE-T: full only	
	4 fixed Gigabit Ethernet S	FP ports	
Additional ports and slots	1 dual-personality (RJ-45 or USB micro-B) serial console port		
Physical	Dimensions	17.44(w) x 13.00(d) x 1.75(h) in (44.3 x 32.26 x 4.45 cm) (1U height)	
characteristics	Weight	10.4 lb (4.72 kg)	
Memory and processor	Processor	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 3 MB dynamically	
		allocated, 256 MB DDR3 DIMM	
Mounting and	Mounts in an EIA-standar	d 19-inch telco rack or equipment cabinet (rack-mounting kit available);	
enclosure	Horizontal surface mounti	· · · ·	
Performance	IPv6 Ready Certified	<u>,                                     </u>	
	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	
nvironment			
Environment	Operating	32°F to 113°F (0°C to 45°C)	
	temperature	$15\% \pm 05\% - 10\% = (10\%)$ representation	
	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-	15% to 90% @ 149°F (65°C), noncondensing	
	operating/Storage		
	relative humidity		
	Altitude	up to 10,000 ft (3 km)	
	Acoustic	Power: 43.6 dB, Pressure: 33.6 dB	
Electrical	Frequency	50/60 Hz	
characteristics	Maximum heat	236 BTU/hr (248.98 kJ/hr), (switch only: 236 BTU/hr; combined switch +	
	dissipation	max. PoE devices: 1624 BTU/hr)	
	Voltage	100 - 127 / 200 - 240 VAC, rated	
	Current	5.8/2.9 A	
	Maximum power rating	476 W	
	Idle power	40.1 W	
	PoE power	382 W	
	Notes:	<ul> <li>Idle power is the actual power consumption of the device with no</li> </ul>	
	Notes.	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.	
		<ul> <li>PoE power is the total power budget available to all PoE ports.</li> </ul>	
Safety	UL 60950-1: CAN/CSA 22	2.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1	
Emissions		ISPR-22 Class A; VCCI Class A	
Immunity	Generic	EN 55024, CISPR 24	
····· y	EN	EN 55024, CISPR 24	
	ESD	IEC 61000-4-2	
	Radiated	IEC 61000-4-3	



	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
Notes:	<ul> <li>out-of-band management (serial RS-232C or Micro USB); IEEE 802.3 Ethernet MIB; Repeater MIB; Ethernet Interface MIB</li> <li>IEEE 802.3az applies to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply to PoE+</li> </ul>	
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	
	<ul> <li>models only. When using SFPs with this product, SFPs with revision "B" or later (product number ends with the letter "B" or later, e.g., J4858B, J4859C) are required.</li> <li><sup>1</sup> All hardware SKUs can be managed by Aruba Central. Central Managed (CM) SKUs a for simplified ordering within U.S. and Canada only. Append "CM" to the indicated SKU J9772ACM to order the J9772A). Requires an active Central license and end-user infor consistent with the Central license purchase. Applicable accessories with a valid "CM" should also be placed on the same order.</li> </ul>	
Services	Refer to the Hewlett Packard Enterprise website at <b>http://www.hpe.com/networking/services</b> 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, J9773ACM<sup>1</sup>)

	ET SWIICH (J777 JA, J7	//JACH /
I/O ports and slots	24 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3 u Type 100BASE-TX, IEEE 802.3 ab Type 1000BASE-T, IEEE 802.3 at PoE+); Media Type: Auto-MDIX; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only 4 fixed Gigabit Ethernet SFP ports	
Additional ports and slots	1 dual-personality (RJ-45 or USB micro-B) serial console port	
Physical	Dimensions	17.44(w) x 13.00(d) x 1.75(h) in (44.3 x 33.02 x 4.45 cm) (1U height)
characteristics	Weight	8.7 lb (3.95 kg)
Memory and processor	Processor	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5 MB dynamically allocated, 256 MB DDR3 DIMM
Mounting and enclosure	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); Horizontal surface mounting; Wall mounting	
Performance	IPv6 Ready Certified	
	100 Mb Latency	< 7.4 $\mu$ 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	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
Environment	Altitude	up to 10,000 ft (3 km)



	Acoustic	Power: 43.9 dB, Pressure: 39.6 dB	
Electrical	Frequency	50/60 Hz	
characteristics	Maximum heat dissipation	135 BTU/hr (142.42 kJ/hr), (switch only: 135 BTU/hr; combined switch + max. PoE devices: 843 BTU/hr)	
	Voltage	100 - 127 / 200 - 240 VAC, rated	
	Current	3.2/1.6 A	
	Maximum power rating	247 W	
	Idle power	25.2 W	
	PoE power	195 W	
	Notes:	<ul> <li>Idle power is the actual power consumption of the device with no ports connected.</li> <li>Maximum power rating and maximum heat dissipation are the</li> </ul>	
		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.	
		<ul> <li>PoE power is the total power budget available to all PoE ports.</li> </ul>	
Safety		2.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1	
Emissions		ISPR-22 Class A; VCCI Class A	
Immunity	Generic	EN 55024, CISPR 24	
	EN	EN 55024, CISPR 24	
	ESD	IEC 61000-4-2	
	Radiated	IEC 61000-4-3	
	EFT/Burst	IEC 61000-4-4	
	Surge	IEC 61000-4-5	
	Conducted	IEC 61000-4-6	
	Power frequency magnetic field	IEC 61000-4-8	
	Voltage dips and interruptions	IEC 61000-4-11	
	Harmonics	EN 61000-3-2, IEC 61000-3-2	
	Flicker	EN 61000-3-3, IEC 61000-3-3	
Management	out-of-band 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:	<ul> <li>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.</li> <li><sup>1</sup> All hardware SKUs can be managed by Aruba Central. Central Managed (CM) SKUs are used for simplified ordering within U.S. and Canada only. Append "CM" to the indicated SKU #: (e.g., J9772ACM to order the J9772A). Requires an active Central license and end-user information consistent with the Central license purchase. Applicable accessories with a valid "CM" suffix should also be placed on the same order.</li> </ul>		
Services	Refer to the Hewlett Packard Enterprise website at <b>http://www.hpe.com/networking/services</b> 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.		

	+ Switch (J9774A, J97		
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		
		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	1 dual-personality (RJ-45 or USB micro-B) serial console port		
slots			
Physical	Dimensions	10.00(w) x 6.28(d) x 1.75(h) in (25.4 x 15.95 x 4.45 cm) (1U height)	
characteristics	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	Mounts in an EIA-standar	d 19-inch telco rack or equipment cabinet (rack-mounting kit available);	
enclosure	horizontal surface mounti	ng; wall mounting	
Performance	IPv6 Ready Certified		
	100 Mb Latency	< 7.4µs (LIFO 64-byte packets)	
	1000 Mb Latency	< 2.6 µs (LIFO 64-byte packets)	
	Throughput	up to 14.8 Mpps (64-byte packets)	
	Switching capacity	20 Gbps	
	MAC address table size	16000 entries	
Environment	Operating	32°F to 113°F (0°C to 45°C)	
	temperature		
	Operating relative humidity	15% to 95% @ 104°F (40°C), non-condensing	
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)	
	Non-operating/ Storage relative humidity	15% to 90% @ 149°F (65°C), noncondensing	
	Altitude	up to 10,000 ft (3 km)	
	Acoustic	Power: 0 dB, Pressure: 0 dB	
Electrical	Frequency	50/60 Hz	
characteristics	Maximum heat	65 BTU/hr (68.58 kJ/hr), (switch only: 65 BTU/hr; combined switch +	
	dissipation	max. PoE devices: 293 BTU/hr)	
	Voltage	100 - 127 / 200 - 240 VAC, rated	
	Current	1.4 A	
	Maximum power rating	86 W	
	Idle power	13.4 W	
	PoE power	67 W	
	Notes:	<ul> <li>Idle power is the actual power consumption of the device with no</li> </ul>	
		<ul> <li>ports connected.</li> <li>Maximum power rating and maximum heat dissipation are the</li> </ul>	
		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.	
0		- 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		ISPR-22 Class A; VCCI Class A	
Immunity	Generic	EN 55024, CISPR 24	
	EN	EN 55024, CISPR 24	
	ESD	IEC 61000-4-2	



Immunity	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
Notes:	<ul> <li>out-of-band management (serial RS-232C or Micro USB); IEEE 802.3 Ethernet MIB; Repeater MIB; Ethernet Interface MIB</li> <li>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.</li> <li><sup>1</sup> All hardware SKUs can be managed by Aruba Central. Central Managed (CM) SKUs are used for simplified ordering within U.S. and Canada only. Append "CM" to the indicated SKU #: (e.g., J9772ACM to order the J9772A). Requires an active Central license and end-user information consistent with the Central license purchase. Applicable accessories with a valid "CM" suffix should also be placed on the same order.</li> </ul>	
Services	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.	
Aruba 2530 48 Pc	E+ Switch (J9778A)	
I/O ports and slots	48 RJ-45 autosensing 10/100 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3 u Type 100BASE-TX, IEEE 802.3 at PoE+) Modia Type: Auto-MDIX Duploy: half or full	

	• • • . •	
I/O ports and slots		/100 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type at PoE+) Media Type: Auto-MDIX Duplex: half or full
		000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, BASE-T) Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full
	2 fixed Gigabit Ethernet S	FP ports
Additional ports and slots	1 dual-personality (RJ-45 or USB micro-B) serial console port	
Physical	Dimensions	17.40(w) x 12.70(d) x 1.75(h) in (44.2 x 32.26 x 4.45 cm) (1U height)
characteristics	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	Mounts in an EIA-standa	rd 19-inch telco rack or equipment cabinet (rack-mounting kit available);
enclosure	Horizontal surface mounti	ing; 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)
	Throughput	up to 13 Mpps (64-byte packets)
	Switching capacity	17.6 Gbps
	MAC address table size	16000 entries
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)



Environment	Non-	15% to 90% @ 149°F (65°C), noncondensing
	operating/Storage	
	relative humidity	
	Altitude	up to 10,000 ft (3 km)
	Acoustic	Power: 37.9 dB, Pressure: 31.8 dB
Electrical	Frequency	50/60 Hz
characteristics	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
	Current	5.2/2.6 A
	Maximum power rating	441 W
	Idle power	37.5 W
	PoE power	382 W
	Notes:	- Idle power is the actual power consumption of the device with no
		ports connected.
		– Maximum power rating and maximum heat dissipation are the
		worst-case theoretical maximum numbers provided for planning
		the infrastructure with fully loaded PoE (if equipped), 100% traffic,
		all ports plugged in, and all modules populated.
		<ul> <li>PoE power is the total power budget available to all PoE ports.</li> </ul>
Safety	UL 60950-1; CAN/CSA 22	2.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
Emissions	FCC Class A; EN 55022/C	ISPR-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 Managem	nent 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:		Gigabit models only; IEEE 802.3at and IEEE 802.3af apply to PoE+
		SFPs with this product, SFPs with revision "B" or later (product number
		<sup>-</sup> later, e.g., J4858B, J4859C) are required.
Services		ard Enterprise website at <b>http://www.hpe.com/networking/services</b> for
		l descriptions and product numbers. For details about services and
	response times in your are	ea, 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		
Additional ports and	2 fixed Gigabit Ethernet SFP ports 1 dual-personality (RJ-45 or USB micro-B) serial console port		
slots	I uuai-personainy (KJ-45		
Physical	Dimensions	17.40(w) x 12.70(d) x 1.75(h) in (44.2 x 32.26 x 4.45 cm) (1U height)	
characteristics	Weight	8.4 lb (3.81 kg)	
Memory and processor Mounting and	Processor Mounts in an EIA-standar	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5 MB dynamically allocated, 256 MB DDR3 DIMM d 19-inch telco rack or equipment cabinet (rack-mounting kit available);	
enclosure	Horizontal surface mounti		
Performance	IPv6 Ready Certified		
	100 Mb Latency	< 1.7 $\mu$ s (LIFO 64-byte packets)	
	1000 Mb Latency	< 1.1µs (LIFO 64-byte packets)	
	Throughput	up to 9.5 Mpps (64-byte packets)	
	Switching capacity	12.8 Gbps	
	MAC address table size	16000 entries	
Environment	Operating	32°F to 113°F (0°C to 45°C)	
	temperature	$15\% \pm 05\% - 10\% = (10\%)$	
	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-	15% to 90% @ 149°F (65°C), noncondensing	
	operating/Storage relative humidity		
	Altitude	up to 10,000 ft (3 km)	
	Acoustic	Power: 40.4 dB, Pressure: 31.7 dB	
Electrical characteristics	Frequency Maximum heat	50/60 Hz 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	
	Current	2.8/1.4 A	
	Maximum power rating	237 W	
	Idle power	21.8 W	
	PoE power	195 W	
	Notes:	<ul> <li>Idle power is the actual power consumption of the device with no ports connected.</li> <li>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.</li> </ul>	
Safety	1.1. 60950-1· CΔN/CSA 2'	<ul> <li>PoE power is the total power budget available to all PoE ports.</li> <li>2.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1</li> </ul>	
Emissions		2.2 NO: 60950-1; EN 60825; IEC 60950-1; EN 60950-1 ISPR-22 Class A; VCCI Class A	
Immunity	Generic	EN 55024, CISPR 24	
	EN	EN 55024, CISPR 24	
	ESD	IEC 61000-4-2	



Immunity	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 managemer	nt (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 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 a	rea, please contact your local Hewlett Packard Enterprise sales office.

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

I/O ports and slots	8 RJ-45 autosensing 10/100 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3at PoE+); Media Type: Auto-MDIX; Duplex: half or full		
	2 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 port (IEEE 802.3		
	, , , , , , , , , , , , , , , , , , , ,	2.3u Type 100Base-Tx; IEEE 802.3ab 1000Base-T Gigabit Ethernet) or as	
	a SFP slot (for use with SF		
Additional ports and		or USB micro-B) serial console port	
slots			
Physical	Dimensions	10.00(w) x 6.28(d) x 1.75(h) in (25.4 x 15.95 x 4.45 cm) (1U height)	
characteristics	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	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available);		
enclosure	horizontal surface mounti		
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)	
	Throughput	up to 4.1 Mpps (64-byte packets)	
	Switching capacity	5.6 Gbps	
	MAC address table size	16000 entries	
Environment	Operating	32°F to 113°F (0°C to 45°C)	
	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-	15% to 90% @ 149°F (65°C), noncondensing	
	operating/Storage		
	relative humidity		
	Altitude	up to 10,000 ft (3 km)	
	Acoustic	Power: 0 dB, Pressure: 0 dB	



Electrical	Frequency	50/60 Hz
characteristics	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
	Current	1.4 A
	Maximum power rating	76.7 W
	Idle power	5.8 W
	PoE power	67 W
	Notes:	<ul> <li>Idle power is the actual power consumption of the device with no ports connected.</li> <li>Maximum power rating and maximum heat dissipation are the</li> </ul>
		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.
		<ul> <li>PoE power is the total power budget available to all PoE ports.</li> </ul>
Safety	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1	
Emissions FCC Class A; EN 55022/CISF		
Immunity	Generic	EN 55024, CISPR 24
	EN	EN 55024, CISPR 24
	ESD Dedicted	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4 IEC 61000-4-5
	Surge Conducted	IEC 61000-4-6
		IEC 61000-4-8
	Power frequency magnetic field	IEC 01000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; out-of-band management (serial RS-232C or Micro USB); IEEE 802.3 Ethernet MIB; Repeater MIB; Ethernet Interface MIB	
Notes:	IEEE 802.3az applies to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply to PoE+ models only. When using SFPs with this product, SFPs with revision "B" or later (product number ends with the letter "B" or later, e.g., J4858B, J4859C) are required.	
Services	Refer to the 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.	

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 S	FP ports	
Additional ports and	1 dual-personality (RJ-45	or USB micro-B) serial console port	
slots			
Physical	Dimensions	17.44(w) x 10.00(d) x 1.75(h) in (44.3 x 25.4 x 4.45 cm) (1U height)	
characteristics	Weight	6.8 lb (3.08 kg)	
Memory and processor	Processor	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 3 MB dynamicall allocated, 256 MB DDR3 DIMM	
Mounting and		d 19-inch telco rack or equipment cabinet (rack-mounting kit available);	
enclosure	Horizontal surface mounti	ing; Wall mounting	
Performance	IPv6 Ready Certified		
	100 Mb Latency	< 7.4 µs (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	Operating	32°F to 113°F (0°C to 45°C)	
	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-	15% to 90% @ 149°F (65°C), noncondensing	
	operating/Storage		
	relative humidity		
	Altitude	up to 10,000 ft (3 km)	
	Acoustic	Power: 34.5 dB, Pressure: 31.0 dB	
Electrical	Frequency	50/60 Hz	
characteristics	requency	Achieved Miercom Certified Green Award	
	Maximum heat	203 BTU/hr (214.17 kJ/hr)	
	dissipation		
	Voltage	100 - 127 / 200 - 240 VAC, rated	
	Current	1.2/0.7 A	
	Maximum power rating	59.5 W	
	Idle power	29.5 W	
	Notes:	<ul> <li>Idle power is the actual power consumption of the device with no</li> </ul>	
	Hores.	ports connected.	
		<ul> <li>Maximum power rating and maximum heat dissipation are the</li> </ul>	
		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	2.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1	
Emissions		ISPR-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	
		IEC 61000-4-5	



Immunity	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 <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.	

Aruba 2530 24G Sw	itch (J9776A)	
I/O ports and slots	100BASE-TX, IEEE 802.3	ASE-TX: half or full; 1000BASE-T: full only
Additional ports and slots		or USB micro-B) serial console port
Physical	Dimensions	17.44(w) x 10.00(d) x 1.75(h) in (44.3 x 25.4 x 4.45 cm) (1U height)
characteristics	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 Horizontal surface mounti	d 19-inch telco rack or equipment cabinet (rack-mounting kit available); ng; Wall mounting
Performance	IPv6 Ready Certified	
	100 Mb Latency	< 7.4 µs (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	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non- operating/Storage relative humidity	15% to 90% @ 149°F (65°C), noncondensing
	Altitude	up to 10,000 ft (3 km)
	Acoustic	Power: 34.0 dB, Pressure: 26.4 dB
Electrical	Frequency	50/60 Hz
characteristics	Maximum heat dissipation	164 BTU/hr (173.02 kJ/hr)
	Voltage	100 - 127 / 200 - 240 VAC, rated
	Current	.6/.4 A



Electrical	Maximum power rating	48.0 W
characteristics	Idle power	28.8 W
	Notes:	<ul> <li>Idle power is the actual power consumption of the device with no ports connected.</li> </ul>
		<ul> <li>Maximum power rating and maximum heat dissipation are the</li> </ul>
		worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic,
Safety		all ports plugged in, and all modules populated. 2.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
Emissions		ISPR-22 Class A; VCCI Class A
Immunity	Generic	EN 55024, CISPR 24
mmumy	EN	EN 55024, CISPR 24
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4 IEC 61000-4-5
	Surge	
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; Out-of-band management (serial RS-232C or MicroUSB); IEEE 802.3 Ethernet MIB; Repeater MIB; Ethernet Interface MIB	
Notes:	IEEE 802.3az applies to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply to PoE+ models only. When using SFPs with this product, SFPs with revision "B" or later (product number ends with the letter "B" or later, e.g., J4858B, J4859C) are required.	
Services	Refer to the 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.	
Aruba 2530 8G Swit	tch (J9777A)	
I/O ports and slots		.00/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type ab Type 1000BASE-T); Media Type: Auto-MDIX; Duplex: 10BASE- II;
	2 dual-personality ports; e	ach port can be used as either an RJ-45 10/100/1000 port (IEEE 802.3 .3u Type 100Base-Tx; IEEE 802.3ab 1000Base-T Gigabit Ethernet) or as P transceivers) ports
Additional ports and		or USB micro-B) serial console port
slots		
Physical	Dimensions	10(w) x 6.28(d) x 1.75(h) in (25.4 x 15.95 x 4.45 cm) (1U height)
characteristics	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 horizontal surface mountin	d 19-inch telco rack or equipment cabinet (rack-mounting kit available);
Performance	IPv6 Ready Certified	שיייייי יוס.
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	Switching capacity	20 Gbps
	MAC address table size	16000 entries
Environment	Operating	32°F to 113°F (0°C to 45°C)
	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-	15% to 90% @ 149°F (65°C), noncondensing
	operating/Storage	
	relative humidity	
	Altitude	up to 10,000 ft (3 km)
	Acoustic	Power: 0 dB, Pressure: 0 dB
Electrical	Frequency	50/60 Hz
characteristics	Maximum heat	63 BTU/hr (66.46 kJ/hr), (switch only: 63 BTU/hr)
	dissipation	
	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.
		<ul> <li>Maximum power rating and maximum heat dissipation are the superior and the section of the section</li></ul>
		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	LIL 60950-1. CAN/CSA 2	2.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
Emissions		ISPR-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 Managem	nent Center; command-line interface; Web browser; configuration menu;
		t (serial RS-232C or MicroUSB); IEEE 802.3 Ethernet MIB; Repeater MIB;
	Ethernet Interface MIB	
Notes:		Gigabit models only; IEEE 802.3at and IEEE 802.3af apply to PoE+
		SFPs with this product, SFPs with revision "B" or later (product number
		later, e.g., J4858B, J4859C) are required.
Services		ard Enterprise website at <b>http://www.hpe.com/networking/services</b> for
		l descriptions and product numbers. For details about services and
		ea, please contact your local Hewlett Packard Enterprise sales office.

I/O ports and slots		/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 802.3 u Type 100BASE-TX, IEEE 802.3 b Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full	
	only	
	2 fixed Gigabit Ethernet S	FP norts
Additional ports and	0	or USB micro-B) serial console port
lots		
Physical	Dimensions	17.40(w) x 9.70(d) x 1.75(h) in (44.2 x 24.64 x 4.45 cm) (1U height)
haracteristics	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	Mounts in an EIA-standard	d 19-inch telco rack or equipment cabinet (rack-mounting kit available);
enclosure	Horizontal surface mounti	ng; Wall mounting
Performance	IPv6 Ready Certified	
	100 Mb Latency	< 6.6 µs (LIFO 64-byte packets)
	1000 Mb Latency	< 2.2 µs (LIFO 64-byte packets)
	Throughput	up to 13 Mpps (64-byte packets)
	Switching capacity	17.6 Gbps
	MAC address table size	16000 entries
Environment	Operating	32°F to 113°F (0°C to 45°C)
	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-	15% to 90% @ 149°F (65°C), noncondensing
	operating/Storage	
	relative humidity	
	Altitude	up to 10,000 ft (3 km)
	Acoustic	Power: 0 dB, Pressure: 0 dB
Electrical	Frequency	50/60 Hz
haracteristics	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.
		<ul> <li>Maximum power rating and maximum heat dissipation are the</li> </ul>
		worst-case theoretical maximum numbers provided for planning
		the infrastructure with fully loaded PoE (if equipped), 100% traffic
· sfati		all ports plugged in, and all modules populated.
afety	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1	
imissions		ISPR-22 Class A; VCCI Class A
mmunity	Generic	EN 55024, CISPR 24
	EN	EN 55024, CISPR 24
	ESD Radiated	IEC 61000-4-2 IEC 61000-4-3



Immunity	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; Out-of-band management (serial RS-232C or MicroUSB); IEEE 802.3 Ethernet MIB; Repeater MIB; Ethernet Interface MIB	
Notes:	IEEE 802.3az applies to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply to PoE+ models only. When using SFPs with this product, SFPs with revision "B" or later (product number ends with the letter "B" or later, e.g., J4858B, J4859C) are required.	
Services	Refer to the 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.	

Aruba 2530 24 Swit	ch (J9782A)	
I/O ports and slots	Duplex: half or full	/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX);
	0	100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX,
		BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full
	only	
Additional ports and	2 fixed Gigabit Ethernet S	or USB micro-B) serial console port
slots	T dual-personality (10-45	
Physical	Dimensions	17.40(w) x 9.70(d) x 1.75(h) in (44.2 x 24.64 x 4.45 cm) (1U height)
characteristics	Weight	5.7 lb (2.59 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	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available);	
enclosure	Horizontal surface mounti	ng; 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)
	Throughput	up to 9.5 Mpps (64-byte packets)
	Switching capacity	12.8 Gbps
	MAC address table size	16000 entries
Environment	Operating	32°F to 113°F (0°C to 45°C)
	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-	15% to 90% @ 149°F (65°C), noncondensing
	operating/Storage	
	relative humidity	
	Altitude	up to 10,000 ft (3 km)
	Acoustic	Power: 0 dB, Pressure: 0 dB

Electrical	Frequency	50/60 Hz
characteristics	Maximum heat dissipation	50 BTU/hr (52.75 kJ/hr)
	Voltage	100 - 127 / 200 - 240 VAC, rated
	Current	0.3/0.2 A
	Maximum power rating	14.7 W
	Idle power	8.4 W
	Notes:	<ul> <li>Idle power is the actual power consumption of the device with no ports connected.</li> </ul>
		<ul> <li>Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning</li> <li>the information with full has head D. F. Gifford includes the full of the full has head D. F. Gifford includes the full has head to be a set of the full</li></ul>
		the infrastructure with fully loaded PoE (if equipped), 100% traffic,
Safety		all ports plugged in, and all modules populated. 2.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
Emissions		ISPR-22 Class A; VCCI Class A
Immunity	Generic	EN 55024, CISPR 24
inini ann y	EN	EN 55024, CISPR 24
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; Out-of-band management (serial RS-232C or MicroUSB); IEEE 802.3 Ethernet MIB; Repeater MIB; Ethernet Interface MIB	
Notes:	IEEE 802.3az applies to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply to PoE+ models only. When using SFPs with this product, SFPs with revision "B" or later (product number ends with the letter "B" or later, e.g., J4858B, J4859C) are required.	
Services	Refer to the Hewlett Pack details on the service-leve	ard Enterprise website at <b>http://www.hpe.com/networking/services</b> for I descriptions and product numbers. For details about services and ea, please contact your local Hewlett Packard Enterprise sales office.

Aruba 2530 8 Switch	ו (J9783A)	
I/O ports and slots	8 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX); Media Type: Auto-MDIX; Duplex: half or full	
	2 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 port (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-Tx; IEEE 802.3ab 1000Base-T Gigabit Ethernet) or as a SFP slot (for use with SFP transceivers) ports	
Additional ports and slots	1 dual-personality (RJ-45 or USB micro-B) serial console port	
Physical	Dimensions	10.00(w) x 6.28(d) x 1.75(h) in (25.4 x 15.95 x 4.45 cm) (1U height)
characteristics	Weight	1.8 lb (0.82 kg)
Memory and processor	Processor	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5 MB dynamically allocated, 256 MB DDR3 DIMM
Mounting and enclosure	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); horizontal surface mounting; wall mounting	



Performance	IPv6 Ready Certified	
	100 Mb Latency	< 1.3 $\mu$ s (LIFO 64-byte packets)
	1000 Mb Latency	< 1.3 $\mu$ s (LIFO 64-byte packets)
	Throughput	up to 4.1 Mpps (64-byte packets)
	Switching capacity	5.6 Gbps
	MAC address table size	16000 entries
Environment	Operating	32°F to 113°F (0°C to 45°C)
	temperature	
	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-	15% to 90% @ 149°F (65°C), noncondensing
	operating/Storage relative humidity	13% 10 90% @ 149 1 (03 C), honcondensing
	Altitude	up to 10,000 ft (3 km)
	Acoustic	Power: 0 dB. Pressure: 0 dB
Electrical	Frequency	50/60 Hz
characteristics	Maximum heat	25 BTU/hr (26.38 kJ/hr)
	dissipation	25 BT0/11 (20.50 kJ/11)
	Voltage	100 - 127 / 200 - 240 VAC, rated
	Current	0.5 A
	Maximum power rating	7.2 W
	Idle power	4.5 W
	Notes:	<ul> <li>Idle power is the actual power consumption of the device with no</li> </ul>
		<ul> <li>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.</li> </ul>
Safety	UL 60950-1: CAN/CSA 22	2.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
Emissions		ISPR-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	



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+	Internal PS Switch (JL	070A)
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; e	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 Gigab		· · · · · · · · · · · · · · · · · · ·
	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	Dimensions	10(w) x 9.68(d) x 1.75(h) in (25.4 x 24.59 x 4.45 cm) (1U height)
characteristics	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	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available);	
enclosure	Horizontal surface mounti	ng; Wall mounting
Performance	IPv6 Ready Certified	
	100 Mb Latency	< 1.3 $\mu$ s (LIFO 64-byte packets)
	1000 Mb Latency	< 1.3 µs (LIFO 64-byte packets)
	10 Gbps Latency	
	Throughput	up to 4.1 Mpps (64-byte packets)
	Switching capacity	5.6 Gbps
	MAC address table size	16000 entries
Environment	Operating	32°F to 113°F (0°C to 45°C)
	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-	15% to 90% @ 149°F (65°C), noncondensing
	operating/Storage	
	relative humidity	$\frac{1}{10000}$
	Altitude	up to 10,000 ft (3 km)
Electrical	Acoustic	Power: 0 dB, Pressure: 0 dB
characteristics	Frequency Maximum heat	50/60 Hz 29 BTU/hr (30.6 kJ/hr), (switch only: 29 BTU/hr; combined switch + max.
characteristics	dissipation	PoE devices: 239 BTU/hr)
		100 - 127 / 200 - 240 VAC, rated
	Voltage Current	0.9/0.5 A
	Maximum power rating	70.2 W
	Idle power	5.3 W
	PoE Power	67 W PoE
	Notes:	- Idle power is the actual power consumption of the device with no
		ports connected.
		<ul> <li>Maximum power rating and maximum heat dissipation are the warst area theoretical maximum numbers are ideal for planning the</li> </ul>
		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.
		<ul> <li>PoE power is the total power budget available to all PoE ports.</li> </ul>
Safety	UL 60950-1: CAN/CSA 2	2.2 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:	<ul> <li>IEEE 802.3az applies to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply to PoE+ models only.</li> </ul>		
	- When using SFPs with this product, SFPs with revision "B" or later (product number ends with		
C	the letter "B" or later, e.g., J4858B, J4859C) are required.		
Services		Refer to the Hewlett Packard Enterprise website at <b><u>http://www.hpe.com/networking/services</u></b> for	
	details on the service-level descriptions and product numbers. For details about services and		
	response times in your a	rea, please contact your local Hewlett Packard Enterprise sales office.	

HPE X111 100M SFP LC FX Transceiver (J9054C)

Ports	1 LC 100BASE-FX port (IEEE 802.3u Type 100BASE-FX); Duplex: half or full
Physical	<b>Dimensions:</b> 2.7(d) x 0.54(w) x 0.48(h) in. (6.86 x 1.38 x 1.22 cm)
characteristics	Weight: 0.06 lb. (0.03 kg)
Environment	<b>Operating temperature:</b> 32°F to 158°F (0°C to 70°C)
	Operating relative humidity: 5% to 95%
	Non-operating/Storage temperature: -40°F to 185°F (-40°C to 85°C)
	Non-operating/Storage relative humidity: 5% to 85%
	Altitude: up to 10,000 ft. (3 km)
Cabling	Туре:
	• 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
	Maximum distance:
	• 2 km (full duplex) or 412 m (half duplex)
Notes:	<ul> <li>Transmitter wavelength: 1310nm</li> </ul>
	<ul> <li>Power consumption is 1.1 watt maximum.</li> </ul>
	- 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.

### **Technical Specifications**

HPE X112 100M	SFP LC BX-D Transceiv	er (J9099B)	
		BX (bi-directional) "downstream" transceiver that provides 100 Mbps full-	
		singlemode fiber. The J9099B connects to the J9100B "upstream" transceiver,	
	ard 100BASE-BX10-U ("upstr		
Ports		oort (IEEE 802.3ah Type 100BASE-BX10-D); Duplex: full only	
Physical	Dimensions	2.7(d) x 0.55(w) x 0.48(h) in. (6.86 x 1.39 x 1.22 cm)	
characteristics	Weight	0.04 lb. (0.03 kg)	
Environment	Operating	32°F to 158°F (0°C to 70°C)	
	temperature		
	Operating relative humidity	0% to 95%, noncondensing	
	Non-	-40°F to 185°F (-40°C to 85°C)	
	operating/Storage temperature		
Cabling	Type:		
-	Single-mode fiber optic, complying with ITU-T G.652;		
	Maximum distance:		
	• 0.5-10,000 m	(single-mode fiber)	
Notes:	– Transmit wavelength: 1550 nm. Receive wavelength: 1310 nm.		
	<ul> <li>Power consumption is 1.1 watt maximum.</li> </ul>		
	<ul> <li>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.</li> </ul>		
	<ul> <li>The J9099B connects to the J9100B "upstream" transceiver, or to any IEEE-standard</li> </ul>		
	100BASE-BX10-U ("upstream") device. (A 100-BX-D transceiver can only connect to a 100-		
	BX-U product. You cannot connect two 100-BX-D transceivers together.)		
Services	Refer to the Hewlett Packard Enterprise website at		
	http://www.hpe.com/networking/services for details on the service-level descriptions and product		
		out services and response times in your area, please contact your local	

#### HPE X112 100M SFP LC BX-U Transceiver (J9100B)

A small form-factor pluggable (SFP) 100-Megabit BX (bi-directional) "upstream" transceiver that provides 100 Mbps full-duplex connectivity up to 10 km on one strand of singlemode fiber. The J9100B connects to the J9099B "downstream" transceiver, or to any IEEE-standard 100BASE-BX10-D ("downstream") device.

Ports	1 LC 100BASE-BX10 p	ort (IEEE 802.3ah Type 100BASE-BX10-U); Duplex: full only
Physical	Dimensions	2.7(d) x 0.55(w) x 0.48(h) in. (6.86 x 1.39 x 1.22 cm)
characteristics	Weight	0.07 lb. (.03 kg)
Environment	Operating	32°F to 158°F (0°C to 70°C)
	temperature	
	<b>Operating relative</b>	0% to 95%, noncondensing
	humidity	
	Non-	-40°F to 185°F (-40°C to 85°C)
	operating/Storage	
	temperature	
Cabling	Туре:	
	Single-mode fiber optic, complying with ITU-T G.652;	
	Maximum distance:	
	• 0.5-10,000 m (single-mode fiber)	

Notes:	<ul> <li>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.</li> <li>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.)</li> <li>Transmit wavelength: 1310 nm. Receive wavelength: 1550 nm.</li> <li>Power consumption is 1.1 watts maximum.</li> </ul>
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 LC SX Transceiver (J4858C)

A small form-factor pluggable (SFP) Gigabit SX transceiver that provides a full-duplex Gigabit solution up to 550 m on multimode fiber.

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Ports	1 LC 1000BASE-SX port; Duplex: full only	
Physical	<b>Dimensions:</b> 2.24(d) x 0.54(w) x 0.48(h) in. (5.69 x 1.37 x 1.22 cm)	
characteristics	Weight: 0.04 lb. (0.02 kg)	
	Transceiver form factor: SFP	
Environment	<b>Operating temperature:</b> 32°F to 158°F (0°C to 70°C)	
	<b>Operating relative humidity:</b> 5% to 85%, noncondensing	
	Non-operating/Storage temperature: -40°F to 203°F (-40°C to 85°C)	
	Altitude: up to 10,000 ft. (3 km)	
Electrical	Power consumption typical: 0.4 W	
characteristics	Power consumption maximum: 0.7 W	
Cabling	Туре:	
	• 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;	
	Maximum distance:	
	<ul> <li>2-220 m (62.5 μm core diameter, 160 MHz*km bandwidth</li> </ul>	
	<ul> <li>2-275 m (62.5 μm core diameter, 200 MHz*km bandwidth</li> </ul>	
	<ul> <li>2-500 m (50 µm core diameter, 400 MHz*km bandwidth)</li> </ul>	
	• 2-550 m (50 $\mu$ m core diameter, 500 MHz*km bandwidth)	
	Cable length: 2-550m	
	Fiber type: Multi Mode	
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 LC LX Transceiver (J4859C)

HPE X121 1G SFP LC	LX Transceiver: An SFP format gigabit transceiver with LC connectors using LX technology.	
Ports	1 LC 1000BASE-LX port (IEEE 802.3z Type 1000BASE-LX); Duplex: full only	
Physical	<b>Dimensions:</b> 2.24(d) x 0.54(w) x 0.486(h) in. (5.69 x 1.37 x 1.23 cm)	
characteristics	<b>Weight:</b> 0.04 lb. (0.02 kg)	
Environment	Operating temperature: 32°F to 158°F (0°C to 70°C)	
	<b>Operating relative humidity:</b> 0% to 85%, noncondensing	
	Non-operating/Storage temperature: -40°F to 212°F (-40°C to 100°C)	
	Altitude: up to 10,000 ft. (3 km)	
Cabling	Туре:	
	<ul> <li>Either single mode or multimode; 62.5/125 µm or 50/125 µm (core/cladding) diameter, graded-index, low metal content, multimode fiber optic, complying with ITU-T G.651 and ISO/IEC 793-2 Type A1b or A1a, respectively; Low metal content, single-mode fiber-optic, complying with ITU-T G.652 and ISO/IEC 793-2 Type B1;</li> <li>Maximum distance:         <ul> <li>2-550 m (multimode 62.5 µm core diameter, 500 MHz*km bandwidth)</li> <li>2-550 m (multimode 50 µm core diameter, 500 MHz*km bandwidth)</li> <li>2-550 m (multimode 50 µm core diameter, 500 MHz*km bandwidth)</li> <li>2-550 m (multimode 50 µm core diameter, 500 MHz*km bandwidth)</li> <li>2-500 m (multimode 50 µm core diameter, 500 MHz*km bandwidth)</li> </ul> </li> </ul>	
Notes:	<ul> <li>A mode conditioning patch cord may be needed in some multimode fiber installations.</li> <li>Wavelength: 1310nm</li> <li>Power Consumption: &lt; 500mW Typical</li> </ul>	
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 LC LH Transceiver (J4860C)

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

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Ports	1 LC 1000BASE-LH port (no IEEE standard exists for 1550 nm optics); Duplex: full only
Physical	<b>Dimensions:</b> 2.17(d) x 0.60(w) x 0.46(h) in. (5.5 x 1.53 x 1.18 cm)
characteristics	Weight: 0.04 lb. (0.02 kg)
Environment	<b>Operating temperature:</b> -40°F to 185°F (-40°C to 85°C)
	<b>Operating relative humidity:</b> 0% to 95% @ 77°F (25°C), noncondensing
	Non-operating/Storage temperature: -40°F to 185°F (-40°C to 85°C)
	Altitude: up to 10,000 ft. (3 km)
Cabling	Cable type:
····· <b>y</b>	<ul> <li>Low metal content, single-mode fiber-optic, complying with ITU-T G.652 and ISO/IEC 793-2 Type B1;</li> </ul>
	Maximum distance:
	• 10-70,000 m (single-mode fiber)
Notes:	- Power consumption is 0.8 watts typical with 1 watt maximum at 100% utilization.
	– For distances less than 20 km, a 10 dB attenuator must be used.
	– For distances between 20 km and 40 km, a 5 dB attenuator must be used.
	<ul> <li>Attenuators can be purchased from most cable vendors.</li> </ul>
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.
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Physical	Dimensions:
characteristics	6.75(w) x 5.25(d) x 1.75(h) in (17.15 x 13.34 x 4.45 cm) (1U height)
	Weight
	0.6 lb (0.27 kg)
Notes:	The 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 <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.

HPE X410 1U	Universal 4-post Rackmount Kit (J9583A)
Notes:	<ul> <li>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.</li> <li>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.</li> </ul>
Services	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.

### HPE X121 1G SFP RJ45 T Transceiver (J8177C)

A small form-factor p Category 5 or better	luggable (SFP) Gigabit copper transceiver that provides a full-duplex Gigabit solution up to 100 m on cable
Ports	1 RJ-45 1000BASE-T port (IEEE 802.3ab Type 1000BASE-T); Duplex: full only
Physical	<b>Dimensions:</b> 0.54(w) x 2.71(d) x 0.55(h) in (1.37 x 6.88 x 1.4 cm)
characteristics	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
	Non-operating/Storage temperature: -40°F to 185°F (-40°C to 85°C)
	Non-operating/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:	<ul> <li>Power consumption is nominally 1 watt.</li> </ul>
	- 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.
	<ul> <li>Important: Important: The earlier J8177B does not support 100 Mb operation.</li> <li>When used in the BreCurve Switch of 20 Port 10/1000 Medule (1/ 002A) the 18177C</li> </ul>
	<ul> <li>When used in the ProCurve Switch gl 20-Port 10/100/1000 Module (J4908A), the J8177C</li> <li>mini CPIC can be installed in either the upper or lower mini CPIC port, but will block access to</li> </ul>
	mini-GBIC can be installed in either the upper or lower mini-GBIC port, but will block access to the other port.



#### Standards and protocols

Applies to all products in series

#### **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

#### **Denial of service protection**

Network DoS Filter

#### **Device Management**

- RFC 1591 DNS (client)
- 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



#### 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)

#### IPv6

- RFC 1981 IPv6 Path MTU Discovery
- RFC 2460 IPv6 Specification
- RFC 2464 Transmission of IPv6 over Ethernet Networks
- RFC 2925 Remote Operations MIB (Ping only)
- RFC 3315 DHCPv6 (client only)
- RFC 3484 Default Address Selection for IPv6
- RFC 3513 IPv6 Addressing Architecture
- RFC 3596 DNS Extension for IPv6
- RFC 3810 Multicast Listener Discovery Version 2 (MLDv2) for IPv6
- RFC 4022 MIB for TCP
- RFC 4113 MIB for UDP
- RFC 4251 SSHv6 Architecture
- RFC 4252 SSHv6 Authentication
- RFC 4252 SSHv6 Transport Layer
- RFC 4254 SSHv6 Connection
- RFC 4291 IP Version 6 Addressing Architecture
- RFC 4293 MIB for IP
- 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

#### 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)

#### **IP Multicast**

• RFC 2236 IGMPv2

#### **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
- ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED)
- SNMPv1/v2c/v3

#### Security

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

# Summary of Changes

Date	Version History	Action	Description of Change
08-Sep-2020	Version 21	Changed	Configuration Information section was updated.
04-Nov-2019	Version 20	Changed	Technical Specifications and Configuration Information sections were updated.
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 Updated Features and Benefits
04-Dec-2012	Version 1	New	New QuickSpecs

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