Overview

#### Aruba 2530 Switch Series



#### Models

Aruba 2530 48G PoE+ Switch	J9772A
Aruba 2530 24G PoE+ Switch	J9773A
Aruba 2530 8G PoE+ Switch	J9774A
Aruba 2530 48 PoE+ Switch	J9778A
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 48G PoE+ 2SFP+ Switch	J9853A
Aruba 2530 24G PoE+ 2SFP+ Switch	J9854A
Aruba 2530 48G 2SFP+ Switch	J9855A
Aruba 2530 24G 2SFP+ Switch	J9856A
Aruba 2530 8 PoE+ Internal PS Switch	JL070A



#### Overview

#### Key features

- Cost-effective, reliable and secure Aruba Layer 2 switch series.
- ACLs, EEE, traffic prioritization and models with 10 Gigabit uplinks.
- 8-, 24-, and 48-port Gigabit or Fast Ethernet models
- PoE+ models for voice, video and wireless.
- Supports Aruba ClearPass Policy Manager and Aruba Airwave.

#### Introduction

The Aruba 2530 Switch Series provides security, reliability, and ease of use for enterprises, branch offices, and SMBs. This series of fully managed switches delivers full Layer 2 capabilities with enhanced access security, ACLs, traffic prioritization, sFlow, and IPv6 host support. Right size deployment is simple with choice of 8-, 24-, and 48-port models available with Gigabit or Fast Ethernet ports, optional PoE+, and optional 10GbE uplinks. The 2530 delivers power savings with fanless models, Energy Efficient Ethernet, and ability to disable LEDs and enable port low power mode. These switches provide consistent wired/wireless user experience with unified management tools such as Aruba ClearPass Policy Manager and Aruba Airwave.

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

#### Features and Benefits

Quality of Service (QoS)

- Traffic prioritization (IEEE 802.1p) allows real-time traffic classification with support for eight priority levels mapped to either two or four gueues, and uses weighted deficit round robin (WDRR) or strict priority
- Simplified QoS configuration
  - Port-based

prioritizes traffic by specifying a port and priority level

- VLAN-based

prioritizes traffic by specifying a VLAN and priority level

- Class of Service (CoS) sets the IEEE 802.1p priority tag based on IP address, IP Type of Service (ToS), Layer 3 protocol,
  - TCP/UDP port number, source port, and DiffServ
- Rate limiting establishes per-port ingress-enforced maximums for all ingressed traffic or for broadcast, multicast, or unknown destination traffic
- Layer 4 prioritization enables prioritization based on TCP/UDP port numbers
- Flow control helps deliver reliable communication during full-duplex operation

Management



#### Overview

- Choice of management interfaces
  - HTML-based easy-to-use Web GUI
    - allows configuration of the switch from any Web browser
  - Robust CLI
    - provides advanced configuration and diagnostics
  - Simple network management protocol (SNMPv1/v2c/v3) allows the switch to be managed with a variety of third-party network management applications
- Virtual stacking
  - provides single IP address management for up to 16 switches
- sFlow (RFC 3176) delivers wire-speed traffic accounting and monitoring, configured by SNMP and CLI with three terminal encrypted receivers
- IEEE 802.1AB Link Layer Discovery Protocol (LLDP) automates device discovery protocol for easy mapping by network management applications
- Logging

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

Port mirroring

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

- Remote monitoring (RMON) provides advanced monitoring and reporting capabilities for statistics, history, alarms, and events
   Find, fix, and inform
- finds and fixes common network problems automatically, and then informs the administrator
- Friendly port names
- allows assignment of descriptive names to ports
- Dual flash images

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

- Multiple configuration files are easily stored with a flash image
- Front-panel LEDs
  - Locator LEDs

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

- Per-port LEDs

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

- Power and fault LEDs

display issues, if any

- Comware CLI
  - Comware-compatible CLI

bridges the experience of Hewlett Packard Enterprise Comware CLI users who are using the ProVision CLI

- Display and fundamental Comware CLI commands are natively embedded in the switch CLI; display output is formatted as on Comware-based switches; fundamental commands provide Comware-familiar initial switch setup
- Configuration Comware CLI commands

when Comware commands are entered, CLI help is elicited to formulate the correct ProVision



#### Overview

software CLI command

- Download Software via DHCP adds the option to specify the location of switch software via DHCP
- TR-069 support enables zero-touch configuration for switches
- Zero-Touch ProVisioning (ZTP) uses settings in DHCP to enable ZTP with Aruba AirWave Network Management

Connectivity

- IPv6
- IPv6 host

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

- Dual stack (IPv4/IPv6)

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

forwards IPv6 multicast traffic to 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 802.3af Power over Ethernet (PoE)

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

• IEEE 802.3at PoE+

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

Auto-MDIX

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

• Pre-standard PoE support detects and provides power to pre-standard PoE devices (refer to the list of supported devices in the product FAQs, which can be accessed at hpe.com/networking)

• SFP slots

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

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

Layer 2 switching

• VLANs

provides support for 512 VLANs and 4,094 VLAN IDs

 Jumbo packet support supports up to 9,220-byte frame size to improve the performance of large data transfers; 8- and 24port Fast Ethernet models automatically support up to 2,000-byte frames with no configuration needed



#### Overview

- 16K MAC address table provides access to many Layer 2 devices
- GARP VLAN Registration Protocol allows automatic learning and dynamic assignment of VLANs Danid Dan V(LAN Spanning Trag. (DD)(CT))
- Rapid Per-VLAN Spanning Tree (RPVST+) allows each VLAN to build a separate spanning tree to improve link bandwidth usage; is compatible with PVST+

#### Security

• ACLs

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

- Source-port filtering allows only specified ports to communicate with each other
- RADIUS/TACACS+ eases switch management security administration by using a password authentication server
- Secure Sockets Layer (SSL) encrypts all HTTP traffic, allowing secure access to the browser-based management GUI in the switch
- Port security

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

- MAC address lockout
- prevents particular configured MAC addresses from connecting to the network
- Multiple user authentication methods
  - IEEE 802.1X

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

- Web-based authentication

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

- MAC-based authentication
  - authenticates the client with the RADIUS server based on the client's MAC address
- Secure shell (SSH) v2
- encrypts all transmitted data for secure remote CLI access over IP networks
- Secure shell encrypts all transmitted data for secure remote CLI access over IP networks
- STP BPDU port protection

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

- STP root guard protects the root bridge from malicious attacks or configuration mistakes
- Secure management access

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

- Custom banner displays security policy when users log in to the switch
- Secure FTP allows secure file transfer to and from the switch; protects against unwanted file downloads or unauthorized copying of a switch configuration file
- Protected ports CLI offers intuitive CLI to configure the source-port filter feature, by allowing specified ports to be isolated



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from all other ports on the switch; the protected port or ports can communicate only with the uplink or shared resources

- Authentication flexibility
  - Multiple IEEE 802.1X users per port

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

- Concurrent IEEE 802.1X and Web or MAC authentication schemes per port allows a switch port to accept any IEEE 802.1X and either Web or MAC authentications

- Switch management logon security
- helps secure switch CLI logon by optionally requiring either RADIUS or TACACS+ authenticationDHCP 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 dataDynamic IP lockdown
- works with DHCP protection to block traffic from unauthorized hosts, preventing IP source address spoofing

Convergence

- LLDP-MED (Media Endpoint Discovery) defines a standard extension of LLDP that stores values for parameters such as QoS and VLAN to automatically configure network devices such as IP phones
- IP multicast (data-driven IGMP) prevents flooding of IP multicast traffic
- IEEE 802.1AB Link Layer Discovery Protocol (LLDP) facilitates easy mapping using network management applications with LLDP automated device discovery protocol
- PoE and PoE+ allocations support multiple methods—automatic, IEEE 802.3at dynamic, LLDP-MED fine grain, IEEE 802.3af device class, or user specified—to allocate and manage PoE/PoE+ power for more efficient energy use
- Voice VLAN
  - uses LLDP-MED to automatically configure a VLAN for IP phones
- IP multicast (data-driven IGMPv3) prevents flooding of IP multicast traffic
- LLDP-CDP compatibility receives and recognizes CDP packets from Cisco's IP phones for seamless interoperation
- Local MAC Authentication assigns attributes such as VLAN and QoS using locally configured profile that can be a list of MAC prefixes

Unified Wired and Wireless

- ClearPass Policy Manager support unified wired and wireless policies using Aruba ClearPass Policy Manager
- HTTP redirect function
   supports HPE Intelligent Management Center (IMC) bring your own device (BYOD) solution
- 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



#### Overview

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 switch configuration or ClearPass (YA version software only).

Resiliency and high availability

- Port trunking and link aggregation
  - Trunking

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

- IEEE 802.3ad Link Aggregation Control Protocol (LACP) eases configuration of trunks through automatic configuration
- IEEE 802.1s Multiple Spanning Tree provides high link availability in multiple VLAN environments by allowing multiple spanning trees; provides legacy support for IEEE 802.1d and IEEE 802.1w

SmartLink

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

Product Architecture

- Energy-efficient design
  - IEEE 802.3az

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

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

- Fanless and variable-speed fans

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

- Port LEDs

conserves energy by optionally turning off port link and activity LEDs

• Switch on a chip

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

#### Flexibility

- Flexible mounting
  - Rack mountable

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

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

- Surface mountable

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

• Quiet operation

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

Compact size

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



#### Overview

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>



#### Configuration

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

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>	See Configuration NOTE: 1, 3
<ul> <li>Aruba 2530 8 PoE+ Switch</li> <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>	J9780A See Configuration NOTE: 1, 3
<ul> <li>Aruba 2530 8 PoE+ Internal PS Switch</li> <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>	JL070A See Configuration NOTE: 1, 2
<ul><li>PDU Cable NA/MEX/TW/JP</li><li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li></ul>	JL070A#B2B
<ul><li>PDU Cable ROW</li><li>C15 PDU Jumper Cord (ROW)</li></ul>	JL070A#B2C
<ul> <li>Aruba 2530 8G Switch</li> <li>8 RJ-45 autosensing 10/100/1000 ports</li> <li>2 dual-personality ports; RJ-45 10/100/1000 or SFP slot (Min 0 // Max 2 SFP)</li> <li>Power Supply Included</li> <li>1U - Height</li> </ul>	J9777A See Configuration NOTE: 1, 3
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>	See Configuration NOTE: 1, 3
Aruba 2530 24 Switch	J9782A



Configuration	
<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>	See Configuration NOTE: 1, 2
<ul> <li>PDU CABLE NA/MEX/TW/JP</li> <li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	J9782A#B2B
<ul><li>PDU CABLE ROW</li><li>C15 PDU Jumper Cord (ROW)</li></ul>	J9782A#B2C
<ul> <li>Aruba 2530 24 PoE+ Switch</li> <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>	J9779A See Configuration NOTE: 1, 2
<ul> <li>PDU CABLE NA/MEX/TW/JP</li> <li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	J9779A#B2B
<ul><li>PDU CABLE ROW</li><li>C15 PDU Jumper Cord (ROW)</li></ul>	J9779A#B2C
<ul> <li>Aruba 2530 24G Switch</li> <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>	J9776A See Configuration NOTE: 1, 2
<ul><li>PDU CABLE NA/MEX/TW/JP</li><li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li></ul>	J9776A#B2B
<ul><li>PDU CABLE ROW</li><li>C15 PDU Jumper Cord (ROW)</li></ul>	J9776A#B2C
Aruba 2530 24G 2SFP+ Switch • 24 RJ-45 autosensing 10/100/1000 ports • 2 SFP+ ports (Min 0 // Max 2 SFP+) • Power Supply Included • 1U - Height	J9856A See Configuration NOTE: 2, 4
PDU Cable NA/MEX/TW/JP	J9856A#B2B

#### Configuration

C15 PDU Jumper Cord (NA/MEX/TW/JP)	
<ul><li>PDU Cable ROW</li><li>C15 PDU Jumper Cord (ROW)</li></ul>	J9856A#B2C
<ul> <li>Aruba 2530 24G PoE+ Switch</li> <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>	J9773A See Configuration NOTE: 1, 2
<ul> <li>PDU CABLE NA/MEX/TW/JP</li> <li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	J9773A#B2B
PDU CABLE ROW <ul> <li>C15 PDU Jumper Cord (ROW)</li> </ul>	J9773A#B2C
Aruba 2530 24G PoE+ 2SFP+ Switch 24 RJ-45 autosensing 10/100/1000 PoE+ ports	J9854A See Configuration NOTE: 2, 4
2 SFP+ ports (Min 0 // Max 2 SFP+)	NOTE. 2, 4
Power Supply Included	
1U - Height	
PDU Cable NA/MEX/TW/JP C15 PDU Jumper Cord (NA/MEX/TW/JP)	J9854A#B2B
PDU Cable ROW C15 PDU Jumper Cord (ROW)	J9854A#B2C
<ul> <li>Aruba 2530 48 Switch</li> <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>	J9781A See Configuration NOTE: 1, 2
<ul><li>PDU CABLE NA/MEX/TW/JP</li><li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li></ul>	J9781A#B2B
<ul><li>PDU CABLE ROW</li><li>C15 PDU Jumper Cord (ROW)</li></ul>	J9781A#B2C



### Configuration

Conngalation	
<ul> <li>Aruba 2530 48 PoE+ Switch</li> <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>	J9778A See Configuration NOTE: 1, 2
<ul> <li>PDU CABLE NA/MEX/TW/JP</li> <li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	J9778A#B2B
<ul><li>PDU CABLE ROW</li><li>C15 PDU Jumper Cord (ROW)</li></ul>	J9778A#B2C
<ul> <li>Aruba 2530 48G Switch</li> <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>	J9775A See Configuration NOTE: 1, 2
<ul> <li>PDU CABLE NA/MEX/TW/JP</li> <li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	J9775A#B2B
<ul><li>PDU CABLE ROW</li><li>C15 PDU Jumper Cord (ROW)</li></ul>	J9775A#B2C
Aruba 2530 48G 2SFP+ Switch 48 RJ-45 autosensing 10/100/1000 ports	J9855A See Configuration NOTE: 2, 4
2 SFP+ ports (Min 0 // Max 2 SFP+)	
Power Supply Included	
● 1U - Height	
PDU Cable NA/MEX/TW/JP C15 PDU Jumper Cord (NA/MEX/TW/JP)	J9855A#B2B
PDU Cable ROW C15 PDU Jumper Cord (ROW)	J9855A#B2C
<ul> <li>Aruba 2530 48G PoE+ Switch</li> <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>	J9772A See Configuration NOTE: 1, 2



Configuration

PDU CABLE NA/MEX/TW/JP • C15 PDU Jumper Cord (NA/MEX/TW/JP)	J9772A#B2B
PDU CABLE ROW	J9772A#B2C
<ul> <li>C15 PDU Jumper Cord (ROW)</li> <li>Aruba 2530 48G PoE+ 2SFP+ Switch 48 RJ-45 autosensing 10/100/1000 ports</li> </ul>	J9853A See Configuration
2 SFP+ ports (Min 0 // Max 2 SFP+)	<b>NOTE:</b> 2, 4
Power Supply Included	
● 1U - Height	
PDU Cable NA/MEX/TW/JP C15 PDU Jumper Cord (NA/MEX/TW/JP)	J9853A#B2B
PDU Cable ROW C15 PDU Jumper Cord (ROW)	J9853A#B2C

#### Configuration Rules:

NOTE 1	The following Transceivers install into this switch:	
	HPE X121 1G SFP LC SX Transceiver	J4858C
	HPE X121 1G SFP LC LX Transceiver	J4859C
	HPE X111 100M SFP LC FX Transceiver	J9054C
	HP X112 100M SFP LC BX-D Transceiver	J9099B
	HP X112 100M SFP LC BX-U Transceiver	J9100B
	HPE X121 1G SFP LC LH Transceiver	J4860C
	HPE X121 1G SFP RJ45 T Transceiver	J8177C
NOTE 2	Localization required on orders without #B2B, #B2C or #B2E options.	
NOTE 3	Localization cable required. No B2x options	

# NOTE 4The following Transceivers install into this Switch:<br/>HPE X121 1G SFP LC SX TransceiverJ4858CHPE X121 1G SFP LC LX TransceiverJ4859CHPE X121 1G SFP LC LH TransceiverJ4860CHPE X121 1G SFP RJ45 T TransceiverJ8177CHPE X132 10G SFP+ LC ER TransceiverJ9153A



#### Configuration

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

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

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

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

#### Rack Level Integration CTO Models

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



• C15 PDU Jumper Cord (ROW)

#### Configuration

<ul> <li>Aruba 2530 24G Switch</li> <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>	J9776A See Configuration NOTE: 1, 2, 3, 4
<ul><li>PDU CABLE NA/MEX/TW/JP</li><li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li></ul>	J9776A#B2B
<ul><li>PDU CABLE ROW</li><li>C15 PDU Jumper Cord (ROW)</li></ul>	J9776A#B2C
<ul> <li>Aruba 2530 24G 2SFP+ Switch</li> <li>24 RJ-45 autosensing 10/100/1000 ports</li> <li>2 SFP+ ports (Min 0 // Max 2 SFP+)</li> <li>Power Supply Included</li> <li>1U - Height</li> </ul>	J9856A See Configuration NOTE: 2, 3, 4, 5
<ul><li>PDU Cable NA/MEX/TW/JP</li><li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li></ul>	J9856A#B2B
<ul><li>PDU Cable ROW</li><li>C15 PDU Jumper Cord (ROW)</li></ul>	J9856A#B2C
<ul> <li>Aruba 2530 24G PoE+ Switch</li> <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>	J9773A See Configuration NOTE: 1, 2, 3, 4
<ul> <li>PDU CABLE NA/MEX/TW/JP</li> <li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	J9773A#B2B
<ul><li>PDU CABLE ROW</li><li>C15 PDU Jumper Cord (ROW)</li></ul>	J9773A#B2C
<ul> <li>Aruba 2530 24G PoE+ 2SFP+ Switch</li> <li>24 RJ-45 autosensing 10/100/1000 PoE+ ports</li> <li>2 SFP+ ports (Min 0 // Max 2 SFP+)</li> <li>Power Supply Included</li> </ul>	J9854A See Configuration NOTE: 2, 3, 4, 5

• 1U - Height



Configuration	
<ul><li>PDU Cable NA/MEX/TW/JP</li><li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li></ul>	J9854A#B2B
<ul><li>PDU Cable ROW</li><li>C15 PDU Jumper Cord (ROW)</li></ul>	J9854A#B2C
Aruba 2530 48 Switch • 48 RJ-45 autosensing 10/100 ports • 2 fixed Gigabit Ethernet SFP ports (Min 0 // Max 2 SFP) • 2 RJ-45 autosensing 10/100/1000 ports • Power Supply Included • 1U - Height	J9781A See Configuration NOTE: 1, 2, 3, 4
<ul> <li>PDU CABLE NA/MEX/TW/JP</li> <li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	J9781A#B2B
<ul><li>PDU CABLE ROW</li><li>C15 PDU Jumper Cord (ROW)</li></ul>	J9781A#B2C
Aruba 2530 48 PoE+ Switch • 48 RJ-45 autosensing 10/100 PoE+ ports • 2 fixed Gigabit Ethernet SFP ports (Min 0 // Max 2 SFP) • 2 RJ-45 autosensing 10/100/1000 ports • Power Supply Included • 1U - Height	J9778A See Configuration NOTE: 1, 2, 3, 4
PDU CABLE NA/MEX/TW/JP • C15 PDU Jumper Cord (NA/MEX/TW/JP)	J9778A#B2B
PDU CABLE ROW • C15 PDU Jumper Cord (ROW)	J9778A#B2C
<ul> <li>Aruba 2530 48G Switch</li> <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>	J9775A See Configuration NOTE: 1, 2, 3, 4
PDU CABLE NA/MEX/TW/JP • C15 PDU Jumper Cord (NA/MEX/TW/JP)	J9775A#B2B
PDU CABLE ROW • C15 PDU Jumper Cord (ROW)	J9775A#B2C



Configuration	
Aruba 2530 48G 2SFP+ Switch • 48 RJ-45 autosensing 10/100/1000 ports • 2 SFP+ ports (Min 0 // Max 2 SFP+) • Power Supply Included • 1U - Height	J9855A See Configuration NOTE: 2, 3, 4, 5
<ul><li>PDU Cable NA/MEX/TW/JP</li><li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li></ul>	J9855A#B2B
<ul><li>PDU Cable ROW</li><li>C15 PDU Jumper Cord (ROW)</li></ul>	J9855A#B2C
<ul> <li>Aruba 2530 48G PoE+ Switch</li> <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>	J9772A See Configuration NOTE: 1, 2, 3, 4
<ul><li>PDU CABLE NA/MEX/TW/JP</li><li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li></ul>	J9772A#B2B
PDU CABLE ROW <ul> <li>C15 PDU Jumper Cord (ROW)</li> </ul>	J9772A#B2C
Aruba 2530 48G PoE+ 2SFP+ Switch • 48 RJ-45 autosensing 10/100/1000 ports • 2 SFP+ ports (Min 0 // Max 2 SFP+) • Power Supply Included • 1U - Height	J9853A See Configuration NOTE: 2, 3, 4, 5
<ul><li>PDU Cable NA/MEX/TW/JP</li><li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li></ul>	J9853A#B2B
<ul><li>PDU Cable ROW</li><li>C15 PDU Jumper Cord (ROW)</li></ul>	J9853A#B2C

#### Configuration Rules:

NOTE 1

The following Transceivers install into this switch: HPE X121 1G SFP LC SX Transceiver

HPE X121 1G SFP LC LX Transceiver

J4858C J4859C



Configuration		
	HPE X111 100M SFP LC FX Transceiver HP X112 100M SFP LC BX-D Transceiver HP X112 100M SFP LC BX-U Transceiver	J9054C J9099B J9100B
	HPE X121 1G SFP LC LH Transceiver	J4860C
	HPE X121 1G SFP RJ45 T Transceiver	J8177C
NOTE 2	If this switch is factory installed in any HPE Universal Racks, Then the J958	33A#0D1 is required.
NOTE 3	Localization (Wall Power Cord) required on orders without #B2B, #B2C (PD Localization Menu)	U Power Cord) . (See
	REMARK: When Switches/Routers are Factory Racked, Then #B2B, or #B Power Cable option on the Switches/Routers.	2C should be the Defaulted
NOTE 4	If HPE CTO Switch Chassis is selected forRack Level Integration, Then the to integrate (with #0D1) to the HPE Networking Universal Rack.	CTO Switch Chassis needs
NOTE 5	The following Transceivers install into this Switch:	
	HPE X121 1G SFP LC SX Transceiver	J4858C
	HPE X121 1G SFP LC LX Transceiver	J4859C
	HPE X121 1G SFP LC LH Transceiver	J4860C
	HPE X121 1G SFP RJ45 T Transceiver	J8177C
	HPE X132 10G SFP+ LC ER Transceiver	J9153A
	HPE X132 10G SFP+ LC SR Transceiver	J9150A
	HPE X132 10G SFP+ LC LR Transceiver	J9151A
	HPE X132 10G SFP+ LC LRM Transceiver	J9152A
	HPE X242 10G SFP+ to SFP+ 1m Direct Attach Copper Cable	J9281B
	HPE X242 10G SFP+ to SFP+ 3m Direct Attach Copper Cable	J9283B
	HPE X242 10G SFP+ to SFP+ 7m Direct Attach Copper Cable	J9285B
	HP X244 10G XFP to SFP+ 1m Direct Attach Copper Cable	J9300A
	HP 10G X244 XFP to SFP+ 3m Direct Attach Copper Cable	J9301A
	HP 10G X244 XFP to SFP+ 5m Direct Attach Copper Cable	J9302A
Remarks:	Drop down under power supply should offer the following options and result	S:

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

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

#### Internal Power Supplies



#### Configuration

Internal Power supplies included

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

Transceivers

#### SFP Transceivers

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

#### SFP+ Transceivers

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

#### Cables

#### Multi-Mode Cables

HP LC to LC Multi-mode OM3 2-Fiber 0.5m 1-Pack Fiber Optic Cable AJ833A HP LC to LC Multi-mode OM3 2-Fiber 1.0m 1-Pack Fiber Optic Cable AJ834A HP LC to LC Multi-mode OM3 2-Fiber 2.0m 1-Pack Fiber Optic Cable AJ835A HP LC to LC Multi-mode OM3 2-Fiber 5.0m 1-Pack Fiber Optic Cable AJ836A HP LC to LC Multi-mode OM3 2-Fiber 15.0m 1-Pack Fiber Optic Cable AJ837A HP LC to LC Multi-mode OM3 2-Fiber 30.0m 1-Pack Fiber Optic Cable AJ838A HP LC to LC Multi-mode OM3 2-Fiber 50.0m 1-Pack Fiber Optic Cable AJ839A HP Premier Flex LC/LC Multi-mode OM4 2 fiber 1m Cable QK732A



#### Configuration

HP Premier Flex LC/LC Multi-mode OM4 2 fiber 2m Cable HP Premier Flex LC/LC Multi-mode OM4 2 fiber 5m Cable HP Premier Flex LC/LC Multi-mode OM4 2 fiber 15m Cable HP Premier Flex LC/LC Multi-mode OM4 2 fiber 30m Cable HP Premier Flex LC/LC Multi-mode OM4 2 fiber 50m Cable

Switch Enclosure Options

Cable Guard

Aruba X510 1U Cable Guard

QK733A QK734A QK735A QK736A QK737A

J9700A See Configuration NOTE: 1

#### Configuration Rules:

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

Option Mounting Kit Aruba 2530 8-port Switch Pwr Adptr Shelf

J9820A See Configuration NOTE: 1

#### Configuration Rules:

NOTE 1

This Power Adapter Shelf is supported only on the J9783A, J9780A, J9777A and J9774A.

Rack Mount Kit HPE X410 1U Universal 4-post Rackmount Kit

J9583A See Configuration NOTE: 1

#### **Configuration Rules:**

NOTE 1 If this Mounting Kit is order with #0D1 then it integrates to the HPE Network Rack. (not the switch)



Aruba 2530 48G Pol	E+ Switch (J9772A)		
I/O ports and slots	48 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Media Type: Auto-MDIX; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only		
	4 fixed Gigabit Ethernet SF	P ports	
Additional ports and slots	1 dual-personality (RJ-45 c	or USB micro-B) serial console port	
Physical characteristics	Dimensions	17.44(w) x 13.00(d) x 1.75(h) in (44.3 x 32.26 x 4.45 cm) (1U height)	
	Weight	10.4 lb (4.72 kg)	
Memory and processor	Processor	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 3 MB dynamically allocated, 256 MB DDR3 DIMM	
Mounting and enclosure		19-inch telco rack or equipment cabinet (rack-mounting kit ce mounting; Wall mounting	
Performance	IPv6 Ready Certified		
	100 Mb Latency	< 7.4 µs (LIFO 64-byte packets)	
	1000 Mb Latency	< 2.3 µs (LIFO 64-byte packets)	
	Throughput	up to 77.3 Mpps (64-byte packets)	
	Switching capacity	104 Gbps	
	MAC address table size	16000 entries	
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)	
	Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing	
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)	
	Non-operating/Storage relative humidity	15% to 90% @ 149°F (65°C), noncondensing	
	Altitude	up to 10,000 ft (3 km)	
	Acoustic	Power: 43.6 dB, Pressure: 33.6 dB	
Electrical	Frequency	50/60 Hz	
characteristics	Maximum heat dissipation	236 BTU/hr (248.98 kJ/hr), (switch only: 236 BTU/hr; combined switch + max. PoE devices: 1624 BTU/hr)	
	Voltage	100 - 127 / 200 - 240 VAC, rated	
	Current	5.8/2.9 A	
	Maximum power rating	476 W	
	Idle power	40.1 W	
	PoE power	382 W	
	NOTES	Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100%	
		traffic, all ports plugged in, and all modules populated.	



**Technical Specifications** 

		PoE power is the total power budget available to all PoE ports.
Safety	LIL 60950-1: CAN/CSA 22	2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
Emissions		SISPR-22 Class A; VCCI Class A
Immunity	Generic	EN 55024, CISPR 24
lining	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 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	configuration menu; out-of	ent Center; command-line interface; Web browser; -band management (serial RS-232C or Micro USB); IEEE ater MIB; Ethernet Interface MIB
NOTES	to PoE+ models only. Whe	igabit models only; IEEE 802.3at and IEEE 802.3af apply en using SFPs with this product, SFPs with revision "B" or s with the letter "B" or later, e.g., J4858B, J4859C) are
Services	details on the service-level de	Enterprise website at <u>http://www.hpe.com/networking/services</u> for scriptions and product numbers. For details about services and please contact your local Hewlett Packard Enterprise sales office.

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

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



Technical Specifications		
Performance	IPv6 Ready Certified	
	100 Mb Latency	< 7.4 µs (LIFO 64-byte packets)
	1000 Mb Latency	< 2.3 µs (LIFO 64-byte packets)
	Throughput	up to 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: 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	Idle power is the actual power consumption of the device with no ports connected.
		Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules
		populated. PoE power is the total power budget available to all PoE ports.
Safety	UL 60950-1 CAN/CS	A 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
Emissions		022/CISPR-22 Class A; VCCI Class A
Immunity	Generic	EN 55024, CISPR 24
,	EN	EN 55024, CISPR 24
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5



	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	configuration menu; o	ngement Center; command-line interface; Web browser; ut-of-band management (serial RS-232C or Micro USB); /IB; Repeater MIB; Ethernet Interface MIB
NOTES	to PoE+ models only.	to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply When using SFPs with this product, SFPs with revision "B" or ends with the letter "B" or later, e.g., J4858B, J4859C) are
Services	details on the service-lev	kard Enterprise website at <u>http://www.hpe.com/networking/services</u> for vel descriptions and product numbers. For details about services and area, please contact your local Hewlett Packard Enterprise sales office.

Aruba 2530 8G PoE+ Switch (	J9774A)
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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	
	port (IEEE 802.3 Type	s; each port can be used as either an RJ-45 10/100/1000 10Base-T; IEEE 802.3u Type 100Base-Tx; IEEE 802.3ab (thernet) or as a SFP slot (for use with SFP transceivers)
Additional ports and slots	1 dual-personality (RJ	-45 or USB micro-B) serial console port
Physical characteristics	Dimensions	10.00(w) x 6.28(d) x 1.75(h) in (25.4 x 15.95 x 4.45 cm) (1U height)
	Weight	2.2 lb (1 kg)
Memory and processor	Processor	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5 MB dynamically allocated, 256 MB DDR3 DIMM
Mounting and enclosure	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); horizontal surface mounting; wall mounting	
Performance	IPv6 Ready Certified	
	100 Mb Latency	< 7.4µs (LIFO 64-byte packets)
	1000 Mb Latency	< 2.6 µs (LIFO 64-byte packets)
	Throughput	up to 14.8 Mpps (64-byte packets)
	Switching capacity	20 Gbps
	MAC address table size	16000 entries
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)



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	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 dissipation	65 BTU/hr (68.58 kJ/hr), (switch only: 65 BTU/hr; combined switch + max. PoE devices: 293 BTU/hr)
	Voltage	100 - 127 / 200 - 240 VAC, rated
	Current	1.4 A
	Maximum power rating	86 W
	Idle power	13.4 W
	PoE power	67 W
	NOTES	Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules papulated
		populated. PoE power is the total power budget available to all PoE ports.
Safety	UL 60950-1; CAN/CS	A 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
Emissions	FCC Class A; EN 550	022/CISPR-22 Class A; VCCI Class A
Immunity	Generic	EN 55024, CISPR 24
	EN	EN 55024, CISPR 24
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	configuration menu; c	agement Center; command-line interface; Web browser; out-of-band management (serial RS-232C or Micro USB); MIB; Repeater MIB; Ethernet Interface MIB

#### Technical Specifications

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 48 PoE+ Switch (J9778A)

I/O ports and slots		10/100 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE -TX, IEEE 802.3at PoE+) Media Type: Auto-MDIX Duplex:	
		1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 02.3ab Type 1000BASE-T) Duplex: 10BASE-T/100BASE-TX: T: full only	
	2 fixed Gigabit Etherne	et SFP ports	
Additional ports and slots	1 dual-personality (RJ	-45 or USB micro-B) serial console port	
Physical characteristics	Dimensions	17.40(w) x 12.70(d) x 1.75(h) in (44.2 x 32.26 x 4.45 cm) (1U height)	
	Weight	10.1 lb (4.58 kg)	
Memory and processor	Processor	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 3 MB dynamically allocated, 256 MB DDR3 DIMM	
Mounting and enclosure	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); Horizontal surface mounting; Wall mounting		
Performance	IPv6 Ready Certified		
	100 Mb Latency	< 6.6 µs (LIFO 64-byte packets)	
	1000 Mb Latency	< 2.2 µs (LIFO 64-byte packets)	
	Throughput	up to 13 Mpps (64-byte packets)	
	Switching capacity	17.6 Gbps	
	MAC address table size	16000 entries	
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)	
	Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing	
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)	
	Non- operating/Storage relative humidity	15% to 90% @ 149°F (65°C), noncondensing	
	Altitude	up to 10,000 ft (3 km)	
	Acoustic	Power: 37.9 dB, Pressure: 31.8 dB	



Electrical	Frequency	50/60 Hz
characteristics	Maximum heat	170 BTU/hr (179.35 kJ/hr), (switch only: 170 BTU/hr;
	dissipation	combined switch + 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. PoE power is the total power budget available to all PoE ports.
Safety	UL 60950-1: CAN/CS	A 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
Emissions	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A	
Immunity	Generic	EN 55024, CISPR 24
5	EN	EN 55024, CISPR 24
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	configuration menu; c	agement Center; command-line interface; Web browser; out-of-band management (serial RS-232C or Micro USB); MIB; Repeater MIB; Ethernet Interface MIB
NOTES	to PoE+ models only.	to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply When using SFPs with this product, SFPs with revision "B" or
	later (product number required.	ends with the letter "B" or later, e.g., J4858B, J4859C) are
Services	details on the service-le	ckard Enterprise website at <u>http://www.hpe.com/networking/services</u> for vel descriptions and product numbers. For details about services and area, please contact your local Hewlett Packard Enterprise sales office.



Aruba 2530 24 PoE+ S	witch (J9779A)		
I/O ports and slots	24 RJ-45 autosensing 10/100 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3at PoE+); Media Type: Auto-MDIX; Duplex: half or full		
	2 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only		
	2 fixed Gigabit Ethern	et SFP ports	
Additional ports and slots	1 dual-personality (R.	I-45 or USB micro-B) serial console port	
Physical characteristics	Dimensions	17.40(w) x 12.70(d) x 1.75(h) in (44.2 x 32.26 x 4.45 cm) (1U height)	
	Weight	8.4 lb (3.81 kg)	
Memory and processor	Processor	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5 MB dynamically allocated, 256 MB DDR3 DIMM	
Mounting and enclosure		ndard 19-inch telco rack or equipment cabinet (rack-mounting tal surface mounting; Wall mounting	
Performance	IPv6 Ready Certified		
	100 Mb Latency	< 1.7 µs (LIFO 64-byte packets)	
	1000 Mb Latency	< 1.1µs (LIFO 64-byte packets)	
	Throughput	up to 9.5 Mpps (64-byte packets)	
	Switching capacity	12.8 Gbps	
	MAC address table size	16000 entries	
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)	
	Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing	
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)	
	Non- operating/Storage relative humidity	15% to 90% @ 149°F (65°C), noncondensing	
	Altitude	up to 10,000 ft (3 km)	
	Acoustic	Power: 40.4 dB, Pressure: 31.7 dB	
Electrical	Frequency	50/60 Hz	
characteristics	Maximum heat dissipation	99 BTU/hr (104.45 kJ/hr), (switch only: 99 BTU/hr; combined switch + max. PoE devices: 809 BTU/hr)	
	Voltage	100 - 127 / 200 - 240 VAC, rated	
	Current	2.8/1.4 A	
	Maximum power rating	237 W	
	Idle power	21.8 W	
	PoE power	195 W	



Technical Specificat	ions	
	NOTES	Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. PoE power is the total power budget available to all PoE ports.
Safety	UL 60950-1; CAN/CS	A 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
Emissions	•	22/CISPR-22 Class A; VCCI Class A
Immunity	Generic	EN 55024, CISPR 24
	EN	EN 55024, CISPR 24
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; out-of-band management (serial RS-232C or Micro USB); IEEE 802.3 Ethernet MIB; Repeater MIB; Ethernet Interface MIB	
NOTES	to PoE+ models only.	to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply When using SFPs with this product, SFPs with revision "B" or ends with the letter "B" or later, e.g., J4858B, J4859C) are
Services	details on the service-leve	ckard Enterprise website at <u>http://www.hpe.com/networking/services</u> for vel descriptions and product numbers. For details about services and area, 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 802.3 u Type 100BASE-TX, IEEE 802.3 at PoE+); Media Type: Auto-MDIX; Duplex: half or full
 2 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 port (IEEE 802.3 Type 10Base-T; IEEE 802.3 u Type 100Base-Tx; IEEE 802.3 ab 1000Base-T Gigabit Ethernet) or as a SFP slot (for use with SFP transceivers) ports
 Additional ports and slots



#### **Technical Specifications**

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Immunity	Generic	EN 55024, CISPR 24	
Emissions		FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A	
Safety	UL 60950-1; CAN/CS	ports. SA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1	
		no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. PoE power is the total power budget available to all PoE	
	NOTES	Idle power is the actual power consumption of the device with	
	PoE power	67 W	
	Idle power	5.8 W	
	Maximum power rating	76.7 W	
	Current	1.4 A	
	Voltage	100 - 127 / 200 - 240 VAC, rated	
	dissipation	combined switch + max. PoE devices: 262 TU/hr)	
characteristics	Maximum heat	29 BTU/hr (30.6 kJ/hr), (switch only: 29 BTU/hr;	
Electrical	Frequency	50/60 Hz	
	Acoustic	up to 10,000 ft (3 km) Power: 0 dB, Pressure: 0 dB	
	operating/Storage relative humidity Altitude	$u_{\rm r}$ to 10,000 ft (2 km)	
	Non-	15% to 90% @ 149°F (65°C), noncondensing	
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)	
	Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing	
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)	
	MAC address table size	16000 entries	
	Switching capacity	5.6 Gbps	
	Throughput	up to 4.1 Mpps (64-byte packets)	
	1000 Mb Latency	< 2.3µs (LIFO 64-byte packets)	
	100 Mb Latency	< 1.3 µs (LIFO 64-byte packets)	
Performance	IPv6 Ready Certified		
Mounting and enclosure		ndard 19-inch telco rack or equipment cabinet (rack-mounting tal surface mounting; wall mounting	
Memory and processor	FIOCESSO	MB dynamically allocated, 256 MB DDR3 DIMM	
Momonyand	Weight Processor	2.0 lb (0.91 kg) ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5	
characteristics	10/-:	height)	
Physical	Dimensions	10.00(w) x 6.28(d) x 1.75(h) in (25.4 x 15.95 x 4.45 cm) (1U	

#### **Technical Specifications**

	EN	EN 55024, CISPR 24
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; out-of-band management (serial RS-232C or Micro USB); IEEE 802.3 Ethernet MIB; Repeater MIB; Ethernet Interface MIB	
NOTES	to PoE+ models only.	to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply When using SFPs with this product, SFPs with revision "B" or ends with the letter "B" or later, e.g., J4858B, J4859C) are
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 48G Switch (J9775A)

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I/O ports and slots	48 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 7/100BASE-TX: half or full; 1000BASE-T: full only		
	4 fixed Gigabit Ethernet SFP ports		
Additional ports and slots	1 dual-personality (RJ-45 or USB micro-B) serial console port		
Physical characteristics	Dimensions	17.44(w) x 10.00(d) x 1.75(h) in (44.3 x 25.4 x 4.45 cm) (1U height)	
	Weight	6.8 lb (3.08 kg)	
Memory and processor	Processor	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 3 MB dynamically allocated, 256 MB DDR3 DIMM	
Mounting and enclosure	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); Horizontal surface mounting; Wall mounting		
Performance	IPv6 Ready Certified		
	100 Mb Latency	< 7.4 µs (LIFO 64-byte packets)	
	1000 Mb Latency	< 2.3 µs (LIFO 64-byte packets)	
	Throughput	up to 77.3 Mpps (64-byte packets)	
	Switching capacity	104 Gbps	



	MAC address table size	16000 entries
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non- operating/Storage relative humidity	15% to 90% @ 149°F (65°C), noncondensing
	Altitude	up to 10,000 ft (3 km)
	Acoustic	Power: 34.5 dB, Pressure: 31.0 dB
Electrical	Frequency	50/60 Hz
characteristics		Achieved Miercom Certified Green Award
	Maximum heat dissipation	203 BTU/hr (214.17 kJ/hr)
	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	Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.
Safety	UL 60950-1; CAN/CS	A 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
Emissions	FCC Class A; EN 550	022/CISPR-22 Class A; VCCI Class A
Immunity	Generic	EN 55024, CISPR 24
	EN	EN 55024, CISPR 24
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3



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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 Switch	ו (J9776A)		
I/O ports and slots	24 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T) Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only		
	4 fixed Gigabit Ethern	et SFP ports	
Additional ports and slots	1 dual-personality (R.	J-45 or USB micro-B) serial console port	
Physical characteristics	Dimensions	17.44(w) x 10.00(d) x 1.75(h) in (44.3 x 25.4 x 4.45 cm) (1U height)	
	Weight	6.1 lb (2.77 kg)	
Memory and processor	Processor	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5 MB dynamically allocated, 256 MB DDR3 DIMM	
Mounting and enclosure	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); Horizontal surface mounting; Wall mounting		
Performance	IPv6 Ready Certified		
	100 Mb Latency	< 7.4 µs (LIFO 64-byte packets)	
	1000 Mb Latency	< 2.3 µs (LIFO 64-byte packets)	
	Throughput	up to 41.6 Mpps (64-byte packets)	
	Switching capacity	56 Gbps	
	MAC address table size	16000 entries	
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)	
	Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing	
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)	
	Non- operating/Storage relative humidity	15% to 90% @ 149°F (65°C), noncondensing	
	Altitude	up to 10,000 ft (3 km)	
	Acoustic	Power: 34.0 dB, Pressure: 26.4 dB	
Electrical	Frequency	50/60 Hz	



Technical Specifica	tions	
characteristics	Maximum heat dissipation	164 BTU/hr (173.02 kJ/hr)
	Voltage	100 - 127 / 200 - 240 VAC, rated
	Current	.6/.4 A
	Maximum power rating	48.0 W
	Idle power	28.8 W
	NOTES	Idle power is the actual power consumption of the device with no ports connected.
		Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.
Safety	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1	
Emissions	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A	
Immunity	Generic	EN 55024, CISPR 24
	EN	EN 55024, CISPR 24
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	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	to PoE+ models only	s to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply /. When using SFPs with this product, SFPs with revision "B" or er ends with the letter "B" or later, e.g., J4858B, J4859C) are
Services	details on the service-le	ackard Enterprise website at <u>http://www.hpe.com/networking/services</u> for evel descriptions and product numbers. For details about services and area, please contact your local Hewlett Packard Enterprise sales office.

Aruba 2530 8G Switch (J9777A)

I/O ports and slots

8 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Media Type: Auto-MDIX; Duplex: 10BASE-T/100BASE-TX: half or full;



recinical opecification	0/13	
	1000BASE-T: full only	
	port (IEEE 802.3 Type	ts; each port can be used as either an RJ-45 10/100/1000 10Base-T; IEEE 802.3u Type 100Base-Tx; IEEE 802.3ab Ethernet) or as a SFP slot (for use with SFP transceivers)
Additional ports and slots	1 dual-personality (RJ	-45 or USB micro-B) serial console port
Physical characteristics	Dimensions	10(w) x 6.28(d) x 1.75(h) in (25.4 x 15.95 x 4.45 cm) (1U height)
	Weight	2.0 lb (0.91 kg)
Memory and processor	Processor	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5 MB dynamically allocated, 256 MB DDR3 DIMM
Mounting and enclosure	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); horizontal surface mounting; wall mounting	
Performance	IPv6 Ready Certified	
	100 Mb Latency	< 7.4 µs (LIFO 64-byte packets)
	1000 Mb Latency	< 2.6 µs (LIFO 64-byte packets)
	Throughput	up to 14.8 Mpps (64-byte packets)
	Switching capacity	20 Gbps
	MAC address table size	16000 entries
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non- operating/Storage relative humidity	15% to 90% @ 149°F (65°C), noncondensing
	Altitude	up to 10,000 ft (3 km)
	Acoustic	Power: 0 dB, Pressure: 0 dB
Electrical	Frequency	50/60 Hz
characteristics	Maximum heat dissipation	63 BTU/hr (66.46 kJ/hr), (switch only: 63 BTU/hr)
	Voltage	100 - 127 / 200 - 240 VAC, rated
	Current	0.5 A
	Maximum power rating	18.6 W
	Idle power	13.6 W
	NOTES	Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if



**Technical Specifications** 

		equipped), 100% traffic, all ports plugged in, and all modules populated	
Safety	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1		
Emissions	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A		
Immunity	Generic	EN 55024, CISPR 24	
	EN	EN 55024, CISPR 24	
	ESD	IEC 61000-4-2	
	Radiated	IEC 61000-4-3	
	EFT/Burst	IEC 61000-4-4	
	Surge	IEC 61000-4-5	
	Conducted	IEC 61000-4-6	
	Power frequency magnetic field	IEC 61000-4-8	
	Voltage dips and interruptions	IEC 61000-4-11	
	Harmonics	EN 61000-3-2, IEC 61000-3-2	
	Flicker	EN 61000-3-3, IEC 61000-3-3	
Management	IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; Out-of-band management (serial RS-232C or MicroUSB); IEEE 802.3 Ethernet MIB; Repeater MIB; Ethernet Interface MIB		
NOTES	IEEE 802.3az applies to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply to PoE+ models only. When using SFPs with this product, SFPs with revision "B" or later (product number ends with the letter "B" or later, e.g., J4858B, J4859C) are required.		
Services	Refer to the 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 Switch (J9781A)

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I/O ports and slots	48 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX);        Duplex: half or full		
	2 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only		
	2 fixed Gigabit Ethernet SFP ports		
Additional ports and slots	1 dual-personality (RJ-45 or USB micro-B) serial console port		
Physical characteristics	Dimensions	17.40(w) x 9.70(d) x 1.75(h) in (44.2 x 24.64 x 4.45 cm) (1U height)	
	Weight	6.3 lb (2.86 kg)	
Memory and processor	Processor	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 3 MB dynamically allocated, 256 MB DDR3 DIMM	



Technical Specifications

Mounting and	Mounts in an EIA-sta	ndard 19-inch telco rack or equipment cabinet (rack-mounting
enclosure		tal surface mounting; Wall mounting
Performance	IPv6 Ready Certified	
	100 Mb Latency	< 6.6 µs (LIFO 64-byte packets)
	1000 Mb Latency	< 2.2 µs (LIFO 64-byte packets)
	Throughput	up to 13 Mpps (64-byte packets)
	Switching capacity	17.6 Gbps
	MAC address table size	16000 entries
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non- operating/Storage relative humidity	15% to 90% @ 149°F (65°C), noncondensing
	Altitude	up to 10,000 ft (3 km)
	Acoustic	Power: 0 dB, Pressure: 0 dB
Electrical	Frequency	50/60 Hz
characteristics	Maximum heat dissipation	102 BTU/hr (107.61 kJ/hr)
	Voltage	100 - 127 / 200 - 240 VAC, rated
	Current	0.7/0.4 A
	Maximum power rating	29.9 W
	Idle power	17.1 W
	NOTES	Idle power is the actual power consumption of the device
		with no ports connected.
		Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.
Safety	UL 60950-1; CAN/CS	A 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
Emissions	FCC Class A; EN 550	022/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



### **Technical Specifications**

	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	configuration menu; C	ngement Center; command-line interface; Web browser; Dut-of-band management (serial RS-232C or MicroUSB); /IB; Repeater MIB; Ethernet Interface MIB
NOTES	IEEE 802.3az applies to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply to PoE+ models only. When using SFPs with this product, SFPs with revision "B" or later (product number ends with the letter "B" or later, e.g., J4858B, J4859C) are required.	
Services	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 Switch (J9782A)

I/O ports and slots	ts and slots 24 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BAS Type 100BASE-TX); Duplex: half or full	
		1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 02.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE- ASE-T: full only
	2 fixed Gigabit Etherne	et SFP ports
Additional ports and slots	1 dual-personality (RJ	-45 or USB micro-B) serial console port
Physical characteristics	Dimensions	17.40(w) x 9.70(d) x 1.75(h) in (44.2 x 24.64 x 4.45 cm) (1U height)
	Weight	5.7 lb (2.59 kg)
Memory and processor	Processor	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5 MB dynamically allocated, 256 MB DDR3 DIMM
Mounting and enclosure	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); Horizontal surface mounting; Wall mounting	
Performance	IPv6 Ready Certified	
	100 Mb Latency	< 1.7 µs (LIFO 64-byte packets)
	1000 Mb Latency	< 1.1 µs (LIFO 64-byte packets)
	Throughput	up to 9.5 Mpps (64-byte packets)
	Switching capacity	12.8 Gbps
	MAC address table size	16000 entries
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing



### Technical Specifications

	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 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	Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.
Safety	UL 60950-1 CAN/CS	A 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
Emissions		022/CISPR-22 Class A; VCCI Class A
Immunity	Generic	EN 55024, CISPR 24
initiality	EN	EN 55024, CISPR 24
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	configuration menu; C	agement Center; command-line interface; Web browser; Dut-of-band management (serial RS-232C or MicroUSB); MIB; Repeater MIB; Ethernet Interface MIB
NOTES	to PoE+ models only.	to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply When using SFPs with this product, SFPs with revision "B" or ends with the letter "B" or later, e.g., J4858B, J4859C) are



Technical Specifications			
Services	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.com/networking/services</a> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales offic		
Amula 2520 0 Quitab ( I	07024)		
Aruba 2530 8 Switch (J	,		
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		
	port (IEEE 802.3 Type	ts; each port can be used as either an RJ-45 10/100/1000 e 10Base-T; IEEE 802.3u Type 100Base-Tx; IEEE 802.3ab Ethernet) or as a SFP slot (for use with SFP transceivers)	
Additional ports and slots	1 dual-personality (RJ	I-45 or USB micro-B) serial console port	
Physical characteristics	Dimensions	10.00(w) x 6.28(d) x 1.75(h) in (25.4 x 15.95 x 4.45 cm) (1U height)	
	Weight	1.8 lb (0.82 kg)	
Memory and processor	Processor	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5 MB dynamically allocated, 256 MB DDR3 DIMM	
Mounting and Mounts in an EIA-standard 19-inch telco rack or equipment cabine enclosure kit available); horizontal surface mounting; wall mounting			
Performance	IPv6 Ready Certified		
	100 Mb Latency	< 1.3 µs (LIFO 64-byte packets)	
	1000 Mb Latency	< 1.3 µs (LIFO 64-byte packets)	
	Throughput	up to 4.1 Mpps (64-byte packets)	
	Switching capacity	5.6 Gbps	
	MAC address table size	16000 entries	
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)	
	Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing	
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)	
	Non- operating/Storage relative humidity	15% to 90% @ 149°F (65°C), noncondensing	
	Altitude	up to 10,000 ft (3 km)	
	Acoustic	Power: 0 dB, Pressure: 0 dB	
Electrical	Frequency	50/60 Hz	
characteristics	Maximum heat dissipation	25 BTU/hr (26.38 kJ/hr)	
	Voltage	100 - 127 / 200 - 240 VAC, rated	
	Current	0.5 A	



	Maximum power rating	7.2 W
	Idle power	4.5 W
	NOTES	Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are
		the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.
Safety	UL 60950-1; CAN/CS	A 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
Emissions	FCC Class A; EN 550	22/CISPR-22 Class A; VCCI Class A
Immunity	Generic	EN 55024, CISPR 24
	EN	EN 55024, CISPR 24
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	configuration menu; C	agement Center; command-line interface; Web browser; Dut-of-band management (serial RS-232C or MicroUSB); /IB; Repeater MIB; Ethernet Interface MIB
NOTES	to PoE+ models only.	to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply When using SFPs with this product, SFPs with revision "B" or ends with the letter "B" or later, e.g., J4858B, J4859C) are
Services	details on the service-lev	kard Enterprise website at <u>http://www.hpe.com/networking/services</u> for vel descriptions and product numbers. For details about services and area, please contact your local Hewlett Packard Enterprise sales office.

#### Aruba 2530 48G PoE+ 2SFP+ Switch (J9853A)

I/O ports and slots	48 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Media Type: Auto-MDIX; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE- T: full only
	2 SFP+ fixed 1000/10000 SFP+ ports
Additional ports and slots	1 dual-personality (RJ-45 or USB micro-B) serial console port



**Technical Specifications** 

Physical characteristics	Dimensions	17.44(w) x 13.00(d) x 1.75(h) in (44.30 x 32.26 x 4.45 cm) (1U height)
	Weight	10.4 lb (4.72 kg)
Memory and processor	-	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 3 MB dynamically allocated, 256 MB DDR3 DIMM
Mounting and enclosure		ndard 19-inch telco rack or equipment cabinet (rack-mounting al surface mounting; wall mounting
Performance	IPv6 Ready Certified	
	100 Mb Latency	< 7.3 µs (LIFO 64-byte packets)
	1000 Mb Latency	< 2.7 µs (LIFO 64-byte packets)
	10 Gbps Latency	< 4.0 µs (LIFO 64-byte packets)
	Throughput	up to 101 Mpps (64-byte packets)
	Switching capacity	136 Gbps
	MAC address table	16000 entries
	size	
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non- operating/Storage relative humidity	15% to 90% @ 149°F (65°C), noncondensing
	Altitude	up to 10,000 ft (3 km)
	Acoustic	Power: 36.4 dB, Pressure: 30.1 dB
Electrical	Frequency	50/60 Hz
characteristics	Maximum heat dissipation	215 BTU/hr (226.83 kJ/hr), (switch only: 215 BTU/hr; combined switch + max. PoE devices: 1499 BTU/hr)
	Voltage	100 - 127 / 200 - 240 VAC, rated
	Current	5.6/2.8 A
	Maximum power rating	439 W
	Idle power	40.2 W
	PoE Power	382 W
	NOTES	Idle power is the actual power consumption of the device with no ports connected.
		Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. PoE power is the total power budget available to all PoE
		ports.
Safety	UL 60950-1; CAN/CS/	A 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
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Technical Specifications		
Emissions	FCC Class A; EN 550	22/CISPR-22 Class A; VCCI Class A
Immunity	Generic	EN 55024, CISPR 24
	EN	EN 55024, CISPR 24
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; out-of-band management (serial RS-232C or Micro USB); IEEE 802.3 Ethernet MIB; Repeater MIB; Ethernet Interface MIB	
NOTES	<ul> <li>IEEE 802.3az applies to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply to PoE+ models only.</li> <li>SFPs with revision "B" or later (e.g., J4858B, J4859C) are required with this product.</li> <li>This product supports only 1 Gigabit SFP &amp; 10 Gigabit SFP+ transceivers, as well as 10 Gigabit Direct Attach Cables.</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.

#### Aruba 2530 24G PoE+ 2SFP+ Switch (J9854A)

I/O ports and slots	24 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Media Type: Auto-MDIX; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only	
	2 SFP+ fixed 1000/100	000 SFP+ ports
Additional ports and slots	1 dual-personality (RJ-	45 or USB micro-B) serial console port
Physical characteristics	Dimensions	17.44(w) x 13.00(d) x 1.75(h) in (44.30 x 33.02 x 4.45 cm) (1U height)
	Weight	8.6 lb (3.9 kg)
Memory and processor	Processor	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5 MB dynamically allocated, 256 MB DDR3 DIMM
Mounting and enclosure	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); horizontal surface mounting; wall mounting	
Performance	IPv6 Ready Certified	
	100 Mb Latency	< 7.3 µs (LIFO 64-byte packets)
°		



Technical Specifications		
	1000 Mb Latency	< 2.7 µs (LIFO 64-byte packets)
	10 Gbps Latency	< 4.0 µs (LIFO 64-byte packets)
	Throughput	up to 65.4 Mpps (64-byte packets)
	Switching capacity	88 Gbps
	MAC address table	16000 entries
	size	
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non- operating/Storage relative humidity	15% to 90% @ 149°F (65°C), noncondensing
	Altitude	up to 10,000 ft (3 km)
	Acoustic	Power: 31.3 dB, Pressure: 24 dB
Electrical	Frequency	50/60 Hz
characteristics	Maximum heat dissipation	118 BTU/hr (124.49 kJ/hr), (switch only: 118 BTU/hr; combined switch + max. PoE devices: 757 BTU/hr)
	Voltage	100 - 127 / 200 - 240 VAC, rated
	Current	2.9/1.4 A
	Maximum power rating	222.2 W
	Idle power	24.7 W
	PoE Power	195 W
	NOTES	Idle power is the actual power consumption of the device with no ports connected.
		Maximum power rating and maximum heat dissipation are
		the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if
		equipped), 100% traffic, all ports plugged in, and all modules populated.
		PoE power is the total power budget available to all PoE ports.
Safety	UL 60950-1; CAN/CS	A 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
Emissions	FCC Class A; EN 550	022/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



### **Technical Specifications**

	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	configuration menu; o	igement Center; command-line interface; Web browser; ut-of-band management (serial RS-232C or Micro USB); /IB; Repeater MIB; Ethernet Interface MIB
NOTES	to PoE+ models only. SFPs with revision "B product.	to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply " or later (e.g., J4858B, J4859C) are required with this only 1 Gigabit SFP & 10 Gigabit SFP+ transceivers, as well ttach Cables.
Services	details on the service-lev	kard Enterprise website at <u>http://www.hpe.com/networking/services</u> for vel descriptions and product numbers. For details about services and area, please contact your local Hewlett Packard Enterprise sales office.

#### Aruba 2530 48G 2SFP+ Switch (J9855A)

I/O ports and slots	802.3u Type 100BAS	10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE E-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE- r full; 1000BASE-T: full only 000 SFP+ ports
Additional ports and slots	1 dual-personality (RJ	-45 or USB micro-B) serial console port
Physical characteristics	Dimensions	17.44(w) x 10.00(d) x 1.75(h) in (44.3 x 25.4 x 4.45 cm) (1U height)
	Weight	7.1 lb (3.08 kg)
Memory and processor	Processor	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 3 MB dynamically allocated, 256 MB DDR3 DIMM
Mounting and enclosure	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); horizontal surface mounting; wall mounting	
Performance	IPv6 Ready Certified	
	100 Mb Latency	< 7.3 µs (LIFO 64-byte packets)
	1000 Mb Latency	< 2.7 µs (LIFO 64-byte packets)
	10 Gbps Latency	< 4.0 μs (LIFO 64-byte packets)
	Throughput	up to 101 Mpps (64-byte packets)
	Switching capacity	136 Gbps
	MAC address table size	16000 entries
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)



Technical Specificat	tions	
	Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non- operating/Storage relative humidity	15% to 90% @ 149°F (65°C), noncondensing
	Altitude	up to 10,000 ft (3 km)
	Acoustic	Power: 32.2 dB, Pressure: 25.6 dB
Electrical	Frequency	50/60 Hz
characteristics		Achieved Miercom Certified Green Award
	Maximum heat dissipation	189 BTU/hr (199.4 kJ/hr)
	Voltage	100 - 127 / 200 - 240 VAC, rated
	Current	0.9/0.5 A
	Maximum power rating	55.1 W
	Idle power	33.3 W
	NOTES	Idle power is the actual power consumption of the device with no ports connected.
		Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.
		PoE power is the total power budget available to all PoE
Safety		ports.
Emissions	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1 FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A	
Immunity	Generic	
mmunity	EN	EN 55024, CISPR 24
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	configuration menu; c	agement Center; command-line interface; Web browser; out-of-band management (serial RS-232C or Micro USB); MIB; Repeater MIB; Ethernet Interface MIB



### Technical Specifications

NOTES	IEEE 802.3az applies to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply to PoE+ models only. SFPs with revision "B" or later (e.g., J4858B, J4859C) are required with this product. This product supports only 1 Gigabit SFP & 10 Gigabit SFP+ transceivers, as well as 10 Gigabit Direct Attach Cables.
Services	Refer to the 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 2SFP+ Switch (J9856A)

I/O ports and slots	802.3u Type 100BAS	10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE E-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE- pr full; 1000BASE-T: full only
	2 SFP+ fixed 1000/10	000 SFP+ ports
Additional ports and slots	1 dual-personality (R	I-45 or USB micro-B) serial console port
Physical characteristics	Dimensions	17.44(w) x 10.00(d) x 1.75(h) in (44.3 x 25.4 x 4.45 cm) (1U height)
	Weight	6.2 lb (2.81 kg)
Memory and processo	r Processor	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5 MB dynamically allocated, 256 MB DDR3 DIMM
Mounting and enclosure		ndard 19-inch telco rack or equipment cabinet (rack-mounting al surface mounting; wall mounting
Performance	IPv6 Ready Certified	
	100 Mb Latency	< 7.3 µs (LIFO 64-byte packets)
	1000 Mb Latency	< 2.7 µs (LIFO 64-byte packets)
	10 Gbps Latency	< 2.2 µs (LIFO 64-byte packets)
	Throughput	up to 65.4 Mpps (64-byte packets)
	Switching capacity	88 Gbps
	MAC address table size	16000 entries
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non- operating/Storage relative humidity	15% to 90% @ 149°F (65°C), noncondensing
	Altitude	up to 10,000 ft (3 km)
	Acoustic	Power: 29.4 dB, Pressure: 22.3 dB
Electrical	Frequency	50/60 Hz



Technical Specifi	cations		
characteristics	Maximum heat dissipation	189 BTU/hr (199.4 kJ/hr)	
	Voltage	100 - 127 / 200 - 240 VAC, rated	
	Current	0.7/0.5 A	
	Maximum power	31 W	
	rating		
	Idle power	20.5 W	
	NOTES	Idle power is the actual power consumption of the device with no ports connected.	
		Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules	
		populated.	
		PoE power is the total power budget available to all PoE ports.	
Safety	UL 60950-1: CAN/C	SA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1	
Emissions		FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A	
Immunity	Generic	EN 55024, CISPR 24	
	EN	EN 55024, CISPR 24	
	ESD	IEC 61000-4-2	
	Radiated	IEC 61000-4-3	
	EFT/Burst	IEC 61000-4-4	
	Surge	IEC 61000-4-5	
	Conducted	IEC 61000-4-6	
	Power frequency magnetic field	IEC 61000-4-8	
	Voltage dips and interruptions	IEC 61000-4-11	
	Harmonics	EN 61000-3-2, IEC 61000-3-2	
	Flicker	EN 61000-3-3, IEC 61000-3-3	
Management	configuration menu;	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	to PoE+ models onl	es to Gigabit models only; IEEE 802.3at and IEEE 802.3af apply y. B" or later (e.g., J4858B, J4859C) are required with this	
	product. This product suppor as 10 Gigabit Direct	ts only 1 Gigabit SFP & 10 Gigabit SFP+ transceivers, as well Attach Cables.	
Services	details on the service-l	ackard Enterprise website at <u>http://www.hpe.com/networking/services</u> for evel descriptions and product numbers. For details about services and r area, please contact your local Hewlett Packard Enterprise sales office.	



### **Technical Specifications**

Aruba 2530 8 PoE+ Int	ernal PS Switch (JL070	A)
I/O ports and slots	8 RJ-45 autosensing	10/100 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE E-TX, IEEE 802.3at PoE+); Media Type: Auto-MDIX; Duplex:
	port (IEEE 802.3 Type	ts; each port can be used as either an RJ-45 10/100/1000 e 10Base-T; IEEE 802.3u Type 100Base-Tx; IEEE 802.3ab Ethernet) or as a SFP slot (for use with SFP transceivers)
Additional ports and slots	•	I-45 or USB micro-B) serial console port
Physical characteristics	Dimensions	10(w) x 9.68(d) x 1.75(h) in (25.4 x 24.59 x 4.45 cm) (1U height)
	Weight	4.65 lb (2.11 kg)
Memory and processo	r Processor	ARM9E @ 800 MHz, 128 MB flash; Packet buffer size: 1.5 MB dynamically allocated, 256 MB DDR3 DIMM
Mounting and enclosure		ndard 19-inch telco rack or equipment cabinet (rack-mounting tal surface mounting; Wall mounting
Performance	IPv6 Ready Certified	
	100 Mb Latency	< 1.3 µs (LIFO 64-byte packets)
	1000 Mb Latency	< 1.3 µs (LIFO 64-byte packets)
	10 Gbps Latency	
	Throughput	up to 4.1 Mpps (64-byte packets)
	Switching capacity	5.6 Gbps
	MAC address table size	16000 entries
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non- operating/Storage relative humidity	15% to 90% @ 149°F (65°C), noncondensing
	Altitude	up to 10,000 ft (3 km)
	Acoustic	Power: 0 dB, Pressure: 0 dB
Electrical	Frequency	50/60 Hz
characteristics	Maximum heat dissipation	29 BTU/hr (30.6 kJ/hr), (switch only: 29 BTU/hr; combined switch + max. PoE devices: 239 BTU/hr)
	Voltage	100 - 127 / 200 - 240 VAC, rated
	Current	0.9/0.5 A
	Maximum power rating	70.2 W
	Idle power	5.3 W



### **Technical Specifications**

	PoE Power	67 W PoE
NOTES	NOTES	Idle power is the actual power consumption of the device with no ports connected.
		Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for
		planning the infrastructure with fully loaded PoE (if
		equipped), 100% traffic, all ports plugged in, and all modules populated.
		PoE power is the total power budget available to all PoE
Cafati		
Safety Emissions	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1 FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A	
	Generic	EN 55024, CISPR 24
Immunity	EN	EN 55024, CISPR 24 EN 55024, CISPR 24
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-2
	EFT/Burst	IEC 61000-4-3
	Surge	IEC 61000-4-4
	Conducted	IEC 61000-4-5
	Power frequency	IEC 61000-4-8
	magnetic field	IEC 01000-4-0
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	Configuration menu;	gement center; Command-line interface; Web browser; Out-of-band management (serial rs-232c or micro usb); leee 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.	
		th this product, SFPs with revision "B" or later (product number " or later, e.g., J4858B, J4859C) are required.
Services		
Services	details on the service-level	ckard Enterprise website at <u>http://www.hpe.com/networking/services</u> for vel descriptions and product numbers. For details about services and area, please contact your local Hewlett Packard Enterprise sales office.

Standards and protocols (applies to all products in series)

Denial of service protection	Network DoS Filter
Device Management	RFC 1591 DNS (client) RFC 2576 (Coexistence between SNMP V1, V2, V3) RFC 2579 (SMIv2 Text Conventions) RFC 2580 (SMIv2 Conformance)



**Technical Specifications** 

RFC 3416 (SNMP Protocol Operations v2) RFC 3417 (SNMP Transport Mappings) SSHv1/SSHv2 Secure Shell

General Protocols	IEEE 802.1D MAC Bridges IEEE 802.1p Priority IEEE 802.1 VLANS IEEE 802.1 VLANS IEEE 802.1 W Rapid Reconfiguration of Spanning Tree IEEE 802.3 Type 10BASE-T IEEE 802.3 ab 1000BASE-T IEEE 802.3 ab 1000BASE-T IEEE 802.3 ad Power over Ethernet IEEE 802.3 af Power over Ethernet Plus IEEE 802.3 at Power over Ethernet Plus IEEE 802.3 at Flow Control RC 788 UDP RFC 783 TFTP Protocol (revision 2) RFC 783 TFTP Protocol (revision 2) RFC 793 TCP RFC 826 ARP RFC 854 TELNET RFC 868 Time Protocol RFC 91 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 2411 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 (SNMP) RFC 3415 View-based Access Control Model (VACM) for the Simple Network Management Protocol (SNMP) RFC 3416 Protocol Operations for SNMP RFC 3416 Protocol Operations for SNMP RFC 3575 IANA Considerations for RADIUS RFC 5905 Network Time Protocol Version 4: Protocol and Algorithms Specification
IP Multicast	RFC 3376 IGMPv3 (host joins only)
IPv6	RFC 1981 IPv6 Path MTU Discovery RFC 2460 IPv6 Specification RFC 2464 Transmission of IPv6 over Ethernet Networks RFC 2925 Remote Operations MIB (Ping only) RFC 3315 DHCPv6 (client only)



Technical Specifications	
	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 4022 MIB for TCP RFC 4113 MIB for UDP RFC 4251 SSHv6 Architecture RFC 4252 SSHv6 Authentication RFC 4252 SSHv6 Authentication RFC 4252 SSHv6 Connection RFC 4254 SSHv6 Connection RFC 4291 IP Version 6 Addressing Architecture RFC 4293 MIB for IP RFC 4419 Key Exchange for SSH RFC 4443 ICMPv6 RFC 4861 IPv6 Neighbor Discovery RFC 4862 IPv6 Stateless Address Auto-configuration RFC 5095 Deprecation of Type 0 Routing Headers in IPv6
MIBs	RFC 1155 Structure & ID of Mgmt Info for TCP/IP Internets RFC 1212 Concise MIB Definitions RFC 1213 MIB II RFC 1493 Bridge MIB RFC 2021 RMONv2 MIB RFC 2021 RMONv2 MIB RFC 2578 Structure of Management Information Version 2 (SMIv2) RFC 2579 Textual Conventions for SMIv2 RFC 2613 SMON MIB RFC 2613 SMON MIB RFC 2618 RADIUS Client MIB RFC 2618 RADIUS Client MIB RFC 2665 Ethernet-Like-MIB RFC 2665 Ethernet-Like-MIB RFC 2668 802.3 MAU MIB RFC 2674 802.1p and IEEE 802.1Q Bridge MIB RFC 2737 Entity MIB (Version 2) RFC 2863 The Interfaces Group MIB RFC 4836 Managed Objects for 802.3 Medium Attachment Units (MAU)
Network Management	<ul> <li>IEEE 802.1AB Link Layer Discovery Protocol (LLDP)</li> <li>RFC 1098 A Simple Network Management Protocol (SNMP)</li> <li>RFC 1155 Structure of Management Information</li> <li>RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events)</li> <li>RFC 3411 SNMP Management Frameworks</li> <li>RFC 3412 Message Processing and Dispatching for the Simple Network Management Protocol (SNMP)</li> <li>RFC 3413 Simple Network Management Protocol (SNMP) Applications</li> <li>RFC 3414 User-based Security Model (USM) for version 3 of the Simple Network Management Protocol (SNMPv3)</li> <li>RFC 3415 View-based Access Control Model (VACM) for the Simple Network Management Protocol (SNMP)</li> <li>RFC 3418 Management Information Base (MIB) for the Simple Network Management Protocol (SNMP)</li> </ul>



### **Technical Specifications**

	RFC 5424 Syslog Protocol ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED) SNMPv1/v2c/v3
QoS/CoS	RFC 2474 DiffServ precedence, with 4 queues per port RFC 2475 DiffServ Architecture RFC 2597 DiffServ Assured Forwarding (AF) RFC 2598 DiffServ Expedited Forwarding (EF)
Security	IEEE 802.1X Port Based Network Access Control RFC 1492 TACACS+ RFC 2138 RADIUS Authentication RFC 2866 RADIUS Accounting Secure Sockets Layer (SSL)



### Accessories

### Aruba 2530 Switch Series accessories

Modules	
HPE X111 100M SFP LC FX Transceiver	J9054C
HPE X121 1G SFP LC SX Transceiver	J4858C
HPE X121 1G SFP LC LX Transceiver	J4859C
HPE X121 1G SFP LC LH Transceiver	J4860C
HPE X121 1G SFP RJ45 T Transceiver	J8177C
HPE X121 1G SFP RJ45 T Transceiver	J8177C
Mounting Kit	
HPE X410 1U Universal 4-post Rackmount Kit	J9583A
Aruba 2530 8G PoE+ Switch (J9774A)	
Aruba 2530 8-port Switch Pwr Adptr Shelf	J9820A
Aruba X510 1U Cable Guard	J9700A
	001007
Aruba 2530 8 PoE+ Switch (J9780A)	
Aruba 2530 8-port Switch Pwr Adptr Shelf	J9820A
Aruba X510 1U Cable Guard	J9700A
Aruba 2530 8G Switch (J9777A)	
Aruba 2530 8-port Switch Pwr Adptr Shelf	J9820A
Aruba X510 1U Cable Guard	J9700A
Aruba 2530 8 Switch (J9783A)	
Aruba 2530 8-port Switch Pwr Adptr Shelf	J9820A
Aruba X510 1U Cable Guard	J9700A
Aruba 2530 48G PoE+ 2SFP+ Switch (J9853A)	
HPE X132 10G SFP+ LC SR Transceiver	J9150A
HPE X132 10G SFP+ LC LR Transceiver	J9151A
HPE X132 10G SFP+ LC LRM Transceiver	J9152A
HPE X132 10G SFP+ LC ER Transceiver	J9153A
HPE X242 10G SFP+ to SFP+ 1m Direct Attach Copper Cable	J9281B
HPE X242 10G SFP+ to SFP+ 3m Direct Attach Copper Cable	J9283B
HPE X242 10G SFP+ to SFP+ 7m Direct Attach Copper Cable	J9285B
HP X244 10G XFP to SFP+ 1m Direct Attach Copper Cable	J9300A
HP 10G X244 XFP to SFP+ 3m Direct Attach Copper Cable	J9301A
HP 10G X244 XFP to SFP+ 5m Direct Attach Copper Cable	J9302A



#### Accessories

HPE X242 40G QSFP+ to QSFP+ 1m Direct Attach Copper Cable HPE X242 40G QSFP+ to QSFP+ 3m Direct Attach Copper Cable HPE X242 40G QSFP+ to QSFP+ 5m Direct Attach Copper Cable	JH234A JH235A JH236A
Aruba 2530 24G PoE+ 2SFP+ Switch (J9854A) HPE X132 10G SFP+ LC SR Transceiver HPE X132 10G SFP+ LC LR Transceiver HPE X132 10G SFP+ LC LRM Transceiver HPE X132 10G SFP+ LC ER Transceiver HPE X242 10G SFP+ to SFP+ 1m Direct Attach Copper Cable HPE X242 10G SFP+ to SFP+ 3m Direct Attach Copper Cable HPE X242 10G SFP+ to SFP+ 7m Direct Attach Copper Cable HPE X242 10G SFP+ to SFP+ 7m Direct Attach Copper Cable HP X244 10G XFP to SFP+ 1m Direct Attach Copper Cable HP 10G X244 XFP to SFP+ 3m Direct Attach Copper Cable HP 10G X244 XFP to SFP+ 5m Direct Attach Copper Cable HPE X242 40G QSFP+ to QSFP+ 1m Direct Attach Copper Cable HPE X242 40G QSFP+ to QSFP+ 3m Direct Attach Copper Cable	J9150A J9151A J9152A J9153A J9281B J9283B J9285B J9300A J9300A J9301A J9302A JH234A JH235A
HPE X242 40G QSFP+ to QSFP+ 5m Direct Attach Copper Cable Aruba 2530 48G 2SFP+ Switch (J9855A) HPE X132 10G SFP+ LC SR Transceiver HPE X132 10G SFP+ LC LR Transceiver HPE X132 10G SFP+ LC LRM Transceiver HPE X132 10G SFP+ LC ER Transceiver HPE X242 10G SFP+ to SFP+ 1m Direct Attach Copper Cable HPE X242 10G SFP+ to SFP+ 3m Direct Attach Copper Cable HPE X242 10G SFP+ to SFP+ 7m Direct Attach Copper Cable HPE X242 10G SFP+ to SFP+ 1m Direct Attach Copper Cable HPE X242 10G SFP+ to SFP+ 7m Direct Attach Copper Cable HP X244 10G XFP to SFP+ 1m Direct Attach Copper Cable HP 10G X244 XFP to SFP+ 3m Direct Attach Copper Cable HP 10G X244 XFP to SFP+ 5m Direct Attach Copper Cable	JH236A J9150A J9151A J9152A J9153A J9281B J9283B J9285B J9300A J9301A J9302A
HPE X242 40G QSFP+ to QSFP+ 1m Direct Attach Copper Cable HPE X242 40G QSFP+ to QSFP+ 3m Direct Attach Copper Cable HPE X242 40G QSFP+ to QSFP+ 5m Direct Attach Copper Cable Aruba 2530 24G 2SFP+ Switch (J9856A) HPE X132 10G SFP+ LC SR Transceiver HPE X132 10G SFP+ LC LR Transceiver HPE X132 10G SFP+ LC LR Transceiver HPE X132 10G SFP+ LC ER Transceiver HPE X132 10G SFP+ LC ER Transceiver HPE X132 10G SFP+ to SFP+ 1m Direct Attach Copper Cable HPE X242 10G SFP+ to SFP+ 3m Direct Attach Copper Cable	JH234A JH235A JH236A J9150A J9151A J9152A J9153A J9281B J9283B



#### Accessories

HPE X242 10G SFP+ to SFP+ 7m Direct Attach Copper Cable	J9285B
HP X244 10G XFP to SFP+ 1m Direct Attach Copper Cable	J9300A
HP 10G X244 XFP to SFP+ 3m Direct Attach Copper Cable	J9301A
HP 10G X244 XFP to SFP+ 5m Direct Attach Copper Cable	J9302A
HPE X242 40G QSFP+ to QSFP+ 1m Direct Attach Copper Cable	JH234A
HPE X242 40G QSFP+ to QSFP+ 3m Direct Attach Copper Cable	JH235A
HPE X242 40G QSFP+ to QSFP+ 5m Direct Attach Copper Cable	JH236A

Aruba 2530 8 PoE+ Internal PS Switch (JL070A) Aruba X510 1U Cable Guard

J9700A



### Accessory Product Details

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

HPE X111 100M SFP LC FX Transceiver (J9054C)	Ports Physical characteristics Environment	1 LC 100BASE-FX port (IEEE 802.3u Type 100BASE-FX); Duplex: half or full Dimensions: 2.7(d) x 0.54(w) x 0.48(h) in. (6.86 x 1.38 x 1.22 cm) Weight: 0.06 lb. (0.03 kg) Operating temperature: 32°F to 158°F (0°C to 70°C) Operating relative humidity: 5% to 95% Nonoperating/Storage temperature: -40°F to 185°F (-40°C to 85°C)
	Cabling	Nonoperating/Storage relative humidity: 5% to 85% Altitude: up to 10,000 ft. (3 km) Type:
		<ul> <li>62.5/125 μm or 50/125 μm (core/cladding) diameter, graded-index, low metal content, multimode fiber optic, complying with ITU-T G.651 and ISO/IEC 793-2 Type A1b or A1a, respectively</li> </ul>
		Maximum distance:
	NOTES	<ul> <li>2 km (full duplex) or 412 m (half duplex)</li> <li>Transmitter wavelength: 1310nm</li> <li>Power consumption is 1.1 watt maximum.</li> </ul>
	Services	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. 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.



Accessory Product Details HP X112 100M SFP LC Ports 1 LC 100BASE-BX10 port (IEEE 802.3ah Type 100BASE-**BX-D** Transceiver BX10-D); Duplex: full only (J9099B) Physical Dimensions 2.7(d) x 0.55(w) x 0.48(h) in. (6.86 x characteristics 1.39 x 1.22 cm) A small form-factor Weight 0.04 lb. (0.03 kg) pluggable (SFP) 100-Megabit BX (bi-Environment Operating temperature 32°F to 158°F (0°C to 70°C) directional) Operating relative 0% to 95%, noncondensing "downstream" humidity transceiver that provides Nonoperating/Storage -40°F to 185°F (-40°C to 85°C) 100 Mbps full-duplex connectivity up to 10 km temperature on one strand of Cabling Type: singlemode fiber. The J9099B connects to the Single-mode fiber optic, complying with ITU-T G.652; J9100B "upstream" transceiver, or to any Maximum distance: IEEE-standard 0.5-10,000 m (single-mode fiber) 100BASE-BX10-U ("upstream") device. NOTES Transmit wavelength: 1550 nm. Receive wavelength: 1310 nm. Power consumption is 1.1 watt maximum. For supported platforms and minimum software requirements to support this product, see the document titled "Support for the HPE BX Transceivers" on the "HPE Mini-GBICs and SFPs" Manuals Web page. The J9099B connects to the J9100B "upstream" transceiver, or to any IEEE-standard 100BASE-BX10-U ("upstream") device. (A 100-BX-D transceiver can only connect to a 100-BX-U product. You cannot connect two 100-BX-D transceivers together.) 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.



Accessory Product Details

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



Accessory Product	Details	
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.	Ports Physical characteristics Environment	1 LC 1000BASE-SX port; Duplex: full only Dimensions: 2.24(d) x 0.54(w) x 0.48(h) in. (5.69 x 1.37 x 1.22 cm) Weight: 0.04 lb. (0.02 kg) Transceiver form factor: SFP Operating temperature: 32°F to 158°F (0°C to 70°C) Operating relative humidity: 5% to 85%, noncondensing Nonoperating/Storage temperature: -40°F to 203°F (-40°C to 85°C)
	Electrical characteristics Cabling	<ul> <li>Altitude: up to 10,000 ft. (3 km)</li> <li>Power consumption typical: 0.4 W</li> <li>Power consumption maximum: 0.7 W</li> <li>Type:</li> <li>62.5/125 μm or 50/125 μm (core/cladding) diameter, graded-index, low metal content, multimode fiber optic, complying with ITU-T G.651 and ISO/IEC 793-2 Type A1b or A1a, respectively;</li> </ul>
	Services	Maximum distance: • 2-220 m (62.5 µm core diameter, 160 MHz*km bandwidth • 2-275 m (62.5 µm core diameter, 200 MHz*km bandwidth) • 2-500 m (50 µm core diameter, 400 MHz*km bandwidth) • 2-550 m (50 µm core diameter, 500 MHz*km bandwidth) Cable length: 2-550m Fiber type: Multi Mode 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.



Accessory Product	Details	
HPE X121 1G SFP LC LX Transceiver (J4859C)	Ports	1 LC 1000BASE-LX port (IEEE 802.3z Type 1000BASE-LX); Duplex: full only
HP X121 1G SFP LC LX Transceiver: An SFP	Physical characteristics	Dimensions: 2.24(d) x 0.54(w) x 0.486(h) in. (5.69 x 1.37 x 1.23 cm) Weight:0.04 lb. (0.02 kg)
format gigabit transceiver with LC connectors using LX technology.	Environment	Operating temperature: 32°F to 158°F (0°C to 70°C) Operating relative humidity: 0% to 85%, noncondensing Nonoperating/Storage temperature: -40°F to 212°F (-40°C to 100°C) Altitude: up to 10,000 ft. (3 km)
	Cabling	Туре:
		<ul> <li>Either single mode or multimode; 62.5/125 µm or 50/125 µm (core/cladding) diameter, graded-index, low metal content, multimode fiber optic, complying with ITU-T G.651 and ISO/IEC 793-2 Type A1b or A1a, respectively; Low metal content, single-mode fiber-optic, complying with ITU-T G.652 and ISO/IEC 793-2 Type B1;</li> </ul>
		Maximum distance:
		<ul> <li>2-550 m (multimode 62.5 μm core diameter, 500 MHz*km bandwidth)</li> <li>2-550 m (multimode 50 μm core diameter, 400 MHz*km bandwidth)</li> <li>2-550 m (multimode 50 μm core diameter, 500 MHz*km bandwidth)</li> <li>2-10,000 m (single-mode fiber)</li> </ul>
	NOTES	A mode conditioning patch cord may be needed in some multimode fiber installations. Wavelength: 1310nm Power Consumption: < 500mW Typical
	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.



Accessory Product	Details	
HPE X121 1G SFP LC LH Transceiver (J4860C)	Ports	1 LC 1000BASE-LH port (no IEEE standard exists for 1550 nm optics); Duplex: full only
A small form-factor pluggable (SFP) Gigabit	Physical characteristics	Dimensions: 2.17(d) x 0.60(w) x 0.46(h) in. (5.5 x 1.53 x 1.18 cm)
LH transceiver that provides a full-duplex Gigabit solution up to 70 km on single-mode fiber.	Environment	Weight: 0.04 lb. (0.02 kg) Operating temperature: -40°F to 185°F (-40°C to 85°C) Operating relative humidity: 0% to 95% @ 77°F (25°C), noncondensing
		Nonoperating/Storage temperature: -40°F to 185°F (-40°C to 85°C)
		Altitude: up to 10,000 ft. (3 km)
	Cabling	Cable type:
		<ul> <li>Low metal content, single-mode fiber-optic, complying with ITU-T G.652 and ISO/IEC 793-2 Type B1;</li> </ul>
		Maximum distance:
		<ul> <li>10-70,000 m (single-mode fiber)</li> </ul>
	NOTES	Power consumption is 0.8 watts typical with 1 watt maximum at 100% utilization.
		For distances less than 20 km, a 10 dB attenuator must be used.
		For distances between 20 km and 40 km, a 5 dB attenuator must be used.
		Attenuators can be purchased from most cable vendors.
	Services	Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.
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Accessory Product	Details	
HPE X121 1G SFP RJ45 T Transceiver	Ports	1 RJ-45 1000BASE-T port (IEEE 802.3ab Type 1000BASE-T); Duplex: full only
(J8177C)	Physical	Dimensions: 0.54(w) x 2.71(d) x 0.55(h) in (1.37 x 6.88 x 1.4
A small form-factor	characteristics	cm) Weight: 0.06 lb (0.03 kg)
pluggable (SFP) Gigabit copper transceiver that provides a full-duplex	Environment	Operating temperature: 32°F to 158°F (0°C to 70°C); with 100 LFM airflow over the SFP module
Gigabit solution up to 100 m on Category 5 or		Operating relative humidity: 0% to 95% @ 75°F (25°C), noncondensing
better cable		Nonoperating/Storage temperature: -40°F to 185°F (-40°C to 85°C)
		Nonoperating/Storage relative humidity: 0% to 95% @ 77°F (25°C), noncondensing
		Altitude: up to 10,000 ft. (3000 km)
	Cabling	Cable type: 1000BASE-T: Category 5 (5E or better recommended), 100 Ù differential 4-pair unshielded twisted pair (UTP) or shielded twisted pair (STP) balanced, complying with IEEE 802.3ab 1000BASE-T;
		Maximum distance:
		• 100 m
	NOTES	Power consumption is nominally 1 watt. For supported platforms and minimum software requirements to support this product, see the document titled "Support for the J8177C 1000Base-T Mini-GBIC" on the "HPE Mini-GBICs and SFPs" Manuals Web page. The J8177C Gigabit copper mini-GBIC is not supported on dual- personality ports. The J8177C is capable of 100 Mb operation. This is supported on only the HPE ProCurve Switch 8200zl, 5400zl, and 6200yl Series using software version K.12.21 or later. Use the "auto-100" port setting to enable 100 Mb operation. Important: Important: The earlier J8177B does not support 100 Mb operation. When used in the ProCurve Switch gl 20-Port 10/100/1000 Module (J4908A), the J8177C mini-GBIC can be installed in either the upper or lower mini-GBIC port, but will block access to the other port.



### Accessory Product Details

HPE X410 1U Univer	rsal 4-post Rackmount Kit (J9583A)
NOTES	The rack mounting kit supports the 1U, full width switches in the following switch series and the power supply: V1810 Series, E2510 Series, E2520 Series, E2610 Series, E2810 Series, E2910 Series, E3500 Series, and the E620 Power Supply This universal rack mounting kit is design to fit the following racks: HPE 10K 10642, HPE 10K 10842, Panduit CN, Panduit CS, Wrightline Vantage S2, APC Netshelter 600mm, and APC Netshelter 800mm. It may well fit many other brands and models too.
Services	Refer to the Hewlett Packard Enterprise website at: <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 8-port Switc Pwr Adptr Shelf (J9820A)	h Physical characteristics	Weight	6.75(w) x 5.25(d) x 1.75(h) in (17.15 x 13.34 x 4.45 cm) (1U height) 0.6 lb (0.27 kg)
	NOTES	The HPE 2530 8-Port S the HPE 2530 8-port sw	Switch Power Adapter Shelf is an accessory for vitches. The shelf mounts on the back of the to hold the external power adapter.
	Services	<u>http://www.hpe.com/r</u> service-level descript about services and re	Packard Enterprise website at <u>networking/services</u> for details on the tions and product numbers. For details esponse times in your area, please ewlett Packard Enterprise sales office.



### Summary of Changes

Date	Version History	Action	Description of Change
06-June-2016	From Version 11 to	Changed	Overview, Features and Benefits, Technical
	12		Specifications, and Accessories updated. SKU
			descriptions updated.
08-Jan-2016	From Version 10 to 11	Changed	URLs updated
01-Dec-2015	From Version 9 to 10	Changed	QuickSpecs name changed to Aruba 2530 Switch Series
			Overview, Features and Benefits, Accessories
			updated
30-Mar-2015	From Version 8 to	Added	Added new SKU:
	9		JL070A
		Changed	Changes made in the Overview, Technical
			Specifications, and Accessories sections.
01-Dec-2014	From Version 7 to 8	Changed	Updated Warranty and support, updated technical specifications
18-Aug-2014	From Version 6 to 7	Added	Added 4 new models: J9856A, J9854A, J9855A, J9853A
		Changed	Changes made on the entire QS.
09-Dec-2013	From Version 5 to 6	Changed	Changes made in the Overview, Technical Specifications, and Accessories sections.
12-Nov-2013	From Version 4 to 5	Changed	Build to Order, Rack Level Integration CTO Models, and Cables were revised.
27-Sep-2013	From Version 3 to 4	Changed	Change made to the Configuration Section - Rack Mount Kit
17-Sep-2013	From Version 2 to 3	Changed	Corrected an issue with the EMEA HTML file.
10-Jun-2013	From Version 1 to	Changed	Changes made to the following:
	2		Added several new models
			Updated Accessories
			Added the new Configuration section
			Updated Features and Benefits



Summary of Changes

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