

## DATA SHEET

# ARUBA 2530 SWITCH SERIES

## PRODUCT OVERVIEW

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

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

The Aruba 2530 Switch Series is easy to deploy, use and manage using Aruba AirWave or Aruba Central. Aruba ClearPass offers Network Access Control and external captive portal support. The switches include a Limited Lifetime Warranty.

## ENHANCED FEATURES

### Wired and Wireless Support

- Switch auto-configuration automatically configures switch for different settings such as VLAN, CoS, PoE max power, and PoE priority when an Aruba access point is detected
- Local User Role defines a set of switch-based policies in areas such as security, authentication, and QoS. A User Role can be assigned to a group of users or devices, using local switch configuration (YA releases only)

### Quality of Service (QoS)

- Traffic prioritization (IEEE 802.1p) for real-time traffic classification. Support for eight priority levels mapped to either two or four queues, and uses weighted deficit round robin (WDRR) or strict priority
- Simplified quality of service (QoS) configuration
  - Port-based traffic prioritization by specifying a port and priority level
  - VLAN-based traffic prioritization by specifying a VLAN and priority level
- Class of Service (CoS) sets the IEEE 802.1p priority tag based on IP address, IP Type of Service (ToS), Layer 3 protocol, TCP/UDP port number, source port, and DiffServ
- Rate limiting establishes per-port ingress-enforced maximums for all traffic or for broadcast, multicast, or unknown destination traffic



## KEY FEATURES

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

- Layer 4 prioritization enables priorities based on TCP/UDP port numbers
- Flow control delivers reliable communication during full-duplex operation

## Simplified Configuration and Management

- Aruba Central cloud-based management platform offers a simple, secure and cost effective way to manage switches. Complies with RFC 7030 for encryption key enrollment
- Zero-Touch-Provisioning (ZTP) simplifies installation of the switch infrastructure using DHCP-based process with AirWave
- Flexible management – Supports both cloud-based Central and on-premise AirWave without ripping and replacing switching infrastructure
- 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

- Provides single IP address management for up to 16 switches individually
- sFlow® (RFC 3176) delivers wire-speed traffic accounting and monitoring, configured by SNMP and CLI with three terminal encrypted receivers
- IEEE 802.1AB Link-Layer Discovery Protocol (LLDP) automates device discovery protocol for easy mapping by network management applications
- Provides local and remote logging of events via SNMP (v2c and v3) and syslog; provides log throttling and log filtering to reduce the number of log events generated
- Port mirroring allows traffic to be mirrored on any port or a network analyzer to assist with diagnostics or detecting network attacks
- Remote monitoring (RMON) provides advanced monitoring and reporting capabilities for statistics, history, alarms, and events
- 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
- IPv6 ACL/QoS supports ACL and QoS for IPv6 network traffic on Gigabit and 48 port 10/100 models
- Security RA Guard, DHCPv6 Protection, Dynamic IPv6 Lockdown (YA only)
- IEEE 802.3at Power over Ethernet (PoE+) provides up to 30 W per port that allows support of the latest PoE+ capable devices such as IP phones, wireless access points, and security cameras, as well as any IEEE 802.3af compliant end device; eliminates the cost of additional electrical cabling and circuits that would otherwise be necessary in IP phone and WLAN deployments
- Auto-MDIX adjusts automatically for straight-through or crossover cables on all ports
- Pre-standard PoE support detects and provides power to pre-standard PoE devices
- SFP slots provides fiber connectivity such as Gigabit-SX, LX, LH, and BX with four SFP slots on all 24- and 48-port Gigabit Ethernet models. Fast Ethernet 24- and 48-port models have two SFP slots and two RJ-45 Gigabit uplinks; 8-port models have two dual-personality ports supporting either SFP or RJ-45 Gigabit uplinks
- Dual-personality (RJ-45 or USB micro-B) serial console port gives easy access to switch CLI with front-of-switch location and the flexibility of using either an RJ-45 or USB micro-B serial console port

## Connectivity

- Compact and fanless 8-port models offer quiet operation for acoustically sensitive areas and uplink flexibility with two dual-personality ports that can be used as either RJ-45 Gigabit Ethernet or SFP ports
- Four built-in Gigabit Ethernet uplinks on 24- and 48- port models. Gigabit models have small form factor pluggable (SFP) for fiber connectivity and Fast Ethernet models have two SFP and two RJ-45 Gigabit uplinks
- IPv6
  - IPv6 host allows the switch to be deployed and managed at the edge of an IPv6 network
  - Dual stack (IPv4/IPv6) supports connectivity for both protocols; provides a transition mechanism from IPv4 to IPv6
  - MLD snooping forwards IPv6 multicast traffic to appropriate interface; prevents IPv6 multicast traffic from flooding the network

## Layer 2 switching

- Support for 512 VLANs and 4,094 VLAN IDs
- Jumbo packet support improves the performance of large data transfers; supports frame size of up to 9,220 bytes; 8- and 24-port Fast Ethernet models automatically support up to 2,000-byte frames with no configuration needed
- 16K MAC address table provides access to many Layer 2 devices
- GARP VLAN Registration Protocol allows automatic learning and dynamic assignment of VLANs
- Rapid Per-VLAN Spanning Tree (RPVST+) allows each VLAN to build a separate spanning tree to improve link bandwidth usage; is compatible with PVST+

## Security

- Access control lists (ACLs) accommodate IPv4/IPv6 port and VLAN-based ACLs (IPv6 ACL is supported only on Gigabit Ethernet and 48-port models.)
- Source-port filtering allows only specified ports to communicate with each other
- RADIUS/TACACS+ eases switch management security administration by using a password authentication server

- Secure Sockets Layer (SSL) encrypts all HTTP traffic, allowing secure access to the browser-based management GUI in the switch
  - Port security allows access only to specified MAC addresses, which can be learned or specified by the administrator
  - MAC address lockout prevents particular configured MAC addresses from connecting to the network
  - Multiple user authentication methods
    - Uses an IEEE 802.1X supplicant on the client in conjunction with a RADIUS server to authenticate in accordance with industry standards
    - Web-based authentication provides a browser-based environment, similar to IEEE 802.1X, to authenticate clients that do not support the IEEE 802.1X supplicant
    - Supports MAC-based client authentication
  - Secure shell (SSH) v2 encrypts all transmitted data for secure remote CLI access over IP networks
  - STP BPDU port protection blocks Bridge Protocol Data Units (BPDUs) on ports that do not require BPDUs, preventing forged BPDU attacks
  - STP root guard protects the root bridge from malicious attacks or configuration mistakes
  - Secure management access delivers protected encryption of all access methods (CLI, GUI, or MIB) through SSHv2 and SNMPv3
  - Custom banner displays security policy when users log in to the switch
  - Secure FTP allows secure file transfer to and from the switch; protects against unwanted file downloads or unauthorized copying of a switch configuration file
  - Protected ports CLI offers intuitive CLI to configure the source-port filter feature, by allowing specified ports to be isolated from all other ports on the switch; the protected port or ports can communicate only with the uplink or shared resources
  - Authentication flexibility
    - Multiple IEEE 802.1X users per port provides authentication for up to 32 IEEE 802.1X users per port; prevents a user from “piggybacking” on another user’s IEEE 802.1X authentication
    - Concurrent IEEE 802.1X, Web or MAC authentication schemes per port allows a switch port to accept IEEE 802.1X and either Web or MAC authentications
  - Switch management logon security helps secure switch CLI logon by optionally requiring either RADIUS or TACACS+ authentication
  - DHCP protection blocks DHCP packets from unauthorized DHCP servers, preventing denial-of-service attacks
  - Dynamic ARP protection blocks ARP broadcasts from unauthorized hosts, preventing eavesdropping or theft of network data
  - Dynamic IP lockdown works with DHCP protection to block traffic from unauthorized hosts, preventing IP source address spoofing
  - MAC Pinning allows non-chatty legacy devices to stay authenticated by pinning client MAC addresses to the port until the clients logoff or get disconnected
- ### Convergence
- IEEE 802.1AB Link Layer Discovery Protocol (LLDP) facilitates easy mapping using network management applications with LLDP automated device discovery protocol
  - 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
  - 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 savings
  - Voice VLAN uses LLDP-MED to automatically configure a VLAN for IP phones
  - IP multicast (IGMP) prevents flooding of IP multicast traffic
  - LLDP-CDP compatibility receives and recognizes CDP packets from Cisco’s IP phones for seamless interoperation
  - Local MAC Authentication assigns attributes such as VLAN and QoS using locally configured profile that can be a list of MAC prefixes Unified Wired and Wireless
- ### 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
  - Fan-less and variable-speed fans decrease power consumption in fan-less (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 nonblocking architecture

### Flexibility

- Power Savings with Energy Efficient Design
  - 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)

### Warranty and support

- Limited Lifetime Warranty  
See [www.hpe.com/networking/warrantysummary](http://www.hpe.com/networking/warrantysummary) for warranty and support information included with your product purchase.
- To find software for your product, refer to [www.hpe.com/networking/support](http://www.hpe.com/networking/support); for details on the software releases available with your product purchase, refer to [www.hpe.com/networking/warrantysummary](http://www.hpe.com/networking/warrantysummary)
- Services  
Refer to the Hewlett Packard Enterprise website at [www.hpe.com/networking/services](http://www.hpe.com/networking/services) for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

<b>SPECIFICATIONS</b>			
	<b>Aruba 2530-48G-PoE+ Switch (J9772A)</b>	<b>Aruba 2530-24G-PoE+ Switch (J9773A)</b>	<b>Aruba 2530-8G-PoE+ Switch (J9774A)</b>
<b>I/O ports and slots</b>			
	48 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Media Type: Auto-MDIX; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only  4 fixed Gigabit Ethernet SFP ports  1 dual-personality (RJ-45 or USB micro-B) serial console port	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  1 dual-personality (RJ-45 or USB micro-B) serial console port	8 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Media Type: Auto-MDIX; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only  2 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 port (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-TX; IEEE 802.3ab1000Base-T Gigabit Ethernet) or as a SFP slot (for use with SFP transceivers)  1 dual-personality (RJ-45 or USB micro-B) serial console port
<b>Physical characteristics</b>			
Dimensions	17.44 (w) x 13.00 (d) x 1.75 (h) in (44.3 x 32.26 x 4.45 cm) (1U height)	17.44 (w) x 13.00 (d) x 1.75 (h) in (44.3 x 33.02 x 4.45 cm) (1U height)	10.00(w) x 6.28(d) x 1.75(h) in (25.4 x 15.95 x 4.45 cm) (1U height)
Weight	10.4 lb (4.72 kg)	8.7 lb (3.95 kg)	2.2 lb (1 kg)
<b>Memory and processor</b>			
Processor	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 3 MB dynamically allocated	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated
<b>Mounting and enclosure</b>			
	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); Horizontal surface mounting; Wall mounting	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); Horizontal surface mounting; Wall mounting	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); Horizontal surface mounting; Wall mounting
<b>Performance</b>			
	IPv6 Ready Certified	IPv6 Ready Certified	IPv6 Ready Certified
100 Mb Latency	< 7.4 μs (LIFO 64-byte packets)	< 7.4 μs (LIFO 64-byte packets)	< 7.4 μs (LIFO 64-byte packets)
1000 Mb Latency	< 2.3 μs (LIFO 64-byte packets)	< 2.3 μs (LIFO 64-byte packets)	< 2.6 μs (LIFO 64-byte packets)
Throughput	up to 77.3 Mpps (64-byte packets)	up to 41.6 Mpps (64-byte packets)	up to 14.8 Mpps (64-byte packets)
Switching capacity	104 Gbps	56 Gbps	20 Gbps
MAC address table size	16000 entries	16000 entries	16000 entries

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	<b>Aruba 2530-48G-PoE+ Switch (J9772A)</b>	<b>Aruba 2530-24G-PoE+ Switch (J9773A)</b>	<b>Aruba 2530-8G-PoE+ Switch (J9774A)</b>
<b>Environment</b>			
Operating temperature	32°F to 113°F (0°C to 45°C)	32°F to 113°F (0°C to 45°C)	32°F to 113°F (0°C to 45°C)
Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing	15% to 95% @ 104°F (40°C), noncondensing	15% to 95% @ 104°F (40°C), noncondensing
Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)
Nonoperating/Storage relative humidity	15% to 90% @ 149°F (65°C), noncondensing	15% to 90% @ 149°F (65°C), noncondensing	15% to 90% @ 149°F (65°C), noncondensing
Altitude	up to 10,000 ft (3 km)	up to 10,000 ft (3 km)	up to 10,000 ft (3 km)
Acoustic	Power: 43.6 dB, Pressure: 33.6 dB	Power: 43.9 dB, Pressure: 39.6 dB	Power: 0 dB, Pressure: 0 dB
<b>Electrical characteristics</b>			
Frequency	50/60 Hz	50/60 Hz	50/60 Hz
Maximum heat dissipation	236 BTU/hr (248.98 kJ/hr), (switch only: 236 BTU/hr; combined switch + max. PoE devices: 1624 BTU/hr)	135 BTU/hr (142.42 kJ/hr), (switch only: 135 BTU/hr; combined switch + max. PoE devices: 843 BTU/hr)	65 BTU/hr (68.58 kJ/hr), (switch only: 65 BTU/hr; combined switch + max. PoE devices: 293 BTU/hr)
AC voltage	100 - 127/200 - 240 VAC	100 - 127/200 - 240 VAC	100 - 127/200 - 240 VAC
Current	5.8/2.9 A	3.2/1.6 A	1.4 A
Maximum power rating	476 W	247 W	86 W
Idle power	40.1 W	25.2 W	13.4 W
PoE power	382 W	195 W	67 W
Notes	<p>Idle power is the actual power consumption of the device with no ports connected.</p> <p>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.</p> <p>PoE power is the total power budget available to all PoE ports.</p>	<p>Idle power is the actual power consumption of the device with no ports connected.</p> <p>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.</p> <p>PoE power is the total power budget available to all PoE ports.</p>	<p>Idle power is the actual power consumption of the device with no ports connected.</p> <p>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.</p> <p>PoE power is the total power budget available to all PoE ports.</p>
<b>Safety</b>			
	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
<b>Emissions</b>			
	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A

<b>SPECIFICATIONS</b>			
	Aruba 2530-48G-PoE+ Switch (J9772A)	Aruba 2530-24G-PoE+ Switch (J9773A)	Aruba 2530-8G-PoE+ Switch (J9774A)
<b>Immunity</b>			
Generic	EN 55024, CISPR 24	EN 55024, CISPR 24	EN 55024, CISPR 24
EN	EN 55024, CISPR 24	EN 55024, CISPR 24	EN 55024, CISPR 24
ESD	IEC 61000-4-2	IEC 61000-4-2	IEC 61000-4-2
Radiated	IEC 61000-4-3	IEC 61000-4-3	IEC 61000-4-3
EFT/Burst	IEC 61000-4-4	IEC 61000-4-4	IEC 61000-4-4
Surge	IEC 61000-4-5	IEC 61000-4-5	IEC 61000-4-5
Conducted	IEC 61000-4-6	IEC 61000-4-6	IEC 61000-4-6
Power frequency magnetic field	IEC 61000-4-8	IEC 61000-4-8	IEC 61000-4-8
Voltage dips and interruptions	IEC 61000-4-11	IEC 61000-4-11	IEC 61000-4-11
Harmonics	EN 61000-3-2, IEC 61000-3-2	EN 61000-3-2, IEC 61000-3-2	EN 61000-3-2, IEC 61000-3-2
Flicker	EN 61000-3-3, IEC 61000-3-3	EN 61000-3-3, IEC 61000-3-3	EN 61000-3-3, IEC 61000-3-3
<b>Management</b>			
	Aruba Central and Aruba AirWave Network 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 AirWave Network Management	Aruba Central and Aruba AirWave Network 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 AirWave Network Management	Aruba Central and Aruba AirWave Network 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 AirWave Network Management
<b>Notes</b>			
	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.	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.	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.
<b>Services</b>			
	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">www.hpe.com/networking/services</a> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">www.hpe.com/networking/services</a> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">www.hpe.com/networking/services</a> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

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	<b>Aruba 2530-48-PoE+ Switch (J9778A)</b>	<b>Aruba 2530-24-PoE+ Switch (J9779A)</b>	<b>Aruba 2530-8-PoE+ Switch (J9780A)</b>
<b>I/O ports and slots</b>			
	48 RJ-45 autosensing 10/100 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3at PoE+); Media Type: Auto-MDIX; Duplex: half or full  2 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only  2 fixed Gigabit Ethernet SFP ports  1 dual-personality (RJ-45 or USB micro-B) serial console port	24 RJ-45 autosensing 10/100 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3at PoE+); Media Type: Auto-MDIX; Duplex: half or full  2 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only  2 fixed Gigabit Ethernet SFP ports  1 dual-personality (RJ-45 or USB micro-B) serial console port	8 RJ-45 autosensing 10/100 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3at PoE+); Media Type: Auto-MDIX; Duplex: half or full  2 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 port (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-TX; IEEE 802.3ab 1000Base-T Gigabit Ethernet) or as a SFP slot (for use with SFP transceivers) ports  1 dual-personality (RJ-45 or USB micro-B) serial console port
<b>Physical characteristics</b>			
Dimensions	17.40 (w) x 12.70 (d) x 1.75 (h) in (44.2 x 32.26 x 4.45 cm) (1U height)	17.40 (w) x 12.70 (d) x 1.75 (h) in (44.2 x 32.26 x 4.45 cm) (1U height)	10.00 (w) x 6.28 (d) x 1.75 (h) in (25.4 x 15.95 x 4.45 cm) (1U height)
Weight	10.1 lb (4.58 kg)	8.4 lb (3.81 kg)	2.0 lb (0.91 kg)
<b>Memory and processor</b>			
Processor	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 3 MB dynamically allocated	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated
<b>Mounting and enclosure</b>			
	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); Horizontal surface mounting; Wall mounting	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); Horizontal surface mounting; Wall mounting	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); Horizontal surface mounting; Wall mounting
<b>Performance</b>			
	IPv6 Ready Certified	IPv6 Ready Certified	IPv6 Ready Certified
100 Mb Latency	< 6.6 $\mu$ s (LIFO 64-byte packets)	< 1.7 $\mu$ s (LIFO 64-byte packets)	< 1.3 $\mu$ s (LIFO 64-byte packets)
1000 Mb Latency	< 2.2 $\mu$ s (LIFO 64-byte packets)	< 1.1 $\mu$ s (LIFO 64-byte packets)	< 1.3 $\mu$ s (LIFO 64-byte packets)
Throughput	up to 13 Mpps (64-byte packets)	up to 9.5 Mpps (64-byte packets)	up to 4.1 Mpps (64-byte packets)
Switching capacity	17.6 Gbps	12.8 Gbps	5.6 Gbps
MAC address table size	16000 entries	16000 entries	16000 entries

<b>SPECIFICATIONS</b>			
	<b>Aruba 2530-48-PoE+ Switch (J9778A)</b>	<b>Aruba 2530-24-PoE+ Switch (J9779A)</b>	<b>Aruba 2530-8-PoE+ Switch (J9780A)</b>
<b>Environment</b>			
Operating temperature	32°F to 113°F (0°C to 45°C)	32°F to 113°F (0°C to 45°C)	32°F to 113°F (0°C to 45°C)
Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing	15% to 95% @ 104°F (40°C), noncondensing	15% to 95% @ 104°F (40°C), noncondensing
Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)
Nonoperating/Storage relative humidity	15% to 90% @ 149°F (65°C), noncondensing	15% to 90% @ 149°F (65°C), noncondensing	15% to 90% @ 149°F (65°C), noncondensing
Altitude	up to 10,000 ft (3 km)	up to 10,000 ft (3 km)	up to 10,000 ft (3 km)
Acoustic	Power: 37.9 dB, Pressure: 31.8 dB	Power: 40.4 dB, Pressure: 31.7 dB	Power: 0 dB, Pressure: 0 dB
<b>Electrical characteristics</b>			
Frequency	50/60 Hz	50/60 Hz	50/60 Hz
Maximum heat dissipation	170 BTU/hr (179.35 kJ/hr), (switch only: 170 BTU/hr; combined switch + max. PoE devices: 1505 BTU/hr)	99 BTU/hr (104.45 kJ/hr), (switch only: 99 BTU/hr; combined switch + max. PoE devices: 809 BTU/hr)	29 BTU/hr (30.6 kJ/hr), (switch only: 29 BTU/hr; combined switch + max. PoE devices: 262 BTU/hr)
AC voltage	100 - 127/200 - 240 VAC	100 - 127/200 - 240 VAC	100 - 127/200 - 240 VAC
Current	5.2/2.6 A	2.8/1.4 A	1.4 A
Maximum power rating	441 W	237 W	76.7 W
Idle power	37.5 W	21.8 W	5.8 W
PoE power	382 W	195 W	67 W
Notes	<p>Idle power is the actual power consumption of the device with no ports connected.</p> <p>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.</p> <p>PoE power is the total power budget available to all PoE ports.</p>	<p>Idle power is the actual power consumption of the device with no ports connected.</p> <p>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.</p> <p>PoE power is the total power budget available to all PoE ports.</p>	<p>Idle power is the actual power consumption of the device with no ports connected.</p> <p>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.</p> <p>PoE power is the total power budget available to all PoE ports.</p>
<b>Safety</b>			
	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
<b>Emissions</b>			
	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A

<b>SPECIFICATIONS</b>			
	Aruba 2530-48-PoE+ Switch (J9778A)	Aruba 2530-24-PoE+ Switch (J9779A)	Aruba 2530-8-PoE+ Switch (J9780A)
<b>Immunity</b>			
Generic	EN 55024, CISPR 24	EN 55024, CISPR 24	EN 55024, CISPR 24
EN	EN 55024, CISPR 24	EN 55024, CISPR 24	EN 55024, CISPR 24
ESD	IEC 61000-4-2	IEC 61000-4-2	IEC 61000-4-2
Radiated	IEC 61000-4-3	IEC 61000-4-3	IEC 61000-4-3
EFT/Burst	IEC 61000-4-4	IEC 61000-4-4	IEC 61000-4-4
Surge	IEC 61000-4-5	IEC 61000-4-5	IEC 61000-4-5
Conducted	IEC 61000-4-6	IEC 61000-4-6	IEC 61000-4-6
Power frequency magnetic field	IEC 61000-4-8	IEC 61000-4-8	IEC 61000-4-8
Voltage dips and interruptions	IEC 61000-4-11	IEC 61000-4-11	IEC 61000-4-11
Harmonics	EN 61000-3-2, IEC 61000-3-2	EN 61000-3-2, IEC 61000-3-2	EN 61000-3-2, IEC 61000-3-2
Flicker	EN 61000-3-3, IEC 61000-3-3	EN 61000-3-3, IEC 61000-3-3	EN 61000-3-3, IEC 61000-3-3
<b>Management</b>			
	Aruba Central and Aruba AirWave Network 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 AirWave Network Management	Aruba Central and Aruba AirWave Network 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 AirWave Network Management	Aruba Central and Aruba AirWave Network 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 AirWave Network Management
<b>Notes</b>			
	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.	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.	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.
<b>Services</b>			
	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">www.hpe.com/networking/services</a> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">www.hpe.com/networking/services</a> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">www.hpe.com/networking/services</a> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

<b>SPECIFICATIONS</b>			
	<b>Aruba 2530-48G Switch (J9775A)</b>	<b>Aruba 2530-24G Switch (J9776A)</b>	<b>Aruba 2530-8G Switch (J9777A)</b>
<b>I/O ports and slots</b>			
	48 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only  4 fixed Gigabit Ethernet SFP ports  1 dual-personality (RJ-45 or USB micro-B) serial console port	24 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only  4 fixed Gigabit Ethernet SFP ports  1 dual-personality (RJ-45 or USB micro-B) serial console port	8 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Media Type: Auto-MDIX; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only  2 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 port (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-TX; IEEE 802.3ab 1000Base-T Gigabit Ethernet) or as a SFP slot (for use with SFP transceivers) ports  1 dual-personality (RJ-45 or USB micro-B) serial console port
<b>Physical characteristics</b>			
Dimensions	17.44 (w) x 10.00 (d) x 1.75 (h) in (44.3 x 25.4 x 4.45 cm) (1U height)	17.44 (w) x 10.00 (d) x 1.75 (h) in (44.3 x 25.4 x 4.45 cm) (1U height)	10.00 (w) x 6.28 (d) x 1.75 (h) in (25.4 x 15.95 x 4.45 cm) (1U height)
Weight	6.8 lb (3.08 kg)	6.1 lb (2.77 kg)	2.0 lb (0.91 kg)
<b>Memory and processor</b>			
Processor	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 3 MB dynamically allocated	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated
<b>Mounting and enclosure</b>			
	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); Horizontal surface mounting; Wall mounting	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); Horizontal surface mounting; Wall mounting	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); Horizontal surface mounting; Wall mounting
<b>Performance</b>			
	IPv6 Ready Certified	IPv6 Ready Certified	IPv6 Ready Certified
100 Mb Latency	< 7.4 μs (LIFO 64-byte packets)	< 7.4 μs (LIFO 64-byte packets)	< 7.4 μs (LIFO 64-byte packets)
1000 Mb Latency	< 2.3 μs (LIFO 64-byte packets)	< 2.3 μs (LIFO 64-byte packets)	< 2.6 μs (LIFO 64-byte packets)
Throughput	up to 77.3 Mpps (64-byte packets)	up to 41.6 Mpps (64-byte packets)	up to 14.8 Mpps (64-byte packets)
Switching capacity	104 Gbps	56 Gbps	20 Gbps
MAC address table size	16000 entries	16000 entries	16000 entries

<b>SPECIFICATIONS</b>			
	<b>Aruba 2530-48G Switch (J9775A)</b>	<b>Aruba 2530-24G Switch (J9776A)</b>	<b>Aruba 2530-8G Switch (J9777A)</b>
<b>Environment</b>			
Operating temperature	32°F to 113°F (0°C to 45°C)	32°F to 113°F (0°C to 45°C)	32°F to 113°F (0°C to 45°C)
Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing	15% to 95% @ 104°F (40°C), noncondensing	15% to 95% @ 104°F (40°C), noncondensing
Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)
Nonoperating/Storage relative humidity	15% to 90% @ 149°F (65°C), noncondensing	15% to 90% @ 149°F (65°C), noncondensing	15% to 90% @ 149°F (65°C), noncondensing
Altitude	up to 10,000 ft (3 km)	up to 10,000 ft (3 km)	up to 10,000 ft (3 km)
Acoustic	Power: 34.5 dB, Pressure: 31.0 dB	Power: 34.0 dB, Pressure: 26.4 dB	Power: 0 dB, Pressure: 0 dB
<b>Electrical characteristics</b>			
Frequency	50/60 Hz	50/60 Hz	50/60 Hz
	Achieved Miercom Certified Green Award		
Maximum heat dissipation	203 BTU/hr (214.17 kJ/hr)	164 BTU/hr (173.02 kJ/hr)	63 BTU/hr (66.46 kJ/hr), (switch only: 63 BTU/hr)
AC voltage	100 - 127/200 - 240 VAC	100 - 127/200 - 240 VAC	100 - 127/200 - 240 VAC
Current	1.2/0.7 A	.6/.4 A	0.5 A
Maximum power rating	59.5 W	48.0 W	18.6 W
Idle power	29.5 W	28.8 W	13.6 W
Notes	<p>Idle power is the actual power consumption of the device with no ports connected.</p> <p>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.</p>	<p>Idle power is the actual power consumption of the device with no ports connected.</p> <p>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.</p>	<p>Idle power is the actual power consumption of the device with no ports connected.</p> <p>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.</p>
<b>Safety</b>			
	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
<b>Emissions</b>			
	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A

<b>SPECIFICATIONS</b>			
	<b>Aruba 2530-48G Switch (J9775A)</b>	<b>Aruba 2530-24G Switch (J9776A)</b>	<b>Aruba 2530-8G Switch (J9777A)</b>
<b>Immunity</b>			
Generic	EN 55024, CISPR 24	EN 55024, CISPR 24	EN 55024, CISPR 24
EN	EN 55024, CISPR 24	EN 55024, CISPR 24	EN 55024, CISPR 24
ESD	IEC 61000-4-2	IEC 61000-4-2	IEC 61000-4-2
Radiated	IEC 61000-4-3	IEC 61000-4-3	IEC 61000-4-3
EFT/Burst	IEC 61000-4-4	IEC 61000-4-4	IEC 61000-4-4
Surge	IEC 61000-4-5	IEC 61000-4-5	IEC 61000-4-5
Conducted	IEC 61000-4-6	IEC 61000-4-6	IEC 61000-4-6
Power frequency magnetic field	IEC 61000-4-8	IEC 61000-4-8	IEC 61000-4-8
Voltage dips and interruptions	IEC 61000-4-11	IEC 61000-4-11	IEC 61000-4-11
Harmonics	EN 61000-3-2, IEC 61000-3-2	EN 61000-3-2, IEC 61000-3-2	EN 61000-3-2, IEC 61000-3-2
Flicker	EN 61000-3-3, IEC 61000-3-3	EN 61000-3-3, IEC 61000-3-3	EN 61000-3-3, IEC 61000-3-3
<b>Management</b>			
	Aruba Central and Aruba AirWave Network 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 AirWave Network Management	Aruba Central and Aruba AirWave Network 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 AirWave Network Management	Aruba Central and Aruba AirWave Network 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 AirWave Network Management
<b>Notes</b>			
	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.	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.	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.
<b>Services</b>			
	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">www.hpe.com/networking/services</a> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">www.hpe.com/networking/services</a> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">www.hpe.com/networking/services</a> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

SPECIFICATIONS			
	Aruba 2530-48 Switch (J9781A)	Aruba 2530-24 Switch (J9782A)	Aruba 2530-8 Switch (J9783A)
<b>I/O ports and slots</b>			
	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  1 dual-personality (RJ-45 or USB micro-B) serial console port	24 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX); Duplex: half or full  2 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only  2 fixed Gigabit Ethernet SFP ports  1 dual-personality (RJ-45 or USB micro-B) serial console port	8 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX); Media Type: Auto-MDIX; Duplex: half or full  2 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 port (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-TX; IEEE 802.3ab 1000Base-T Gigabit Ethernet) or as a SFP slot (for use with SFP transceivers) ports  1 dual-personality (RJ-45 or USB micro-B) serial console port
<b>Physical characteristics</b>			
Dimensions	17.40 (w) x 9.70 (d) x 1.75 (h) in (44.2 x 24.64 x 4.45 cm) (1U height)	17.40 (w) x 9.70 (d) x 1.75 (h) in (44.2 x 24.64 x 4.45 cm) (1U height)	10.00 (w) x 6.28 (d) x 1.75 (h) in (25.4 x 15.95 x 4.45 cm) (1U height)
Weight	6.3 lb (2.86 kg)	5.7 lb (2.59 kg)	1.8 lb (0.82 kg)
<b>Memory and processor</b>			
Processor	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 3 MB dynamically allocated	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated
<b>Mounting and enclosure</b>			
	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); Horizontal surface mounting; Wall mounting	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); Horizontal surface mounting; Wall mounting	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); Horizontal surface mounting; Wall mounting
<b>Performance</b>			
	IPv6 Ready Certified	IPv6 Ready Certified	IPv6 Ready Certified
100 Mb Latency	< 6.6 μs (LIFO 64-byte packets)	< 1.7 μs (LIFO 64-byte packets)	< 1.3 μs (LIFO 64-byte packets)
1000 Mb Latency	< 2.2 μs (LIFO 64-byte packets)	< 1.1 μs (LIFO 64-byte packets)	< 1.3 μs (LIFO 64-byte packets)
Throughput	up to 13 Mpps (64-byte packets)	up to 9.5 Mpps (64-byte packets)	up to 4.1 Mpps (64-byte packets)
Switching capacity	17.6 Gbps	12.8 Gbps	5.6 Gbps
MAC address table size	16000 entries	16000 entries	16000 entries

<b>SPECIFICATIONS</b>			
	<b>Aruba 2530-48 Switch (J9781A)</b>	<b>Aruba 2530-24 Switch (J9782A)</b>	<b>Aruba 2530-8 Switch (J9783A)</b>
<b>Environment</b>			
Operating temperature	32°F to 113°F (0°C to 45°C)	32°F to 113°F (0°C to 45°C)	32°F to 113°F (0°C to 45°C)
Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing	15% to 95% @ 104°F (40°C), noncondensing	15% to 95% @ 104°F (40°C), noncondensing
Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)
Nonoperating/Storage relative humidity	15% to 90% @ 149°F (65°C), noncondensing	15% to 90% @ 149°F (65°C), noncondensing	15% to 90% @ 149°F (65°C), noncondensing
Altitude	up to 10,000 ft (3 km)	up to 10,000 ft (3 km)	up to 10,000 ft (3 km)
Acoustic	Power: 0 dB, Pressure: 0 dB	Power: 0 dB, Pressure: 0 dB	Power: 0 dB, Pressure: 0 dB
<b>Electrical characteristics</b>			
Frequency	50/60 Hz	50/60 Hz	50/60 Hz
Maximum heat dissipation	102 BTU/hr (107.61 kJ/hr)	50 BTU/hr (52.75 kJ/hr)	25 BTU/hr (26.38 kJ/hr)
AC voltage	100 - 127/200 - 240 VAC	100 - 127/200 - 240 VAC	100 - 127/200 - 240 VAC
Current	0.7/0.4 A	0.3/0.2 A	0.5 A
Maximum power rating	29.9 W	14.7 W	7.2 W
Idle power	17.1 W	8.4 W	4.5 W
Notes	<p>Idle power is the actual power consumption of the device with no ports connected.</p> <p>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.</p>	<p>Idle power is the actual power consumption of the device with no ports connected.</p> <p>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.</p>	<p>Idle power is the actual power consumption of the device with no ports connected.</p> <p>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.</p>
<b>Safety</b>			
	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
<b>Emissions</b>			
	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A

<b>SPECIFICATIONS</b>			
	Aruba 2530-48 Switch (J9781A)	Aruba 2530-24 Switch (J9782A)	Aruba 2530-8 Switch (J9783A)
<b>Immunity</b>			
Generic	EN 55024, CISPR 24	EN 55024, CISPR 24	EN 55024, CISPR 24
EN	EN 55024, CISPR 24	EN 55024, CISPR 24	EN 55024, CISPR 24
ESD	IEC 61000-4-2	IEC 61000-4-2	IEC 61000-4-2
Radiated	IEC 61000-4-3	IEC 61000-4-3	IEC 61000-4-3
EFT/Burst	IEC 61000-4-4	IEC 61000-4-4	IEC 61000-4-4
Surge	IEC 61000-4-5	IEC 61000-4-5	IEC 61000-4-5
Conducted	IEC 61000-4-6	IEC 61000-4-6	IEC 61000-4-6
Power frequency magnetic field	IEC 61000-4-8	IEC 61000-4-8	IEC 61000-4-8
Voltage dips and interruptions	IEC 61000-4-11	IEC 61000-4-11	IEC 61000-4-11
Harmonics	EN 61000-3-2, IEC 61000-3-2	EN 61000-3-2, IEC 61000-3-2	EN 61000-3-2, IEC 61000-3-2
Flicker	EN 61000-3-3, IEC 61000-3-3	EN 61000-3-3, IEC 61000-3-3	EN 61000-3-3, IEC 61000-3-3
<b>Management</b>			
	Aruba Central and Aruba AirWave Network 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 AirWave Network Management	Aruba Central and Aruba AirWave Network 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 AirWave Network Management	Aruba Central and Aruba AirWave Network 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 AirWave Network Management
<b>Notes</b>			
	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.	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.	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.
<b>Services</b>			
	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">www.hpe.com/networking/services</a> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">www.hpe.com/networking/services</a> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">www.hpe.com/networking/services</a> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

SPECIFICATIONS	
Aruba 2530-8-PoE+ Internal PS Switch (JL070A)	
<b>I/O ports and slots</b>	
	8 RJ-45 autosensing 10/100 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3at PoE+); Media Type: Auto-MDIX; Duplex: half or full 2 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 port (IEEE 802.3 Type 10BASE-T; IEEE 802.3u Type 100BASE-TX; IEEE 802.3ab 1000BASE-T Gigabit Ethernet) or as a SFP slot (for use with SFP transceivers) ports 1 dual-personality (RJ-45 or USB micro-B) serial console port
<b>Physical characteristics</b>	
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)
<b>Memory and processor</b>	
	ARM9E @ 800 MHz, 128 MB flash, 256 MB DDR3 DIMM; packet buffer size: 1.5 MB dynamically allocated
<b>Mounting and enclosure</b>	
	Mounts in an EIA-standard 19-inch telco rack or equipment cabinet (rack-mounting kit available); Horizontal surface mounting; Wall mounting
<b>Performance</b>	
	IPv6 Ready Certified
100 Mb Latency	< 1.3 $\mu$ s (LIFO 64-byte packets)
1000 Mb Latency	< 1.3 $\mu$ s (LIFO 64-byte packets)
Throughput	up to 4.1 Mpps (64-byte packets)
Switching capacity	5.6 Gbps
MAC address table size	16000 entries
<b>Environment</b>	
Operating temperature	32°F to 113°F (0°C to 45°C)
Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing
Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
Nonoperating/Storage relative humidity	15% to 90% @ 149°F (65°C), noncondensing
Altitude	up to 10,000 ft (3 km)
Acoustic	Power: 0 dB, Pressure: 0 dB
<b>Electrical characteristics</b>	
Frequency	50/60 Hz
Maximum heat dissipation	29 BTU/hr (30.6 kJ/hr), (switch only: 29 BTU/hr; combined switch + max. PoE devices: 239 BTU/hr)
AC voltage	100 - 127/200 - 240 VAC
Current	0.9/0.5 A
Maximum power rating	70.2 W
Idle power	5.3 W
PoE power	67 W PoE
Notes	Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. PoE power is the total power budget available to all PoE ports.

SPECIFICATIONS	
<b>Aruba 2530-8-PoE+ Internal PS Switch (JL070A)</b>	
<b>Safety</b>	
	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
<b>Emissions</b>	
	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A
<b>Immunity</b>	
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
<b>Management</b>	
	Aruba Central and Aruba AirWave Network 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 AirWave Network Management
<b>Notes</b>	
	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.
<b>Services</b>	
	Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">www.hpe.com/networking/services</a> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

## **STANDARDS AND PROTOCOLS (APPLIES TO ALL PRODUCTS IN SERIES)**

### **Denial of service protection**

- Network DoS Filter

### **Device management**

- RFC 1591 DNS (client)
- SSHv1/SSHv2 Secure Shell
- RFC 2576 (Coexistence between SNMP V1, V2, V3)
- RFC 2579 (SMIv2 Text Conventions)
- RFC 2580 (SMIv2 Conformance)
- RFC 3416 (SNMP Protocol Operations v2)
- RFC 3417 (SNMP Transport Mappings)

### **General protocols**

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

- RFC 3575 IANA Considerations for RADIUS
- RFC 5905 NTP Client

### **IP multicast**

- RFC 2236 IGMPv2

### **IPv6**

- RFC 1981 IPv6 Path MTU Discovery
- RFC 2460 IPv6 Specification
- RFC 2464 Transmission of IPv6 over Ethernet Networks
- RFC 2925 Remote Operations MIB (Ping only)
- RFC 3315 DHCPv6 (client only)
- RFC 3484 Default Address Selection for IPv6
- RFC 3513 IPv6 Addressing Architecture
- RFC 3596 DNS Extension for IPv6
- RFC 3810 Multicast Listener Discovery Version 2 (MLDv2) for IPv6
- RFC 4022 MIB for TCP
- RFC 4113 MIB for UDP
- RFC 4251 SSHv6 Architecture
- RFC 4252 SSHv6 Authentication
- RFC 4252 SSHv6 Transport Layer
- RFC 4254 SSHv6 Connection
- RFC 4291 IP Version 6 Addressing Architecture
- RFC 4293 MIB for IP
- RFC 4419 Key Exchange for SSH
- RFC 4443 ICMPv6
- RFC 4861 IPv6 Neighbor Discovery
- RFC 4862 IPv6 Stateless Address Auto-configuration
- RFC 5095 Deprecation of Type 0 Routing Headers in IPv6

### **MIBs**

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

## Network management

- IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
- RFC 1098 A Simple Network Management Protocol (SNMP)
- RFC 1155 Structure of Management Information
- RFC 2819 Four groups of RMON: 1 (statistics), 2 (history) 3 (alarm) and 9 (events)
- RFC 3411 SNMP Management Frameworks
- RFC 3412 Message Processing and Dispatching for the Simple Network Management Protocol (SNMP)
- RFC 3413 Simple Network Management Protocol (SNMP) Applications
- RFC 3414 User-based Security Model (USM) for version 3 of the Simple Network Management Protocol (SNMPv3)
- RFC 3415 View-based Access Control Model (VACM) for the Simple Network Management Protocol (SNMP)
- RFC 3418 Management Information Base (MIB) for the Simple Network Management Protocol (SNMP)
- RFC 5424 Syslog Protocol
- 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
- RFC 7030 Enrollment over Secure Transport
- Secure Sockets Layer (SSL)

## ARUBA 2530 SWITCHES AND ACCESSORIES

### Switch Models

- Aruba 2530-48G-PoE+ Switch (J9772A)
- Aruba 2530-24G-PoE+ Switch (J9773A)
- Aruba 2530-8G-PoE+ Switch (J9774A)

- Aruba 2530-48G Switch (J9775A)
- Aruba 2530-24G Switch (J9776A)
- Aruba 2530-8G Switch (J9777A)
- Aruba 2530-48-PoE+ Switch (J9778A)
- Aruba 2530-24-PoE+ Switch (J9779A)
- Aruba 2530-8-PoE+ Switch (J9780A)
- Aruba 2530-48 Switch (J9781A)
- Aruba 2530-24 Switch (J9782A)
- Aruba 2530-8 Switch (J9783A)
- Aruba 2530-8-PoE+ Internal PS Switch (JL070A)

### Transceivers

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

### Cables

- Aruba X2C2 RJ45 to DB9 Console Cable (JL448A)

### Mounting Kit

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

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

- HPE X510 1U Cable Guard (J9700A)

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

- Aruba 2530 8-port Switch Power Adapter Shelf (J9820A)
- Aruba X510 1U Cable Guard (J9700A)

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

- Aruba 2530 8-port Switch Power Adapter Shelf (J9820A)
- Aruba X510 1U Cable Guard (J9700A)

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

- Aruba 2530 8-port Switch Power Adapter Shelf (J9820A)
- Aruba X510 1U Cable Guard (J9700A)

### Aruba 2530-8 Switch (J9783A)

- Aruba 2530 8-port Switch Power Adapter Shelf (J9820A)
- HPE X510 1U Cable Guard (J9700A)