QuickSpecs

Overview

Aruba 2930M Switch Series

Product overview

The Aruba 2930M Switch Series is designed for customers creating digital workplaces that are optimized for mobile users with an integrated wired and wireless approach. These Layer 3 access switches are easy to deploy and manage with advanced security and network management tools like Aruba ClearPass Policy Manager and Aruba AirWave. With support from cloud-based Aruba Central, you can quickly set up remote offices with little or no IT support. A powerful Aruba ProVision ASIC delivers performance and value with support of the latest SDN apps with future proof programmability for tomorrow's applications. High performance modular stacking for up to 10 switches provides simplicity, scalability with a pay as you grow approach. The 2930M supports 10GbE and 40GbE uplinks, Dual Modular Power Supplies, up to 1440 Watts of PoE+, HPE Smart Rate (IEEE 802.3bz), robust QoS, RIP, Access OSPF routing, Tunnel Node, PIM, VRRP and IPv6 with no software licensing required.

The Aruba 2930M Switch Series provides a convenient and cost-effective access switch solution that can be quickly set up with Zero Touch Deployment. The switches include a limited lifetime warranty.

Key Features

- Aruba Layer 3 Switch with 10 chassis backplane stacking, static, RIP and access OSPF routing, ACLs, and robust QoS
- Advanced security and network management tools like Aruba ClearPass Policy Manager, Aruba AirWave and Aruba Central
- Modular 10GbE or 40GbE uplinks and HPE Smart Rate (IEEE 802.3bz), up to 1440W PoE+
- Ready for innovative SDN applications with OpenFlow support
- Simple deployment with Zero Touch Provisioning

Features and Benefits

Hewlett Packard Enterprise

Overview

Software-defined networking

- OpenFlow supports OpenFlow 1.3 specifications to enable SDN by allowing separation of the data (packet forwarding) and control (routing decision) paths

Unified Wired and Wireless

- ClearPass Policy Manager supports unified wired and wireless policies using Aruba ClearPass Policy Manager
- 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.
- 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 switch-based local user role or download from ClearPass.
- Tunneled Node provides a secured tunnel to transport network traffic on a per-port or per-user-role basis to an Aruba Controller. In per-user-role Tunneled Node, users are authenticated with ClearPass Policy Manager which can direct the traffic to be tunneled to Aruba controller or switch locally.
- HTTP redirect function supports HPE Intelligent Management Center (IMC) bring your own device (BYOD) solution

Quality of Service (QoS)

- Traffic prioritization (IEEE 802.1p) allows real-time traffic classification into eight priority levels mapped to eight queues
- Layer 4 prioritization enables prioritization based on TCP/ UDP port numbers
- Class of Service (CoS) sets the IEEE 802.1p priority tag based on IP address, IP Type of Service (ToS), Layer 3 protocol, TCP/UDP port number, source port, and DiffServ
- Rate limiting sets per-port ingress enforced maximums and per-port, per-queue minimums
- Large buffers Provide graceful congestion management

Connectivity

- HPE Smart Rate (IEEE 802.3bz) connectivity 4 port HPE Smart Rate Port module available to connect to 802.11ac wireless access points
- Flexible 10 Gb/s Ethernet connectivity Modular 4 port 10 Gigabit (SFP+) available
- 40Gbps Uplink port connectivity Modular 40Gbps QSFP+ port available
- Auto-MDIX provides automatic adjustments for straight-through or crossover cables on all 10/100 and 10/100/1000 ports
- 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
- Pre-standard PoE support detects and provides power to pre-standard PoE devices
- IPv6
    - IPv6 host enables switches to be managed in an IPv6 network
    - Dual stack (IPv4 and IPv6) transitions from IPv4 to IPv6, supporting connectivity for both protocols
    - MLD snooping forwards IPv6 multicast traffic to the appropriate interface
    - IPv6 ACL/QoS supports ACL and QoS for IPv6 network traffic
    - IPv6 routing supports static and RIPng protocols
    - Security provides RA guard, DHCPv6 protection, dynamic IPv6 lockdown, and ND snooping

Performance

- Energy-efficient design
    - 80 PLUS Gold and Platinum Certified power supplies increase power efficiency and savings
    - Energy-efficient Ethernet (EEE) support reduces power consumption in accordance with IEEE 802.3az

Overview

- HPE/Aruba ASIC architecture is designed with the latest HPE/Aruba ASIC, providing very low latency, increased packet buffering, and adaptive power consumption
- Selectable queue configurations allows for increased performance by selecting the number of queues and associated memory buffering that best meet the requirements of the network applications
- Stacking Topology
    - Ring Stacking Topology High Performance stacking—up to 100 Gbps of stacking throughput per switch. Each 2-port stacking module can support up to 25Gbps in each direction per port.
    - Ring topology—Supports up to 10 member stack
    - Virtualized Switching Provides simplified management as the switches act as a single chassis when stacked

Convergence

- IP multicast snooping and data-driven IGMP automatically prevent flooding of IP multicast traffic
- LLDP-MED (Media Endpoint Discovery) defines a standard extension of LLDP that stores values for parameters such as QoS and VLAN to configure automatically network devices such as IP phones
- IEEE 802.1AB Link Layer Discovery Protocol (LLDP) facilitates easy mapping using network management applications with LLDP automated device discovery protocol
- PoE and PoE+ allocations support multiple methods (automatic, IEEE 802.3at dynamic, LLDP-MED fine grain, IEEE 802.3af device class, or user-specified) to allocate and manage PoE/PoE+ power for more efficient energy savings
- Local MAC Authentication assigns attributes such as VLAN and QoS using locally configured profile that can be a list of MAC prefixes
- IP multicast routing includes PIM sparse and dense modes to route IP multicast traffic

Resiliency and high availability

- Virtual Router Redundancy Protocol (VRRP) allows groups of two routers to back each other up dynamically to create highly available routed environments in IPV4 and IPV6 networks
- 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
- IEEE 802.3ad link-aggregation-control protocol (LACP) and port trunking Support up to 26 static, dynamic, or distributed trunks with each trunk having up to eight links (ports) per static trunk
- SmartLink provides easy-to-configure link redundancy of active and standby links
- Dual Hot Swappable Power Supplies
    - Increased Resiliency provides secondary power supply to enable complete switch power redundancy in case or power line or supply failure
    - Increased PoE+ Power provides secondary power supply to increase the total available PoE+ power

Management

- Aruba Central support Cloud based management platform offers simple, secure and cost effective way to manage switches
- Zero-Touch-Provisioning (ZTP) simplifies installation of the switch infrastructure using Aruba Activate-based or DHCP-based process with AirWave Network Management
- Out-of-band Ethernet management port enables management a separate physical management network, and keeps management traffic segmented from network data traffic
- SNMPv1, v2, and v3 provide complete support of SNMP; provide full support of industry-standard Management Information Base (MIB) plus private extensions; SNMPv3 supports increased security using encryption

Manageability

- Dual flash images provides independent primary and secondary operating system files for backup while upgrading
- Friendly port names allow assignment of descriptive names to ports
- Find-Fix-Inform finds and fixes common network problems automatically, then informs administrator

Overview

- Multiple configuration files allow multiple configuration files to be stored to a flash image
- Software updates free downloads from the Web
- RMON, XRMON, and sFlow provide advanced monitoring and reporting capabilities for statistics, history, alarms, and events
- Troubleshooting ingress and egress port monitoring enable network problem solving
- Unidirectional link detection (UDLD) monitors the link between two switches and blocks the ports on both ends of the link if the link goes down at any point between the two devices
- Power down mode allows power savings while the switch is not in use by powering down most of the switch, except for a clock which will boot up the switch on a schedule

Layer 2 switching

- IEEE802.1ad QinQ Increases the scalability of an Ethernet network by providing a hierarchical structure; conets multiple LANs on a high-speed campus or metro network
- VLAN Support and Tagging supports IEEE 802.1Q (4094 VLAN IDs) and 2K VLANs simultaneously
- Jumbo packet support improves the performance of large data transfers; supports frame size of up to 9220 bytes
- IEEE 802.1v protocol VLANs isolate select non-IPv4 protocols automatically into their own 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+
- GVRP and MVRP allows automatic learning and dynamic assignment of VLANs
- VxLAN encapsulation (tunneling) protocol for overlay network that enables a more scalable virtual network deployment
- IEEE 1588v2 Transparent Clock Mode1-step and end to end delay mode support critical timing Applications

Layer 3 services

- DHCP server centralizes and reduces the cost of IPv4 address management

Layer 3 routing

- Static IP routing provides manually configured routing; includes ECMP capability
- 256 static and 10,000 RIP routes facilitate segregation of user data, without adding external hardware
- Routing Information Protocol (RIP) provides RIPv1, RIPv2, and RIPng routing
- Access OSPF provides OSPFv2 and OSPFv3 protocols for routing between access and the next layer on the LAN. One OSPF area and up to eight interfaces are supported.

Security

- Control Plane Policing set rate limit on control protocols to protect CPU overload from DOS attacks
- 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
- TPM-based Security
  - Includes a Trusted Platform Module (TPM) for secure hardware-based generation and storage of cryptographic keys that can be used for a variety of authentication purposes
- Authentication flexibility
  - Multiple IEEE 802.1X users per port provides authentication of multiple IEEE 802.1X users per port; prevents a user from "piggybacking" on another user's IEEE 802.1X authentication
  - Concurrent IEEE 802.1X, Web, and MAC authentication schemes per port switch port will accept up to 32 sessions of IEEE 802.1X, Web, and MAC authentications

Overview

- Access control lists (ACLs) provide IP Layer 3 filtering based on source/destination IP address/subnet and source/destination TCP/UDP port number
- 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 shell encrypts all transmitted data for secure remote CLI access over IP networks
- 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
- Secure FTP allows secure file transfer to and from the switch; protects against unwanted file downloads or unauthorized copying of a switch configuration file
- Switch management logon security helps secure switch CLI logon by optionally requiring either RADIUS or TACACS+ authentication
- Custom banner displays security policy when users log in to the switch
- STP BPDU port protection blocks Bridge Protocol Data Units (BPDUs) on ports that do not require BPDUs, preventing forged BPDU attacks
- 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
- STP root guard protects the root bridge from malicious attacks or configuration mistakes
- Identity-driven ACL enables implementation of a highly granular and flexible access security policy and VLAN assignment specific to each authenticated network user
- Per-port broadcast throttling Configures broadcast control selectively on heavy traffic port uplinks
- Private VLAN provides network security by restricting peer-to-peer communication to prevent a variety of malicious attacks; typically a switch port can only communicate with other ports in the same community and/or an uplink port, regardless of VLAN ID or destination MAC address

Monitor and diagnostics

- Digital optical monitoring of SFP+ and 1000BASE-T transceivers allows detailed monitoring of the transceiver settings and parameters

Warranty

- Limited Lifetime Warranty
  See **http://www.hpe.com/networking/warrantysummary** for warranty and support information included with your product purchase.
- Software releases to find software for your product, refer to **http://www.hpe.com/networking/support**; for details on the software releases available with your product purchase, refer to **http://www.hpe.com/networking/warrantysummary**

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 2930M 24G 1-slot Switch

- 4 Combo Ports 10/100/1000BaseT or 100M/1G SFP Ports
- 20 10/100/1000BaseT
- min=0 \\ max=4 SFP Transceivers
- 1 Uplink Module Slot
- 1 Stacking Module Slot
- Must select minimum 1 Power Supply
- 1U - Height

JL319A
See Configuration
NOTE: 1

Aruba 2930M 24G PoE+ 1-slot Switch

- 4 Combo Ports 10/100/1000BaseT PoE+ or 100M/1G SFP Ports
- 20 10/100/1000BaseT PoE+
- min=0 \\ max=4 SFP Transceivers
- 1 Uplink Module Slot
- 1 Stacking Module Slot
- Must select minimum 1 Power Supply
- 1U - Heigh

JL320A
See Configuration
NOTE: 1

Aruba 2930M 48G 1-slot Switch

- 4 Combo Ports 10/100/1000BaseT or 100M/1G SFP Ports
- 44 10/100/1000BaseT
- min=0 \\ max=4 SFP Transceivers
- 1 Uplink Module Slot
- 1 Stacking Module Slot
- Must select minimum 1 Power Supply
- 1U - Height

JL321A
See Configuration
NOTE: 1

Aruba 2930M 48G PoE+ 1-slot Switch

- 4 Combo Ports 10/100/1000BaseT PoE+ or 100M/1G SFP Ports
- 44 10/100/1000BaseT PoE+
- min=0 \\ max=4 SFP Transceivers
- 1 Uplink Module Slot
- 1 Stacking Module Slot
- Must select minimum 1 Power Supply
- 1U - Heigh

JL322A
See Configuration
NOTE: 1

Configuration Rules:

NOTE 1   The following Transceivers install into this Module: (Use #0D1 or #B01 if switch is CTO) - if applicable

HPE X121 1G SFP LC LH Transceiver	J4860C
HPE X121 1G SFP LC LX Transceiver	J4859C
HPE X121 1G SFP LC SX Transceiver	J4858C
HP X122 1G SFP LC BX-D Transceiver	J9142B
HP X122 1G SFP LC BX-U Transceiver	J9143B
HPE X121 1G SFP RJ45 T Transceiver	J8177C

Configuration

HPE X111 100M SFP LC FX Transceiver   J9054C

Rack Level Integration CTO Models

Aruba 2930M 24G 1-slot Switch   JL319A
- 4 Combo Ports 10/100/1000BaseT or 100M/1G SFP Ports   See Configuration
- 20 10/100/1000BaseT   **NOTE:** 1, 2, 3
- min=0 \\ max=4 SFP Transceivers
- 1 Uplink Module Slot
- 1 Stacking Module Slot
- Must select minimum 1 Power Supply
- 1U - Height

Aruba 2930M 24G PoE+ 1-slot Switch   JL320A
- 4 Combo Ports 10/100/1000BaseT PoE+ or 100M/1G SFP Ports   See Configuration
- 20 10/100/1000BaseT PoE+   **NOTE:** 1, 2, 3
- min=0 \\ max=4 SFP Transceivers
- 1 Uplink Module Slot
- 1 Stacking Module Slot
- Must select minimum 1 Power Supply
- 1U - Height

Aruba 2930M 48G 1-slot Switch   JL321A
- 4 Combo Ports 10/100/1000BaseT or 100M/1G SFP Ports   See Configuration
- 44 10/100/1000BaseT   **NOTE:** 1, 2, 3
- min=0 \\ max=4 SFP Transceivers
- 1 Uplink Module Slot
- 1 Stacking Module Slot
- Must select minimum 1 Power Supply
- 1U - Height

Aruba 2930M 48G PoE+ 1-slot Switch   JL322A
- 4 Combo Ports 10/100/1000BaseT PoE+ or 100M/1G SFP Ports   See Configuration
- 44 10/100/1000BaseT PoE+   **NOTE:** 1, 2, 3
- min=0 \\ max=4 SFP Transceivers
- 1 Uplink Module Slot
- 1 Stacking Module Slot
- Must select minimum 1 Power Supply
- 1U - Height

Configuration Rules:

NOTE 1   The following Transceivers install into this Module: (Use #0D1 or #B01 if switch is CTO) - if applicable
HPE X121 1G SFP LC LH Transceiver   J4860C
HPE X121 1G SFP LC LX Transceiver   J4859C
HPE X121 1G SFP LC SX Transceiver   J4858C
HP X122 1G SFP LC BX-D Transceiver   J9142B
HP X122 1G SFP LC BX-U Transceiver   J9143B
HPE X121 1G SFP RJ45 T Transceiver   J8177C
HPE X111 100M SFP LC FX Transceiver   J9054C

Configuration

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

Networking

Uplink Modules
System (std 0 // max 1) User Selection (min 0 // max 1) per enclosure

Aruba 3810M/2930M 1-port QSFP+ 40GbE Module	JL078A
• 1 x QSFP+ Ports	See Configuration
	NOTE: 3
Aruba 3810M 4 HPE Smart Rate PoE+ Module	JL081A
• 4 x HPE Smart Rate Ports	
Aruba 3810M/2930M 4-port 100M/1G/10G SFP+ MACsec Module	JL083A
• 4 x 10GbE SFP+ Ports	See Configuration
	NOTE: 1, 2

Configuration Rules:

NOTE 1   The following 1G Transceivers install into this Module (Use #0D1 or #B01 quoted to switch if switch is CTO) - if applicable

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

NOTE 2   The following 10G Transceivers install into this Module (Use #0D1 or #B01 quoted to switch if switch is CTO) - if applicable

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

NOTE 3   The following 40G Transceivers install into this Module (Use #0D1 or #B01 quoted to switch if switch is CTO) - if applicable

HPE X142 40G QSFP+ MPO SR4 Transceiver	JH231A
HPE X142 40G QSFP+ LC LR4 SM Transceiver	JH232A

Configuration

HPE X142 40G QSFP+ MPO eSR4 300M Transceiver	JH233A
Aruba 40G QSFP+ LC Bidirectional 150m MMF 2-strand Transceiver	JL308A
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

Remarks: Watson Only Blue Note - Although all 3810M/2930M Switches are compatible with the 4 Port HPE Smart Rate module, non PoE switches do not provide PoE power to the HPE Smart Rate Module.

Stacking Modules

System (std 0 // max 1) User Selection (min 0 // max 1) per Stacking Module

Aruba 2930 2-port Stacking Module	JL325A
• min=1 \ max=2 Stacking Cables	See Configuration **NOTE:** 1

Configuration Rules:

NOTE 1	One of the following Stacking Cables must be selected:	
	Aruba 2920/2930M 0.5m Stacking Cable (Default)	J9734A
	Aruba 2920/2930M 1m Stacking Cable	J9735A
	Aruba 2920/2930M 3m Stacking Cable	J9736A

Transceivers

SFP Transceivers

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

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

QSFP+ Transceivers

HPE X142 40G QSFP+ MPO SR4 Transceiver	JH231A
HPE X142 40G QSFP+ LC LR4 SM Transceiver	JH232A
HPE X142 40G QSFP+ MPO eSR4 300M Transceiver	JH233A
Aruba 40G QSFP+ LC Bidirectional 150m MMF 2-strand Transceiver	JL308A
HPE X242 40G QSFP+ to QSFP+ 1m Direct Attach Copper Cable	JH234A
HPE X242 40G QSFP+ to QSFP+ 3m Direct Attach Copper Cable	JH235A

Configuration

HPE X242 40G QSFP+ to QSFP+ 5m Direct Attach Copper Cable   JH236A

Internal Power Supplies

System (std 0 // max 2) User Selection (min 1 // max 2) per enclosure

Aruba X371 12VDC 250W 100-240VAC Power Supply   JL085A
                                                                                        See Configuration
                                                                                        NOTE: 1, 3, 4

PDU Cable NA/MEX/TW/JP   JL085A#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW   JL085A#B2C
- C15 PDU Jumper Cord (ROW)

High Volt Power Supply to Wall Power Cord   JL085A#B2E
- NEMA L6-20P Cord (NA/MEX/JP/TW)

No Power Cord   JL085A#AC3
- No Localized Power Cord Selected

Aruba X372 54VDC 680W 100-240VAC Power Supply   JL086A
                                                                                        See Configuration
                                                                                        NOTE: 2, 3, 5

PDU Cable NA/MEX/TW/JP   JL086A#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW   JL086A#B2C
- C15 PDU Jumper Cord (ROW)

High Volt Power Supply to Wall Power Cord   JL086A#B2E
- NEMA L6-20P Cord (NA/MEX/JP/TW)

No Power Cord   JL086A#AC3
- No Localized Power Cord Selected

Aruba X372 54VDC 1050W 110-240VAC Power Supply   JL087A
                                                                                        See Configuration
                                                                                        NOTE: 2, 3

PDU Cable NA/MEX/TW/JP   JL087A#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW   JL087A#B2C
- C15 PDU Jumper Cord (ROW)

High Volt Power Supply to Wall Power Cord   JL087A#B2E
- NEMA L6-20P Cord (NA/MEX/JP/TW)

Configuration

No Power Cord JL087A#AC3

- No Localized Power Cord Selected

Cables

Stacking Cables
(std 0 // max 99) User Selection (min 0 // max 99) per switch
Aruba 2920/2930M 0.5m Stacking Cable J9734A
Aruba 2920/2930M 1m Stacking Cable J9735A
Aruba 2920/2930M 3m Stacking Cable J9736A

Console Cables
(std 0 // max 99) User Selection (min 0 // max 99) per switch
Aruba X2C2 RJ45 to DB9 Console Cable JL448A

Multi-Mode Cables
(std 0 // max 99) User Selection (min 0 // max 99) per switch
HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 1m Cable QK732A
HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 2m Cable QK733A
HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 5m Cable QK734A
HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 15m Cable QK735A
HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 30m Cable QK736A
HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 50m Cable QK737A

Configuration

Switch Enclosure Options

Mounting Kit

HPE X410 1U Universal 4-post Rackmount Kit   J9583A
See Configuration
NOTE: 1

Configuration Rules:

NOTE 1   If this Mounting Kit is ordered with #0D1, then it integrates to the HP Universal Rack. (not the switch)

Technical Specifications

Aruba 2930M 24G 1-slot Switch (JL319A)

I/O ports and slots	20 Autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASETX, IEEE 802.3ab Type 1000Base-T); Duplex: 10BASE-T/100BASE-TX:half or full;1000BASE-T:full only	
	4 Combo 10/100/1000BASE-T or 100/1000Mbps SFP Ports	
Additional ports and slots	1 Dual Personality (RJ-45 or USB Micro-B) serial console port	
	1 USB B port for uploading/ downloading files	
	1 100BASE-T Out of Band Management Port	
	1 Uplink Slot	
	1 Stacking Module Slot	
	2 Power Supply Slots (power supplies not included)	
Physical characteristics	**Dimensions**	1.73" (Height) x 17.42" (Width) x 12.77" (Depth) (4.39cm x 44.25cm x 32.43cm)
	Weight	9.81 lbs 4.45kg
Memory and processor	Dual Core ARM Cortex A9 @ 1016 MHz	
	1 GB DDR3 SDRAM	
	Packet Buffer Size: 12.38 MB 4.5MB Ingress/7.875MB Egress	
	4GB eMMC	
Performance	**10 Mbps Latency**	< 98.5us (FIFO 64 byte packets)
	100 Mbps Latency	<11.8us (FIFO 64-byte Packets)
	1000 Mbps Latency	< 3.1us (FIFO 64-byte packets)
	10Gbps Latency	<3.4us (FIFO 64-byte packets)
	Throughput	95.2Mpps
	Stacking Performance	100 Gbps
	Switching Capacity	128 Gbps
	Switching Capacity (including Stacking)	228 Gbps
	Routing table Size	10000 entries (IPv4), 5000 entries (IPv6)
	Mac Address Table Size	32768 entries
Environment	**Operating temperature**	32˚ F to 131˚F (0° C to 55° C) up to 5000ft, 32˚ F to 122˚F (0° C to 50° C). Derate -1 degree C for every 1000 ft from 5000 ft to 10000 ft
	Operating relative humidity	15%to 95% (Non-condens- ing) 10,000 ft
	Nonoperating/Storage temperature	-40°C to 70°C up to 15000 ft
	Nonoperating/Storage relative humidity	90% at 65°C (non-condens- ing); 15,000 ft
	Acoustic	Sound Power LWaD=4.0 Bel, Sound Pressure LpAm, Bystander = 22.8 dB
	Primary Airflow direction	Front to Back
Electrical Characteristics	**Frequency**	50/60Hz
	Maximum Heat Dissipation	145 BTU/hr 150 kJ/hr
	Voltage	JL085A PSU: 100-127/200-240
	Current	JL085A PSU: 1A/0.5A

Technical Specifications

Maximum power rating	93W
Idle Power	28W
PoE Power (Max Possible)	N/A
Hibernate Power	7W
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 provide for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.

Aruba 2930M 24G PoE+ 1-slot Switch (JL320A)

I/O ports and slots	20 Autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASETX, IEEE 802.3ab Type 1000Base-T IEEE 802.3at PoE+); Duplex: 10BASE‑T/100BASE-TX:half or full;1000BASE-T:full only
	4 Combo 10/100/1000BASE-T or 100/1000Mbps SFP Ports
Additional ports and slots	1 Dual Personality (RJ-45 or USB Micro-B) serial console port
	1 USB B port for uploading/ downloading files
	1 100BASE-T Out of Band Management Port
	1 Uplink Slot
	1 Stacking Module Slot
	2 Power Supply Slots (power supplies not included)

Physical characteristics		
	Dimensions	1.73" (Height) x 17.42" (Width) x 12.77" (Depth) (4.39cm x 44.25cm x 32.43cm)
	Weight	9.92 lbs 4.50 kg

Memory and processor	
	Dual Core ARM Cortex A9 @ 1016 MHz
	1 GB DDR3 SDRAM
	Packet Buffer Size: 12.38 MB 4.5MB Ingress/7.875MB Egress
	4GB eMMC

Performance		
	10 Mbps Latency	< 98.5us (FIFO 64 byte packets)
	100 Mbps Latency	<11.8us (FIFO 64-byte Packets)
	1000 Mbps Latency	< 3.1us (FIFO 64-byte packets)
	10Gbps Latency	<3.4us (FIFO 64-byte packets)
	Throughput	95.2Mpps
	Stacking Performance	100 Gbps
	Switching Capacity	128 Gbps
	Switching Capacity (including Stacking)	228 Gbps
	Routing table Size	10000 entries (IPv4), 5000 entries (IPv6)
	Mac Address Table Size	32768 entries

Environment		
	Operating temperature	32˚ F to 131˚F (0° C to 55° C) up to 5000ft, 32˚ F to 122˚F (0° C to 50° C). Derate -1 degree C for every 1000 ft from 5000 ft to 10000 ft
	Operating relative humidity	15%to 95% (Non-condens- ing) 10,000 ft
	Nonoperating/Storage temperature	-40°C to 70°C up to 15000 ft
	Nonoperating/Storage	90% at 65°C (non-condens- ing); 15,000 ft

Technical Specifications

	relative humidity	
	Acoustic	Sound Power LWaD=4.1 Bel, Sound Pressure LpAm, Bystander = 23.7 dB
	Primary Airflow direction	Front to Back
Electrical Characteristics	**Frequency**	50/60Hz
	Maximum Heat Dissipation	150 BTU/hr 162 kJ/hr
	Voltage	JL086A PSU: 100-127/200- 240 VAC JL087A PSU: 110-127/200- 240 VAC
	Current	JL086A PSU (each): 5A/2.5A JL087A PSU (each): 8.5A/5A
	Maximum power rating	JL086A PSU (each): 470W JL087A PSU (each): 860W
	Idle Power	30W
	PoE Power (Max Possible)	720 Watts
	Hibernate Power	7W
	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 provide for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.

Aruba 2930M 48G 1-slot Switch (JL321A)

I/O ports and slots	44 Autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASETX, IEEE 802.3ab Type 1000Base-T); Duplex: 10BASE-T/100BASE-TX:half or full;1000BASE-T:full only
	4 Combo 10/100/1000BASE-T or 100/1000Mbps SFP Ports
Additional ports and slots	1 Dual Personality (RJ-45 or USB Micro-B) serial console port
	1 USB B port for uploading/ downloading files
	1 100BASE-T Out of Band Management Port
	1 Uplink Slot
	1 Stacking Module Slot
	2 Power Supply Slots (power supplies not included)

Physical characteristics	**Dimensions**	1.73" (Height) x 17.42" (Width) x 12.77" (Depth) (4.39cm x 44.25cm x 32.43cm)
	Weight	10.14 lbs 4.60 kg

Memory and processor	Dual Core ARM Cortex A9 @ 1016 MHz
	1 GB DDR3 SDRAM
	Packet Buffer Size: 12.38 MB 4.5MB Ingress/7.875MB Egress
	4GB eMMC

Performance	**10 Mbps Latency**	< 98.5us (FIFO 64 byte packets)
	100 Mbps Latency	<11.8us (FIFO 64-byte Packets)
	1000 Mbps Latency	< 3.1us (FIFO 64-byte packets)
	10Gbps Latency	<3.4us (FIFO 64-byte packets)
	Throughput	112 Mpps
	Stacking Performance	100 Gbps
	Switching Capacity	176 Gbps

Technical Specifications

	Switching Capacity (including Stacking)	276 Gbps
	Routing table Size	10000 entries (IPv4), 5000 entries (IPv6)
	Mac Address Table Size	32768 entries
Environment	**Operating temperature**	32˚ F to 131˚F (0° C to 55° C) up to 5000ft, 32˚ F to 122˚F (0° C to 50° C). Derate -1 degree C for every 1000 ft from 5000 ft to 10000 ft
	Operating relative humidity	15%to 95% (Non-condens- ing) 10,000 ft
	Nonoperating/Storage temperature	-40°C to 70°C up to 15000 ft
	Nonoperating/Storage relative humidity	90% at 65°C (non-condens- ing); 15,000 ft
	Acoustic	Sound Power LWaD=4.6 Bel, Sound Pressure LpAm, Bystander = 28.8 dB
	Primary Airflow direction	Front to Back
Electrical Characteristics	**Frequency**	50/60Hz
	Maximum Heat Dissipation	185 BTU/hr 194kJ/hr
	Voltage	JL085A PSU: 100-127/200- 240
	Current	JL085A PSU: 1A/0.5A
	Maximum power rating	111W
	Idle Power	36W
	PoE Power (Max Possible)	N/A
	Hibernate Power	7W
	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 provide for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.

Aruba 2930M 48G PoE+ 1-slot Switch (JL322A)

I/O ports and slots	44 Autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASETX, IEEE 802.3ab Type 1000Base-T, IEEE 802.3at PoE+); Duplex: 10BASE‑T/100BASE-TX:half or full;1000BASE-T:full only
	4 Combo 10/100/1000BASE-T or 100/1000Mbps SFP Ports
Additional ports and slots	1 Dual Personality (RJ-45 or USB Micro-B) serial console port
	1 USB B port for uploading/ downloading files
	1 100BASE-T Out of Band Management Port
	1 Uplink Slot
	1 Stacking Module Slot
	2 Power Supply Slots (power supplies not included)
Physical characteristics	**Dimensions** 1.73" (Height) x 17.42" (Width) x 12.77" (Depth) (4.39cm x 44.25cm x 32.43cm)
	Weight 10.25 lbs 4.65 kg
Memory and processor	Dual Core ARM Cortex A9 @ 1016 MHz
	1 GB DDR3 SDRAM

Technical Specifications

	Packet Buffer Size: 12.38 MB 4.5MB Ingress/7.875MB Egress	
	4GB eMMC	
Performance	**10 Mbps Latency**	< 98.5us (FIFO 64 byte packets)
	100 Mbps Latency	<11.8us (FIFO 64-byte Packets)
	1000 Mbps Latency	< 3.1us (FIFO 64-byte packets)
	10Gbps Latency	<3.4us (FIFO 64-byte packets)
	Throughput	112 Mpps
	Stacking Performance	100 Gbps
	Switching Capacity	176 Gbps
	Switching Capacity (including Stacking)	278 Gbps
	Routing table Size	10000 entries (IPv4), 5000 entries (IPv6)
	Mac Address Table Size	32768 entries
Environment	**Operating temperature**	32˚ F to 131˚F (0° C to 55° C) up to 5000ft, 32˚ F to 122˚F (0° C to 50° C). Derate -1 degree C for every 1000 ft from 5000 ft to 10000 ft
	Operating relative humidity	15%to 95% (Non-condens- ing) 10,000 ft
	Nonoperating/Storage temperature	-40°C to 70°C up to 15000 ft
	Nonoperating/Storage relative humidity	90% at 65°C (non-condens- ing); 15,000 ft
	Acoustic	Sound Power LWaD=4.6 Bel, Sound Pressure LpAm, Bystander = 28.8 dB
	Primary Airflow direction	Front to Back
Electrical Characteristics	**Frequency**	50/60Hz
	Maximum Heat Dissipation	200 BTU/hr
		216 kJ/hr
	Voltage	JL086A PSU: 100-127/200- 240 VAC
		JL087A PSU: 110-127/200-240 VAC
	Current	JL086A PSU (each): 5A/2.5A
		JL087A PSU (each): 8.5A/5A
	Maximum power rating	JL086A PSU (each): 470W
		JL087A PSU (each): 860W
	Idle Power	40W
	PoE Power (Max Possible)	1440 Watts
	Hibernate Power	7W
	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 provide for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.

The operating temperature range for an Aruba 2930M switch is 0°C to 50°C (32°F to 122°F) if any of the following transceivers are installed in the switch:

HPE X132 10G SFP+ LC SR Transceiver   J9150A

HPE X132 10G SFP+ LC LR Transceiver   J9151A

Technical Specifications

HPE X132 10G SFP+ LC LRM Transceiver	J9152A
HPE X132 10G SFP+ LC ER Transceiver	J9153A
HPE X142 40G QSFP+ MPO SR4 Transceiver	JH231A
HPE X142 40G QSFP+ LC LR4 SM Transceiver	JH232A
HPE X142 40G QSFP+ MPO eSR4 300M Transceiver	JH233A

General Specifications

Safety	UL 60950-1, 2nd Edition EN 60950-1:2006 +A11:2009 : A1:2010 +A12:2011 +A2:2013 IEC60950-1:2005 +A1:2009 +A2:2013 CSA 22.2 No. 60950-1-07 2nd EN60825-1:2007 /IEC 60825-1:2007 Class 1	
Emissions	VCCI Class A CNS 13438 ICES-003 Class A FCC CFR 47 Part 15, Class A EN 55022: 2010/CISPR-22, Class A	
Immunity	**Generic**	EN 55024:2010/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	Aruba AirWave Network Management IMC—Intelligent Management Center Command-line interface Web browser Configuration menu SNMP manager Telnet RMON1 FTP Out-of-band management (serial RS-232C, micro USB, Ethernet)	

Standards and Protocols

(applies to all products in series)

Technical Specifications

Denial of service protection
- CPU DoS Protection

Device Management
- RFC 1155 Structure and Mgmt Information (SMIv1)
- RFC 1157 SNMPv1/v2c
- RFC 1591 DNS (client)
- RFC 1901 (Community based SNMPv2)
- RFC 1901-1907 SNMPv2c, SMIv2 and Revised MIB-II
- RFC 1908 (SNMP v1/2 Coexistence)
- RFC 2576 (Coexistence between SNMP V1, V2, V3)
- RFC 2578-2580 SMIv2
- RFC 2579 (SMIv2 Text Conventions)
- RFC 2580 (SMIv2 Conformance)
- RFC 2819 (RMON groups Alarm, Event, History and Statistics only)
- RFC 3416 (SNMP Protocol Operations v2)
- RFC 3417 (SNMP Transport Mappings)
- HTML and telnet management
- HTTP, SSHv1, and Telnet
- Multiple Configuration Files
- Multiple Software Images
- SNMP v3 and RMON RFC support
- SSHv1/SSHv2 Secure Shell
- TACACS/TACACS+
- Web UI

General protocols
- IEEE 802.1AX-2008 Link Aggregation
- IEEE 802.1D MAC Bridges
- IEEE 802.1p Priority
- IEEE 802.1Q VLANs
- IEEE 802.1s Multiple Spanning Trees
- IEEE 802.1v VLAN classification by Protocol and Port
- IEEE 802.1w Rapid Reconfiguration of Spanning Tree
- IEEE 802.3ab 1000BASE-T
- IEEE 802.3ad Link Aggregation Control Protocol (LACP)
- IEEE 802.3af Power over Ethernet
- IEEE 802.3at PoE+
- IEEE 802.3az Energy Efficient Ethernet
- IEEE 802.3bz 2.5Gb/s and 5Gb/s interfaces
- 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 1058 RIPv1
- RFC 1256 ICMP Router Discovery Protocol (IRDP)
- RFC 1350 TFTP Protocol (revision 2)
- RFC 1519 CIDR
- RFC 1542 BOOTP Extensions
- IEEE 1588v2 Precision Time Protocol(Transparent Clock Mode)

Technical Specifications

- RFC 1918 Address Allocation for Private Internet
- RFC 2030 Simple Network Time Protocol (SNTP) v4
- RFC 2131 DHCP
- RFC 2236 IGMP Snooping
- RFC 2453 RIPv2
- RFC 2865 Remote Authentication Dial In User Service (RADIUS)
- RFC 2866 RADIUS Accounting
- RFC 3046 DHCP Relay Agent Information Option
- RFC 3411 An Architecture for Describing Simple Network Management Protocol (SNMP) Management Frameworks
- RFC 3412 Message Processing and Dispatching for the Simple Network Management Protocol (SNMP)
- RFC 3413 Simple Network Management Protocol (SNMP) Applications
- RFC 3414 User-based Security Model (USM) for version 3 of the Simple Network Management Protocol (SNMPv3)
- RFC 3415 View-based Access Control Model (VACM) for the Simple Network Management Protocol (SNMP)
- RFC 3416 Protocol Operations for SNMP
- RFC 3417 Transport Mappings for the Simple Network Management Protocol (SNMP)
- RFC 3418 Management Information Base (MIB) for the Simple Network Management Protocol (SNMP)
- RFC 3575 IANA Considerations for RADIUS
- RFC 3576 Ext to RADIUS (CoA only)
- RFC 4541 Considerations for Internet Group Management Protocol (IGMP) and Multicast Listener Discovery (MLD) Snooping Switches
- RFC 4675 RADIUS VLAN & Priority
- RFC 4861 Neighbor Discovery for IP version 6 (IPv6)
- RFC 4862 IPv6 Stateless Address Autoconfiguration
- RFC 5905 Network Time Protocol Version 4: Protocol and Algorithms Specification
- UDLD (Uni-directional Link Detection)

IP Multicast
- RFC 1112 IGMP
- RFC 2236 IGMPv2
- RFC 2710 Multicast Listener Discovery (MLD) for IPv6
- RFC 3376 IGMPv3
- RFC 3973 PIM Dense Mode
- RFC 4601 PIM Sparse Mode
- RFC 4541 Considerations for Internet Group Management Protocol (IGMP) and Multicast Listener Discovery (MLD) Snooping Switches
- RFC 5059 Bootstrap Router—Except for scope zones
- RFC 7761 PIM Sparse Mode

IPV6
- RFC 1981 IPv6 Path MTU Discovery
- RFC 2080 RIPng for IPv6
- RFC 2081 RIPng Protocol Applicability Statement
- RFC 2082 RIP-2 MD5
- RFC 2460 IPv6 Specification
- RFC 2464 Transmission of IPv6 over Ethernet Networks
- RFC 2710 Multicast Listener Discovery (MLD) for IPv6
- RFC 2925 Definitions of Managed Objects for Remote Ping, Traceroute, and Lookup Operations (Ping only)
- RFC 2925 Remote Operations MIB (Ping only)
- RFC 3019 MLDv1 MIB
- RFC 3315 DHCPv6 (client and relay)
- RFC 3484 Default Address Selection for IPv6
- RFC 3513 IPv6 Addressing Architecture

Technical Specifications

- RFC 3596 DNS Extension for IPv6
- RFC 3810 MLDv2 for IPv6
- RFC 4022 MIB for TCP
- RFC 4113 MIB for UDP
- RFC 4251 SSHv6 Architecture
- RFC 4252 SSHv6 Authentication
- RFC 4253 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 4541 IGMP & MLD Snooping Switch
- RFC 4861 IPv6 Neighbor Discovery
- RFC 4862 IPv6 Stateless Address Auto-configuration
- RFC 5095 Deprecation of Type 0 Routing Headers in IPv6
- RFC 6620 FCFS SAVI
- draft-ietf-savi-mix

MIBs

- IEEE 802.1ap (MSTP and STP MIB's only)
- IEEE 8021-Bridge-MIB (2008)
- IEEE 8021-Q-Bridge-MIB (2008)
- RFC 1155 Structure & ID of Mgmt Info for TCP/IP Internets
- RFC 1156 (TCP/IP MIB)
- RFC 1157 A Simple Network Management Protocol (SNMP)
- RFC 1213 MIB II
- RFC 1493 Bridge MIB
- RFC 1724 RIPv2 MIB
- RFC 2021 RMONv2 MIB
- RFC 2578 Structure of Management Information Version 2 (SMIv2)
- RFC 2579 Textual Conventions for SMIv2
- RFC 2580 Conformance Statements for SMIv2
- RFC 2613 SMON MIB
- RFC 2618 RADIUS Client MIB
- RFC 2620 RADIUS Accounting 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 2819 RMON MIB
- RFC 2863 The Interfaces Group MIB
- RFC 2925 Ping MIB
- RFC 2932 IP (Multicast Routing MIB)
- RFC 2933 IGMP MIB
- RFC 3414 SNMP-User based-SM MIB
- RFC 3415 SNMP-View based-ACM MIB
- RFC 3417 Simple Network Management Protocol (SNMP) over IEEE 802 Networks
- RFC 3418 MIB for SNMPv3
- RFC 4836 Managed Objects for 802.3 Medium Attachment Units (MAU)

Network Management

- IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
- RFC 1155 Structure of Management Information
- RFC 1157 SNMPv1
- RFC 2021 Remote Network Monitoring Management Information Base Version 2 using SMIv2
- RFC 2576 Coexistence between SNMP versions
- RFC 2578 Structure of Management Information Version 2 (SMIv2)

Technical Specifications

- RFC 2579 Textual Conventions for SMIv2
- RFC 2580 Conformance Statements for SMIv2
- RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events)
- RFC 2819 Remote Network Monitoring Management Information Base
- RFC 2856 Textual Conventions for Additional High Capacity Data Types
- RFC 2925 Definitions of Managed Objects for Remote Ping, Traceroute, and Lookup Operations
- RFC 3164 BSD syslog Protocol
- RFC 3176 sFlow
- 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 (LLDPMED)
- SNMPv1/v2c/v3
- XRMON

QoS/CoS
- IEEE 802.1p (CoS)
- RFC 2474 DiffServ Precedence, including 8 queues/port
- RFC 2475 DiffServ Architecture
- RFC 2597 DiffServ Assured Forwarding (AF)
- RFC 2598 DiffServ Expedited Forwarding (EF)
- Ingress Rate Limiting

Security
- IEEE 802.1X Port Based Network Access Control
- RFC 1321 The MD5 Message-Digest Algorithm
- RFC 1334 PPP Authentication Protocols (PAP)
- RFC 1492 An Access Control Protocol, Sometimes Called TACACS
- RFC 1492 TACACS+
- RFC 1994 PPP Challenge Handshake Authentication Protocol (CHAP)
- RFC 2082 RIP-2 MD5 Authentication
- RFC 2104 Keyed-Hashing for Message Authentication
- RFC 2138 RADIUS Authentication
- RFC 2139 RADIUS Accounting
- RFC 2246 Transport Layer Security (TLS)
- RFC 2548 Microsoft Vendor-specific RADIUS Attributes
- RFC 2618 RADIUS Authentication Client MIB
- RFC 2620 RADIUS Accounting Client MIB
- RFC 2716 PPP EAP TLS Authentication Protocol
- RFC 2818 HTTP Over TLS
- RFC 2865 RADIUS (client only)
- RFC 2865 RADIUS Authentication
- RFC 2866 RADIUS Accounting
- RFC 2867 RADIUS Accounting Modifications for Tunnel Protocol Support
- RFC 2868 RADIUS Attributes for Tunnel Protocol Support
- RFC 2869 RADIUS Extensions
- RFC 2882 NAS Requirements: Extended RADIUS Practices
- RFC 3162 RADIUS and IPv6
- RFC 3576 Dynamic Authorization Extensions to RADIUS
- RFC 3579 RADIUS Support For Extensible Authentication Protocol (EAP)

Technical Specifications

- RFC 3580 IEEE 802.1X RADIUS
- RFC 3580 IEEE 802.1X Remote Authentication Dial In User Service (RADIUS) Usage Guidelines
- RFC 4576 RADIUS Attributes
- Access Control Lists (ACLs)
- draft-grant-tacacs-02 (TACACS)
- Guest VLAN for 802.1X
- MAC Authentication
- MAC Lockdown
- MAC Lockout
- Port Security
- Secure Sockets Layer (SSL)
- SSHv2 Secure Shell
- Web Authentication

Refer to Hewlett Packard Enterprise website **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 2930M Switch Series accessories

Modules

Aruba 2930 2-port Stacking Module	JL325A
Aruba 3810M/2930M 1-port QSFP+ 40GbE Module	JL078A
Aruba 3810M/2930M 4-port 100M/1G/10G SFP+ MACsec Module	JL083A
Aruba 3810M 4 HPE Smart Rate PoE+ Module	JL081A

Transceivers

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
HPE X142 40G QSFP+ MPO SR4 Transceiver	JH231A
HPE X142 40G QSFP+ LC LR4 SM Transceiver	JH232A
HPE X142 40G QSFP+ MPO eSR4 300M Transceiver	JH233A
Aruba 40G QSFP+ LC Bidirectional 150m MMF 2-strand Transceiver	JL308A
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
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 X122 1G SFP LC BX-D Transceiver	J9142B
HPE X122 1G SFP LC BX-U Transceiver	J9143B

Stacking Cables

Aruba 2920/2930M 0.5m Stacking Cable	J9734A

Acessories

Aruba 2920/2930M 1m Stacking Cable   J9735A
Aruba 2920/2930M 3m Stacking Cable   J9736A

Power Supplies
Aruba X371 12VDC 250W 100-240VAC Power Supply   JL085A
Aruba X372 54VDC 680W 100-240VAC Power Supply   JL086A
Aruba X372 54VDC 1050W 110-240VAC Power Supply   JL087A

Mounting Kit
HPE X410 1U Universal 4-post Rackmount Kit   J9583A

Cables
Aruba X2C2 RJ45 to DB9 Console Cable   JL448A
HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 1m Cable   QK732A
HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 2m Cable   QK733A
HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 5m Cable   QK734A
HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 15m Cable   QK735A
HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 30m Cable   QK736A
HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 50m Cable   QK737A

Summary of Changes

Date	Version History	Action	Description of Change
07-Aug-2017	From Version 2 to 3	Added	SKU added: JL308A
03-Jul-2017	From Version 1 to 2	Added	SKU added: JL448A
01-May-2017	Version 1	Created	Document creation.

f 🐦 in ✉

Sign up for updates

Hewlett Packard Enterprise

To learn more, visit**: http://www.hpe.com/networking**

a00004551 - 15887 - Worldwide – V3 – 07-August-2017