

Overview

Aruba 2540 Switch Series

Models

Aruba 2540 24G 4SFP+ Switch	JL354A
Aruba 2540 48G 4SFP+ Switch	JL355A
Aruba 2540 24G PoE+ 4SFP+ Switch	JL356A
Aruba 2540 48G PoE+ 4SFP+ Switch	JL357A



Key Features

- Aruba Layer 2 switch series with Static and RIP routing, ACLs and robust QoS
- Advanced security and network management tools like Aruba ClearPass Policy Manager and Aruba Airwave
- Simple deployment with Zero Touch Provisioning and cloud-based Aruba Central support
- Convenient built-in 10GbE uplinks and up to 370W PoE+
- Limited Lifetime Warranty

Product overview

Designed for the digital workplace, the Aruba 2540 Switch Series is optimized for mobile users. With advanced security and network management tools — Aruba ClearPass Policy Manager and Aruba AirWave — this Layer 2 access switch is easy to deploy and manage. With support from Aruba Central, you can quickly set up remote branch sites with little or no IT support. A powerful Aruba ProVision ASIC delivers performance, robust feature support and value with flexible programmability for future applications.

The Aruba 2540 Switch Series provides a convenient and cost-effective wired access solution that can be quickly set up with Zero Touch Provisioning. PoE+ models deliver power across all access ports for wireless APs, security cameras and IoT devices. The 2540 has wire speed backhaul bandwidth capacity with built-in 10GbE uplinks, robust QoS, static & RIP routing, IPv6 and includes a limited lifetime warranty with no software licensing required.

Overview

Features and Benefits

Unified Wired and Wireless

- **ClearPass Policy Manager support**
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 configuration or ClearPass
- **HTTP redirect function**
supports HPE Intelligent Management Center (IMC) bring your own device (BYOD) solution
- **Static IP Visibility**
provides a way for ClearPass to do accounting for clients with static IP address

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

- **Flexible 10 Gb/s Ethernet connectivity**
four fixed 10 Gigabit ports (SFP+) 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

Overview

- **Security**
provides RA guard, DHCPv6 protection, dynamic IPv6 lockdown, and ND snooping

Performance

- **Energy-efficient design**
 - **80 PLUS Silver Certified power supply:**
increases power efficiency and savings
 - **Energy-efficient Ethernet (EEE) support**
reduces power consumption in accordance with IEEE 802.3az
- **Aruba ProVision ASIC architecture**
is designed with the latest Aruba ProVision 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

Convergence

- **IP multicast snooping and data-driven IGMP**
automatically prevent flooding of IP multicast traffic
- **IEEE 802.1AB Link Layer Discovery Protocol (LLDP)**
facilitates easy mapping using network management applications with LLDP automated device discovery protocol
- **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
- **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

Resiliency and high availability

- **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

Management

- **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
- **Zero-Touch ProVisioning (ZTP)**
simplifies installation of the switch infrastructure using the Aruba Activate-based or a DHCP-based process with AirWave Network Management
- **Aruba Central support**
cloud based management platform offers simple, secure, and cost effective way to manage switches

Overview

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
- **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
- **Uni-Directional 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
- **IP SLA for voice**
monitor quality of voice traffic using the UDP Jitter and UDP Jitter for VoIP tests.

Layer 2 switching

- **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
- **VLAN support and tagging**
supports IEEE 802.1Q (4094 VLAN IDs) and 512 VLANs simultaneously

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 2,000 RIP route**
facilitate segregation of user data, without adding external hardware
- **Routing Information Protocol (RIP)**
provides RIPv1, RIPv2, and RIPv3 routing

Security

- **Multiple user authentication methods**
 - IEEE 802.1X

Overview

- 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
- **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
- **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
- **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
- **Dynamic IP lockdown**
 - works with DHCP protection to block traffic from unauthorized hosts, preventing IP source address spoofing
- **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

Monitor and diagnostics

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

Warranty and support

Overview

- **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 2540 24G 4SFP+ Switch

- 24 RJ-45 autosensing 10/100/1000 ports
- 4 SFP/SFP+ 1G/10G ports
- min=0 \\ max=4 SFP/SFP+ Transceivers
- 1U - Height

JL354A
See Configuration
NOTE: 1, 2, 3

PDU Cable NA/MEX/TW/JP

- HPE 2.0m C13 to C14 PDU Pwr Cord (J9959A)

JL354A #B2B

PDU CABLE ROW

- HPE 2.0m C13 to C14 PDU Pwr Cord (J9959A)

JL354A #B2C

High Volt Switch to Wall Power Cord

- HPE 2.3m C13 to NEMA 6-15P Pwr Cord(J9936A)

JL354A #B2E

No Power Cord

- No Localized Power Cord Selected

JL354A #AC3

Aruba 2540 48G 4SFP+ Switch

- 48 RJ-45 autosensing 10/100/1000 ports
- 4 SFP/SFP+ 1G/10G ports
- min=0 \\ max=4 SFP/SFP+ Transceivers
- 1U - Height

JL355A
See Configuration
NOTE: 1, 2, 3

PDU Cable NA/MEX/TW/JP

- HPE 2.0m C13 to C14 PDU Pwr Cord (J9959A)

JL355A#B2B

PDU CABLE ROW

- HPE 2.0m C13 to C14 PDU Pwr Cord (J9959A)

JL355A#B2C

High Volt Switch to Wall Power Cord

- HPE 2.3m C13 to NEMA 6-15P Pwr Cord(J9936A)

JL355A#B2E

No Power Cord

- No Localized Power Cord Selected

JL355A#AC3

Configuration

Aruba 2540 24G PoE+ 4SFP+ Switch	JL356A
<ul style="list-style-type: none"> • 24 RJ-45 PoE+ autosensing 10/100/1000 ports • 4 SFP/SFP+ 1G/10G ports • min=0 \\ max=4 SFP/SFP+ Transceivers • 1U - Height 	See Configuration NOTE: 1, 2, 3
PDU Cable NA/MEX/TW/JP	JL356A#B2B
<ul style="list-style-type: none"> • HPE 2.0m C13 to C14 PDU Pwr Cord (J9959A) 	
PDU CABLE ROW	JL356A#B2C
<ul style="list-style-type: none"> • HPE 2.0m C13 to C14 PDU Pwr Cord (J9959A) 	
High Volt Switch to Wall Power Cord	JL356A#B2E
<ul style="list-style-type: none"> • HPE 2.3m C13 to NEMA 6-15P Pwr Cord(J9936A) 	
No Power Cord	JL356A#AC3
Aruba 2540 48G PoE+ 4SFP+ Switch	JL357A
<ul style="list-style-type: none"> • 24 RJ-45 PoE+ autosensing 10/100/1000 ports • 4 SFP/SFP+ 1G/10G ports • min=0 \\ max=4 SFP/SFP+ Transceivers • 1U - Height 	See Configuration NOTE: 1, 2, 3
PDU Cable NA/MEX/TW/JP	JL357A#B2B
<ul style="list-style-type: none"> • HPE 2.0m C13 to C14 PDU Pwr Cord (J9959A) 	
PDU CABLE ROW	JL357A#B2C
<ul style="list-style-type: none"> • HPE 2.0m C13 to C14 PDU Pwr Cord (J9959A) 	
High Volt Switch to Wall Power Cord	JL357A#B2E
<ul style="list-style-type: none"> • HPE 2.3m C13 to NEMA 6-15P Pwr Cord(J9936A) 	
No Power Cord	JL357A#AC3

Configuration Rules

NOTE 1 The following Transceivers install into this Module Switch:

HPE X111 100M SFP LC FX Transceiver	J9054C
HPE X121 1G SFP LC LH Transceiver	J4860C
HPE X121 1G SFP LC LX Transceiver	J4859C
HPE X121 1G SFP LC SX Transceiver	J4858C
HPE X121 1G SFP RJ45 T Transceiver	J8177C

Configuration

NOTE 2 The following Transceivers install into this Switch (Use #0D1 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 X242 10G SFP+ to SFP+ 1m DAC Cable	J9281B
HPE X242 10G SFP+ to SFP+ 3m DAC Cable	J9283B

Rack Level Integration CTO Models

Aruba 2540 24G 4SFP+ Switch

- 24 RJ-45 autosensing 10/100/1000 ports
- 4 SFP/SFP+ 1G/10G ports
- min=0 \ max=4 SFP/SFP+ Transceivers
- 1U - Height

JL354A

See Configuration

NOTE: 1, 2, 3, 4, 5

PDU Cable NA/MEX/TW/JP

- HPE 2.0m C13 to C14 PDU Pwr Cord (J9959A)

JL354A #B2B

PDU CABLE ROW

- HPE 2.0m C13 to C14 PDU Pwr Cord (J9959A)

JL354A #B2C

High Volt Switch to Wall Power Cord

- HPE 2.3m C13 to NEMA 6-15P Pwr Cord(J9936A)

JL354A #B2E

No Power Cord

- No Localized Power Cord Selected

JL354A #AC3

Aruba 2540 48G 4SFP+ Switch

- 48 RJ-45 autosensing 10/100/1000 ports
- 4 SFP/SFP+ 1G/10G ports
- min=0 \ max=4 SFP/SFP+ Transceivers
- 1U - Height

JL355A

See Configuration

NOTE: 1, 2, 3, 4, 5

PDU Cable NA/MEX/TW/JP

- HPE 2.0m C13 to C14 PDU Pwr Cord (J9959A)

JL355A#B2B

PDU CABLE ROW

- HPE 2.0m C13 to C14 PDU Pwr Cord (J9959A)

JL355A#B2C

High Volt Switch to Wall Power Cord

- HPE 2.3m C13 to NEMA 6-15P Pwr Cord(J9936A)

JL355A#B2E

Configuration

No Power Cord	JL355A#AC3
<ul style="list-style-type: none"> No Localized Power Cord Selected 	
Aruba 2540 24G PoE+ 4SFP+ Switch	JL356A
<ul style="list-style-type: none"> 24 RJ-45 PoE+ autosensing 10/100/1000 ports 4 SFP/SFP+ 1G/10G ports min=0 \\ max=4 SFP/SFP+ Transceivers 1U - Height 	See Configuration NOTE: 1, 2, 3, 4, 5
PDU Cable NA/MEX/TW/JP	JL356A#B2B
<ul style="list-style-type: none"> HPE 2.0m C13 to C14 PDU Pwr Cord (J9959A) 	
PDU CABLE ROW	JL356A#B2C
<ul style="list-style-type: none"> HPE 2.0m C13 to C14 PDU Pwr Cord (J9959A) 	
High Volt Switch to Wall Power Cord	JL356A#B2E
<ul style="list-style-type: none"> HPE 2.3m C13 to NEMA 6-15P Pwr Cord(J9936A) 	
No Power Cord	JL356A#AC3
Aruba 2540 48G PoE+ 4SFP+ Switch	JL357A
<ul style="list-style-type: none"> 24 RJ-45 PoE+ autosensing 10/100/1000 ports 4 SFP/SFP+ 1G/10G ports min=0 \\ max=4 SFP/SFP+ Transceivers 1U - Height 	See Configuration NOTE: 1, 2, 3, 4, 5
PDU Cable NA/MEX/TW/JP	JL357A#B2B
<ul style="list-style-type: none"> HPE 2.0m C13 to C14 PDU Pwr Cord (J9959A) 	
PDU CABLE ROW	JL357A#B2C
<ul style="list-style-type: none"> HPE 2.0m C13 to C14 PDU Pwr Cord (J9959A) 	
High Volt Switch to Wall Power Cord	JL357A#B2E
<ul style="list-style-type: none"> HPE 2.3m C13 to NEMA 6-15P Pwr Cord(J9936A) 	
No Power Cord	JL357A#AC3

Configuration Rules

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

HPE X111 100M SFP LC FX Transceiver

J9054C

Configuration

HPE X121 1G SFP LC LH Transceiver	J4860C
HPE X121 1G SFP LC LX Transceiver	J4859C
HPE X121 1G SFP LC SX Transceiver	J4858C
HPE X121 1G SFP RJ45 T Transceiver	J8177C

NOTE 2 The following Transceivers install into this Switch (Use #0D1 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 X242 10G SFP+ to SFP+ 1m DAC Cable	J9281B
HPE X242 10G SFP+ to SFP+ 3m DAC Cable	J9283B

NOTE 3 If this switch is factory installed in HPE Racks, Then the J9583A#0D1 is required.
CLIC Only - Allow the J9583AZ in all regions.

NOTE 4 Localization required on orders without #B2B, #B2C, #B2E options.

NOTE 5 If this Switch Chassis is selected for Rack Level Integration, Then the Switch Chassis needs to integrate (with #0D1) to the HPE Rack.

Remarks Drop down under power supply should offer the following options and results:
Switch/Router/Power Supply to PDU Power Cord - #B2B in North America, Mexico, Taiwan, and Japan or #B2C ROW. (Watson Default B2B or B2C for Rack Level CTO)
Switch/Router/Power Supply to Wall Power Cord - Localized Option (Watson Default for BTO and Box Level CTO)
No Power Cord - #AC3

Transceivers

SFP Transceivers

HPE X111 100M SFP LC FX Transceiver	J9054C
HPE X121 1G SFP LC LH Transceiver	J4860C
HPE X121 1G SFP LC LX Transceiver	J4859C
HPE X121 1G SFP LC SX Transceiver	J4858C
HPE X121 1G SFP RJ45 T Transceiver	J8177C

SFP+ Transceivers

HPE X132 10G SFP+ LC ER Transceiver	J9153A
HPE X132 10G SFP+ LC SR Transceiver	J9150A
HPE X132 10G SFP+ LC LR Transceiver	J9151A
HPE X242 10G SFP+ to SFP+ 1m Direct Attach Copper Cable	J9281B
HPE X242 10G SFP+ to SFP+ 3m Direct Attach Copper Cable	J9283B

Cables

Multi-Mode Cables

Configuration

HPE LC to LC Multi-mode OM3 2-Fiber 0.5m 1-Pack Fiber Optic Cable	AJ833A
HPE LC to LC Multi-mode OM3 2-Fiber 1.0m 1-Pack Fiber Optic Cable	AJ834A
HPE LC to LC Multi-mode OM3 2-Fiber 2.0m 1-Pack Fiber Optic Cable	AJ835A
HPE LC to LC Multi-mode OM3 2-Fiber 5.0m 1-Pack Fiber Optic Cable	AJ836A
HPE LC to LC Multi-mode OM3 2-Fiber 15.0m 1-Pack Fiber Optic Cable	AJ837A
HPE LC to LC Multi-mode OM3 2-Fiber 30.0m 1-Pack Fiber Optic Cable	AJ838A
HPE LC to LC Multi-mode OM3 2-Fiber 50.0m 1-Pack Fiber Optic Cable	AJ839A
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

Switch Enclosure Options

Mounting Kit

(std 0 // max 1) User Selection (min 0 // max 1) per switch

HPE X410 1U Universal 4-post Rackmount Kit

J9583A
See Configuration

NOTE: 1

Configuration Rules

NOTE 1 If this Mounting Kit is order with #OD1 then it integrates to the HPE Universal Rack.
(not the switch)

Technical Specifications

Aruba 2540 24G 4SFP+ Switch (JL354A)

I/O ports and slots	24 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only 4 SFP+ 1/10GbE ports; PHY-less	
Additional ports and slots	1 dual-personality (RJ-45 or USB micro-B) serial console port	
Physical characteristics	Dimensions	17.42(w) x 7.88(d) x 1.73(h) in (44.25 x 20.02 x 4.39 cm) (1U height)
	Weight	5.31 lb (2.41 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, 4 GB eMMC	
Performance	1000 Mb Latency	< 3.8 μ s (64-byte packets)
	10 Gbps Latency	< 1.6 μ s (64-byte packets)
	Throughput	up to 95.2 Mpps
	Switching capacity	128 Gbps
	Routing table size	2000 entries (IPv4), 1000 entries (IPv6)
	MAC address table size	16384 entries
Environment	Operating temperature	32°F to 113°F (0°C to 45°C); up to 5000 Feet, - 0C to 40C (32F to 104F) up to 10000 Feet
	Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C); up to 15000 Feet
	Non-operating/ Storage relative humidity	15% to 95% @ 149°F (65°C)
	Acoustic	Power: 49.7 dB, Pressure: 37.1 dB
	Airflow direction	Side-to-side
Electrical characteristics	Frequency	50/60 Hz
	Maximum heat dissipation	100 BTU/hr (105.5 kJ/hr)
	Voltage	100 - 127 / 200 - 240 VAC, rated
	Current	0.6/0.4 A
	Maximum power rating	29.3 W
	Idle power	19.5 W
	NOTES	Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated
Safety	UL 60950-1 2nd Edition; EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011+A2:2013; IEC 60950-1:2005 +A1:2009 +A2:2013; CSA 22.2 No. 60950-1-07 2nd; EN 60825-1:2007 / 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

Technical Specifications

	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 or micro USB)	
Services	Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.	

Aruba 2540 48G 4SFP+ Switch (JL355A)

I/O ports and slots	48 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only 4 SFP+ 1/10GbE ports; PHY-less	
Additional ports and slots	1 dual-personality (RJ-45 or USB micro-B) serial console port	
Physical characteristics	Dimensions	17.42(w) x 9.7(d) x 1.73(h) in (44.25 x 24.63 x 4.39 cm) (1U height)
	Weight	6.83 lb (3.10 kg)
Memory and processor	Dual Core ARM Cortex A9 @ 1016 MHz, 1 GB DDR3 SDRAM; Packet buffer size: 12.38 GB 4.5MB Ingress/7.875MB Egress, 4 GB eMMC	
Performance	1000 Mb Latency	< 3.8 μ s (64-byte packets)
	10 Gbps Latency	< 1.6 μ s (64-byte packets)
	Throughput	up to 112.0 Mpps
	Switching capacity	176 Gbps
	Routing table size	2000 entries (IPv4), 1000 entries (IPv6)
	MAC address table size	16384 entries
Environment	Operating temperature	32°F to 113°F (0°C to 45°C); up to 5000 Feet, - 0C to 40C (32F to 104F) up to 10000 Feet
	Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C); up to 15000 Feet
	Non-operating/ Storage relative humidity	15% to 95% @ 149°F (65°C)
	Acoustic	Power: 54.1 dB, Pressure: 40.2 dB
	Airflow direction	Side-to-side
Electrical characteristics	Frequency	50/60 Hz
	Maximum heat dissipation	159 BTU/hr (167.74 kJ/hr)
	Voltage	100 - 127 / 200 - 240 VAC, rated

Technical Specifications

	Current	0.9/0.6 A
	Maximum power rating	46.6 W
	Idle power	32.7 W
	NOTES	Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated
Safety	UL 60950-1 2nd Edition; EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011+A2:2013; IEC 60950-1:2005 +A1:2009 +A2:2013; CSA 22.2 No. 60950-1-07 2nd; EN 60825-1:2007 / 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 or micro USB)	
Services	Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.	

Aruba 2540 24G PoE+ 4SFP+ Switch (JL356A)

I/O ports and slots	24 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only 4 SFP+ 1/10GbE ports; PHY-less	
Additional ports and slots	1 dual-personality (RJ-45 or USB micro-B) serial console port	
Physical characteristics	Dimensions	17.42(w) x 11.98(d) x 1.73(h) in (44.25 x 30.42 x 4.39 cm) (1U height)
	Weight	8.6 lb (3.9 kg)
Memory and processor	Dual Core ARM Cortex A9 @ 1016 MHz, 1 GB DDR3 SDRAM; Packet buffer size: 12.38 MB 4.5MB Ingress/7.785 Egress, 4 GB eMMC	
Performance	1000 Mb Latency	< 3.8 μ s (64-byte packets)
	10 Gbps Latency	< 1.6 μ s (64-byte packets)

Technical Specifications

	Throughput	up to 95.2 Mpps
	Switching capacity	128 Gbps
	Routing table size	2000 entries (IPv4), 1000 entries (IPv6)
	MAC address table size	16384 entries
Environment	Operating temperature	32°F to 113°F (0°C to 45°C); up to 5000 Feet, - 0C to 40C (32F to 104F) up to 10000 Feet
	Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C); up to 15000 Feet
	Non-operating/ Storage relative humidity	15% to 95% @ 149°F (65°C)
	Acoustic	Power: 54.1 dB, Pressure: 40.6 dB
	Airflow direction	Side-to-side
Electrical characteristics	Frequency	50/60 Hz
	80plus.org Certification	Silver
	Maximum heat dissipation	1518 BTU/hr (1601.49 kJ/hr)
	Voltage	100 - 127 / 200 - 240 VAC, rated
	Current	4.9/2.4 A
	Maximum power rating	445 W
	Idle power	36.8 W
	PoE power	370 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
Safety		UL 60950-1 2nd Edition; EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011+A2:2013; IEC 60950-1:2005 +A1:2009 +A2:2013; CSA 22.2 No. 60950-1-07 2nd; EN 60825-1:2007 / 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 or micro USB)
Services		Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for

Technical Specifications

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 2540 48G PoE+ 4SFP+ Switch (JL357A)

I/O ports and slots	48 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only 4 SFP+ 1/10GbE ports; PHY-less	
Additional ports and slots	1 dual-personality (RJ-45 or USB micro-B) serial console port	
Physical characteristics	Dimensions	17.42(w) x 11.98(d) x 1.73(h) in (44.25 x 30.42 x 4.39 cm) (1U height)
	Weight	9.83 lb (4.46 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, 4 GB eMMC	
Performance	1000 Mb Latency	< 3.8 μ s (64-byte packets)
	10 Gbps Latency	< 1.6 μ s (64-byte packets)
	Throughput	up to 112.0 Mpps
	Switching capacity	176 Gbps
	Routing table size	2000 entries (IPv4), 1000 entries (IPv6)
	MAC address table size	16384 entries
Environment	Operating temperature	32°F to 113°F (0°C to 45°C); up to 5000 Feet, - 0C to 40C (32F to 104F) up to 10000 Feet
	Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C); up to 15000 Feet
	Non-operating/ Storage relative humidity	15% to 95% @ 149°F (65°C)
	Acoustic	Power: 55.7 dB, Pressure: 41.7 dB
	Airflow direction	Side-to-side
Electrical characteristics	Frequency	50/60 Hz
	80plus.org Certification	Silver
	Maximum heat dissipation	1566 BTU/hr (1652.13 kJ/hr)
	Voltage	100 - 127 / 200 - 240 VAC, rated
	Current	5.1/2.5 A
	Maximum power rating	459 W
	Idle power	48.6 W
	PoE power	370 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
Safety	UL 60950-1 2nd Edition; EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011+A2:2013; IEC 60950-1:2005 +A1:2009 +A2:2013; CSA 22.2 No. 60950-1-07 2nd; EN 60825-1:2007 / IEC 60825-1:2007 Class 1	

Technical Specifications

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 or micro USB)	
Services	Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.	

Standards and protocols (applies to all products in series)

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

Technical Specifications

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 802.3x 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
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

Technical Specifications

RFC 2710 Multicast Listener Discovery (MLD) for IPv6
RFC 3376 IGMPv3
RFC 4541 Considerations for Internet Group Management Protocol (IGMP) and Multicast Listener Discovery (MLD) Snooping Switches

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
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

Technical Specifications

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)
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 (LLDP-MED)
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

Technical Specifications

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)
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

Accessories

Aruba 2540 Switch Series accessories

Transceivers

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 X132 10G SFP+ LC SR Transceiver	J9150A
HPE X132 10G SFP+ LC LR Transceiver	J9151A
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	J9283A

Cables

HPE LC to LC Multi-mode OM3 2-Fiber 0.5m 1-Pack Fiber Optic Cable	AJ833A
HPE LC to LC Multi-mode OM3 2-Fiber 1.0m 1-Pack Fiber Optic Cable	AJ834A
HPE LC to LC Multi-mode OM3 2-Fiber 2.0m 1-Pack Fiber Optic Cable	AJ835A
HPE LC to LC Multi-mode OM3 2-Fiber 5.0m 1-Pack Fiber Optic Cable	AJ836A
HPE LC to LC Multi-mode OM3 2-Fiber 15.0m 1-Pack Fiber Optic Cable	AJ837A
HPE LC to LC Multi-mode OM3 2-Fiber 30.0m 1-Pack Fiber Optic Cable	AJ838A
HPE LC to LC Multi-mode OM3 2-Fiber 50.0m 1-Pack Fiber Optic Cable	AJ839A
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

Mounting Kit

HPE X410 1U Universal 4-post Rackmount Kit	J9583A
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Summary of Changes

Date	Version History	Action	Description of Change
17-Feb-2017	From Version 1 to 2	Changed	Accessories updated
07-Nov-2016	Version 1	Created	Document Creation



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