Overview

Models

HP 2920-24G Switch	J9726A
HP 2920-24G-PoE+ Switch	J9727A
HP 2920-48G Switch	J9728A
HP 2920-48G-PoE+ Switch	J9729A
HP 2920-48G-PoE+ 740W Switch	J9836A
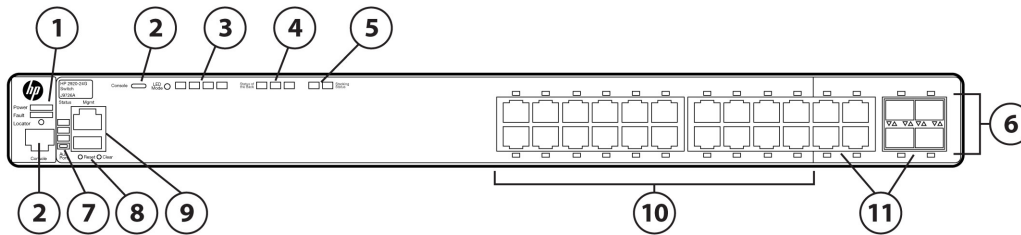
HP 2920-24G Switch

1. Power, Fault, and Locator LEDs
2. Console ports
3. LED Mode button and indicator LEDs
4. Status LEDs for components on the back of the switch
5. Stacking status LEDs
6. Switch port LEDs

7. PoE, Tmp (Temperature), Test, Fan, and Aux (Auxiliary) port status LED
8. Reset and Clear buttons
9. Aux port and Out-of-Band Management port
10. 10/100/1000BASE-T PoE+ RJ-45 ports
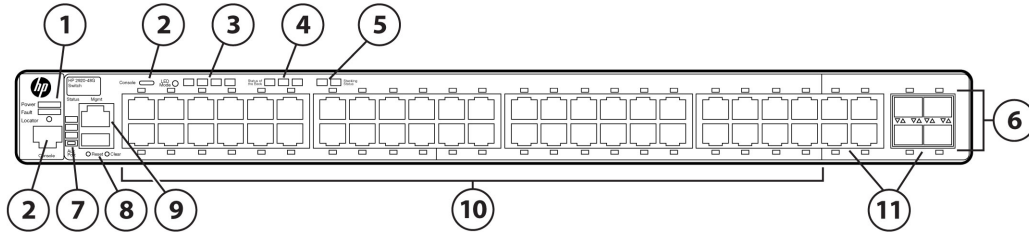11. Dual-Personality (10/100/1000BASE-T or SFP) ports
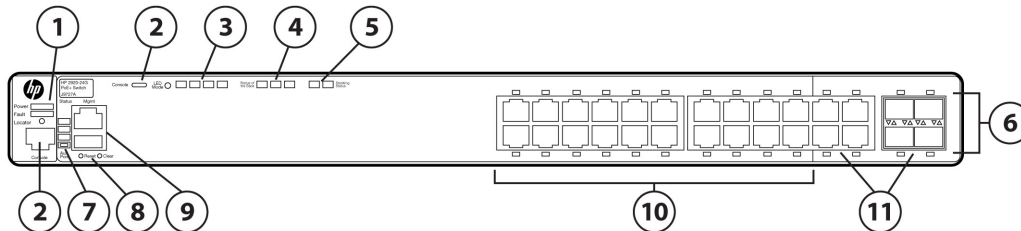
HP 2920-24G-PoE+ Switch

1. Power, Fault, and Locator LEDs
2. Console ports
3. LED Mode button and indicator LEDs
4. Status LEDs for components on the back of the switch

7. PoE, Tmp (Temperature), Test, Fan, and Aux (Auxiliary) port status LED
8. Reset and Clear buttons
9. Aux port and Out-of-Band Management port
10. 10/100/1000BASE-T PoE+ RJ-45 ports

Overview

5. Stacking status LEDs
6. Switch port LEDs

11. Dual-Personality (10/100/1000BASE-T or SFP) ports

HP 2920-48G Switch

1. Power, Fault, and Locator LEDs

2. Console ports
3. LED Mode button and indicator LEDs
4. Status LEDs for components on the back of the switch
5. Stacking status LEDs
6. Switch port LEDs

7. PoE, Tmp (Temperature), Test, Fan, and Aux (Auxiliary) port status LED
8. Reset and Clear buttons
9. Aux port and Out-of-Band Management port
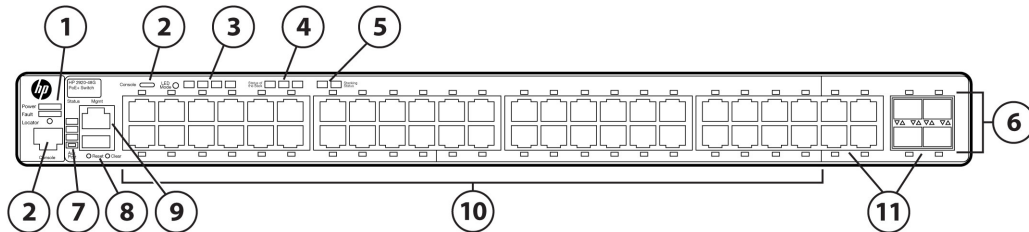10. 10/100/1000BASE-T PoE+ RJ-45 ports
11. Dual-Personality (10/100/1000BASE-T or SFP) ports

**HP 2920-48G-PoE+ Switch**
HP 2920-48G-PoE+ 740W Switch

1. Power, Fault, and Locator LEDs

2. Console ports
3. LED Mode button and indicator LEDs
4. Status LEDs for components on the back of the switch
5. Stacking status LEDs
6. Switch port LEDs

7. PoE, Tmp (Temperature), Test, Fan, and Aux (Auxiliary) port status LED
8. Reset and Clear buttons
9. Aux port and Out-of-Band Management port
10. 10/100/1000BASE-T PoE+ RJ-45 ports
11. Dual-Personality (10/100/1000BASE-T or SFP) ports
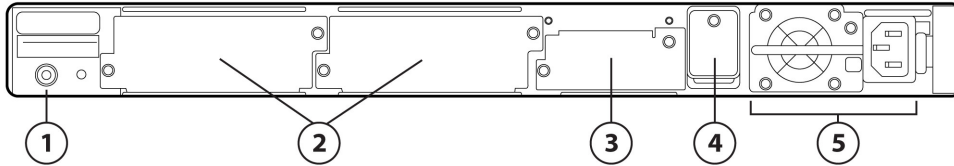
HP 2920 Switch Series Rear (All)

1. Grounding lug mounting hole
2. 10G Expansion Module slots
3. Stacking Module Slot
4. XPS Connector
5. Power Supply and AC power connector

Product overview

The HP 2920 Switch Series consists of five switches: the HP 2920-24G and 2920-24G-PoE+ Switches with 24 10/100/1000 ports, and the HP 2920-48G and 2920-48G-PoE+ and 2920-48G 740W PoE+ Switches with 48 10/100/1000 ports. Each switch has four dual-personality ports for 10/100/1000 or SFP connectivity.

In addition, the 2920 switch series supports up to four optional 10 Gigabit Ethernet (SFP+ and/or 10GBASE-T) ports, as well as a two-port stacking module. These options provide you with flexible and easy-to-deploy uplinks and stacking.

Together with static and RIP routing, robust security and management, enterprise-class features, free lifetime warranty, and free software updates, the 2920 switch series is a cost-effective, scalable solution for customers who are building high-performance networks. These switches can be deployed at the enterprise edge, in remote branch offices, and in converged networks.

Key Features

- High-performance Gigabit Ethernet access switch
- Four optional 10GbE (SFP+ and/or 10GBASE-T) ports
- Stacking capability with a total of four switches
- Layer 2 and Layer 3 plus static and RIP routing, PoE, and PoE+ support
- Lifetime warranty, sFlow, ACLs, OpenFlow, and rate limiting

Features and Benefits

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

Overview

- **Large buffers**
  provide graceful congestion management

Connectivity

- **Flexible 10 Gbps Ethernet connectivity**
  up to four optional 10-Gigabit ports (SFP+ and/or 10GBASE-T)
- **Two-port stacking module with up to 40 Gbps/port**
  optional two-port stacking module allows stacking of up to four switch units into a single virtual device
- **Auto-MDIX**
  automatically adjusts for straight-through or crossover cables on all 10/100 and 10/100/1000 ports
- **IPv6**
  - **IPv6 host**
    allows the switches to be managed and deployed at the edge of IPv6 networks
  - **Dual stack (IPv4/IPv6)**
    provides transition mechanism from IPv4 to IPv6; supports connectivity for both protocols
  - **MLD snooping**
    forwards IPv6 multicast traffic to the appropriate interface; prevents IPv6 multicast traffic from flooding the network
- **IEEE 802.3at Power over Ethernet (PoE+)**
  provide 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
- **Dual-personality functionality**
  includes four 10/100/1000 ports or SFP slots for optional fiber connectivity such as Gigabit-SX, -LX, and -LH, or 100-FX

Performance

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

Software-defined networking

- **NEW OpenFlow**
  supports OpenFlow 1.0 and 1.3 specifications to enable SDN by allowing separation of the data (packet forwarding) and control (routing decision) paths

Convergence

- **IP multicast snooping and data-driven IGMP**
  automatically prevent flooding of IP multicast traffic

Overview

- **LLDP-MED (Media Endpoint Discovery)**
  defines a standard extension of LLDP that stores values for parameters such as QoS and VLAN to automatically configure network devices such as IP phones
- **IEEE 802.1AB Link Layer Discovery Protocol (LLDP)**
  is an automated device discovery protocol that provides easy mapping of network management applications
- **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 HP port trunking**
  support up to 60 static, dynamic, or distributed trunks active across a stack, with each trunk having up to eight links (ports) per static trunk; support trunking across stack members
- **Ring and chain stacking topology**
  allows failure of a link or switch in the ring of stacked switches, while the remaining connected switches continue operation
- **New 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
- **Out-of-band Ethernet management port**
  enables management over a separate physical management network, keeping management traffic segmented from network data traffic

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 a link between two switches and blocks the ports on both ends of the link if the link goes down at any point between

Overview

the two devices.

Layer 2 switching

- **VLAN support and tagging**
  supports IEEE 802.1Q (4,094 VLAN IDs) and 256 VLANs simultaneously
- **GARP VLAN Registration Protocol**
  allows automatic learning and dynamic assignment of VLANs
- **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+

Layer 3 routing

- **Static IP routing**
  provides manually configured routing; includes ECMP capability
- **Routing Information Protocol (RIP)**
  provides RIPv1 and RIPv2 routing
- **256 static and 2,048 RIP routes**
  facilitate segregation of user data without adding external hardware

Security

- **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
- **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
- **IEEE 802.1X, MAC or Web authentication**
  provides concurrent network access control and Web authentication of up to 24 clients per port
- **Secure shell**

Overview

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**
  selectively configures broadcast control 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

- **Lifetime Warranty 2.0**
  advance hardware replacement for as long as you own the product with next-business-day delivery (available in most countries)†
- **Electronic and telephone support (for Lifetime Warranty 2.0)**:
  limited 24x7 telephone support is available from HP for the first 3 years; limited electronic and business hours telephone support is available from HP for the entire warranty period; to reach our support centers, refer to: **www.hp.com/networking/contact-support**; for details on the duration of support provided with your product purchase, refer to: **www.hp.com/networking/warrantysummary**
- **Software releases**
  to find software for your product, refer to **www.hp.com/networking/support**; for details on the software releases available with your product purchase, refer to **www.hp.com/networking/warrantysummary**

†HP warranty includes repair or replacement of hardware for as long as you own the product, with next business day advance replacement (available in most countries). The disk drive included with HP AllianceOne Advanced Services and Services zl Modules, HP Threat Management Services zl Module, HP AllianceOne Extended zl Module with Riverbed Steelhead, HP MSM765zl Mobility Controller

Overview

and HP Survivable Branch Communication zl Module powered by Microsoft® Lync has a five-year hardware warranty. For details, refer to the Software license and hardware warranty statements at www.hp.com/networking/warranty.

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.

HP 2920-24G Switch — J9726A
- 24 RJ-45 autosensing 10/100/1000 ports
- 4 dual-personality ports
- min=0 \ max=4 SFP Transceivers
- 1 - HP X331 165W 100-240VAC to 12VDC PS included
- 1U - Height

PDU CABLE NA/MEX/TW/JPPDU CABLE NA/MEX/TW/JP — J9726A#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU CABLE ROW — J9726A#B2C
- C15 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord — J9726A#B2E
- NEMA L6-20P Cord (NA/MEX/JP/TW)

HP 2920-24G-POE+ Switch — J9727A
- 24 RJ-45 autosensing 10/100/1000 PoE+ ports
- 4 dual-personality ports
- min=0 \ max=4 SFP Transceivers
- 1 - HP X332 575W 100-240VAC to 54VDC PS included
- 1U - Height

See Configuration Note:1, 2

PDU CABLE NA/MEX/TW/JPPDU CABLE NA/MEX/TW/JP — J9727A#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU CABLE ROW — J9727A#B2C
- C15 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord — J9727A#B2E
- NEMA L6-20P Cord (NA/MEX/JP/TW)

HP 2920-48G Switch — J9728A
- 48 RJ-45 autosensing 10/100/1000 ports
- 4 dual-personality ports
- min=0 \ max=4 SFP Transceivers
- 1 - HP X331 165W 100-240VAC to 12VDC PS included
- 1U - Height

See Configuration Note:1, 2

PDU CABLE NA/MEX/TW/JPPDU CABLE NA/MEX/TW/JP — J9728A#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

Configuration

PDU CABLE ROW — J9728A#B2C
- C15 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord — J9728A#B2E
- NEMA L6-20P Cord (NA/MEX/JP/TW)

HP 2920-48G-POE+ Switch — J9729A
- 48 RJ-45 autosensing 10/100/1000 PoE+ ports — See
- 4 dual-personality ports — Configuration
- min=0 \ max=4 SFP Transceivers — Note:1, 2
- 1 - HP X332 575W 100-240VAC to 54VDC PS included
- 1U - Height

PDU CABLE NA/MEX/TW/JP — J9729A#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU CABLE ROW — J9729A#B2C
- C15 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord — J9729A#B2E
- NEMA L6-20P Cord (NA/MEX/JP/TW)

HP 2920-48G-POE+ 740W Switch — J9836A
- 44 RJ-45 autosensing 10/100/1000 PoE+ ports — See
- 4 RJ-45 dual-personality 10/100/1000 PoE+ ports — Configuration
- min=0 \ max=4 SFP Transceivers — Note:1, 2
- 1 - HP X332 1050W 110-240VAC to 54VDC PS included
- 1U - Height

PDU CABLE NA/MEX/TW/JP — J9836A#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU CABLE ROW — J9836A#B2C
- C15 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord — J9836A#B2E
- NEMA L6-20P Cord (NA/MEX/JP/TW)

Configuration Rules

	The following Transceivers install into this Module Switch:	
Note 1	HP X121 1G SFP LC LH Transceiver	J4860C
	HP X121 1G SFP LC LX Transceiver	J4859C
	HP 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

Configuration

HP X121 1G SFP RJ45 T Transceiver	J8177C
HP X111 100M SFP LC FX Transceiver	J9054C
HP X112 100M SFP LC BX-D Transceiver	J9099B
HP X112 100M SFP LC BX-U Transceiver	J9100B

Note 2   Localization required on orders without #B2B, #B2C or #B2E options.

Rack Level Integration CTO Models

HP 2920-24G Switch   J9726A#0D1
- 24 RJ-45 autosensing 10/100/1000 ports
- 4 dual-personality ports\
- min=0 \ max=4 SFP Transceivers
- 1 - HP X331 165W 100-240VAC to 12VDC PS included
- 1U - Height

See Configuration Note:1, 3, 4, 5

PDU CABLE NA/MEX/TW/JP   J9726A#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU CABLE ROW   J9726A#B2C
- C15 PDU Jumper Cord (ROW)

HP 2920-24G-POE+ Switch   J9727A#0D1
- 24 RJ-45 autosensing 10/100/1000 PoE+ ports
- 4 dual-personality ports
- min=0 \ max=4 SFP Transceivers
- 1 - HP X332 575W 100-240VAC to 54VDC PS included
- 1U - Height

See Configuration Note:1, 3, 4, 5

PDU CABLE NA/MEX/TW/JP   J9727A#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU CABLE ROW   J9727A#B2C
- C15 PDU Jumper Cord (ROW)

HP 2920-48G Switch   J9728A#0D1
- 48 RJ-45 autosensing 10/100/1000 ports
- 4 dual-personality ports
- min=0 \ max=4 SFP Transceivers
- 1 - HP X331 165W 100-240VAC to 12VDC PS included
- 1U - Height

See Configuration Note:1, 3, 4, 5

PDU CABLE NA/MEX/TW/JP   J9728A#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU CABLE ROW   J9728A#B2C

Configuration

- C15 PDU Jumper Cord (ROW)

HP 2920-48G-POE+ Switch	J9729A#0D1

- 48 RJ-45 autosensing 10/100/1000 PoE+ ports
- 4 dual-personality ports
- min=0 \ max=4 SFP Transceivers
- 1 - HP X332 575W 100-240VAC to 54VDC PS included
- 1U - Height

See Configuration Note:1, 3, 4, 5

PDU CABLE NA/MEX/TW/JP	J9729A#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU CABLE ROW	J9729A#B2C

- C15 PDU Jumper Cord (ROW)

HP 2920-48G-POE+ 740W Switch	J9836A

- 44 RJ-45 autosensing 10/100/1000 PoE+ ports
- 4 RJ-45 dual-personality 10/100/1000 PoE+ ports
- min=0 \ max=4 SFP Transceivers
- 1 - HP X332 1050W 110-240VAC to 54VDC PS included
- 1U - Height

See Configuration Note:1, 3, 4, 5

PDU CABLE NA/MEX/TW/JP	J9836A#B2B

- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU CABLE ROW	J9836A#B2C

- C15 PDU Jumper Cord (ROW)

Configuration Rules

Note 1	The following Transceivers install into this Module (Use #0D1 quoted to switch if switch is CTO) – if applicable:	
	HP X121 1G SFP LC LH Transceiver	J4860C
	HP X121 1G SFP LC LX Transceiver	J4859C
	HP 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
	HP X121 1G SFP RJ45 T Transceiver	J8177C
	HP X111 100M SFP LC FX Transceiver	J9054C
	HP X112 100M SFP LC BX-D Transceiver	J9099B
	HP X112 100M SFP LC BX-U Transceiver	J9100B
Note 3	If this switch is factory installed in HP Racks, then the J9583A#0D1 is required. CLIC Only - Allow the J9583AZ in all regions	
Note 4	Localization required on orders without #B2B or #B2C options	

Configuration

Note 5	If HP CTO Switch Chassis is selected for Rack Level Integration, Then the CTO Switch Chassis needs to integrate (with #0D1) to the HP 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)

Internal Power Supplies

System (std 1 // max 1) per switch enclosure

HP X331 165W 100-240VAC to 12VDC PS
- includes 1 x c15, 165w (Spare Only)

J9739A#0D1
See Configuration Note:1, 3, 4

PDU CABLE NA/MEX/TW/JP
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

J9739A#B2B

PDU CABLE ROW
- C15 PDU Jumper Cord (ROW)

J9739A#B2C

High Volt Switch to Wall Power Cord
- NEMA L6-20P Cord (NA/MEX/JP/TW)

J9739A#B2E

HP X332 575W 100-240VAC to 54VDC PS
- includes 1 x c15, 575w (Spare Only)

J9738A#0D1
See Configuration Note:2, 3, 4

PDU CABLE NA/MEX/TW/JP
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

J9738A#B2B

PDU CABLE ROW
- C15 PDU Jumper Cord (ROW)

J9738A#B2C

High Volt Switch to Wall Power Cord
- NEMA L6-20P Cord (NA/MEX/JP/TW)

J9738A#B2E

HP X332 1050W 100-240VAC to 54VDC PS
- includes 1 x c15, 1050w (Spare or Upgrade Only)

J9737A
See Configuration Note:2, 3, 4

Configuration

PDU CABLE NA/MEX/TW/JP   J9737A#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU CABLE ROW   J9737A#B2C
- C15 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord   J9737A#B2E
- NEMA L6-20P Cord (NA/MEX/JP/TW)

Configuration Rules

Note 1	This power supply is only supported on the J9726A and J9728A.
Note 2	This power supply is only supported on the J9727A ,J9729A and J9836A.
Note 3	Localization required on orders without #B2B ,#B2C or #B2E options.
Note 4	If #B2E is selected Then replace Localized option with #B2E for power supply and with #B2E for switch . (Offered only in NA, Mexico,, Taiwan, and Japan)
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) High Volt Switch/Router/Power Supply to Wall Power Cord - #B2E Option. (Offered only in North America, Mexico, Taiwan, and Japan)

Localization	X332 575W 100-240VAC to 54VDC PS, CL - Chile - English localization	J9738A#A1X
	Power Cord: Quantity :1, CEI 23-50, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-6980	
	X332 575W 100-240VAC to 54VDC PS, US - U.S. - English localization	J9738A#ABA
	Power Cord: Quantity :1, NEMA 5-15P, C15 STRAIGHT, 125 V, 15 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-0973	
	X332 575 W 100-240VAC to 54VDC PS, EU - Europe - English localization	J9738A#ABB
	Power Cord: Quantity :1, CEE 7-VII, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6811	
	X332 575W 100-240VAC to 54VDC PS, AU - Australia - English localization	J9738A#ABG
	Power Cord: Quantity :1, AS/NZS 3112, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8121-0834	
	X332 575W 100-240VAC to 54VDC PS, BR - Brazil - Portuguese localization	J9738A#AC4
	Power Cord: Quantity :1, NBR 14136 Fig13, C13 STRAIGHT, 250 V, 2.5 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-1069	
	X332 575W 100-240VAC to 54VDC PS, KR - Korea - English localization	J9738A#AC6
	Power Cord: Quantity :1, CEE 7-VII, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6811	

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X332 575W 100-240VAC to 54VDC PS, UK – United Kingdom – English localization	J9738A#ACC
Power Cord: Quantity :1, BS 1363/A, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-6809	
X332 575W 100-240VAC to 54VDC PS, SZ – Switzerland – English localization	J9738A#ACD
Power Cord: Quantity :1, SEV 6534-2 Type 12, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6815	
X332 575W 100-240VAC to 54VDC PS, DK – Denmark – English localization	J9738A#ACE
Power Cord: Quantity :1, DK 2-5A, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6814	
X332 575W 100-240VAC to 54VDC PS, JP – Japan – English localization	J9738A#ACF
Power Cord: Quantity :1, JIS C 8303, C13 STRAIGHT, 125 V, 12 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-4753	
X332 575W 100-240VAC to 54VDC PS, IN – India – English localization	J9738A#ACJ
Power Cord: Quantity :1, IS 1293, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8121-0780	
X332 575W 100-240VAC to 54VDC PS, ZA – South Africa – English localization	J9738A#ACQ
Power Cord: Quantity :1, SABS 164, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6813	
X332 575W 100-240VAC to 54VDC PS, IL – Israel – English localization	J9738A#AKJ
Power Cord: Quantity :1, SI 32 90-DEG, C13 STRAIGHT, 250 V, 10 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-1035	
X332 575W 100-240VAC to 54VDC PS, TH – Thailand – English localization	J9738A#AKL
X332 575W 100-240VAC to 54VDC PS, CN – China – English localization	J9738A#AKM
Power Cord: Quantity :1, GB 1002, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-8707	
X332 575W 100-240VAC to 54VDC PS, TW – Taiwan – English localization	J9738A#ARB
Power Cord: Quantity :1, CNS 690 Type 2(1), C13 STRAIGHT, 125 V, 13 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-0974	
X332 575W 100-240VAC to 54VDC PS, MY – Malaysia – English localization	J9738A#ARE
Power Cord: Quantity :1, BS 1363/A, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-6809	
X332 575W 100-240VAC to 54VDC PS, AR – Argentina – English localization	J9738A#ARM
Power Cord: Quantity :1, IRAM 2073, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-6869	
X331 165W 100-240VAC to 12VDC PS, CL – Chile – English localization	J9739A#A1X
Power Cord: Quantity :1, CEI 23-50, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-6980	
X331 165W 100-240VAC to 12VDC PS, US – U.S. – English localization	J9739A#ABA
Power Cord: Quantity :1, NEMA 5-15P, C15 STRAIGHT, 125 V, 15 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-0973	
X331 165W 100-240VAC to 12VDC PS, EU – Europe – English localization	J9739A#ABB
Power Cord: Quantity :1, CEE 7-VII, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6811	
X331 165W 100-240VAC to 12VDC PS, AU – Australia – English localization	J9739A#ABG
Power Cord: Quantity :1, AS/NZS 3112, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8121-0834	
X331 165W 100-240VAC to 12VDC PS, BR – Brazil – Portuguese localization	J9739A#AC4

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Power Cord: Quantity :1, NBR 14136 Fig13, C13 STRAIGHT, 250 V, 2.5 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-1069	
X331 165W 100-240VAC to 12VDC PS, KR – Korea – English localization	J9739A#AC6
Power Cord: Quantity :1, CEE 7-VII, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6811	
X331 165W 100-240VAC to 12VDC PS, UK – United Kingdom – English localization	J9739A#ACC
Power Cord: Quantity :1, BS 1363/A, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-6809	
X331 165W 100-240VAC to 12VDC PS, SZ – Switzerland – English localization	J9739A#ACD
Power Cord: Quantity :1, SEV 6534-2 Type 12, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6815	
X331 165W 100-240VAC to 12VDC PS, DK – Denmark – English localization	J9739A#ACE
Power Cord: Quantity :1, DK 2-5A, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6814	
X331 165W 100-240VAC to 12VDC PS, JP – Japan – English localization	J9739A#ACF
Power Cord: Quantity :1, JIS C 8303, C13 STRAIGHT, 125 V, 12 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-4753	
X331 165W 100-240VAC to 12VDC PS, IN – India – English localization	J9739A#ACJ
Power Cord: Quantity :1, IS 1293, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8121-0780	
X331 165W 100-240VAC to 12VDC PS, ZA – South Africa – English localization	J9739A#ACQ
Power Cord: Quantity :1, SABS 164, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6813	
X331 165W 100-240VAC to 12VDC PS, IL – Israel – English localization	J9739A#AKJ
Power Cord: Quantity :1, SI 32 90-DEG, C13 STRAIGHT, 250 V, 10 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-1035	
X331 165W 100-240VAC to 12VDC PS, TH – Thailand – English localization	J9739A#AKL
Power Cord: Quantity :1, NEMA 5-15P, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8121-0668	
X331 165W 100-240VAC to 12VDC PS, CN – China – English localization	J9739A#AKM
Power Cord: Quantity :1, GB 1002, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-8707	
X331 165W 100-240VAC to 12VDC PS, TW – Taiwan – English localization	J9739A#ARB
Power Cord: Quantity :1, CNS 690 Type 2(1), C13 STRAIGHT, 125 V, 13 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-0974	
X331 165W 100-240VAC to 12VDC PS, MY – Malaysia – English localization	J9739A#ARE
Power Cord: Quantity :1, BS 1363/A, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-6809	
X331 165W 100-240VAC to 12VDC PS, AR – Argentina – English localization	J9739A#ARM
Power Cord: Quantity :1, IRAM 2073, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-6869	
2920-24G Switch, CL – Chile – English localization	J9726A#A1X
Power Cord: Quantity :1, CEI 23-50, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-6980	
2920-24G Switch, US – U.S. – English localization	J9726A#ABA
Power Cord: Quantity :1, NEMA 5-15P, C15 STRAIGHT, 125 V, 15 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-0914	

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2920-24G Switch, EU - Europe - English localization	J9726A#ABB
Power Cord: Quantity :1, CEE 7-VII, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6811	
2920-24G Switch, AU - Australia - English localization	J9726A#ABG
Power Cord: Quantity :1, AS/NZS 3112, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8121-0834	
2920-24G Switch, BR - Brazil - Portuguese localization	J9726A#AC4
Power Cord: Quantity :1, NBR 14136 Fig13, C13 STRAIGHT, 250 V, 2.5 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-1069	
2920-24G Switch, KR - Korea - English localization	J9726A#AC6
Power Cord: Quantity :1, CEE 7-VII, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6811	
2920-24G Switch, UK - United Kingdom - English localization	J9726A#ACC
Power Cord: Quantity :1, BS 1363/A, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-6809	
2920-24G Switch, SZ - Switzerland - English localization	J9726A#ACD
Power Cord: Quantity :1, SEV 6534-2 Type 12, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6815	
2920-24G Switch, DK - Denmark - English localization	J9726A#ACE
Power Cord: Quantity :1, DK 2-5A, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6814	
2920-24G Switch, JP - Japan - English localization	J9726A#ACF
Power Cord: Quantity :1, JIS C 8303, C13 STRAIGHT, 125 V, 12 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-4753	
2920-24G Switch, IN - India - English localization	J9726A#ACJ
Power Cord: Quantity :1, IS 1293, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8121-0780	
2920-24G Switch, ZA - South Africa - English localization	J9726A#ACQ
Power Cord: Quantity :1, SABS 164, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6813	
2920-24G Switch, IL - Israel - English localization	J9726A#AKJ
Power Cord: Quantity :1, SI 32 90-DEG, C13 STRAIGHT, 250 V, 10 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-1035	
2920-24G Switch, TH - Thailand - English localization	J9726A#AKL
Power Cord: Quantity :1, NEMA 5-15P, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8121-0668	
2920-24G Switch, CN - China - English localization	J9726A#AKM
Power Cord: Quantity :1, GB 1002, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-8707	
2920-24G Switch, TW - Taiwan - English localization	J9726A#ARB
Power Cord: Quantity :1, CNS 690 Type 2(1), C13 STRAIGHT, 125 V, 13 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-0974	
2920-24G Switch, MY - Malaysia - English localization	J9726A#ARE
Power Cord: Quantity :1, BS 1363/A, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-6809	
2920-24G Switch, AR - Argentina - English localization	J9726A#ARM

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Power Cord: Quantity :1, IRAM 2073, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-6869	
2920-24G Switch, JmpCbl-NA/JP/TW - JmpCbl-NA/JP/TW	J9726A#B2B
Power Cord: Quantity :1, C14 STRAIGHT, C15 STRAIGHT, 250 V, 10 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-1091	
2920-24G Switch, JmpCbl-ROW - JmpCbl-ROW	J9726A#B2C
Power Cord: Quantity :1, C14 STRAIGHT, C15 STRAIGHT, 250 V, 10 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-1094	
2920-24G Switch, 220V-NA - L6-20 220V-NA	J9726A#B2E
Power Cord: Quantity :1, NEMA 6-15P, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-3996	
2920-24G-POE+ Switch, CL - Chile - English localization	J9727A#A1X
Power Cord: Quantity :1, CEI 23-50, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-6980	
2920-24G-POE+ Switch, US - U.S. - English localization	J9727A#ABA
Power Cord: Quantity :1, NEMA 5-15P, C15 STRAIGHT, 125 V, 15 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-0914	
2920-24G-POE+ Switch, EU - Europe - English localization	J9727A#ABB
Power Cord: Quantity :1, CEE 7-VII, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6811	
2920-24G-POE+ Switch, AU - Australia - English localization	J9727A#ABG
Power Cord: Quantity :1, AS/NZS 3112, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8121-0834	
2920-24G-POE+ Switch, BR - Brazil - Portuguese localization	J9727A#AC4
Power Cord: Quantity :1, NBR 14136 Fig13, C13 STRAIGHT, 250 V, 2.5 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-1069	
2920-24G-POE+ Switch, KR - Korea - English localization	J9727A#AC6
Power Cord: Quantity :1, CEE 7-VII, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6811	
2920-24G-POE+ Switch, UK - United Kingdom - English localization	J9727A#ACC
Power Cord: Quantity :1, BS 1363/A, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-6809	
2920-24G-POE+ Switch, SZ - Switzerland - English localization	J9727A#ACD
Power Cord: Quantity :1, SEV 6534-2 Type 12, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6815	
2920-24G-POE+ Switch, DK - Denmark - English localization	J9727A#ACE
Power Cord: Quantity :1, DK 2-5A, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6814	
2920-24G-POE+ Switch, JP - Japan - English localization	J9727A#ACF
Power Cord: Quantity :1, JIS C 8303, C13 STRAIGHT, 125 V, 12 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-4753	
2920-24G-POE+ Switch, IN - India - English localization	J9727A#ACJ
Power Cord: Quantity :1, IS 1293, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8121-0780	
Power Cord: Quantity :1, SABS 164, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6813	J9727A#ACQ
2920-24G-POE+ Switch, IL - Israel - English localization	J9727A#AKJ

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Power Cord: Quantity :1, SI 32 90-DEG, C13 STRAIGHT, 250 V, 10 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-1035	
2920-24G-POE+ Switch, TH - Thailand - English localization	J9727A#AKL
Power Cord: Quantity :1, NEMA 5-15P, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8121-0668	
2920-24G-POE+ Switch, CN - China - English localization	J9727A#AKM
Power Cord: Quantity :1, GB 1002, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-8707	
2920-24G-POE+ Switch, TW - Taiwan - English localization	J9727A#ARB
Power Cord: Quantity :1, CNS 690 Type 2(1), C13 STRAIGHT, 125 V, 13 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-0974	
2920-24G-POE+ Switch, MY - Malaysia - English localization	J9727A#ARE
Power Cord: Quantity :1, BS 1363/A, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-6809	
2920-24G-POE+ Switch, AR - Argentina - English localization	J9727A#ARM
Power Cord: Quantity :1, IRAM 2073, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-6869	
2920-24G-POE+ Switch, JmpCbl-NA/JP/TW - JmpCbl-NA/JP/TW	J9727A#B2B
Power Cord: Quantity :1, C14 STRAIGHT, C15 STRAIGHT, 250 V, 10 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-1091	
2920-24G-POE+ Switch, JmpCbl-ROW - JmpCbl-ROW	J9727A#B2C
Power Cord: Quantity :1, C14 STRAIGHT, C15 STRAIGHT, 250 V, 10 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-1094	
2920-24G-POE+ Switch, 220V-NA - L6-20 220V-NA	J9727A#B2E
Power Cord: Quantity :1, NEMA 6-15P, C15 STRAIGHT, 250 V, 10 A, 2.5 meters, 8.21 feet ,Part Store #: 8120-5338	
2920-48G Switch, CL - Chile - English localization	J9728A#A1X
Power Cord: Quantity :1, CEI 23-50, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-6980	
2920-48G Switch, US - U.S. - English localization	J9728A#ABA
Power Cord: Quantity :1, NEMA 5-15P, C15 STRAIGHT, 125 V, 15 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-0914	
2920-48G Switch, EU - Europe - English localization	J9728A#ABB
Power Cord: Quantity :1, CEE 7-VII, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6811	
2920-48G Switch, AU - Australia - English localization	J9728A#ABG
Power Cord: Quantity :1, AS/NZS 3112, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8121-0834	
2920-48G Switch, BR - Brazil - Portuguese localization	J9728A#AC4
Power Cord: Quantity :1, NBR 14136 Fig13, C13 STRAIGHT, 250 V, 2.5 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-1069	
2920-48G Switch, KR - Korea - English localization	J9728A#AC6
Power Cord: Quantity :1, CEE 7-VII, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6811	
2920-48G Switch, UK - United Kingdom - English localization	J9728A#ACC
Power Cord: Quantity :1, BS 1363/A, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-6809	

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2920-48G Switch, SZ – Switzerland – English localization	J9728A#ACD
Power Cord: Quantity :1, SEV 6534-2 Type 12, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6815	
2920-48G Switch, DK – Denmark – English localization	J9728A#ACE
Power Cord: Quantity :1, DK 2-5A, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6814	
2920-48G Switch, JP – Japan – English localization	J9728A#ACF
Power Cord: Quantity :1, JIS C 8303, C13 STRAIGHT, 125 V, 12 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-4753	
2920-48G Switch, IN – India – English localization	J9728A#ACJ
Power Cord: Quantity :1, IS 1293, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8121-0780	
2920-48G Switch, ZA – South Africa – English localization	J9728A#ACQ
Power Cord: Quantity :1, SABS 164, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6813	
2920-48G Switch, IL – Israel – English localization	J9728A#AKJ
Power Cord: Quantity :1, SI 32 90-DEG, C13 STRAIGHT, 250 V, 10 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-1035	
2920-48G Switch, TH – Thailand – English localization	J9728A#AKL
Power Cord: Quantity :1, NEMA 5-15P, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8121-0668	
2920-48G Switch, CN – China – English localization	J9728A#AKM
Power Cord: Quantity :1, GB 1002, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-8707	
2920-48G Switch, TW – Taiwan – English localization	J9728A#ARB
Power Cord: Quantity :1, CNS 690 Type 2(1), C13 STRAIGHT, 125 V, 13 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-0974	
2920-48G Switch, MY – Malaysia – English localization	J9728A#ARE
Power Cord: Quantity :1, BS 1363/A, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-6809	
2920-48G Switch, AR – Argentina – English localization	J9728A#ARM
Power Cord: Quantity :1, IRAM 2073, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-6869	
2920-48G Switch, JmpCbl-NA/JP/TW – JmpCbl-NA/JP/TW	J9728A#B2B
Power Cord: Quantity :1, C14 STRAIGHT, C15 STRAIGHT, 250 V, 10 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-1091	
2920-48G Switch, JmpCbl-ROW – JmpCbl-ROW	J9728A#B2C
Power Cord: Quantity :1, C14 STRAIGHT, C15 STRAIGHT, 250 V, 10 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-1094	
2920-48G Switch, 220V-NA – L6-20 220V-NA	J9728A#B2E
Power Cord: Quantity :1, NEMA 6-15P, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-3996	
2920-48G-POE+ Switch, CL – Chile – English localization	J9729A#A1X
Power Cord: Quantity :1, CEI 23-50, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-6980	
2920-48G-POE+ Switch, US – U.S. – English localization	J9729A#ABA

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Power Cord: Quantity :1, NEMA 5-15P, C15 STRAIGHT, 125 V, 15 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-0914	
2920-48G-POE+ Switch, EU - Europe - English localization	J9729A#ABB
Power Cord: Quantity :1, CEE 7-VII, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6811	
2920-48G-POE+ Switch, AU - Australia - English localization	J9729A#ABG
Power Cord: Quantity :1, AS/NZS 3112, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8121-0834	
2920-48G-POE+ Switch, BR - Brazil - Portuguese localization	J9729A#AC4
Power Cord: Quantity :1, NBR 14136 Fig13, C13 STRAIGHT, 250 V, 2.5 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-1069	
2920-48G-POE+ Switch, KR - Korea - English localization	J9729A#AC6
Power Cord: Quantity :1, CEE 7-VII, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6811	
2920-48G-POE+ Switch, UK - United Kingdom - English localization	J9729A#ACC
Power Cord: Quantity :1, BS 1363/A, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-6809	
2920-48G-POE+ Switch, SZ - Switzerland - English localization	J9729A#ACD
Power Cord: Quantity :1, SEV 6534-2 Type 12, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6815	
2920-48G-POE+ Switch, DK - Denmark - English localization	J9729A#ACE
Power Cord: Quantity :1, DK 2-5A, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6814	
2920-48G-POE+ Switch, JP - Japan - English localization	J9729A#ACF
Power Cord: Quantity :1, JIS C 8303, C13 STRAIGHT, 125 V, 12 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-4753	
2920-48G-POE+ Switch, IN - India - English localization	J9729A#ACJ
Power Cord: Quantity :1, IS 1293, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8121-0780	
2920-48G-POE+ Switch, ZA - South Africa - English localization	J9729A#ACQ
Power Cord: Quantity :1, SABS 164, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6813	
2920-48G-POE+ Switch, IL - Israel - English localization	J9729A#AKJ
Power Cord: Quantity :1, SI 32 90-DEG, C13 STRAIGHT, 250 V, 10 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-1035	
2920-48G-POE+ Switch, TH - Thailand - English localization	J9729A#AKL
Power Cord: Quantity :1, NEMA 5-15P, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8121-0668	
2920-48G-POE+ Switch, CN - China - English localization	J9729A#AKM
Power Cord: Quantity :1, GB 1002, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-8707	
2920-48G-POE+ Switch, TW - Taiwan - English localization	J9729A#ARB
Power Cord: Quantity :1, CNS 690 Type 2(1), C13 STRAIGHT, 125 V, 13 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-0974	
Power Cord: Quantity :1, BS 1363/A, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-6809	J9729A#ARE
2920-48G-POE+ Switch, AR - Argentina - English localization	J9729A#ARM

Configuration

Power Cord: Quantity :1, IRAM 2073, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-6869

2920-48G-POE+ Switch, JmpCbl-NA/JP/TW - JmpCbl-NA/JP/TW   J9729A#B2B

Power Cord: Quantity :1, C14 STRAIGHT, C15 STRAIGHT, 250 V, 10 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-1091

2920-48G-POE+ Switch, JmpCbl-ROW - JmpCbl-ROW   J9729A#B2C

Power Cord: Quantity :1, C14 STRAIGHT, C15 STRAIGHT, 250 V, 10 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-1094

2920-48G-POE+ Switch, 220V-NA - L6-20 220V-NA   J9729A#B2E

Power Cord: Quantity :1, NEMA 6-15P, C15 STRAIGHT, 250 V, 10 A, 2.5 meters, 8.21 feet ,Part Store #: 8120-5338

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

Networking

Ethernet Modules

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

HP 2920 2-port 10GbE SFP+ Module	J9731A
• min=0 \ max=2 SFP + Transceivers	See Configuration Note:1
HP 2920 2-port 10GBASE-T Module	J9732A

Configuration Rules

Note 1	HP X121 1G SFP LC LH Transceiver	J4860C
	HP X121 1G SFP LC LX Transceiver	J4859C
	HP 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
	HP X132 10G SFP+ LC SR Transceiver	J9150A
	HP X132 10G SFP+ LC ER Transceiver	J9153A
	HP X132 10G SFP+ LC LR Transceiver	J9151A
	HP X132 10G SFP+ LC LRM Transceiver	J9152A
	HP X242 SFP+ SFP+ 1m Direct Attach Cable	J9281B
	HP X242 SFP+ SFP+ 3m Direct Attach Cable	J9283B
	HP X242 SFP+ SFP+ 7m Direct Attach Cable	J9285B
	HP X244 XFP SFP+ 1m Direct Attach Cable	J9300A
	HP X244 XFP SFP+ 3m Direct Attach Cable	J9301A
	HP X244 XFP SFP+ 5m Direct Attach Cable	J9302A
	HP X242 10G SFP+ 10m DAC Cable	J9286B

Configuration

HP X242 10G SFP+ 15m DAC Cable   J9287B

Stacking Modules

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

HP 2920 2-port Stacking Module   J9733A

Transceivers

SFP Transceivers

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

SFP+ Transceivers

HP X132 10G SFP+ LC ER Transceiver	J9153A
HP X132 10G SFP+ LC SR Transceiver	J9150A
HP X132 10G SFP+ LC LR Transceiver	J9151A
HP X132 10G SFP+ LC LRM Transceiver	J9152A
HP X242 10G SFP+ SFP+ 1m DAC Cable	J9281B
HP X242 10G SFP+ SFP+ 3m DAC Cable	J9283B
HP X242 10G SFP+ SFP+ 7m DAC Cable	J9285B
HP X244 10G XFP SFP+ 1m DAC Cable	J9300A
HP X244 10G XFP SFP+ 3m DAC Cable	J9301A
HP X244 10G XFP SFP+ 5m DAC Cable	J9302A
HP X242 10G SFP+ 10m DAC Cable	J9286B
HP X242 10G SFP+ 15m DAC Cable	J9287B

Cables

Multi-Mode Cables

HP .5m Multi-mode OM3 LC/LC FC Cable	AJ833A
HP 1m Multi-mode OM3 LC/LC FC Cable	AJ834A
HP 2 m Multimode OM3 LC/LC FC Cable	AJ835A

Configuration

HP 5 m Multimode OM3 LC/LC FC Cable	AJ836A
HP 15 m Multimode OM3 LC/LC FC Cable	AJ837A
HP 30 m Multimode OM3 LC/LC FC Cable	AJ838A
HP 50 m Multimode OM3 LC/LC FC Cable	AJ839A
HP Premier Flex LC/LC OM4 2f 1m Cbl	QK732A
HP Premier Flex LC/LC OM4 2f 2m Cbl	QK733A
HP Premier Flex LC/LC OM4 2f 5m Cbl	QK734A
HP Premier Flex LC/LC OM4 2f 15m Cbl	QK735A
HP Premier Flex LC/LC OM4 2f 30m Cbl	QK736A
HP Premier Flex LC/LC OM4 2f 50m Cbl	QK737A

Stacking Cables

HP 2920 0.5m Stacking Cable	J9734A
HP 2920 1.0m Stacking Cable	J9735A
HP 2920 3.0m Stacking Cable	J9736A

Switch Enclosure Options

Mounting Kit

HP X410 1U Univ 4-post Rack Mnt Kit	J9583A
	See Configuration Note:1

Cofiguration Rules

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

External/Redundant Power Supplies

HP 640 External/Redundant Power Supply   J9805A
- Height = 1U   See Configuration
- includes 1 x c13, 800w   Note:1, 3, 4, 5

HP X331 165W 100-240VAC to 12VDC PS   J9739A
- includes 1 x c15, 165w   See Configuration
                                                                                      Note:2

PDU CABLE NA/MEX/TW/JP   J9739A#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU CABLE ROW   J9739A#B2C
- C15 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord   J9739A#B2E

Configuration

- NEMA L6-20P Cord (NA/MEX/JP/TW)

HP X332 575W 100-240VAC to 54VDC PS   J9738A
- includes 1 x c15, 575w

See Configuration Note:2

PDU CABLE NA/MEX/TW/JP   J9738A#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU CABLE ROW   J9738A#B2C
- C15 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord   J9738A#B2E
- NEMA L6-20P Cord (NA/MEX/JP/TW)

HP X332 1050W 100-240VAC to 54VDC PS   J9737A
- includes 1 x c15, 1050w

See Configuration Note:2

PDU CABLE NA/MEX/TW/JP   J9737A#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU CABLE ROW   J9737A#B2C
- C15 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord   J9737A#B2E
- NEMA L6-20P Cord (NA/MEX/JP/TW)

Configuration Rules

Note 1   Can take up to Three internal power supplies. (J9737A, J9738A and J9739A) System (std 0 // max 3) User Selection (min 1 // max 3) per Power Supply enclosure. Mixing or matching of the 3 different power supplies is supported in the Chassis.

Note 2   Localization required on orders without #B2B, #B2C or #B2E options.

Note 3   No Localization. Localization is on the internal Power supplies.

Note 4   Up to eight (8) Switch Chassis can be connected to this External Redundant Power Source.
Power supply slot 1 supports up to 4 cables
Power supply slot 2 supports up to 2 cables
Power supply slot 3 supports up to 2 cables
Supported on J9726A, J9727A, J9728A, J9729A and J9836A switches only.

Note 5   If this RPS/EPS is installed in HP Universal Racks, Then the J9583A#0D1 is required

Configuration

Remarks: For J9726A, and J9728A, the power supply in J9805A must be J9739A (165W).
For J9727A and J9729A, the power supply in J9805A must be J9737A (1050W) or J9738A (575W).
For J9836A, the power supply in J9805A must be J9737A (1050W).

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)
High Volt Switch/Router/Power Supply to Wall Power Cord - #B2E Option. (Offered only in North America, Mexico, Taiwan, and Japan)

External/Redundant Power Cables

HP 640 EPS/RPS 1m Cable   J9806A
See Configuration
Note:1

Configuration Rules

Note 1   1, 2, 3 or 4 cables per AC Power Supply used with J9805A supported. System (std 0 // max 8) User Selection (min 1 // max 8) per Power Supply enclosure.
Power supply slot 1 supports up to 4 cables
Power supply slot 2 supports up to 2 cables
Power supply slot 3 supports up to 2 cables

HP 2920-24G Switch (J9726A)

I/O ports and slots	20 RJ-45 autosensing 10/100/1000 ports; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T) 4 RJ-45 dual-personality 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T) 1 dual-personality (RJ-45 or USB micro-B) 1 USB 1.1 1 RJ-45 out-of-band management port 2 module slots 1 stacking module slot	
Power supplies	1 power supply slot 1 minimum power supply required includes: 1 x J9739A (HP X331 165W 100-240VAC to 12VDC Modular Power Supply)	
Physical characteristics	Dimensions	17.42(w) x 13.23(d) x 1.75(h) in (44.25 x 33.6 x 4.45 cm) (1U height)
	Weight	11.57 lb (5.25 kg)
Memory and processor	Tri Core ARM1176 @ 625 MHz, 512 MB SDRAM, 1 GB flash MB; packet buffer size: 11.25 MB (6.75 MB dynamic egress + 4.5 MB ingress)	
Performance	100 Mb Latency	< 9.0 μs (FIFO 64-byte packets)
	1000 Mb Latency	< 3.3 μs (FIFO 64-byte packets)
	10 Gbps Latency	< 3.3 μs (FIFO 64-byte packets)
	Throughput	95.2 million pps
	Switching capacity	128 Gb/s
	Routing table size	2048 entries (IPv4), 256 entries (IPv6)
	MAC address table size	16000 entries
Environment	Operating temperature	32°F to 131°F (0°C to 55°C)
	Operating relative humidity	15% to 95%, noncondensing
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non-operating/ Storage relative humidity	15% to 95%, noncondensing
	Altitude	up to 10,000 ft (3 km)
	Acoustic	Power: 57 dB, Pressure: 41.4 dB
Electrical characteristics	Frequency	50/60 Hz
	Maximum heat dissipation	198 BTU/hr (208.89 kJ/hr)
	AC voltage	100-240 VAC
	Maximum power rating	58 W
	Idle power	26 W

Technical Specifications

Safety	CE Labeled; EN 60825-1 Safety of Laser Products-Part 1; FCC Part 15, Subpart B; GOST; EU RoHS Compliant; EN 55022 Class A; EN 55024: 1998; C-Tick; ICES-003, Class A; VCCI Class A; IEC 60950-1 :Second Edition ; IEC 60825-1; EN62479:2010; CSA C22.2 No. 60950-1-07 2nd Edition; EN 60950-1:2006+A11:2009+A1:2010+A12:2011; IEC 60950-1 (ed.2): am1	
Emissions	FCC part 15 Class A; VCCI Class A; EN 55022/CISPR 22 Class A	
Immunity	**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	IEC 61000-3-2
	Flicker	IEC 61000-3-3
Management	HP PCM+; IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; out-of-band management (RJ-45 Ethernet); SNMP Manager; Telnet; RMON1; FTP; in-line and out-of-band; out-of-band management (serial RS-232C or Micro USB)	
Services	Refer to the HP website at www.hp.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 HP sales office.	

HP 2920-24G-PoE+ Switch (J9727A)

I/O ports and slots	20 RJ-45 autosensing 10/100/1000 PoE+ ports; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+) 4 RJ-45 dual-personality 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+) 1 dual-personality (RJ-45 or USB micro-B) 1 USB 1.1 1 RJ-45 out-of-band management port 2 module slots 1 stacking module slot	
Power supplies	1 power supply slot 1 minimum power supply required includes: 1 x J9738A (HP X332 575W 100-240VAC to 54VDC Modular Power Supply)	
Physical characteristics	**Dimensions**	17.42(w) x 13.23(d) x 1.75(h) in (44.25 x 33.6 x 4.45 cm) (1U height)
	Weight	12.04 lb (5.46 kg)
Memory and processor	Tri Core ARM1176 @ 625 MHz, 512 MB SDRAM, 1 GB flash; packet buffer size: 11.25 MB (6.5 MB dynamic egress + 4.5 MB ingress)	
Performance	**100 Mb Latency**	< 9.0 µs (FIFO 64-byte packets)
	1000 Mb Latency	< 3.3 µs (FIFO 64-byte packets)

Technical Specifications

	10 Gbps Latency	< 3.3 µs (FIFO 64-byte packets)
	Throughput	95.2 million pps
	Switching capacity	128 Gb/s
	Routing table size	2048 entries (IPv4), 256 entries (IPv6)
	MAC address table size	16000 entries
Environment	**Operating temperature**	32°F to 131°F (0°C to 55°C)
	Operating relative humidity	15% to 95%, noncondensing
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non-operating/ Storage relative humidity	15% to 95%, noncondensing
	Altitude	up to 10,000 ft (3 km)
	Acoustic	Power: 61 dB, Pressure: 44.9 dB
Electrical characteristics	**Frequency**	50/60 Hz
	Maximum heat dissipation	358 BTU/hr (377.69 kJ/hr)
	AC voltage	100-240 VAC
	Maximum power rating	475 W
	Idle power	42 W
	PoE power	370 W
Safety	CE Labeled; EN 60825-1 Safety of Laser Products-Part 1; FCC Part 15, Subpart B; GOST; EU RoHS Compliant; EN 55022 Class A; EN 55024: 1998; C-Tick; ICES-003, Class A; VCCI Class A; IEC 60950-1 :Second Edition ; IEC 60825-1; EN62479:2010; CSA C22.2 No. 60950-1-07 2nd Edition; EN 60950-1:2006+A11:2009+A1:2010+A12:2011; IEC 60950-1 (ed.2): am1	
Emissions	FCC part 15 Class A; VCCI Class A; EN 55022/CISPR 22 Class A	
Immunity	**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	IEC 61000-3-2
	Flicker	IEC 61000-3-3
Management	HP PCM+; IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; out-of-band management (RJ-45 Ethernet); SNMP Manager; Telnet; RMON1; FTP; in-line and out-of-band; out-of-band management (serial RS-232C or Micro USB)	

Technical Specifications

Services	Refer to the HP website at www.hp.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 HP sales office.

HP 2920-48G Switch (J9728A)

I/O ports and slots	44 RJ-45 autosensing 10/100/1000 ports; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T) 4 RJ-45 dual-personality 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T) 1 dual-personality (RJ-45 or USB micro-B) 1 USB 1.1 1 RJ-45 out-of-band management port 2 module slots 1 stacking module slot	
Power supplies	1 power supply slot 1 minimum power supply required includes: 1 x J9739A (HP X331 165W 100-240VAC to 12VDC Modular Power Supply)	
Physical characteristics	**Dimensions**	17.42(w) x 13.23(d) x 1.75(h) in (44.25 x 33.6 x 4.45 cm) (1U height)
	Weight	11.95 lb (5.42 kg)
Memory and processor	Tri Core ARM1176 @ 625 MHz, 512 MB SDRAM, 1 GB flash; packet buffer size: 11.25 MB (6.75 MB dynamic egress + 4.5 MB ingress)	
Performance	**100 Mb Latency**	< 9.0 µs (FIFO 64-byte packets)
	1000 Mb Latency	< 3.3 µs (FIFO 64-byte packets)
	10 Gbps Latency	< 3.2 µs (FIFO 64-byte packets)
	Throughput	130.9 million pps
	Switching capacity	176 Gb/s
	Routing table size	2048 entries (IPv4), 256 entries (IPv6)
	MAC address table size	16000 entries
Environment	**Operating temperature**	32°F to 131°F (0°C to 55°C)
	Operating relative humidity	15% to 95%, noncondensing
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non-operating/ Storage relative humidity	15% to 95%, noncondensing
	Altitude	up to 10,000 ft (3 km)
	Acoustic	Power: 57 dB, Pressure: 41.8 dB
Electrical characteristics	**Frequency**	50/60 Hz
	Maximum heat dissipation	239 BTU/hr (252.15 kJ/hr)
	AC voltage	100-240 VAC
	Maximum power rating	70 W

Technical Specifications

	Idle power	27 W
Safety	CE Labeled; EN 60825-1 Safety of Laser Products-Part 1; FCC Part 15, Subpart B; GOST; EU RoHS Compliant; EN 55022 Class A; EN 55024: 1998; C-Tick; ICES-003, Class A; VCCI Class A; IEC 60825-1; IEC 60950-1, Second Edition; EN62479:2010; CSA C22.2 No. 60950-1-07 2nd Edition; EN 60950-1:2006+A11:2009+A1:2010+A12:2011; IEC 60950-1 (ed.2): am1	
Emissions	FCC part 15 Class A; VCCI Class A; EN 55022/CISPR 22 Class A	
Immunity	**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	IEC 61000-3-2
	Flicker	IEC 61000-3-3
Management	HP PCM+; IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; out-of-band management (RJ-45 Ethernet); SNMP Manager; Telnet; RMON1; FTP; in-line and out-of-band; out-of-band management (serial RS-232C or Micro USB)	
Services	Refer to the HP website at www.hp.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 HP sales office.	

HP 2920-48G-PoE+ Switch (J9729A)

I/O ports and slots	44 RJ-45 autosensing 10/100/1000 PoE+ ports; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+) 4 RJ-45 dual-personality 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+) 1 dual-personality (RJ-45 or USB micro-B) 1 USB 1.1 1 RJ-45 out-of-band management port 2 module slots 1 stacking module slot
Power supplies	1 power supply slot 1 minimum power supply required includes: 1 x J9738A (HP X332 575W 100-240VAC to 54VDC Modular Power Supply)
Physical characteristics **Dimensions**	17.42(w) x 13.23(d) x 1.73(h) in (44.25 x 33.6 x 4.39 cm) (1U height)
Weight	12.57 lb (5.7 kg)
Memory and processor	Tri Core ARM1176 @ 625 MHz, 512 MB SDRAM, 1 GB flash; packet buffer size: 11.25 MB (6.75 MB dynamic egress + 4.5 MB ingress)
Performance **100 Mb Latency**	< 9.0 µs (FIFO 64-byte packets)

Technical Specifications

	1000 Mb Latency	< 3.2 µs (FIFO 64-byte packets)
	10 Gbps Latency	< 3.2 µs (FIFO 64-byte packets)
	Throughput	130.9 million pps
	Switching capacity	176 Gb/s
	Routing table size	2048 entries (IPv4), 256 entries (IPv6)
	MAC address table size	16000 entries
Environment	**Operating temperature**	32°F to 131°F (0°C to 55°C)
	Operating relative humidity	15% to 95%, noncondensing
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non-operating/ Storage relative humidity	15% to 95%, noncondensing
	Altitude	up to 10,000 ft (3 km)
	Acoustic	Power: 62 dB, Pressure: 45.2 dB
Electrical characteristics	**Frequency**	50/60 Hz
	Maximum heat dissipation	399 BTU/hr (420.95 kJ/hr)
	AC voltage	100-240 VAC
	Maximum power rating	487 W
	Idle power	46 W
	PoE power	370 W
Safety	CE Labeled; EN 60825-1 Safety of Laser Products-Part 1; FCC Part 15, Subpart B; GOST; EU RoHS Compliant; EN 55022 Class A; EN 55024: 1998; C-Tick; ICES-003, Class A; VCCI Class A; IEC 60825-1; IEC 60950-1, Second Edition; EN62479:2010; CSA C22.2 No. 60950-1-07 2nd Edition; EN 60950-1:2006+A11:2009+A1:2010+A12:2011; IEC 60950-1 (ed.2): am1	
Emissions	FCC part 15 Class A; VCCI Class A; EN 55022/CISPR 22 Class A	
Immunity	**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	IEC 61000-3-2
	Flicker	IEC 61000-3-3

Technical Specifications

Management	HP PCM+; IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; out-of-band management (RJ-45 Ethernet); SNMP Manager; Telnet; RMON1; FTP; in-line and out-of-band; out-of-band management (serial RS-232C or Micro USB)
Services	Refer to the HP website at www.hp.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 HP sales office.

HP 2920-48G-PoE+ 740W Switch (J9836A)

I/O ports and slots	44 RJ-45 autosensing 10/100/1000 PoE+ ports; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+) 4 RJ-45 dual-personality 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+) 1 dual-personality (RJ-45 or USB micro-B) 1 USB 1.1 1 RJ-45 out-of-band management port 2 module slots 1 stacking module slot	
Power supplies	1 power supply slot 1 minimum power supply required includes: 1 x J9737A (HP X332 1050W 110-240VAC to 54VDC Power Supply)	
Physical characteristics	**Dimensions**	17.42(w) x 13.23(d) x 1.73(h) in (44.25 x 33.6 x 4.39 cm) (1U height)
	Weight	12.86 lb (5.83 kg)
Memory and processor	Tri Core ARM1176 @ 625 MHz, 512 MB SDRAM, 1 GB flash; packet buffer size: 11.25 MB (6.75 MB dynamic egress + 4.5 MB ingress)	
Performance	**100 Mb Latency**	< 9.0 µs (FIFO 64-byte packets)
	1000 Mb Latency	< 3.2 µs (FIFO 64-byte packets)
	10 Gbps Latency	< 3.2 µs (FIFO 64-byte packets)
	Throughput	130.9 million pps
	Switching capacity	176 Gb/s
	Routing table size	2048 entries (IPv4), 256 entries (IPv6)
	MAC address table size	16000 entries
Environment	**Operating temperature**	32°F to 131°F (0°C to 55°C)
	Operating relative humidity	15% to 95%, noncondensing
	Non-operating/ Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non-operating/ Storage relative humidity	15% to 95%, noncondensing
	Altitude	up to 10,000 ft (3 km)
	Acoustic	Power: -53 dB, Pressure: -38.3 dB
Electrical characteristics	**Frequency**	50/60 Hz

Technical Specifications

Maximum heat dissipation	399 BTU/hr (420.95 kJ/hr)	
AC voltage	100-240 VAC	
Maximum power rating	487 W	
Idle power	46 W	
PoE power	740 W	

Safety	CE Labeled; EN 60825-1 Safety of Laser Products-Part 1; FCC Part 15, Subpart B; GOST; EU RoHS Compliant; EN 55022 Class A; EN 55024: 1998; C-Tick; ICES-003, Class A; VCCI Class A; IEC 60950-1 :Second Edition ; IEC 60825-1; EN62479:2010; CSA C22.2 No. 60950-1-07 2nd Edition; EN 60950-1:2006+A11:2009+A1:2010+A12:2011; IEC 60950-1 (ed.2): am1	
Emissions	FCC part 15 Class A; VCCI Class A; EN 55022/CISPR 22 Class A	
Immunity	**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	IEC 61000-3-2
	Flicker	IEC 61000-3-3
Management	HP PCM+; IMC - Intelligent Management Center; command-line interface; Web browser; configuration menu; out-of-band management (RJ-45 Ethernet); SNMP Manager; Telnet; RMON1; FTP; in-line and out-of-band; out-of-band management (serial RS-232C or Micro USB)	
Services	Refer to the HP website at www.hp.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 HP 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 2578-2580 SMIv2 RFC 2579 (SMIv2 Text Conventions) RFC 2580 (SMIv2 Conformance) RFC 2819 (RMON groups Alarm, Event, History and

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Technical Specifications

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 802.3x 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 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

Technical Specifications

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 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
UDLD (Uni-directional Link Detection)

IP multicast
RFC 1112 IGMP
RFC 2236 IGMPv2
RFC 2710 Multicast Listener Discovery (MLD) for IPv6
RFC 3376 IGMPv3 (host joins only)
RFC 4541 Considerations for Internet Group
Management Protocol (IGMP) and Multicast Listener
Discovery (MLD) Snooping Switches

IPv6
RFC 1981 IPv6 Path MTU Discovery
RFC 2460 IPv6 Specification
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 3513 IPv6 Addressing Architecture
RFC 3596 DNS Extension for IPv6
RFC 3810 MLDv2 (host joins only)
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 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

MIBs
IEEE 802.1ap (MSTP and STP MIB's only)
RFC 1156 (TCP/IP MIB)
RFC 1157 A Simple Network Management Protocol (SNMP)

Technical Specifications

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 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

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 SNMPv3 Message Processing
RFC 3414 SNMPv3 User-based Security Model (USM)
RFC 3415 SNMPv3 View-based Access Control Model VACM)
ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED)
SNMPv1/v2c/v3
XRMON

QoS/CoS

Technical Specifications

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

Security
IEEE 802.1X Port Based Network Access Control
IEEE 802.1X:Port-Based Network Access Control (2001)
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)
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

Accessory Product Details

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

HP 0.5 m Multimode OM3 LC/LC Optical Cable (AJ833A)	**Cabling**	**Cable type**: 50/125 μm (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m **Maximum distance**: 10Gbps Transfer Rate (Ethernet): 300m
	Notes	Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end. ● Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um ● Optical glass: Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm. ● Optical glass: Bandwidth: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links. ● CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber and designed to work in both the 850 and 1300 nm wavelength windows. ● BULK CABLE & CABLE ASSEMBLY CONFIGURATION: ● Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic. ● Jacket Color: Aqua for OM3 multimode per TIA 598 ● Boot Color: White ● Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters. ● Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46. ● Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg
	Services	Refer to the HP website at www.hp.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 HP sales office.

Accessory Product Details

HP 1 m Multimode OM3 LC/LC Optical Cable (AJ834A)	**Cabling**	**Cable type**: 50/125 µm (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m **Maximum distance**: 10Gbps Transfer Rate (Ethernet): 300m
	Notes	Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um
- Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.
- Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links.
- CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows.
- BULK CABLE & CABLE ASSEMBLY CONFIGURATION:
- Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.
- Jacket Color: Aqua for OM3 multimode per TIA 598
- Boot Color: White
- Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters.
- Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.
- Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg

	Services	Refer to the HP website at www.hp.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 HP sales office.

Accessory Product Details

HP 2 m Multimode OM3 LC/LC Optical Cable (AJ835A)	**Cabling**	**Cable type**: 50/125 μm (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m; **Maximum distance**: 10Gbps Transfer Rate (Ethernet): 300m
	Notes	Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um
- Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.
- Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links.
- CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows.
- BULK CABLE & CABLE ASSEMBLY CONFIGURATION:
- Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.
- Jacket Color: Aqua for OM3 multimode per TIA 598
- Boot Color: White
- Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters.
- Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.
- Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg

	Services	Refer to the HP website at www.hp.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 HP sales office.

Accessory Product Details

HP 5 m Multimode OM3 LC/LC Optical Cable (AJ836A)	**Cabling**	**Cable type**: 50/125 µm core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m; **Maximum distance**: 10Gbps Transfer Rate (Ethernet): 300m
	Notes	Cable Specs: This specification defines the detail requirements for a tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um
- Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.
- Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links.
- CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows.
- BULK CABLE & CABLE ASSEMBLY CONFIGURATION:
- Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.
- Jacket Color: Aqua for OM3 multimode per TIA 598
- Boot Color: White
- Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters.
- Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.
- Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg

	Services	Refer to the HP website at www.hp.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 HP sales office.

Accessory Product Details

HP 15 m Multimode OM3 LC/LC Optical Cable (AJ837A)	**Cabling**	**Cable type**: 50/125 μm (core/cladding) diameter, mulitmode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m;
		Maximum distance: 10Gbps Transfer Rate (Ethernet): 300m
	Notes	Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um
- Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.
- Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links.
- CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows.
- BULK CABLE & CABLE ASSEMBLY CONFIGURATION:
- Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.
- Jacket Color: Aqua for OM3 multimode per TIA 598
- Boot Color: White
- Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters.
- Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.
- Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg

	Services	Refer to the HP website at www.hp.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 HP sales office.

Accessory Product Details

HP 30 m Multimode OM3 LC/LC Optical Cable (AJ838A)	**Cabling**	**Cable type**: 50/125 µm (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m; **Maximum distance**: 10Gbps Transfer Rate (Ethernet): 300m
	Notes	Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um
- Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.
- Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links.
- CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows.
- BULK CABLE & CABLE ASSEMBLY CONFIGURATION:
- Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.
- Jacket Color: Aqua for OM3 multimode per TIA 598
- Boot Color: White
- Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters.
- Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.
- Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg

	Services	Refer to the HP website at www.hp.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 HP sales office.

Accessory Product Details

HP 50 m Multimode OM3 LC/LC Optical Cable (AJ839A)	**Cabling**	**Cable type**: 50/125 µm (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m; **Maximum distance**: 10Gbps Transfer Rate (Ethernet): 300m
	Notes	Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um
- Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.
- Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links.
- CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows.
- BULK CABLE & CABLE ASSEMBLY CONFIGURATION:
- Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.
- Jacket Color: Aqua for OM3 multimode per TIA 598
- Boot Color: White
- Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters.
- Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.
- Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg

	Services	Refer to the HP website at www.hp.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 HP sales office.

Accessory Product Details

HP Premier Flex LC/LC Multi-mode OM4 2 fiber 1m Cable (QK732A)	**Notes**	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end. • Core Diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um • Bandwidth: 3000 MHz-km @ 850nm (Laser) • Jacket Color: Blue • Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic • Boot Color: White • Outer Jacket Print: HP PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable. • Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m • Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45
	Services	Refer to the HP website at www.hp.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 HP sales office.
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 2m Cable (QK733A)	**Notes**	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end. • Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um • Bandwidth: 3000 MHz-km @ 850nm (Laser) • Jacket Color: Blue • Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic • Boot Color: White • Outer Jacket Print: HP PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable. • Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m • Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45
	Services	Refer to the HP website at www.hp.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 HP sales office.

Accessory Product Details

HP Premier Flex LC/LC Multi-mode OM4 2 fiber 5m Cable (QK734A)	**Notes**	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end. • Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um • Bandwidth: 3000 MHz-km @ 850nm (Laser) • Jacket Color: Blue • Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic • Boot Color: White • Outer Jacket Print: HP PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable. • Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m • Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45
	Services	Refer to the HP website at www.hp.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 HP sales office.
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 15m Cable (QK735A)	**Notes**	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end. • Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um • Bandwidth: 3000 MHz-km @ 850nm (Laser) • Jacket Color: Blue • Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic • Boot Color: White • Outer Jacket Print: HP PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable. • Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m • Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45
	Services	Refer to the HP website at www.hp.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 HP sales office.

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HP Premier Flex LC/LC Multi-mode OM4 2 fiber 30m Cable (QK736A)	**Notes**	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end. • Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um • Bandwidth: 3000 MHz-km @ 850nm (Laser) • Jacket Color: Blue • Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic • Boot Color: White • Outer Jacket Print: HP PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable. • Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m • Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45
	Services	Refer to the HP website at www.hp.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 HP sales office.
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 50m Cable (QK737A)	**Notes**	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end. • Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um • Bandwidth: 3000 MHz-km @ 850nm (Laser) • Jacket Color: Blue • Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic • Boot Color: White • Outer Jacket Print: HP PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable. • Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m • Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45
	Services	Refer to the HP website at www.hp.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 HP sales office.

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HP X410 1U Universal 4-post Rack Mounting Kit (J9583A)	**Notes**	The rack mounting kit supports the 1U, full width switches in the following switch series and the power supply: V1810 Series, E2510 Series, E2520 Series, E2610 Series, E2810 Series, E2910 Series, E3500 Series, and the E620 Power Supply This universal rack mounting kit is design to fit the following racks: HP 10K 10642, HP 10K 10842, Panduit CN, Panduit CS, Wrightline Vantage S2, APC Netshelter 600mm, and APC Netshelter 800mm. It may well fit many other brands and models too.
	Services	Refer to the HP website at: www.hp.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 HP sales office.

HP Identity Driven Manager 3.0 Software--500-User License (J9438A)	**Identity Driven Manager 3.0 software and license for managing up to 500 users.**	
	RADIUS server support	Microsoft Network Policy Server on Windows Server 2008 (32-bit) Microsoft Internet Authentication Service (IAS) on Windows Server 2003 (32-bit) FreeRADIUS supplied with Red Hat Enterprise Linux (4.7 and 5.2) RADIUS on the Network Access Controller 800 FreeRADIUS supplied with SuSE Linux Enterprise Server (9.3 and 10.2)
	Features	Intuitive Explorer-style interface OpenView NNM integration Application of policies by user identity ● Auto VLAN assignment ● Auto set quality of service by user ● Auto set bandwidth assignment by user Rule-based access rights deployment Dynamic rights assignment based on: ● Time ● Location ● User system Auto-discovery of: ● RADIUS servers ● Realms ● Users
	Notes	Additional specifications ● Supports environments with up to 10,000 users. ● Supports up to 10 RADIUS servers with HP Identity Driven Manager agents installed. Requires the HP PCM Plus 3.0 or greater network management platform. ● Please see HP PCM Plus 3.0 for hardware and software system

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	requirements.
Services	3-Year, 9x5 SW phone support, software updates (UQ124E) 3-year, 24x7 SW phone support, software updates (UQ125E)
	Refer to the HP website at www.hp.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 HP sales office.

HP Identity Driven Manager 3.0 Software-- Additional 1,000-User License (J9440A)	**License to add support for managing an additional 1,000 users with the Identity Driven Manager 3.0 product.**
RADIUS server support	—
Features	—
Notes	Additional specifications

- Supports environments with up to 10,000 users.
- Supports up to 10 RADIUS servers with HP Identity Driven Manager agents installed.

Requires the HP PCM Plus 3.0 or greater network management platform.

- Please see HP PCM Plus 3.0 for hardware and software system requirements. Requires the HP Identity Driven Manager 3.0 base product (J9438A).

Multiple licenses for additional 1,000 users can be added to the base HP Identity Driven Manager product to support larger numbers of users.

Services	3-year, 24x7 SW phone support, software updates (UQ119E) 3-Year, 9x5 SW phone support, software updates (UQ118E)
	Refer to the HP website at www.hp.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 HP sales office.

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HP Identity Driven Manager 3.0 Software-- Unlimited-User License (J9439A)	**Identity Driven Manager 3.0 software and license for managing an unlimited number of users.**	
	RADIUS server support	Microsoft Network Policy Server on Windows Server 2008 (32-bit) Microsoft Internet Authentication Service (IAS) on Windows Server 2003 (32-bit) FreeRADIUS supplied with Red Hat Enterprise Linux (4.7 and 5.2) RADIUS on the Network Access Controller 800 FreeRADIUS supplied with SuSE Linux Enterprise Server (9.3 and 10.2)
	Features	Intuitive Explorer-style interface OpenView NNM integration Application of policies by user identity • Auto VLAN assignment • Auto set quality of service by user • Auto set bandwidth assignment by user Rule-based access rights deployment Dynamic rights assignment based on: • Time • Location • User system Auto-discovery of: • RADIUS servers • Realms • Users
	Notes	Additional specifications • Supports environments with up to 10,000 users. • Supports up to 10 RADIUS servers with HP Identity Driven Manager agents installed. Requires the HP PCM Plus 3.0 or greater network management platform. Please see HP PCM Plus 3.0 for hardware and software system requirements.
	Services	3-year, 24x7 SW phone support, software updates (UQ133E) 3-Year, 9x5 SW phone support, software updates (UQ132E) Refer to the HP website at www.hp.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 HP sales office.

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To learn more, visit: www.hp.com/networking