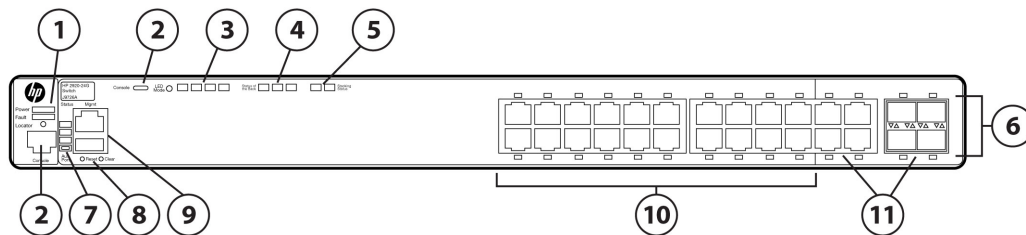


### Overview

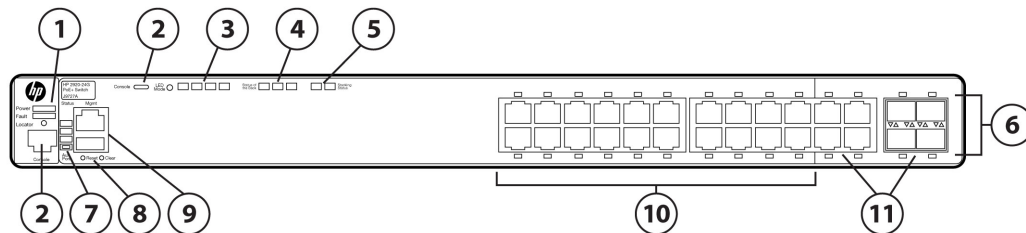
### Models

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

- |                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none"> <li>1. Power, Fault, and Locator LEDs</li> <li>2. Console ports</li> <li>3. LED Mode button and indicator LEDs</li> <li>4. Status LEDs for components on the back of the switch</li> <li>5. Stacking status LEDs</li> <li>6. Switch port LEDs</li> </ol> | <ol style="list-style-type: none"> <li>7. PoE, Tmp (Temperature), Test, Fan, and Aux (Auxiliary) port status LED</li> <li>8. Reset and Clear buttons</li> <li>9. Aux port and Out-of-Band Management port</li> <li>10. 10/100/1000BASE-T PoE+ RJ-45 ports</li> <li>11. Dual-Personality (10/100/1000BASE-T or SFP) ports</li> </ol> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

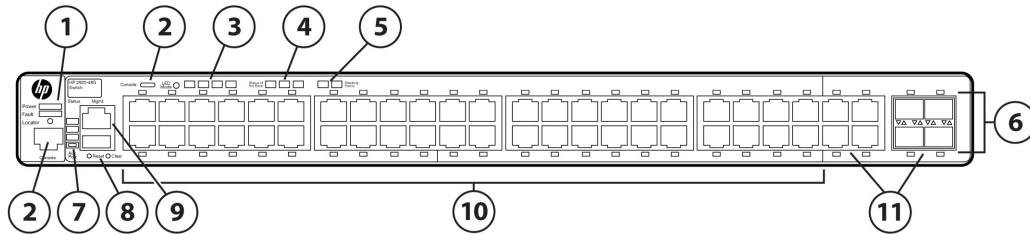


#### HP 2920-24G-PoE+ Switch

- |                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ol style="list-style-type: none"> <li>1. Power, Fault, and Locator LEDs</li> <li>2. Console ports</li> <li>3. LED Mode button and indicator LEDs</li> <li>4. Status LEDs for components on the back of the switch</li> </ol> | <ol style="list-style-type: none"> <li>7. PoE, Tmp (Temperature), Test, Fan, and Aux (Auxiliary) port status LED</li> <li>8. Reset and Clear buttons</li> <li>9. Aux port and Out-of-Band Management port</li> <li>10. 10/100/1000BASE-T PoE+ RJ-45 ports</li> </ol> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

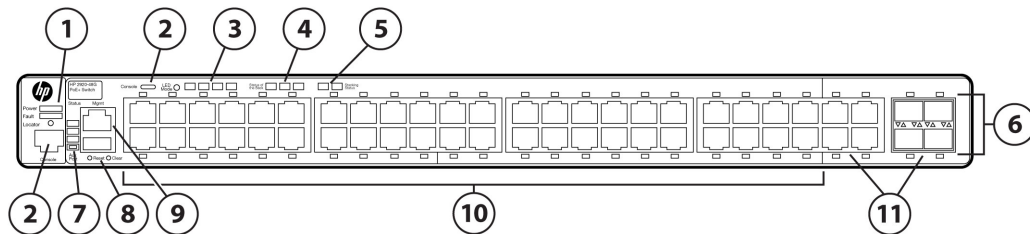
### Overview

5. Stacking status LEDs
6. Switch port LEDs
11. Dual-Personality (10/100/1000BASE-T or SFP) ports



### HP 2920-48G Switch

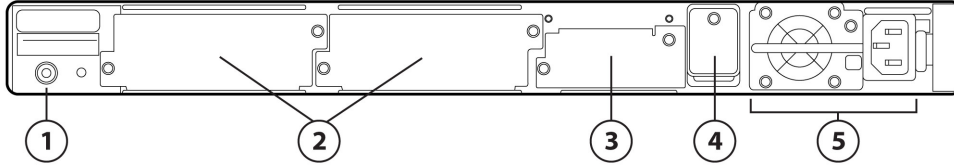
1. Power, Fault, and Locator LEDs
2. Console ports
3. LED Mode button and indicator LEDs
4. Status LEDs for components on the back of the switch
5. Stacking status LEDs
6. Switch port LEDs
7. PoE, Tmp (Temperature), Test, Fan, and Aux (Auxiliary) port status LED
8. Reset and Clear buttons
9. Aux port 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

### Overview



#### HP 2920 Switch Series Rear (All)

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

### 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**  
is a key technology that enables software-defined networking by allowing the separation of 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

### 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

### 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 the two devices.

### Layer 2 switching



### Overview

- **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**  
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**

### Overview

- allows access only to specified MAC addresses, which can be learned or specified by the administrator
- **MAC address lockdown**  
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](http://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](http://www.hp.com/networking/warrantysummary)
- **Software releases**  
to find software for your product, refer to [www.hp.com/networking/support](http://www.hp.com/networking/support); for details on the software releases available with your product purchase, refer to [www.hp.com/networking/warrantysummary](http://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 z1 Modules, HP Threat Management Services z1 Module, HP AllianceOne Extended z1 Module with Riverbed Steelhead, HP MSM765z1 Mobility Controller and HP Survivable Branch Communication z1 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](http://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
<ul style="list-style-type: none"> <li>• 24 RJ-45 autosensing 10/100/1000 ports</li> <li>• 4 dual-personality ports</li> <li>• min=0 \ max=4 SFP Transceivers</li> <li>• 1 - HP X331 165W 100-240VAC to 12VDC PS included</li> <li>• 1U - Height</li> </ul>	
PDU CABLE NA/MEX/TW/JPPDU CABLE NA/MEX/TW/JP	J9726A#B2B
<ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	
PDU CABLE ROW	J9726A#B2C
<ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul>	
High Volt Switch to Wall Power Cord	J9726A#B2E
<ul style="list-style-type: none"> <li>• NEMA L6-20P Cord (NA/MEX/JP/TW)</li> </ul>	
HP 2920-24G-POE+ Switch	J9727A
<ul style="list-style-type: none"> <li>• 24 RJ-45 autosensing 10/100/1000 PoE+ ports</li> <li>• 4 dual-personality ports</li> <li>• min=0 \ max=4 SFP Transceivers</li> <li>• 1 - HP X332 575W 100-240VAC to 54VDC PS included</li> <li>• 1U - Height</li> </ul>	See Configuration Note:1, 2
PDU CABLE NA/MEX/TW/JPPDU CABLE NA/MEX/TW/JP	J9727A#B2B
<ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	
PDU CABLE ROW	J9727A#B2C
<ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul>	
High Volt Switch to Wall Power Cord	J9727A#B2E
<ul style="list-style-type: none"> <li>• NEMA L6-20P Cord (NA/MEX/JP/TW)</li> </ul>	
HP 2920-48G Switch	J9728A
<ul style="list-style-type: none"> <li>• 48 RJ-45 autosensing 10/100/1000 ports</li> <li>• 4 dual-personality ports</li> <li>• min=0 \ max=4 SFP Transceivers</li> <li>• 1 - HP X331 165W 100-240VAC to 12VDC PS included</li> <li>• 1U - Height</li> </ul>	See Configuration Note:1, 2
PDU CABLE NA/MEX/TW/JPPDU CABLE NA/MEX/TW/JP	J9728A#B2B
<ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	



### Configuration

PDU CABLE ROW	J9728A#B2C
<ul style="list-style-type: none"> <li>C15 PDU Jumper Cord (ROW)</li> </ul>	
High Volt Switch to Wall Power Cord	J9728A#B2E
<ul style="list-style-type: none"> <li>NEMA L6-20P Cord (NA/MEX/JP/TW)</li> </ul>	
HP 2920-48G-POE+ Switch	J9729A
<ul style="list-style-type: none"> <li>48 RJ-45 autosensing 10/100/1000 PoE+ ports</li> <li>4 dual-personality ports</li> <li>min=0 \ max=4 SFP Transceivers</li> <li>1 - HP X332 575W 100-240VAC to 54VDC PS included</li> <li>1U - Height</li> </ul>	See Configuration Note:1, 2
PDU CABLE NA/MEX/TW/JP	J9729A#B2B
<ul style="list-style-type: none"> <li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	
PDU CABLE ROW	J9729A#B2C
<ul style="list-style-type: none"> <li>C15 PDU Jumper Cord (ROW)</li> </ul>	
High Volt Switch to Wall Power Cord	J9729A#B2E
<ul style="list-style-type: none"> <li>NEMA L6-20P Cord (NA/MEX/JP/TW)</li> </ul>	
HP 2920-48G-POE+ 740W Switch	J9836A
<ul style="list-style-type: none"> <li>44 RJ-45 autosensing 10/100/1000 PoE+ ports</li> <li>4 RJ-45 dual-personality 10/100/1000 PoE+ ports</li> <li>min=0 \ max=4 SFP Transceivers</li> <li>1 - HP X332 1050W 110-240VAC to 54VDC PS included</li> <li>1U - Height</li> </ul>	See Configuration Note:1, 2
PDU CABLE NA/MEX/TW/JP	J9836A#B2B
<ul style="list-style-type: none"> <li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	
PDU CABLE ROW	J9836A#B2C
<ul style="list-style-type: none"> <li>C15 PDU Jumper Cord (ROW)</li> </ul>	
High Volt Switch to Wall Power Cord	J9836A#B2E
<ul style="list-style-type: none"> <li>NEMA L6-20P Cord (NA/MEX/JP/TW)</li> </ul>	

### Configuration Rules

Note 1	The following Transceivers install into this Module Switch:	
	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

<b>HP 2920-24G Switch</b> <ul style="list-style-type: none"> <li>• 24 RJ-45 autosensing 10/100/1000 ports</li> <li>• 4 dual-personality ports\</li> <li>• min=0 \ max=4 SFP Transceivers</li> <li>• 1 - HP X331 165W 100-240VAC to 12VDC PS included</li> <li>• 1U - Height</li> </ul>	<b>J9726A#0D1</b> <a href="#">See Configuration Note:1, 3, 4, 5</a>
<b>PDU CABLE NA/MEX/TW/JP</b> <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	<b>J9726A#B2B</b>
<b>PDU CABLE ROW</b> <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul>	<b>J9726A#B2C</b>
<b>HP 2920-24G-POE+ Switch</b> <ul style="list-style-type: none"> <li>• 24 RJ-45 autosensing 10/100/1000 PoE+ ports</li> <li>• 4 dual-personality ports</li> <li>• min=0 \ max=4 SFP Transceivers</li> <li>• 1 - HP X332 575W 100-240VAC to 54VDC PS included</li> <li>• 1U - Height</li> </ul>	<b>J9727A#0D1</b> <a href="#">See Configuration Note:1, 3, 4, 5</a>
<b>PDU CABLE NA/MEX/TW/JP</b> <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	<b>J9727A#B2B</b>
<b>PDU CABLE ROW</b> <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul>	<b>J9727A#B2C</b>
<b>HP 2920-48G Switch</b> <ul style="list-style-type: none"> <li>• 48 RJ-45 autosensing 10/100/1000 ports</li> <li>• 4 dual-personality ports</li> <li>• min=0 \ max=4 SFP Transceivers</li> <li>• 1 - HP X331 165W 100-240VAC to 12VDC PS included</li> <li>• 1U - Height</li> </ul>	<b>J9728A#0D1</b> <a href="#">See Configuration Note:1, 3, 4, 5</a>
<b>PDU CABLE NA/MEX/TW/JP</b> <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	<b>J9728A#B2B</b>
<b>PDU CABLE ROW</b>	<b>J9728A#B2C</b>

### 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	J9739A#0D1
<ul style="list-style-type: none"> <li>includes 1 x c15, 165w (Spare Only)</li> </ul>	See Configuration Note:1, 3, 4
PDU CABLE NA/MEX/TW/JP	J9739A#B2B
<ul style="list-style-type: none"> <li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	
PDU CABLE ROW	J9739A#B2C
<ul style="list-style-type: none"> <li>C15 PDU Jumper Cord (ROW)</li> </ul>	
High Volt Switch to Wall Power Cord	J9739A#B2E
<ul style="list-style-type: none"> <li>NEMA L6-20P Cord (NA/MEX/JP/TW)</li> </ul>	
HP X332 575W 100-240VAC to 54VDC PS	J9738A#0D1
<ul style="list-style-type: none"> <li>includes 1 x c15, 575w (Spare Only)</li> </ul>	See Configuration Note:2, 3, 4
PDU CABLE NA/MEX/TW/JP	J9738A#B2B
<ul style="list-style-type: none"> <li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	
PDU CABLE ROW	J9738A#B2C
<ul style="list-style-type: none"> <li>C15 PDU Jumper Cord (ROW)</li> </ul>	
High Volt Switch to Wall Power Cord	J9738A#B2E
<ul style="list-style-type: none"> <li>NEMA L6-20P Cord (NA/MEX/JP/TW)</li> </ul>	
HP X332 1050W 100-240VAC to 54VDC PS	J9737A
<ul style="list-style-type: none"> <li>includes 1 x c15, 1050w (Spare or Upgrade Only)</li> </ul>	See Configuration Note:2, 3, 4

### Configuration

PDU CABLE NA/MEX/TW/JP	J9737A#B2B
<ul style="list-style-type: none"> <li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	
PDU CABLE ROW	J9737A#B2C
<ul style="list-style-type: none"> <li>C15 PDU Jumper Cord (ROW)</li> </ul>	
High Volt Switch to Wall Power Cord	J9737A#B2E
<ul style="list-style-type: none"> <li>NEMA L6-20P Cord (NA/MEX/JP/TW)</li> </ul>	

### 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)

<b>Localization</b>	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	



### Configuration

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

### Configuration

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	



### Configuration

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



### Configuration

Power Cord: Quantity :1, IRAM 2073, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-6869	
2920-24G 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

### Configuration

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	

### Configuration

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

### Configuration

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
<ul style="list-style-type: none"> <li>min=0 \ max=2 SFP + Transceivers</li> </ul>	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
	<a href="#">See Configuration Note:1</a>

#### Configuration 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
<ul style="list-style-type: none"> <li>Height = 1U</li> <li>includes 1 x c13, 800w</li> </ul>	<a href="#">See Configuration Note:1, 3, 4, 5</a>
HP X331 165W 100-240VAC to 12VDC PS	J9739A
<ul style="list-style-type: none"> <li>includes 1 x c15, 165w</li> </ul>	<a href="#">See Configuration Note:2</a>
PDU CABLE NA/MEX/TW/JP	J9739A#B2B
<ul style="list-style-type: none"> <li>C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>	
PDU CABLE ROW	J9739A#B2C
<ul style="list-style-type: none"> <li>C15 PDU Jumper Cord (ROW)</li> </ul>	
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

- includes 1 x c15, 575w

J9738A  
See Configuration  
Note:2

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

J9737A  
See Configuration  
Note:2

PDU CABLE NA/MEX/TW/JP

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

J9737A#B2B

PDU CABLE ROW

- C15 PDU Jumper Cord (ROW)

J9737A#B2C

High Volt Switch to Wall Power Cord

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

J9737A#B2E

### 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

### Technical Specifications

#### HP 2920-24G Switch (J9726A)

<b>Ports</b>	20 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only	
	4 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)	
	2 module slots	
	1 stacking module slot	
	1 dual-personality (RJ-45 or USB micro-B)	
	1 USB 1.1	
	1 RJ-45 out-of-band management port	
<b>Power supplies</b>	1 power supply slot	
	1 minimum power supply required	
	includes: 1 x J9739A (HP X331 165W 100-240VAC to 12VDC Modular Power Supply)	
<b>Physical characteristics</b>	<b>Dimensions</b>	17.42(w) x 13.23(d) x 1.75(h) in (44.25 x 33.6 x 4.45 cm) (1U height)
	<b>Weight</b>	11.57 lb (5.25 kg)
<b>Memory and processor</b>	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)	
<b>Performance</b>	<b>100 Mb Latency</b>	< 9.0 $\mu$ s (FIFO 64-byte packets)
	<b>1000 Mb Latency</b>	< 3.3 $\mu$ s (FIFO 64-byte packets)
	<b>10 Gbps Latency</b>	< 3.3 $\mu$ s (FIFO 64-byte packets)
	<b>Throughput</b>	95.2 million pps
	<b>Switching capacity</b>	128 Gbps
	<b>Routing table size</b>	2048 entries (IPv4), 256 entries (IPv6)
	<b>MAC address table size</b>	16000 entries
<b>Environment</b>	<b>Operating temperature</b>	32°F to 131°F (0°C to 55°C)
	<b>Operating relative humidity</b>	15% to 95%, noncondensing
	<b>Non-operating/Storage temperature</b>	-40°F to 158°F (-40°C to 70°C)
	<b>Non-operating/Storage relative humidity</b>	15% to 95%, noncondensing
	<b>Altitude</b>	up to 10,000 ft (3 km)
	<b>Acoustic</b>	Power: 57 dB, Pressure: 41.4 dB
<b>Electrical characteristics</b>	<b>Frequency</b>	50/60 Hz
	<b>80plus.org Certification</b>	Silver
	<b>Maximum heat dissipation</b>	198 BTU/hr (208.89 kJ/hr)
	<b>Voltage</b>	100-240 VAC
	<b>Maximum power rating</b>	58 W
	<b>Idle power</b>	26 W

### Technical Specifications

	<b>Notes</b>	Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.
<b>Safety</b>	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	
<b>Emissions</b>	FCC part 15 Class A; VCCI Class A; EN 55022/CISPR 22 Class A	
<b>Immunity</b>	<b>EN</b>	EN 55024, CISPR 24
	<b>ESD</b>	IEC 61000-4-2
	<b>Radiated</b>	IEC 61000-4-3
	<b>EFT/Burst</b>	IEC 61000-4-4
	<b>Surge</b>	IEC 61000-4-5
	<b>Conducted</b>	IEC 61000-4-6
	<b>Power frequency magnetic field</b>	IEC 61000-4-8
	<b>Voltage dips and interruptions</b>	IEC 61000-4-11
	<b>Harmonics</b>	IEC 61000-3-2
	<b>Flicker</b>	IEC 61000-3-3
<b>Management</b>	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)	
<b>Services</b>	Refer to the HP website at <a href="http://www.hp.com/networking/services">www.hp.com/networking/services</a> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.	

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

<b>Ports</b>	20 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only 4 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+) 2 module slots 1 stacking module slot 1 dual-personality (RJ-45 or USB micro-B) 1 USB 1.1 1 RJ-45 out-of-band management port
<b>Power supplies</b>	1 power supply slot 1 minimum power supply required includes: 1 x J9738A (HP X332 575W 100-240VAC to 54VDC Modular Power Supply)
<b>Physical characteristics</b>	<b>Dimensions</b> 17.42(w) x 13.23(d) x 1.75(h) in (44.25 x 33.6 x 4.45 cm) (1U height)



### Technical Specifications

	<b>Weight</b>	12.04 lb (5.46 kg)
<b>Memory and processor</b>	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)	
<b>Performance</b>	<b>100 Mb Latency</b>	< 9.0 $\mu$ s (FIFO 64-byte packets)
	<b>1000 Mb Latency</b>	< 3.3 $\mu$ s (FIFO 64-byte packets)
	<b>10 Gbps Latency</b>	< 3.3 $\mu$ s (FIFO 64-byte packets)
	<b>Throughput</b>	95.2 million pps
	<b>Switching capacity</b>	128 Gbps
	<b>Routing table size</b>	2048 entries (IPv4), 256 entries (IPv6)
	<b>MAC address table size</b>	16000 entries
<b>Environment</b>	<b>Operating temperature</b>	32°F to 131°F (0°C to 55°C)
	<b>Operating relative humidity</b>	15% to 95%, noncondensing
	<b>Non-operating/Storage temperature</b>	-40°F to 158°F (-40°C to 70°C)
	<b>Non-operating/Storage relative humidity</b>	15% to 95%, noncondensing
	<b>Altitude</b>	up to 10,000 ft (3 km)
	<b>Acoustic</b>	Power: 61 dB, Pressure: 44.9 dB
	<b>Frequency</b>	50/60 Hz
<b>Electrical characteristics</b>	<b>80plus.org Certification</b>	Silver
	<b>Maximum heat dissipation</b>	358 BTU/hr (377.69 kJ/hr)
	<b>Voltage</b>	100-240 VAC
	<b>Maximum power rating</b>	475 W
	<b>Idle power</b>	42 W
	<b>PoE power</b>	370 W
	<b>Notes</b>	<p>Idle power is the actual power consumption of the device with no ports connected.</p> <p>Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.</p> <p>PoE power is the power supplied by the internal power supply. It is dependent on the type and quantity of power supplies and may be supplemented with the use of an external power supply (EPS).</p> <p>370 W of PoE+ power is available using the internal default power supply.</p>
<b>Safety</b>	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	
<b>Emissions</b>	FCC part 15 Class A; VCCI Class A; EN 55022/CISPR 22 Class A	
<b>Immunity</b>	<b>EN</b>	EN 55024, CISPR 24

### Technical Specifications

	<b>ESD</b>	IEC 61000-4-2
	<b>Radiated</b>	IEC 61000-4-3
	<b>EFT/Burst</b>	IEC 61000-4-4
	<b>Surge</b>	IEC 61000-4-5
	<b>Conducted</b>	IEC 61000-4-6
	<b>Power frequency magnetic field</b>	IEC 61000-4-8
	<b>Voltage dips and interruptions</b>	IEC 61000-4-11
	<b>Harmonics</b>	IEC 61000-3-2
	<b>Flicker</b>	IEC 61000-3-3
<b>Management</b>	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)	
<b>Services</b>	Refer to the HP website at <a href="http://www.hp.com/networking/services">www.hp.com/networking/services</a> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.	

### HP 2920-48G Switch (J9728A)

<b>Ports</b>	44 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only 4 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) 2 module slots 1 stacking module slot 1 dual-personality (RJ-45 or USB micro-B) 1 USB 1.1 1 RJ-45 out-of-band management port	
<b>Power supplies</b>	1 power supply slot 1 minimum power supply required includes: 1 x J9739A (HP X331 165W 100-240VAC to 12VDC Modular Power Supply)	
<b>Physical characteristics</b>	<b>Dimensions</b>	17.42(w) x 13.23(d) x 1.75(h) in (44.25 x 33.6 x 4.45 cm) (1U height)
	<b>Weight</b>	11.95 lb (5.42 kg)
<b>Memory and processor</b>	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)	
<b>Performance</b>	<b>100 Mb Latency</b>	< 9.0 µs (FIFO 64-byte packets)
	<b>1000 Mb Latency</b>	< 3.3 µs (FIFO 64-byte packets)
	<b>10 Gbps Latency</b>	< 3.2 µs (FIFO 64-byte packets)
	<b>Throughput</b>	130.9 million pps
	<b>Switching capacity</b>	176 Gbps
	<b>Routing table size</b>	2048 entries (IPv4), 256 entries (IPv6)
	<b>MAC address table size</b>	16000 entries
<b>Environment</b>	<b>Operating temperature</b>	32°F to 131°F (0°C to 55°C)

### Technical Specifications

	<b>Operating relative humidity</b>	15% to 95%, noncondensing
	<b>Non-operating/Storage temperature</b>	-40°F to 158°F (-40°C to 70°C)
	<b>Non-operating/Storage relative humidity</b>	15% to 95%, noncondensing
	<b>Altitude</b>	up to 10,000 ft (3 km)
	<b>Acoustic</b>	Power: 57 dB, Pressure: 41.8 dB
<b>Electrical characteristics</b>	<b>Frequency</b>	50/60 Hz
	<b>80plus.org Certification</b>	Silver
	<b>Maximum heat dissipation</b>	239 BTU/hr (252.15 kJ/hr)
	<b>Voltage</b>	100-240 VAC
	<b>Maximum power rating</b>	70 W
	<b>Idle power</b>	27 W
	<b>Notes</b>	Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.
<b>Safety</b>	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	
<b>Emissions</b>	FCC part 15 Class A; VCCI Class A; EN 55022/CISPR 22 Class A	
<b>Immunity</b>	<b>EN</b>	EN 55024, CISPR 24
	<b>ESD</b>	IEC 61000-4-2
	<b>Radiated</b>	IEC 61000-4-3
	<b>EFT/Burst</b>	IEC 61000-4-4
	<b>Surge</b>	IEC 61000-4-5
	<b>Conducted</b>	IEC 61000-4-6
	<b>Power frequency magnetic field</b>	IEC 61000-4-8
	<b>Voltage dips and interruptions</b>	IEC 61000-4-11
	<b>Harmonics</b>	IEC 61000-3-2
	<b>Flicker</b>	IEC 61000-3-3
<b>Management</b>	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](http://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)

#### Ports

44 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only  
 4 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+)  
 2 module slots  
 1 stacking module slot  
 1 dual-personality (RJ-45 or USB micro-B)  
 1 USB 1.1  
 1 RJ-45 out-of-band management port

#### 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)  
**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 Gbps  
**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)

#### Electrical characteristics

**Acoustic** Power: 62 dB, Pressure: 45.2 dB  
**Frequency** 50/60 Hz  
**80plus.org Certification** Silver  
**Maximum heat dissipation** 399 BTU/hr (420.95 kJ/hr)  
**Voltage** 100-240 VAC

### Technical Specifications

<b>Maximum power rating</b>	487 W
<b>Idle power</b>	46 W
<b>PoE power</b>	370 W
<b>Notes</b>	<p>Idle power is the actual power consumption of the device with no ports connected.</p> <p>Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.</p> <p>PoE power is the power supplied by the internal power supply. It is dependent on the type and quantity of power supplies and may be supplemented with the use of an external power supply (EPS).</p> <p>370 W of PoE+ power is available using the internal default power supply.</p>

<b>Safety</b>	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+A12:2011; IEC 60950-1 (ed.2): am1
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<b>Emissions</b>	FCC part 15 Class A; VCCI Class A; EN 55022/CISPR 22 Class A
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<b>Immunity</b>	<b>EN</b> EN 55024, CISPR 24
	<b>ESD</b> IEC 61000-4-2
	<b>Radiated</b> IEC 61000-4-3
	<b>EFT/Burst</b> IEC 61000-4-4
	<b>Surge</b> IEC 61000-4-5
	<b>Conducted</b> IEC 61000-4-6
	<b>Power frequency magnetic field</b> IEC 61000-4-8
	<b>Voltage dips and interruptions</b> IEC 61000-4-11
	<b>Harmonics</b> IEC 61000-3-2
	<b>Flicker</b> IEC 61000-3-3

<b>Management</b>	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)
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<b>Services</b>	Refer to the HP website at <a href="http://www.hp.com/networking/services">www.hp.com/networking/services</a> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.
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### HP 2920-48G-PoE+ 740W Switch (J9836A)

<b>Ports</b>	<p>44 RJ-45 autosensing 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only</p> <p>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+)</p> <p>2 module slots</p>
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### Technical Specifications

	1 stacking module slot
	1 dual-personality (RJ-45 or USB micro-B)
	1 USB 1.1
	1 RJ-45 out-of-band management port
<b>Power supplies</b>	1 power supply slot
	1 minimum power supply required
	includes: 1 x J9737A (HP X332 1050W 110-240VAC to 54VDC Power Supply)
<b>Physical characteristics</b>	<b>Dimensions</b> 17.42(w) x 13.23(d) x 1.73(h) in (44.25 x 33.6 x 4.39 cm) (1U height)
	<b>Weight</b> 12.86 lb (5.83 kg)
<b>Memory and processor</b>	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)
<b>Performance</b>	<b>100 Mb Latency</b> < 9.0 $\mu$ s (FIFO 64-byte packets)
	<b>1000 Mb Latency</b> < 3.2 $\mu$ s (FIFO 64-byte packets)
	<b>10 Gbps Latency</b> < 3.2 $\mu$ s (FIFO 64-byte packets)
	<b>Throughput</b> 130.9 million pps
	<b>Switching capacity</b> 176 Gbps
	<b>Routing table size</b> 2048 entries (IPv4), 256 entries (IPv6)
	<b>MAC address table size</b> 16000 entries
<b>Environment</b>	<b>Operating temperature</b> 32°F to 131°F (0°C to 55°C)
	<b>Operating relative humidity</b> 15% to 95%, noncondensing
	<b>Non-operating/Storage temperature</b> -40°F to 158°F (-40°C to 70°C)
	<b>Non-operating/Storage relative humidity</b> 15% to 95%, noncondensing
	<b>Altitude</b> up to 10,000 ft (3 km)
	<b>Acoustic</b> Power: -53 dB, Pressure: -38.3 dB
<b>Electrical characteristics</b>	<b>Frequency</b> 50/60 Hz
	<b>80plus.org Certification</b> Gold
	<b>Maximum heat dissipation</b> 399 BTU/hr (420.95 kJ/hr)
	<b>Voltage</b> 100-240 VAC
	<b>Maximum power rating</b> 487 W
	<b>Idle power</b> 46 W
	<b>PoE power</b> 740 W
	<b>Notes</b> Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. PoE power is the power supplied by the internal power supply. It is dependent on the type and quantity of power supplies and may be supplemented with the

### Technical Specifications

use of an external power supply (EPS).

740 W of PoE+ power is available using the internal default power supply.

<b>Safety</b>	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	
<b>Emissions</b>	FCC part 15 Class A; VCCI Class A; EN 55022/CISPR 22 Class A	
<b>Immunity</b>	<b>EN</b>	EN 55024, CISPR 24
	<b>ESD</b>	IEC 61000-4-2
	<b>Radiated</b>	IEC 61000-4-3
	<b>EFT/Burst</b>	IEC 61000-4-4
	<b>Surge</b>	IEC 61000-4-5
	<b>Conducted</b>	IEC 61000-4-6
	<b>Power frequency magnetic field</b>	IEC 61000-4-8
	<b>Voltage dips and interruptions</b>	IEC 61000-4-11
	<b>Harmonics</b>	IEC 61000-3-2
	<b>Flicker</b>	IEC 61000-3-3
<b>Management</b>	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)	
<b>Services</b>	Refer to the HP website at <a href="http://www.hp.com/networking/services">www.hp.com/networking/services</a> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local 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 Statistics only)  
 RFC 3416 (SNMP Protocol Operations v2)  
 RFC 3417 (SNMP Transport Mappings)  
 HTML and telnet management  
 HTTP, SSHv1, and Telnet  
 Multiple Configuration Files

### Technical Specifications

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 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)

### Technical Specifications

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)  
RFC 1213 MIB II  
RFC 1493 Bridge MIB  
RFC 1724 RIPv2 MIB  
RFC 2021 RMONv2 MIB  
RFC 2578 Structure of Management Information Version 2 (SMIPv2)  
RFC 2579 Textual Conventions for SMIPv2

### Technical Specifications

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**

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

### Technical Specifications

#### 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 Cabling LC/LC Optical Cable (AJ833A)

#### Notes

#### Cable type:

50/125 µm (core/cladding) diameter, multimode 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

Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 µm fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions: Core diameter: 50 ± 3.0µm Cladding diameter: 125 ± 2.0µm Coating diameter: 245 ± 10µm
- 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 50/125µm 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](http://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, multimode 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 µm fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions: Core diameter:  $50 \pm 3.0\mu\text{m}$  Cladding diameter:  $125 \pm 2.0\mu\text{m}$  Coating diameter:  $245 \pm 10\mu\text{m}$
- 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 50/125µm 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](http://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, multimode 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 µm fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions: Core diameter:  $50 \pm 3.0\mu\text{m}$  Cladding diameter:  $125 \pm 2.0\mu\text{m}$  Coating diameter:  $245 \pm 10\mu\text{m}$
- 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 50/125µm 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](http://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, multimode 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 µm fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions: Core diameter:  $50 \pm 3.0\mu\text{m}$  Cladding diameter:  $125 \pm 2.0\mu\text{m}$  Coating diameter:  $245 \pm 10\mu\text{m}$
- 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 50/125µm 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](http://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)

#### Notes

#### Cable type:

50/125  $\mu$ m (core/cladding) diameter, multimode 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

Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125  $\mu$ m fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions: Core diameter:  $50 \pm 3.0\mu$ m Cladding diameter:  $125 \pm 2.0\mu$ m Coating diameter:  $245 \pm 10\mu$ m
- 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 50/125 $\mu$ m 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](http://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**    **Cabling**  
(AJ838A)

#### Notes

#### Cable type:

50/125 µm (core/cladding) diameter, multimode 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

Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 µm fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions: Core diameter:  $50 \pm 3.0\mu\text{m}$  Cladding diameter:  $125 \pm 2.0\mu\text{m}$  Coating diameter:  $245 \pm 10\mu\text{m}$
- 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 50/125µm 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](http://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)

#### Notes

#### Cable type:

50/125  $\mu$ m (core/cladding) diameter, multimode 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

Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125  $\mu$ m fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions: Core diameter:  $50 \pm 3.0\mu$ m Cladding diameter:  $125 \pm 2.0\mu$ m Coating diameter:  $245 \pm 10\mu$ m
- 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 50/125 $\mu$ m 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](http://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  $\pm$  3um, Cladding diameter: 125um  $\pm$  2um; Coating diameter: 245  $\pm$  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](http://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  $\pm$  3um, Cladding diameter: 125um  $\pm$  2um; Coating diameter: 245  $\pm$  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](http://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  $\pm$  3um, Cladding diameter: 125um  $\pm$  2um; Coating diameter: 245  $\pm$  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](http://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  $\pm$  3um, Cladding diameter: 125um  $\pm$  2um; Coating diameter: 245  $\pm$  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](http://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  
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  $\pm$  3um, Cladding diameter: 125um  $\pm$  2um; Coating diameter: 245  $\pm$  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](http://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  $\pm$  3um, Cladding diameter: 125um  $\pm$  2um; Coating diameter: 245  $\pm$  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](http://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 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](http://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

Accessory Product Details

	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 <a href="http://www.hp.com/networking/services">www.hp.com/networking/services</a> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

HP Identity Driven Manager 3.0 Software--Additional 1,000-User License (J9440A)	<b>License to add support for managing an additional 1,000 users with the Identity Driven Manager 3.0 product.</b>
	<b>RADIUS server support</b> —
	<b>Features</b> —
	<b>Notes</b> Additional specifications <ul style="list-style-type: none"><li>• Supports environments with up to 10,000 users.</li><li>• Supports up to 10 RADIUS servers with HP Identity Driven Manager agents installed.</li></ul> Requires the HP PCM Plus 3.0 or greater network management platform. <ul style="list-style-type: none"><li>• Please see HP PCM Plus 3.0 for hardware and software system requirements. Requires the HP Identity Driven Manager 3.0 base product (J9438A).</li></ul> Multiple licenses for additional 1,000 users can be added to the base HP Identity Driven Manager product to support larger numbers of users.
	<b>Services</b> 3-year, 24x7 SW phone support, software updates (UQ119E) 3-Year, 9x5 SW phone support, software updates (UQ118E)  Refer to the HP website at <a href="http://www.hp.com/networking/services">www.hp.com/networking/services</a> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

### Accessory Product Details

**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.

#### **Services**

Please see HP PCM Plus 3.0 for hardware and software system requirements.  
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](http://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

To learn more, visit: [www.hp.com/networking](http://www.hp.com/networking)

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