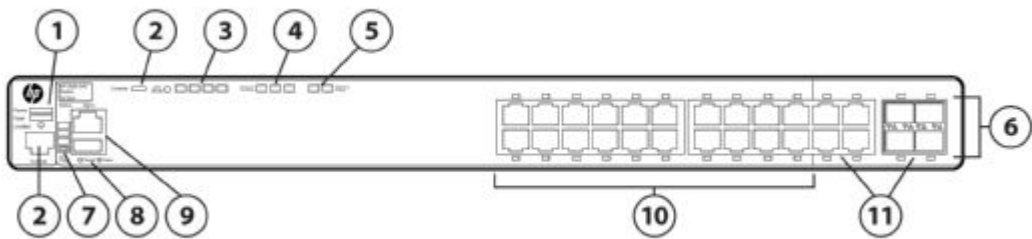


Overview

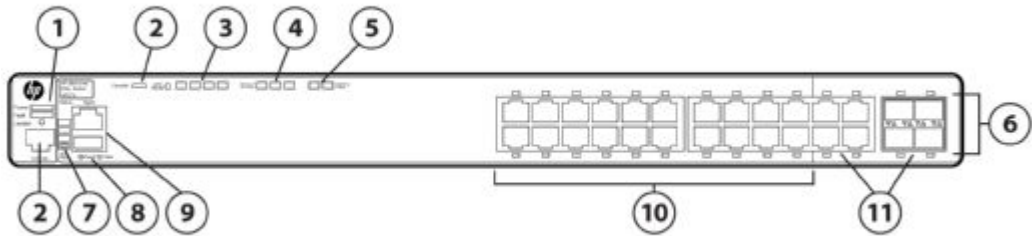
Models

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



HP 2920-24G Switch

- |                                                         |                                                                           |
|---------------------------------------------------------|---------------------------------------------------------------------------|
| 1. Power, Fault, and Locator LEDs                       | 7. PoE, Tmp (Temperature), Test, Fan, and Aux (Auxiliary) port status LED |
| 2. Console ports                                        | 8. Reset and Clear buttons                                                |
| 3. LED Mode button and indicator LEDs                   | 9. Aux port and Out-of-Band Management port                               |
| 4. Status LEDs for components on the back of the switch | 10. 10/100/1000BASE-T PoE+ RJ-45 ports                                    |
| 5. Stacking status LEDs                                 | 11. Dual-Personality (10/100/1000BASE-T or SFP) ports                     |
| 6. Switch port LEDs                                     |                                                                           |

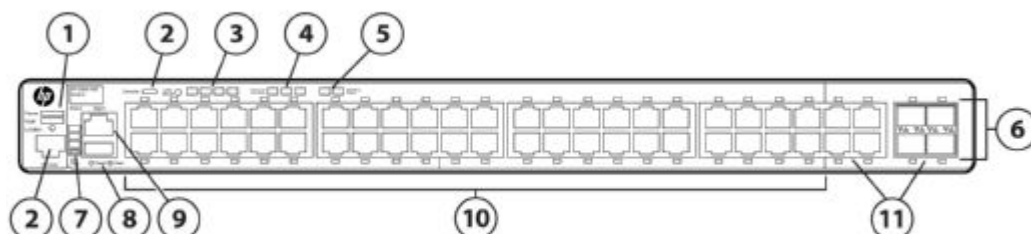


HP 2920-24G-PoE+ Switch

- |                                       |                                                                           |
|---------------------------------------|---------------------------------------------------------------------------|
| 1. Power, Fault, and Locator LEDs     | 7. PoE, Tmp (Temperature), Test, Fan, and Aux (Auxiliary) port status LED |
| 2. Console ports                      | 8. Reset and Clear buttons                                                |
| 3. LED Mode button and indicator LEDs | 9. Aux port and Out-of-Band Management port                               |

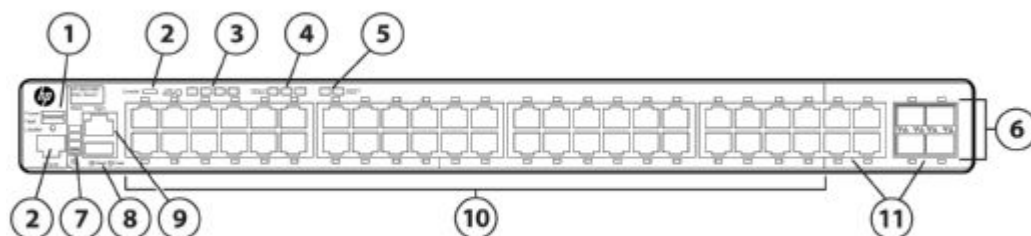
### Overview

- |                                                         |                                                       |
|---------------------------------------------------------|-------------------------------------------------------|
| 4. Status LEDs for components on the back of the switch | 10. 10/100/1000BASE-T PoE+ RJ-45 ports                |
| 5. Stacking status LEDs                                 | 11. Dual-Personality (10/100/1000BASE-T or SFP) ports |
| 6. Switch port LEDs                                     |                                                       |



### HP 2920-48G Switch

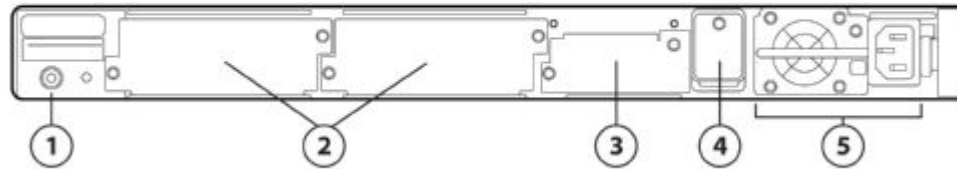
- |                                                         |                                                                           |
|---------------------------------------------------------|---------------------------------------------------------------------------|
| 1. Power, Fault, and Locator LEDs                       | 7. PoE, Tmp (Temperature), Test, Fan, and Aux (Auxiliary) port status LED |
| 2. Console ports                                        | 8. Reset and Clear buttons                                                |
| 3. LED Mode button and indicator LEDs                   | 9. Aux port and Out-of-Band Management port                               |
| 4. Status LEDs for components on the back of the switch | 10. 10/100/1000BASE-T PoE+ RJ-45 ports                                    |
| 5. Stacking status LEDs                                 | 11. Dual-Personality (10/100/1000BASE-T or SFP) ports                     |
| 6. Switch port LEDs                                     |                                                                           |



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

- |                                                         |                                                                           |
|---------------------------------------------------------|---------------------------------------------------------------------------|
| 1. Power, Fault, and Locator LEDs                       | 7. PoE, Tmp (Temperature), Test, Fan, and Aux (Auxiliary) port status LED |
| 2. Console ports                                        | 8. Reset and Clear buttons                                                |
| 3. LED Mode button and indicator LEDs                   | 9. Aux port and Out-of-Band Management port                               |
| 4. Status LEDs for components on the back of the switch | 10. 10/100/1000BASE-T PoE+ RJ-45 ports                                    |
| 5. Stacking status LEDs                                 | 11. Dual-Personality (10/100/1000BASE-T or SFP) ports                     |
| 6. Switch port LEDs                                     |                                                                           |

### 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        |                                        |

### 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
- L2 and L3 plus static and RIP routing, PoE, and PoE+ support
- Limited Lifetime Warranty 2.0, sFlow, ACLs, OpenFlow, and rate limiting

### Product overview

The HP 2920 Switch Series consists of five switches—the 2920-24G and 2920-24G-PoE+ switches with 24 10/100/1000 ports and the 2920-48G, 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 routing-information-protocol (RIP) routing, robust security and management, enterprise-class features, Limited Lifetime Warranty 2.0, and software updates included, the 2920 Switch Series is a comprehensive, cost-effective, and scalable solution for building high-performance networks. These switches can be deployed at the enterprise edge, in remote branch offices, and in converged networks.

### Features and Benefits

#### Software-defined networking

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

#### Unified Wired and Wireless

- 



### Overview

- **HTTP redirect function**  
supports HP Intelligent Management Center (IMC) bring your own device (BYOD) solution

### Quality of Service (QoS)

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

### Connectivity

- **Flexible 10 Gb/s Ethernet connectivity**  
up to four optional 10 Gigabit ports (SFP+ and/or 10GBASE-T)
- **Optional two-port stacking module with up to 40 Gb/s per port**  
allows stacking of up to four switch units into a single virtual device
- **Auto-MDIX**  
provides automatic adjustments 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 the transition mechanism from IPv4 to IPv6 and supports connectivity for both protocols
  - **MLD snooping**  
forwards IPv6 multicast traffic to the appropriate interface and helps prevent IPv6 multicast traffic from flooding the network
  - **Security**  
provides RA guard, DHCPv6 protection, dynamic IPv6 lockdown
- **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 and 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**



### Overview

- **80 PLUS Silver Certified power supply**→High-efficiency power supplies  
increases power efficiency and savings
- **Energy-efficient Ethernet (EEE) support**  
reduces power consumption in accordance with IEEE 802.3az
- **HP ProVision ASIC architecture**  
is designed with the latest ProVision ASIC, providing very low latency, increased packet buffering, and adaptive power consumption
- **Selectable queue configurations**  
allows for increased performance by selecting the number of queues and associated memory buffering that best meet the requirements of the network applications

### Convergence

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

### Resiliency and high availability

- **IEEE 802.1s Multiple Spanning Tree**  
provides high link availability in multiple VLAN environments by allowing multiple spanning trees→provides legacy support for IEEE 802.1d and IEEE 802.1w
- **IEEE 802.3ad link-aggregation-control protocol (LACP) and HP port trunking**  
support up to 60 static, dynamic, or distributed trunks active across a stack, with each trunk having up to eight links (ports) per static trunk→support trunking across stack members
- **Ring and chain stacking topology**  
allows failure of a link or switch in the ring of stacked switches, while the remaining connected switches continue operation
- **SmartLink**  
provides easy-to-configure link redundancy of active and standby links

### Management

- **SNMPv1, v2, and v3**  
provide complete support of SNMP→provide full support of industry-standard Management Information Base (MIB) plus private extensions→SNMPv3 supports increased security using encryption
- **Out-of-band Ethernet management port**  
enables management of a separate physical management network, keeping management traffic segmented from network data traffic

### Overview

#### Manageability

- **Dual flash images**  
provides independent primary and secondary operating system files for backup while upgrading
- **Friendly port names**  
allow assignment of descriptive names to ports
- **Find-Fix-Inform**  
finds and fixes common network problems automatically, then informs administrator
- **Multiple configuration files**  
allow multiple configuration files to be stored to a flash image
- **Software updates**  
free downloads from the Web
- **RMON, XRMON, and sFlow**  
provide advanced monitoring and reporting capabilities for statistics, history, alarms, and events
- **Troubleshooting**  
ingress and egress port monitoring enable network problem solving
- **Uni-Directional Link Detection (UDLD)**  
monitors 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

- **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 services

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

#### Layer 3 routing

- **Static IP routing**  
provides manually configured routing—includes ECMP capability
- **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

### Overview

#### 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**  
allows access only to specified MAC addresses, which can be learned or specified by the administrator
- **MAC address lockout**  
prevents particular configured MAC addresses from connecting to the network
- **Secure FTP**  
allows secure file transfer to and from the switch—protects against unwanted file downloads or unauthorized copying of a switch configuration file
- **Switch management logon security**  
helps secure switch CLI logon by optionally requiring either RADIUS or TACACS+ authentication
- **Custom banner**  
displays security policy when users log in to the switch
- **STP BPDU port protection**  
blocks Bridge Protocol Data Units (BPDUs) on ports that do not require BPDUs, preventing forged BPDU attacks
- **DHCP protection**  
blocks DHCP packets from unauthorized DHCP servers, preventing denial-of-service attacks
- **Dynamic ARP protection**

### Overview

- blocks ARP broadcasts from unauthorized hosts, preventing eavesdropping or theft of network data
- **STP Root Guard**  
protects the root bridge from malicious attacks or configuration mistakes
- **Identity-driven ACL**  
enables implementation of a highly granular and flexible access security policy and VLAN assignment specific to each authenticated network user
- **Per-port broadcast throttling**  
configures broadcast control selectively on heavy traffic port uplinks

### Monitor and diagnostics

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

### Warranty and support

- **Limited Lifetime Warranty v2.0**  
advance hardware replacement with next-business-day delivery (available in most countries). See [www.hp.com/networking/warrantysummary](http://www.hp.com/networking/warrantysummary) for duration details.
- **Electronic and telephone support (for Limited Lifetime Warranty 2.0)**  
limited 24x7 telephone support is available from HP for the first 3 years<sup>†</sup>limited electronic and business hours telephone support is available from HP for the entire warranty period<sup>‡</sup>to reach our support centers, refer to [www.hp.com/networking/contact-support](http://www.hp.com/networking/contact-support)<sup>‡</sup> 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)<sup>‡</sup>for details on the software releases available with your product purchase, refer to [www.hp.com/networking/warrantysummary](http://www.hp.com/networking/warrantysummary)



Configuration

Build To Order

BTO is a standalone unit with no integration. BTO products ship standalone are not part of a CTO or Rack-Shippable solution.

|                                                                                                                                                                                                                                                  |                                             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| 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> |                                             |
|                                                                                                                                                                                                                                                  | <a href="#">See Configuration Note 1, 2</a> |
| 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                                      |



### Configuration

|                                                                                                                                                                                                                                                                                                                       |                                             |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| <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<br>Configuration<br>Note 1, 2           |
| PDU CABLE NA/MEX/TW/JPPDU CABLE NA/MEX/TW/JP <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>                                                                                                                                                                                   | J9728A#B2B                                  |
| PDU CABLE ROW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul>                                                                                                                                                                                                                           | J9728A#B2C                                  |
| High Volt Switch to Wall Power Cord <ul style="list-style-type: none"> <li>• NEMA L6-20P Cord (NA/MEX/JP/TW)</li> </ul>                                                                                                                                                                                               | J9728A#B2E                                  |
| HP 2920-48G-POE+ Switch <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>                              | J9729A<br>See<br>Configuration<br>Note 1, 2 |
| PDU CABLE NA/MEX/TW/JP <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>                                                                                                                                                                                                         | J9729A#B2B                                  |
| PDU CABLE ROW <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (ROW)</li> </ul>                                                                                                                                                                                                                           | J9729A#B2C                                  |
| High Volt Switch to Wall Power Cord <ul style="list-style-type: none"> <li>• NEMA L6-20P Cord (NA/MEX/JP/TW)</li> </ul>                                                                                                                                                                                               | J9729A#B2E                                  |
| HP 2920-48G-POE+ 740W Switch <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> | J9836A<br>See<br>Configuration<br>Note 1, 2 |
| PDU CABLE NA/MEX/TW/JP <ul style="list-style-type: none"> <li>• C15 PDU Jumper Cord (NA/MEX/TW/JP)</li> </ul>                                                                                                                                                                                                         | J9836A#B2B                                  |
| PDU CABLE ROW                                                                                                                                                                                                                                                                                                         | J9836A#B2C                                  |

Configuration

- [C15 PDU Jumper Cord \(ROW\)](#)

|                                                                                                   |            |
|---------------------------------------------------------------------------------------------------|------------|
| High Volt Switch to Wall Power Cord                                                               | J9836A#B2E |
| <ul style="list-style-type: none"><li>• <a href="#">NEMA L6-20P Cord (NA/MEX/JP/TW)</a></li></ul> |            |

Configuration Rules

|        |                                                             |                        |
|--------|-------------------------------------------------------------|------------------------|
| Note 1 | The following Transceivers install into this Module Switch- |                        |
|        | <a href="#">HP X121 1G SFP LC LH Transceiver</a>            | <a href="#">J4860C</a> |
|        | <a href="#">HP X121 1G SFP LC LX Transceiver</a>            | <a href="#">J4859C</a> |
|        | <a href="#">HP X121 1G SFP LC SX Transceiver</a>            | <a href="#">J4858C</a> |
|        | <a href="#">HP X122 1G SFP LC BX-D Transceiver</a>          | <a href="#">J9142B</a> |
|        | <a href="#">HP X122 1G SFP LC BX-U Transceiver</a>          | <a href="#">J9143B</a> |
|        | <a href="#">HP X111 100M SFP LC FX Transceiver</a>          | <a href="#">J9054C</a> |
|        | <a href="#">HP X112 100M SFP LC BX-D Transceiver</a>        | <a href="#">J9099B</a> |
|        | <a href="#">HP X112 100M SFP LC BX-U Transceiver</a>        | <a href="#">J9100B</a> |

|        |                                                                                     |
|--------|-------------------------------------------------------------------------------------|
| Note 2 | <a href="#">Localization required on orders without #B2B, #B2C or #B2E options.</a> |
|--------|-------------------------------------------------------------------------------------|

Rack Level Integration CTO Models

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

### Configuration

|                                                                                                                                                                                                                                                                                                                    |                                                                 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------|
| <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>                                                                                                                                                                                                 | J9727A#B2B                                                      |
| <b>PDU CABLE ROW</b> <ul style="list-style-type: none"> <li>C15 PDU Jumper Cord (ROW)</li> </ul>                                                                                                                                                                                                                   | J9727A#B2C                                                      |
| <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>                                        | J9728A#0D1<br><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>                                                                                                                                                                                                 | J9728A#B2B                                                      |
| <b>PDU CABLE ROW</b> <ul style="list-style-type: none"> <li>C15 PDU Jumper Cord (ROW)</li> </ul>                                                                                                                                                                                                                   | J9728A#B2C                                                      |
| <b>HP 2920-48G-POE+ Switch</b> <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>                              | J9729A#0D1<br><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>                                                                                                                                                                                                 | J9729A#B2B                                                      |
| <b>PDU CABLE ROW</b> <ul style="list-style-type: none"> <li>C15 PDU Jumper Cord (ROW)</li> </ul>                                                                                                                                                                                                                   | J9729A#B2C                                                      |
| <b>HP 2920-48G-POE+ 740W Switch</b> <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> | J9836A<br><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>                                                                                                                                                                                                 | J9836A#B2B                                                      |

### Configuration

#### 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 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

**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

- includes 1 x c15, 165w (Spare Only)

See  
Configuration  
Note-1, 3, 4

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

J9739A#B2B

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

#### PDU CABLE ROW

J9739A#B2C



Configuration

|                                                                                                 |                                                |
|-------------------------------------------------------------------------------------------------|------------------------------------------------|
| <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>             | <a href="#">See Configuration Note 2, 3, 4</a> |
| 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> | <a href="#">See Configuration Note 2, 3, 4</a> |
| 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.

### Configuration

|         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Note 4  | If #B2E is selected Then replace Localized option with #B2E for power supply and with #B2E for switch .<br>(Offered only in NA, Mexico,, Taiwan, and Japan)                                                                                                                                                                                                                                                                                                                                     |
| Remarks | Drop down under power supply should offer the following options and results-<br>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)<br>Switch/Router/Power Supply to Wall Power Cord - Localized Option (Watson Default for BTO and Box Level CTO)<br>High Volt Switch/Router/Power Supply to Wall Power Cord - #B2E Option. (Offered only in North America, Mexico, Taiwan, and Japan) |

### Localization

|                                                                                                                      |            |
|----------------------------------------------------------------------------------------------------------------------|------------|
| X332 575W 100-240VAC to 54VDC PS, CL - Chile - English localization                                                  | J9738A#A1X |
| Power Cord-Quantity 1, CEI 23-50, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #-8120-6980           |            |
| X332 575W 100-240VAC to 54VDC PS, US - U.S. - English localization                                                   | J9738A#ABA |
| Power Cord-Quantity 1, NEMA 5-15P, C15 STRAIGHT, 125 V, 15 A, 2.5 meters, 8.21 feet ,Part Store #-8121-0973          |            |
| X332 575 W 100-240VAC to 54VDC PS, EU - Europe - English localization                                                | J9738A#ABB |
| Power Cord-Quantity 1, CEE 7-VII, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #-8120-6811          |            |
| X332 575W 100-240VAC to 54VDC PS, AU - Australia - English localization                                              | J9738A#ABG |
| Power Cord-Quantity 1, AS/NZS 3112, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #-8121-0834         |            |
| X332 575W 100-240VAC to 54VDC PS, BR - Brazil - Portuguese localization                                              | J9738A#AC4 |
| Power Cord-Quantity 1, NBR 14136 Fig13, C13 STRAIGHT, 250 V, 2.5 A, 2.5 meters, 8.21 feet ,Part Store #-8121-1069    |            |
| X332 575W 100-240VAC to 54VDC PS, KR - Korea - English localization                                                  | J9738A#AC6 |
| Power Cord-Quantity 1, CEE 7-VII, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #-8120-6811          |            |
| X332 575W 100-240VAC to 54VDC PS, UK - United Kingdom - English localization                                         | J9738A#ACC |
| Power Cord-Quantity 1, BS 1363/A, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #-8120-6809           |            |
| X332 575W 100-240VAC to 54VDC PS, SZ - Switzerland - English localization                                            | J9738A#ACD |
| Power Cord-Quantity 1, SEV 6534-2 Type 12, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #-8120-6815 |            |
| X332 575W 100-240VAC to 54VDC PS, DK - Denmark - English localization                                                | J9738A#ACE |
| Power Cord-Quantity 1, DK 2-5A, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #-8120-6814            |            |
| X332 575W 100-240VAC to 54VDC PS, JP - Japan - English localization                                                  | J9738A#ACF |
| Power Cord-Quantity 1, JIS C 8303, C13 STRAIGHT, 125 V, 12 A, 2.3 meters, 7.55 feet ,Part Store #-8120-4753          |            |
| X332 575W 100-240VAC to 54VDC PS, IN - India - English localization                                                  | J9738A#ACJ |

### Configuration

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



### Configuration

|                                                                                                                                                                                                   |            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| X331 165W 100-240VAC to 12VDC PS, SZ - Switzerland - English localization<br>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 | J9739A#ACD |
| X331 165W 100-240VAC to 12VDC PS, DK - Denmark - English localization<br>Power Cord=Quantity 1, DK 2-5A, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #=8120-6814                | J9739A#ACE |
| X331 165W 100-240VAC to 12VDC PS, JP - Japan - English localization<br>Power Cord=Quantity 1, JIS C 8303, C13 STRAIGHT, 125 V, 12 A, 2.3 meters, 7.55 feet ,Part Store #=8120-4753                | J9739A#ACF |
| X331 165W 100-240VAC to 12VDC PS, IN - India - English localization<br>Power Cord=Quantity 1, IS 1293, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #=8121-0780                   | J9739A#ACJ |
| X331 165W 100-240VAC to 12VDC PS, ZA - South Africa - English localization<br>Power Cord=Quantity 1, SABS 164, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #=8120-6813          | J9739A#ACQ |
| X331 165W 100-240VAC to 12VDC PS, IL - Israel - English localization<br>Power Cord=Quantity 1, SI 32 90-DEG, C13 STRAIGHT, 250 V, 10 A, 2.5 meters, 8.21 feet ,Part Store #=8121-1035             | J9739A#AKJ |
| X331 165W 100-240VAC to 12VDC PS, TH - Thailand - English localization<br>Power Cord=Quantity 1, NEMA 5-15P, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #=8121-0668             | J9739A#AKL |
| X331 165W 100-240VAC to 12VDC PS, CN - China - English localization<br>Power Cord=Quantity 1, GB 1002, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #=8120-8707                   | J9739A#AKM |
| X331 165W 100-240VAC to 12VDC PS, TW - Taiwan - English localization<br>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        | J9739A#ARB |
| X331 165W 100-240VAC to 12VDC PS, MY - Malaysia - English localization<br>Power Cord=Quantity 1, BS 1363/A, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #=8120-6809              | J9739A#ARE |
| X331 165W 100-240VAC to 12VDC PS, AR - Argentina - English localization<br>Power Cord=Quantity 1, IRAM 2073, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #=8120-6869             | J9739A#ARM |
| 2920-24G Switch, CL - Chile - English localization<br>Power Cord=Quantity 1, CEI 23-50, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #=8120-6980                                  | J9726A#A1X |
| 2920-24G Switch, US - U.S. - English localization<br>Power Cord=Quantity 1, NEMA 5-15P, C15 STRAIGHT, 125 V, 15 A, 2.5 meters, 8.21 feet ,Part Store #=8121-0914                                  | J9726A#ABA |
| 2920-24G Switch, EU - Europe - English localization<br>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 |

### Configuration

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

### Configuration

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

### Configuration

|                                                                                                                    |            |
|--------------------------------------------------------------------------------------------------------------------|------------|
| 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 |
| 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 |



### Configuration

|                                                                                                                      |            |
|----------------------------------------------------------------------------------------------------------------------|------------|
| 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           |            |
| 2920-48G Switch, SZ - Switzerland - English localization                                                             | J9728A#ACD |
| Power Cord=Quantity 1, SEV 6534-2 Type 12, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #-8120-6815 |            |
| 2920-48G Switch, DK - Denmark - English localization                                                                 | J9728A#ACE |
| Power Cord=Quantity 1, DK 2-5A, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #-8120-6814            |            |
| 2920-48G Switch, JP - Japan - English localization                                                                   | J9728A#ACF |
| Power Cord=Quantity 1, JIS C 8303, C13 STRAIGHT, 125 V, 12 A, 2.3 meters, 7.55 feet ,Part Store #-8120-4753          |            |
| 2920-48G Switch, IN - India - English localization                                                                   | J9728A#ACJ |
| Power Cord=Quantity 1, IS 1293, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #-8121-0780             |            |
| 2920-48G Switch, ZA - South Africa - English localization                                                            | J9728A#ACQ |
| Power Cord=Quantity 1, SABS 164, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #-8120-6813           |            |
| 2920-48G Switch, IL - Israel - English localization                                                                  | J9728A#AKJ |
| Power Cord=Quantity 1, SI 32 90-DEG, C13 STRAIGHT, 250 V, 10 A, 2.5 meters, 8.21 feet ,Part Store #-8121-1035        |            |
| 2920-48G Switch, TH - Thailand - English localization                                                                | J9728A#AKL |
| Power Cord=Quantity 1, NEMA 5-15P, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #-8121-0668          |            |
| 2920-48G Switch, CN - China - English localization                                                                   | J9728A#AKM |
| Power Cord=Quantity 1, GB 1002, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #-8120-8707             |            |
| 2920-48G Switch, TW - Taiwan - English localization                                                                  | J9728A#ARB |
| Power Cord=Quantity 1, CNS 690 Type 2(1), C13 STRAIGHT, 125 V, 13 A, 2.5 meters, 8.21 feet ,Part Store #-8121-0974   |            |
| 2920-48G Switch, MY - Malaysia - English localization                                                                | J9728A#ARE |
| Power Cord=Quantity 1, BS 1363/A, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #-8120-6809           |            |
| 2920-48G Switch, AR - Argentina - English localization                                                               | J9728A#ARM |

### 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 Switch, JmpCbl-NA/JP/TW - JmpCbl-NA/JP/TW                                                                   | J9728A#B2B |
| Power Cord—Quantity 1, C14 STRAIGHT, C15 STRAIGHT, 250 V, 10 A, 2.5 meters, 8.21 feet ,Part Store #—8121-1091        |            |
| 2920-48G Switch, JmpCbl-ROW - JmpCbl-ROW                                                                             | J9728A#B2C |
| Power Cord—Quantity 1, C14 STRAIGHT, C15 STRAIGHT, 250 V, 10 A, 2.5 meters, 8.21 feet ,Part Store #—8121-1094        |            |
| 2920-48G Switch, 220V-NA - L6-20 220V-NA                                                                             | J9728A#B2E |
| Power Cord—Quantity 1, NEMA 6-15P, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #—8120-3996          |            |
| 2920-48G-POE+ Switch, CL - Chile - English localization                                                              | J9729A#A1X |
| Power Cord—Quantity 1, CEI 23-50, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #—8120-6980           |            |
| 2920-48G-POE+ Switch, US - U.S. - English localization                                                               | J9729A#ABA |
| 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 |



### Configuration

|                                                                                                                    |            |
|--------------------------------------------------------------------------------------------------------------------|------------|
| 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 |
| 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 |
|----------------------------------|--------|



### Configuration

- min=0 \ max=2 SFP + Transceivers

See  
Configuration  
Note 1

HP 2920 2-port 10GBASE-T Module

J9732A

### Configuration Rules

Note 1 The following Transceivers install into this Module (Use #0D1 or #B01 quoted to switch if switch is CT0) - 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 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 10G SFP+ to SFP+ 1m Direct Attach Copper Cable  | J9281B |
| HP X242 10G SFP+ to SFP+ 3m Direct Attach Copper Cable  | J9283B |
| HP X242 10G SFP+ to SFP+ 7m Direct Attach Copper Cable  | J9285B |
| HP X244 10G XFP to SFP+ 1m Direct Attach Copper Cable   | J9300A |
| HP 10G X244 XFP to SFP+ 3m Direct Attach Copper Cable   | J9301A |
| HP 10G X244 XFP to SFP+ 5m Direct Attach Copper Cable   | J9302A |
| HP X242 10G SFP+ to SFP+ 10m Direct Attach Copper Cable | J9286B |
| HP X242 10G SFP+ to SFP+ 15m Direct Attach Copper 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 |





### Configuration

|                                      |        |
|--------------------------------------|--------|
| 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+ to SFP+ 1m Direct Attach Copper Cable  | J9281B#B01 |
| HP X242 10G SFP+ to SFP+ 3m Direct Attach Copper Cable  | J9283B#B01 |
| HP X242 10G SFP+ to SFP+ 7m Direct Attach Copper Cable  | J9285B#B01 |
| HP X244 10G XFP to SFP+ 1m Direct Attach Copper Cable   | J9300A#B01 |
| HP 10G X244 XFP to SFP+ 3m Direct Attach Copper Cable   | J9301A#B01 |
| HP 10G X244 XFP to SFP+ 5m Direct Attach Copper Cable   | J9302A#B01 |
| HP X242 10G SFP+ to SFP+ 10m Direct Attach Copper Cable | J9286B     |
| HP X242 10G SFP+ to SFP+ 15m Direct Attach Copper 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 |
| 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



## Configuration

|                             |        |
|-----------------------------|--------|
| 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                                        |
| <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                                            |
| <ul style="list-style-type: none"><li>includes 1 x c15, 575w</li></ul>                     | <a href="#">See Configuration Note~2</a>          |
| 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>         |                                                   |



Configuration

|                                                                                    |                          |
|------------------------------------------------------------------------------------|--------------------------|
| 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</li></ul>            |                          |
|                                                                                    | See Configuration Note 2 |
| 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   | 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.<br>Power supply slot 1 supports up to 4 cables<br>Power supply slot 2 supports up to 2 cables<br>Power supply slot 3 supports up to 2 cables<br>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                                                                                                                                                                                                                                       |
| Remarks- | For J9726A, and J9728A, the power supply in J9805A must be J9739A (165W).<br>For J9727A and J9729A, the power supply in J9805A must be J9737A (1050W) or J9738A (575W).<br>For J9836A, the power supply in J9805A must be J9737A (1050W).<br>Drop down under power supply should offer the following options and results- |

Configuration

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<br><a href="#">See Configuration Note<sup>1</sup></a> |
|-------------------------|--------------------------------------------------------------|

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.<br>Power supply slot 1 supports up to 4 cables<br>Power supply slot 2 supports up to 2 cables<br>Power supply slot 3 supports up to 2 cables |
|--------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### Technical Specifications

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

|                                 |                                                                                                                                                                                                                                                            |                                                                       |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| <b>I/O ports and slots</b>      | 20 RJ-45 autosensing 10/100/1000 ports <sup>†</sup> Duplex <sup>†</sup> 10BASE-T/100BASE-TX <sup>†</sup> half or full <sup>†</sup> 1000BASE-T <sup>†</sup> full only (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T) |                                                                       |
|                                 | 4 RJ-45 dual-personality 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T)                                                                                                                           |                                                                       |
|                                 | 1 dual-personality (RJ-45 or USB micro-B)                                                                                                                                                                                                                  |                                                                       |
|                                 | 1 USB 1.1                                                                                                                                                                                                                                                  |                                                                       |
|                                 | 1 RJ-45 out-of-band management port                                                                                                                                                                                                                        |                                                                       |
|                                 | 2 module slots                                                                                                                                                                                                                                             |                                                                       |
|                                 | 1 stacking module slot                                                                                                                                                                                                                                     |                                                                       |
| <b>Power supplies</b>           | 1 power supply slot                                                                                                                                                                                                                                        |                                                                       |
|                                 | 1 minimum power supply required<br>includes <sup>†</sup> 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 <sup>†</sup> packet buffer size <sup>†</sup> 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>                                                                                                                                                                                                                                     | < 3.3 µs (FIFO 64-byte packets)                                       |
|                                 | <b>Throughput</b>                                                                                                                                                                                                                                          | 95.2 million pps                                                      |
|                                 | <b>Switching capacity</b>                                                                                                                                                                                                                                  | 128 Gb/s                                                              |
|                                 | <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 <sup>†</sup> 57 dB, Pressure <sup>†</sup> 41.4 dB               |
|                                 | <b>Electrical characteristics</b>                                                                                                                                                                                                                          |                                                                       |
|                                 | <b>Frequency</b>                                                                                                                                                                                                                                           | 50/60 Hz                                                              |
|                                 | <b>Maximum heat dissipation</b>                                                                                                                                                                                                                            | 198 BTU/hr (208.89 kJ/hr)                                             |
|                                 | <b>AC voltage</b>                                                                                                                                                                                                                                          | 100-240 VAC                                                           |
|                                 | <b>Maximum power rating</b>                                                                                                                                                                                                                                | 58 W                                                                  |
|                                 | <b>Idle power</b>                                                                                                                                                                                                                                          | 26 W                                                                  |

### Technical Specifications

|                   |                                                                                                                                                                                                                                                                                                                                    |                    |
|-------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| <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+—HMC - 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>I/O ports and slots</b>      | 20 RJ-45 autosensing 10/100/1000 PoE+ ports—Duplex—10BASE-T/100BASE-TX—half or full—1000BASE-T—full only (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+)<br>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+)<br>1 dual-personality (RJ-45 or USB micro-B)<br>1 USB 1.1<br>1 RJ-45 out-of-band management port<br>2 module slots<br>1 stacking module slot |                                                                       |
| <b>Power supplies</b>           | 1 power supply slot<br>1 minimum power supply required<br>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) |
|                                 | <b>Weight</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 12.04 lb (5.46 kg)                                                    |



### Technical Specifications

|                                   |                                                                                                                                                                                                                                                                                                                                      |                                         |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| <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 µs (FIFO 64-byte packets)         |
|                                   | <b>1000 Mb Latency</b>                                                                                                                                                                                                                                                                                                               | < 3.3 µs (FIFO 64-byte packets)         |
|                                   | <b>10 Gbps Latency</b>                                                                                                                                                                                                                                                                                                               | < 3.3 µs (FIFO 64-byte packets)         |
|                                   | <b>Throughput</b>                                                                                                                                                                                                                                                                                                                    | 95.2 million pps                        |
|                                   | <b>Switching capacity</b>                                                                                                                                                                                                                                                                                                            | 128 Gb/s                                |
|                                   | <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>Electrical characteristics</b> | <b>Frequency</b>                                                                                                                                                                                                                                                                                                                     | 50/60 Hz                                |
|                                   | <b>Maximum heat dissipation</b>                                                                                                                                                                                                                                                                                                      | 358 BTU/hr (377.69 kJ/hr)               |
|                                   | <b>AC 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>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+A12-2010+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                           |

### Technical Specifications

|                   |                                                                                                                                                                                                                                                                                         |                |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
|                   | <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>I/O ports and slots</b>      | 44 RJ-45 autosensing 10/100/1000 ports™Duplex™10BASE-T/100BASE-TX™half or full™1000BASE-T™full only (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T)<br>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)<br>1 dual-personality (RJ-45 or USB micro-B)<br>1 USB 1.1<br>1 RJ-45 out-of-band management port<br>2 module slots<br>1 stacking module slot |                                                                       |
| <b>Power supplies</b>           | 1 power supply slot<br>1 minimum power supply required<br>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 Gb/s                                                              |
|                                 | <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)                                        |





### Technical Specifications

|                                   |                                                                                                                                                                                                                                                                                                                                     |                               |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|
|                                   | <b>Non-operating/<br/>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>Maximum heat dissipation</b>                                                                                                                                                                                                                                                                                                     | 239 BTU/hr (252.15 kJ/hr)     |
|                                   | <b>AC voltage</b>                                                                                                                                                                                                                                                                                                                   | 100-240 VAC                   |
|                                   | <b>Maximum power rating</b>                                                                                                                                                                                                                                                                                                         | 70 W                          |
|                                   | <b>Idle power</b>                                                                                                                                                                                                                                                                                                                   | 27 W                          |
| <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+=HMC - 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-PoE+ Switch (J9729A)

|                            |                                                                                                                                                                                                                   |
|----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>I/O ports and slots</b> | 44 RJ-45 autosensing 10/100/1000 PoE+ ports=Duplex=10BASE-T/100BASE-TX=half or full=1000BASE-T=full only (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+) |
|                            | 4 RJ-45 dual-personality 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+)                                                          |



### Technical Specifications

|                                   |                                                                                                                                                                                                                                                                                                                                                       |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                   | 1 dual-personality (RJ-45 or USB micro-B)                                                                                                                                                                                                                                                                                                             |
|                                   | 1 USB 1.1                                                                                                                                                                                                                                                                                                                                             |
|                                   | 1 RJ-45 out-of-band management port                                                                                                                                                                                                                                                                                                                   |
|                                   | 2 module slots                                                                                                                                                                                                                                                                                                                                        |
|                                   | 1 stacking module slot                                                                                                                                                                                                                                                                                                                                |
| <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 1.73(h) in (44.25 x 33.6 x 4.39 cm) (1U height)                                                                                                                                                                                                                                                               |
|                                   | <b>Weight</b> 12.57 lb (5.7 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> < 3.2 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 Gb/s                                                                                                                                                                                                                                                                                                                    |
|                                   | <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 62 dB, Pressure 45.2 dB                                                                                                                                                                                                                                                                                                         |
| <b>Electrical characteristics</b> | <b>Frequency</b> 50/60 Hz                                                                                                                                                                                                                                                                                                                             |
|                                   | <b>Maximum heat dissipation</b> 399 BTU/hr (420.95 kJ/hr)                                                                                                                                                                                                                                                                                             |
|                                   | <b>AC voltage</b> 100-240 VAC                                                                                                                                                                                                                                                                                                                         |
|                                   | <b>Maximum power rating</b> 487 W                                                                                                                                                                                                                                                                                                                     |
|                                   | <b>Idle power</b> 46 W                                                                                                                                                                                                                                                                                                                                |
|                                   | <b>PoE power</b> 370 W                                                                                                                                                                                                                                                                                                                                |
| <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; EN 62479-2010; CSA C22.2 No. 60950-1-07 2nd Edition; EN 60950-1-2006+A11-2009+A12-2010+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                                                                                                                                                                                                                                                                                          |



### Technical Specifications

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

|                                 |                                                                                                                                                                                                                   |                                                                       |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------|
| <b>I/O ports and slots</b>      | 44 RJ-45 autosensing 10/100/1000 PoE+ ports™Duplex™10BASE-T/100BASE-TX™half or full™1000BASE-T™full only (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+) |                                                                       |
|                                 | 4 RJ-45 dual-personality 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+)                                                          |                                                                       |
|                                 | 1 dual-personality (RJ-45 or USB micro-B)                                                                                                                                                                         |                                                                       |
|                                 | 1 USB 1.1                                                                                                                                                                                                         |                                                                       |
|                                 | 1 RJ-45 out-of-band management port                                                                                                                                                                               |                                                                       |
|                                 | 2 module slots                                                                                                                                                                                                    |                                                                       |
|                                 | 1 stacking module slot                                                                                                                                                                                            |                                                                       |
|                                 |                                                                                                                                                                                                                   |                                                                       |
| <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 µs (FIFO 64-byte packets)                                       |
|                                 | <b>1000 Mb Latency</b>                                                                                                                                                                                            | < 3.2 µs (FIFO 64-byte packets)                                       |
|                                 | <b>10 Gbps Latency</b>                                                                                                                                                                                            | < 3.2 µs (FIFO 64-byte packets)                                       |



### Technical Specifications

|                                   |                                                                                                                                                                                                                                                                                                                                     |                                         |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
|                                   | <b>Throughput</b>                                                                                                                                                                                                                                                                                                                   | 130.9 million pps                       |
|                                   | <b>Switching capacity</b>                                                                                                                                                                                                                                                                                                           | 176 Gb/s                                |
|                                   | <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>Maximum heat dissipation</b>                                                                                                                                                                                                                                                                                                     | 399 BTU/hr (420.95 kJ/hr)               |
|                                   | <b>AC 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>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+A12—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                           |

### Technical Specifications

|                   |                                                                                                                                                                                                                                                                                         |
|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <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 Denial of service protection

(applies to all products in series)

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  
 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+



### Technical Specifications

IEEE 802.3az Energy Efficient Ethernet  
IEEE 802.3x Flow Control  
RFC 768 UDP  
RFC 783 TFTP Protocol (revision 2)  
RFC 792 ICMP  
RFC 793 TCP  
RFC 826 ARP  
RFC 854 TELNET  
RFC 868 Time Protocol  
RFC 951 BOOTP  
RFC 1058 RIPv1  
RFC 1256 ICMP Router Discovery Protocol (IRDP)  
RFC 1350 TFTP Protocol (revision 2)  
RFC 1519 CIDR  
RFC 1542 BOOTP Extensions  
RFC 1918 Address Allocation for Private Internet  
RFC 2030 Simple Network Time Protocol (SNTP) v4  
RFC 2131 DHCP  
RFC 2236 IGMP Snooping  
RFC 2453 RIPv2  
RFC 2865 Remote Authentication Dial In User Service (RADIUS)  
RFC 2866 RADIUS Accounting  
RFC 3046 DHCP Relay Agent Information Option  
RFC 3411 An Architecture for Describing Simple Network Management Protocol (SNMP) Management Frameworks  
RFC 3412 Message Processing and Dispatching for the Simple Network Management Protocol (SNMP)  
RFC 3413 Simple Network Management Protocol (SNMP) Applications  
RFC 3414 User-based Security Model (USM) for version 3 of the Simple Network Management Protocol (SNMPv3)  
RFC 3415 View-based Access Control Model (VACM) for the Simple Network Management Protocol (SNMP)  
RFC 3416 Protocol Operations for SNMP  
RFC 3417 Transport Mappings for the Simple Network Management Protocol (SNMP)  
RFC 3418 Management Information Base (MIB) for the Simple Network Management Protocol (SNMP)  
RFC 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

## Technical Specifications

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 2464 Transmission of IPv6 over Ethernet Networks  
RFC 2710 Multicast Listener Discovery (MLD) for IPv6  
RFC 2925 Definitions of Managed Objects for Remote Ping, Traceroute, and Lookup Operations (Ping only)  
RFC 2925 Remote Operations MIB (Ping only)  
RFC 3019 MLDv1 MIB  
RFC 3315 DHCPv6 (client and relay)  
RFC 3484 Default Address Selection for IPv6  
RFC 3513 IPv6 Addressing Architecture  
RFC 3596 DNS Extension for IPv6  
RFC 3810 MLDv2 for IPv6  
RFC 4022 MIB for TCP  
RFC 4113 MIB for UDP  
RFC 4251 SSHv6 Architecture  
RFC 4252 SSHv6 Authentication  
RFC 4253 SSHv6 Transport Layer  
RFC 4254 SSHv6 Connection  
RFC 4291 IP Version 6 Addressing Architecture  
RFC 4293 MIB for IP  
RFC 4419 Key Exchange for SSH  
RFC 4443 ICMPv6  
RFC 4541 IGMP & MLD Snooping Switch  
RFC 4861 IPv6 Neighbor Discovery  
RFC 4862 IPv6 Stateless Address Auto-configuration  
RFC 5095 Deprecation of Type 0 Routing Headers in IPv6

### **MIBs**

IEEE 802.1ap (MSTP and STP MIB's only)  
RFC 1155 Structure & ID of Mgmt Info for TCP/IP Internets  
RFC 1156 (TCP/IP MIB)  
RFC 1157 A Simple Network Management Protocol (SNMP)  
RFC 1213 MIB II  
RFC 1493 Bridge MIB  
RFC 1724 RIPv2 MIB  
RFC 2021 RMONv2 MIB  
RFC 2578 Structure of Management Information Version 2 (SMIv2)  
RFC 2579 Textual Conventions for SMIv2  
RFC 2580 Conformance Statements for SMIv2  
RFC 2613 SMON MIB

### Technical Specifications

RFC 2618 RADIUS Client MIB  
RFC 2620 RADIUS Accounting MIB  
RFC 2665 Ethernet-Like-MIB  
RFC 2668 802.3 MAU MIB  
RFC 2674 802.1p and IEEE 802.1Q Bridge MIB  
RFC 2737 Entity MIB (Version 2)  
RFC 2819 RMON MIB  
RFC 2863 The Interfaces Group MIB  
RFC 2925 Ping MIB  
RFC 2932 IP (Multicast Routing MIB)  
RFC 2933 IGMP MIB  
RFC 3414 SNMP-User based-SM MIB  
RFC 3415 SNMP-View based-ACM MIB  
RFC 3417 Simple Network Management Protocol (SNMP) over IEEE 802 Networks  
RFC 3418 MIB for SNMPv3  
RFC 4836 Managed Objects for 802.3 Medium Attachment Units (MAU)

#### **Network management**

IEEE 802.1AB Link Layer Discovery Protocol (LLDP)  
RFC 1155 Structure of Management Information  
RFC 1157 SNMPv1  
RFC 2021 Remote Network Monitoring Management Information Base Version 2 using SMIv2  
RFC 2576 Coexistence between SNMP versions  
RFC 2578 Structure of Management Information Version 2 (SMIv2)  
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)  
RFC 5424 Syslog Protocol  
ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED)  
SNMPv1/v2c/v3  
XRMON

#### **QoS/CoS**

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



### Technical Specifications

Ingress Rate Limiting

#### Security

IEEE 802.1X Port Based Network Access Control

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

RFC 1321 The MD5 Message-Digest Algorithm

RFC 1334 PPP Authentication Protocols (PAP)

RFC 1492 An Access Control Protocol, Sometimes Called TACACS

RFC 1492 TACACS+

RFC 1994 PPP Challenge Handshake Authentication  
Protocol (CHAP)

RFC 2082 RIP-2 MD5 Authentication

RFC 2104 Keyed-Hashing for Message Authentication

RFC 2138 RADIUS Authentication

RFC 2139 RADIUS Accounting

RFC 2246 Transport Layer Security (TLS)

RFC 2548 Microsoft Vendor-specific RADIUS Attributes

RFC 2618 RADIUS Authentication Client MIB

RFC 2620 RADIUS Accounting Client MIB

RFC 2716 PPP EAP TLS Authentication Protocol

RFC 2818 HTTP Over TLS

RFC 2865 RADIUS (client only)

RFC 2865 RADIUS Authentication

RFC 2866 RADIUS Accounting

RFC 2867 RADIUS Accounting Modifications for Tunnel Protocol Support

RFC 2868 RADIUS Attributes for Tunnel Protocol Support

RFC 2869 RADIUS Extensions

RFC 2882 NAS Requirements—Extended RADIUS Practices

RFC 3162 RADIUS and IPv6

RFC 3576 Dynamic Authorization Extensions to RADIUS

RFC 3579 RADIUS Support For Extensible Authentication Protocol (EAP)

RFC 3580 IEEE 802.1X Remote Authentication Dial In

User Service (RADIUS) Usage Guidelines

RFC 4576 RADIUS Attributes

Access Control Lists (ACLs)

draft-grant-tacacs-02 (TACACS)

Guest VLAN for 802.1x

MAC Authentication

MAC Lockdown

MAC Lockout

Port Security

Secure Sockets Layer (SSL)

SSHv2 Secure Shell

Web Authentication

### Accessories

| HP 2920 Switch series accessories | Modules                                                           |         |
|-----------------------------------|-------------------------------------------------------------------|---------|
|                                   | HP 2920 2-port 10GbE SFP+ Module                                  | J9731A  |
|                                   | HP 2920 2-port 10GBASE-T Module                                   | J9732A  |
|                                   | HP 2920 2-port Stacking Module                                    | J9733A  |
|                                   | HP 2920 2-port 10GbE SFP+ Module/S-Buy                            | J9731AS |
|                                   | HP 2920 2-port 10GBASE-T Module/S-Buy                             | J9732AS |
|                                   | HP 2920 2-port Stacking Module/S-Buy                              | J9733AS |
|                                   | <b>Transceivers</b>                                               |         |
|                                   | HP X121 1G SFP LC SX Transceiver                                  | J4858C  |
|                                   | HP X121 1G SFP LC LX Transceiver                                  | J4859C  |
|                                   | HP X122 1G SFP LC BX-D Transceiver                                | J9142B  |
|                                   | HP X122 1G SFP LC BX-U Transceiver                                | J9143B  |
|                                   | HP X121 1G SFP LC LH Transceiver                                  | J4860C  |
|                                   | 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  |
|                                   | 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 X132 10G SFP+ LC ER Transceiver                                | J9153A  |
|                                   | HP X242 10G SFP+ to SFP+ 1m Direct Attach Copper Cable            | J9281B  |
|                                   | HP X242 10G SFP+ to SFP+ 3m Direct Attach Copper Cable            | J9283B  |
|                                   | HP X242 10G SFP+ to SFP+ 7m Direct Attach Copper Cable            | J9285B  |
|                                   | HP X244 10G XFP to SFP+ 1m Direct Attach Copper Cable             | J9300A  |
|                                   | HP 10G X244 XFP to SFP+ 3m Direct Attach Copper Cable             | J9301A  |
|                                   | HP 10G X244 XFP to SFP+ 5m Direct Attach Copper Cable             | J9302A  |
|                                   | HP X132 10G SFP+ LC SR XCVR/S-Buy                                 | J9150AS |
|                                   | HP X132 10G SFP+ LC LR XCVR/S-Buy                                 | J9151AS |
|                                   | HP X132 10G SFP+ LC LRM XCVR/S-Buy                                | J9152AS |
|                                   | <b>Cables</b>                                                     |         |
|                                   | HP LC to LC Multi-mode OM3 2-Fiber 0.5m 1-Pack Fiber Optic Cable  | AJ833A  |
|                                   | HP LC to LC Multi-mode OM3 2-Fiber 1.0m 1-Pack Fiber Optic Cable  | AJ834A  |
|                                   | HP LC to LC Multi-mode OM3 2-Fiber 2.0m 1-Pack Fiber Optic Cable  | AJ835A  |
|                                   | HP LC to LC Multi-mode OM3 2-Fiber 5.0m 1-Pack Fiber Optic Cable  | AJ836A  |
|                                   | HP LC to LC Multi-mode OM3 2-Fiber 15.0m 1-Pack Fiber Optic Cable | AJ837A  |
|                                   | HP LC to LC Multi-mode OM3 2-Fiber 30.0m 1-Pack Fiber Optic Cable | AJ838A  |
|                                   | HP LC to LC Multi-mode OM3 2-Fiber 50.0m 1-Pack Fiber Optic Cable | AJ839A  |
|                                   | HP Premier Flex LC/LC Multi-mode OM4 2 fiber 1m Cable             | QK732A  |
|                                   | HP Premier Flex LC/LC Multi-mode OM4 2 fiber 2m Cable             | QK733A  |

### Accessories

|                                                                            |         |
|----------------------------------------------------------------------------|---------|
| HP Premier Flex LC/LC Multi-mode OM4 2 fiber 5m Cable                      | QK734A  |
| HP Premier Flex LC/LC Multi-mode OM4 2 fiber 15m Cable                     | QK735A  |
| HP Premier Flex LC/LC Multi-mode OM4 2 fiber 30m Cable                     | QK736A  |
| HP Premier Flex LC/LC Multi-mode OM4 2 fiber 50m Cable                     | QK737A  |
| HP 2920 0.5m Stacking Cable                                                | J9734A  |
| HP 2920 1.0m Stacking Cable                                                | J9735A  |
| HP 2920 3.0m Stacking Cable                                                | J9736A  |
| HP 640 External/Redundant Power Supply 1m Cable                            | J9806A  |
| HP 2920 0.5m Stacking Cable/S-Buy                                          | J9734AS |
| HP 2920 1.0m Stacking Cable/S-Buy                                          | J9735AS |
| HP 2920 3.0m Stacking Cable/S-Buy                                          | J9736AS |
| <b>Power Supply</b>                                                        |         |
| HP 640 Redundant/External Power Supply Shelf                               | J9805A  |
| <b>Mounting Kit</b>                                                        |         |
| HP X410 1U Universal 4-post Rack Mounting Kit                              | J9583A  |
| <b>HP 2920-48G-PoE+ 740W Switch<sub>2</sub> PL (J9836A<sub>2</sub> PL)</b> |         |
| HP X332 575W 100-240VAC to 54VDC modular power supply                      | J9738A  |
| HP X332 1050W 110-240VAC to 54VDC Power Supply                             | J9737A  |

Accessory Product Details

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

|                                                               |                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------------------------------|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>HP 0.5 m Multimode OM3 LC/LC Optical Cable</b><br>(AJ833A) | <b>Cabling</b>  | <b>Cable type</b> —<br>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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|                                                               | <b>Notes</b>    | <b>Maximum distance</b> —<br>10Gbps Transfer Rate (Ethernet)—300m<br><br>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. <ul style="list-style-type: none"><li>• Dimensions—Core diameter—50 ± 3.0µm Cladding diameter—125 ± 2.0µm Coating diameter—245 ± 10µm</li><li>• Optical glass—Bandwidth—For LED sources—1500/500 MHz-km @850/1300nm.</li><li>• 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.</li><li>• 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.</li><li>• BULK CABLE &amp; CABLE ASSEMBLY CONFIGURATION—</li><li>• Jacket Material—Riser Grade - Low Smoke Zero Halogen thermoplastic.</li><li>• Jacket Color—Aqua for OM3 multimode per TIA 598</li><li>• Boot Color—White</li><li>• Insertion Loss—less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths &gt; 30 meters.</li><li>• 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.</li><li>• Weight—Air Packed Weight—1 LB Net Weight—0.454Kg</li></ul> |
|                                                               | <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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |



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 ± 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—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 ± 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—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 Cabling**  
**LC/LC Optical Cable**  
 (AJ837A)

#### 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 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 30 m Multimode OM3 Cabling  
LC/LC Optical Cable  
(AJ838A)

**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 ± 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—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 Cabling**  
**LC/LC Optical Cable**  
 (AJ839A)

#### 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 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 Premier Flex LC/LC  
Multi-mode OM4 2 fiber  
1m Cable (QK732A)**

#### Notes

Cable Specs=Graded-index, Bendable Fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.

- Core Diameter=50um ±3um, Cladding diameter=125um ±2um Coating diameter=245 ± 10um
- Bandwidth=3000 MHz-km @ 850nm (Laser)
- Jacket Color=Blue
- Jacket Material=Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic
- Boot Color=White
- Outer Jacket Print=HP PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable.
- Insertion Loss=Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m
- Maximum Cable Attenuation=3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45

#### Services

Refer to the HP website at [www.hp.com/networking/services](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 ±3um, Cladding diameter=125um ±2um Coating diameter=245 ± 10um
- Bandwidth=3000 MHz-km @ 850nm (Laser)
- Jacket Color=Blue
- Jacket Material=Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic
- Boot Color=White
- Outer Jacket Print=HP PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable.
- Insertion Loss=Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m
- Maximum Cable Attenuation=3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45

#### Services

Refer to the HP website at [www.hp.com/networking/services](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 ±3um, Cladding diameter—125um ±2um—Coating diameter—245 ± 10um
- Bandwidth—3000 MHz-km @ 850nm (Laser)
- Jacket Color—Blue
- Jacket Material—Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic
- Boot Color—White
- Outer Jacket Print—HP PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable.
- Insertion Loss—Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m
- Maximum Cable Attenuation—3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45

#### Services

Refer to the HP website at [www.hp.com/networking/services](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 ±3um, Cladding diameter—125um ±2um—Coating diameter—245 ± 10um
- Bandwidth—3000 MHz-km @ 850nm (Laser)
- Jacket Color—Blue
- Jacket Material—Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic
- Boot Color—White
- Outer Jacket Print—HP PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable.
- Insertion Loss—Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m
- Maximum Cable Attenuation—3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45

#### Services

Refer to the HP website at [www.hp.com/networking/services](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 ±3um, Cladding diameter=125um ±2um Coating diameter=245 ± 10um
- Bandwidth=3000 MHz-km @ 850nm (Laser)
- Jacket Color=Blue
- Jacket Material=Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic
- Boot Color=White
- Outer Jacket Print=HP PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable.
- Insertion Loss=Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m
- Maximum Cable Attenuation=3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45

#### Services

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**HP Premier Flex LC/LC  
Multi-mode OM4 2 fiber  
50m Cable (QK737A)**

#### Notes

Cable Specs=Graded-index, Bendable Fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.

- Core diameter=50um ±3um, Cladding diameter=125um ±2um Coating diameter=245 ± 10um
- Bandwidth=3000 MHz-km @ 850nm (Laser)
- Jacket Color=Blue
- Jacket Material=Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic
- Boot Color=White
- Outer Jacket Print=HP PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable.
- Insertion Loss=Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m
- Maximum Cable Attenuation=3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45

#### Services

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Accessory Product Details

**HP X410 1U Universal 4-post Rack Mounting Kit**     **Notes**  
(J9583A)

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.

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.

**Services**

### Summary of Changes

| Date        | Version History       | Action  | Description of Change                                                                                                                                    |
|-------------|-----------------------|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| 01-Dec-2014 | From Version 13 to 14 | Changed | Warranty and support updated, Accessories were added back to the document<br>Key Features, Product Overview and Features and Benefits were also updated. |
| 09-Oct-2014 | From Version 12 to 13 | Removed | Removed SKUs J9438A, J9440A and J9439A from Accessory Product Details                                                                                    |
| 15-Apr-2014 | From Version 10 to 12 | Removed | HP X121 1G SFP RJ45 T Transceiver was removed from Configuration.                                                                                        |
| 17-Feb-2014 | From Version 9 to 10  | Changed | SFP+ Transceivers were revised.                                                                                                                          |
| 12-Nov-2013 | From Version 8 to 9   | Changed | Build to Order, Rack Level Integration CTO Models, Internal Power Supplies, Cables, and Switch Enclosure Options were revised.                           |

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