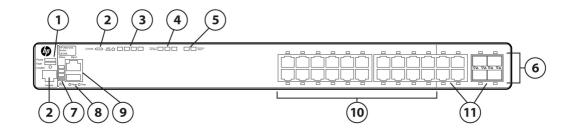
## Overview

## Models

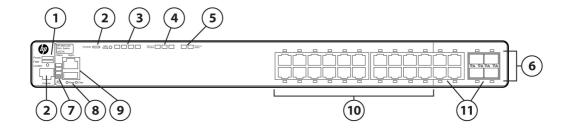
HP 2920-24G Switch	J9726A
HP 2920-24G-PoE+ Switch	J9727A
HP 2920-48G Switch	J9728A
HP 2920-48G-PoE+ Switch	J9729A
HP 2920-48G-PoE+ 740W Switch	J9836A



## HP 2920-24G Switch

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

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



## HP 2920-24G-PoE+ Switch

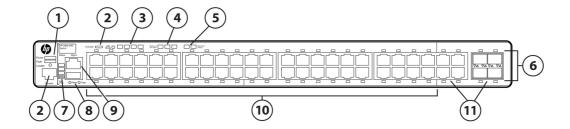
- 1. Power, Fault, and Locator LEDs
- 2. Console ports
- 3. LED Mode button and indicator LEDs
- 4. Status LEDs for components on the back of the switch
- 7. PoE, Tmp (Temperature), Test, Fan, and Aux (Auxiliary) port status LED
- 8. Reset and Clear buttons
- 9. Aux port and Out-of-Band Management port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



## Overview

- 5. Stacking status LEDs
- 6. Switch port LEDs

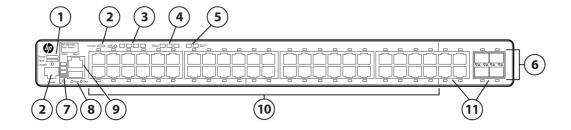
11. Dual-Personality (10/100/1000BASE-T or SFP) ports



## HP 2920-48G Switch

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

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



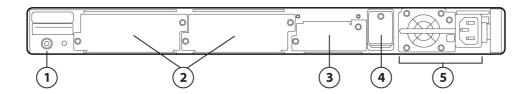
## HP 2920-48G-PoE+ Switch HP 2920-48G-PoE+ 740W Switch

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

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



## Overview



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

- Grounding lug mounting hole
- 2. 10G Expansion Module slots
- 3. Stacking Module Slot

- 4. XPS Connector
- 5. Power Supply and AC power connector

## **Product overview**

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

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

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

## **Key Features**

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

## **Features and Benefits**

**Quality of Service (QoS)** 

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



### Overview

## Large buffers

provide graceful congestion management

## **Connectivity**

## • Flexible 10 Gbps Ethernet connectivity

up to four optional 10-Gigabit ports (SFP+ and/or 10GBASE-T)

### • Two-port stacking module with up to 40 Gbps/port

optional two-port stacking module allows stacking of up to four switch units into a single virtual device

### Auto-MDIX

automatically adjusts for straight-through or crossover cables on all 10/100 and 10/100/1000 ports

### IPv6

### IPv6 host

allows the switches to be managed and deployed at the edge of IPv6 networks

### ○ Dual stack (IPv4/IPv6)

provides transition mechanism from IPv4 to IPv6; supports connectivity for both protocols

## MLD snooping

forwards IPv6 multicast traffic to the appropriate interface; prevents IPv6 multicast traffic from flooding the network

## • IEEE 802.3at Power over Ethernet (PoE+)

provide up to 30 W per port that allows support of the latest PoE+-capable devices such as IP phones, wireless access points, and security cameras, as well as any IEEE 802.3af-compliant end device; eliminates the cost of additional electrical cabling and circuits that would otherwise be necessary in IP phone and WLAN deployments

## Pre-standard PoE support

detects and provides power to pre-standard PoE devices

## • Dual-personality functionality

includes four 10/100/1000 ports or SFP slots for optional fiber connectivity such as Gigabit-SX, -LX, and -LH, or 100-FX

## **Performance**

## • Energy-efficient design

## High-efficiency power supplies

80 PLUS Silver Certified power supply increases power savings

## Energy-efficient Ethernet (EEE) support

reduces power consumption in accordance with IEEE 802.3az

### HP ProVision ASIC architecture

is designed with the latest HP ProVision ASIC, providing very low latency, increased packet buffering, and adaptive power consumption

## • Selectable queue configurations

allows for increased performance by selecting the number of queues and associated memory buffering that best meet the requirements of the network applications

## Software-defined networking

### NEW OpenFlow

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

## Convergence

### IP multicast snooping and data-driven IGMP

automatically prevent flooding of IP multicast traffic



## Overview

## LLDP-MED (Media Endpoint Discovery)

defines a standard extension of LLDP that stores values for parameters such as QoS and VLAN to automatically configure network devices such as IP phones

## • IEEE 802.1AB Link Layer Discovery Protocol (LLDP)

is an automated device discovery protocol that provides easy mapping of network management applications

### • PoE and PoE+ allocations

support multiple methods (automatic, IEEE 802.3at dynamic, LLDP-MED fine grain, IEEE 802.3af device class, or user specified) to allocate and manage PoE/PoE+ power for more efficient energy savings

### Local MAC Authentication

assigns attributes such as VLAN and QoS using locally configured profile that can be a list of MAC prefixes

## Resiliency and high availability

## • IEEE 802.1s Multiple Spanning Tree

provides high link availability in multiple VLAN environments by allowing multiple spanning trees; provides legacy support for IEEE 802.1d and IEEE 802.1w

## • IEEE 802.3ad Link Aggregation Control Protocol (LACP) and HP port trunking

support up to 60 static, dynamic, or distributed trunks active across a stack, with each trunk having up to eight links (ports) per static trunk; support trunking across stack members

## Ring and chain stacking topology

allows failure of a link or switch in the ring of stacked switches, while the remaining connected switches continue operation

### New SmartLink

provides easy-to-configure link redundancy of active and standby links

## Management

### SNMPv1, v2, and v3

provide complete support of SNMP; provide full support of industry-standard Management Information Base (MIB) plus private extensions; SNMPv3 supports increased security using encryption

### Out-of-band Ethernet management port

enables management over a separate physical management network, keeping management traffic segmented from network data traffic

## Manageability

## • Dual flash images

provides independent primary and secondary operating system files for backup while upgrading

## Friendly port names

allow assignment of descriptive names to ports

### • Find-Fix-Inform

finds and fixes common network problems automatically, then informs administrator

## • Multiple configuration files

allow multiple configuration files to be stored to a flash image

### Software updates

free downloads from the Web

### RMON, XRMON, and sFlow

provide advanced monitoring and reporting capabilities for statistics, history, alarms, and events

## Troubleshooting

ingress and egress port monitoring enable network problem solving

## Uni-Directional Link Detection (UDLD)

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



## Overview

the two devices.

## Layer 2 switching

VLAN support and tagging

supports IEEE 802.1Q (4,094 VLAN IDs) and 256 VLANs simultaneously

• GARP VLAN Registration Protocol

allows automatic learning and dynamic assignment of VLANs

Jumbo packet support

improves the performance of large data transfers; supports frame size of up to 9220 bytes

• IEEE 802.1v protocol VLANs

isolate select non-IPv4 protocols automatically into their own VLANs

Rapid Per-VLAN Spanning Tree (RPVST+)

allows each VLAN to build a separate spanning tree to improve link bandwidth usage; is compatible with PVST+

## Layer 3 routing

• Static IP routing

provides manually configured routing; includes ECMP capability

Routing Information Protocol (RIP)

provides RIPv1 and RIPv2 routing

• 256 static and 2,048 RIP routes

facilitate segregation of user data without adding external hardware

## **Security**

### Multiple user authentication methods

O 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

O 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
  - O 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

O Concurrent IEEE 802.1X, Web, and MAC authentication schemes per port

switch port will accept up to 32 sessions of IEEE 802.1X, Web, and MAC authentications

Access control lists (ACLs)

provide IP Layer 3 filtering based on source/destination IP address/subnet and source/destination TCP/UDP port number

• Source-port filtering

allows only specified ports to communicate with each other

• RADIUS/TACACS+

eases switch management security administration by using a password authentication server

• IEEE 802.1X, MAC or Web authentication

provides concurrent network access control and Web authentication of up to 24 clients per port

Secure shell



## Overview

encrypts all transmitted data for secure remote CLI access over IP networks

## • Secure Sockets Layer (SSL)

encrypts all HTTP traffic, allowing secure access to the browser-based management GUI in the switch

### Port security

allows access only to specified MAC addresses, which can be learned or specified by the administrator

### MAC address lockout

prevents particular configured MAC addresses from connecting to the network

### Secure FTP

allows secure file transfer to and from the switch; protects against unwanted file downloads or unauthorized copying of a switch configuration file

## Switch management logon security

helps secure switch CLI logon by optionally requiring either RADIUS or TACACS+ authentication

### Custom banner

displays security policy when users log in to the switch

## • STP BPDU port protection

blocks Bridge Protocol Data Units (BPDUs) on ports that do not require BPDUs, preventing forged BPDU attacks

### DHCP protection

blocks DHCP packets from unauthorized DHCP servers, preventing denial-of-service attacks

## Dynamic ARP protection

blocks ARP broadcasts from unauthorized hosts, preventing eavesdropping or theft of network data

## STP Root Guard

protects the root bridge from malicious attacks or configuration mistakes

## • Identity-driven ACL

enables implementation of a highly granular and flexible access security policy and VLAN assignment specific to each authenticated network user

### Per-port broadcast throttling

selectively configures broadcast control on heavy traffic port uplinks

## **Monitor and diagnostics**

## • Digital optical monitoring of SFP+ and 1000BASE-T transceivers

allows detailed monitoring of the transceiver settings and parameters

## **Warranty and support**

## Lifetime Warranty 2.0

advance hardware replacement for as long as you own the product with next-business-day delivery (available in most countries)†

## • Electronic and telephone support (for Lifetime Warranty 2.0):

limited 24x7 telephone support is available from HP for the first 3 years; limited electronic and business hours telephone support is available from HP for the entire warranty period; to reach our support centers, refer to: <a href="https://www.hp.com/networking/contact-support">www.hp.com/networking/contact-support</a>; for details on the duration of support provided with your product purchase, refer to: <a href="https://www.hp.com/networking/warrantysummary">www.hp.com/networking/warrantysummary</a>

## Software releases

to find software for your product, refer to <a href="https://www.hp.com/networking/support">www.hp.com/networking/support</a>; for details on the software releases available with your product purchase, refer to <a href="https://www.hp.com/networking/warrantysummary">www.hp.com/networking/warrantysummary</a>

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



## Overview

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



## Configuration

## **Build To Order:**

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

HP 2920-24G Switch J9726A 24 RJ-45 autosensing 10/100/1000 ports 4 dual-personality ports min=0 \ max=4 SFP Transceivers 1 - HP X331 165W 100-240VAC to 12VDC PS included • 1U - Height PDU CABLE NA/MEX/TW/JPPDU CABLE NA/MEX/TW/JP J9726A#B2B C15 PDU Jumper Cord (NA/MEX/TW/JP) PDU CABLE ROW J9726A#B2C C15 PDU Jumper Cord (ROW) High Volt Switch to Wall Power Cord J9726A#B2E NEMA L6-20P Cord (NA/MEX/JP/TW) HP 2920-24G-POE+ Switch J9727A 24 RJ-45 autosensing 10/100/1000 PoE+ ports See 4 dual-personality ports Configuration min=0 \ max=4 SFP Transceivers Note:1, 2 1 - HP X332 575W 100-240VAC to 54VDC PS included • 1U - Height PDU CABLE NA/MEX/TW/JPPDU CABLE NA/MEX/TW/JP J9727A#B2B C15 PDU Jumper Cord (NA/MEX/TW/JP) PDU CABLE ROW J9727A#B2C C15 PDU Jumper Cord (ROW) High Volt Switch to Wall Power Cord J9727A#B2E NEMA L6-20P Cord (NA/MEX/JP/TW) HP 2920-48G Switch J9728A 48 RJ-45 autosensing 10/100/1000 ports See Configuration 4 dual-personality ports min=0 \ max=4 SFP Transceivers Note:1, 2 1 - HP X331 165W 100-240VAC to 12VDC PS included • 1U - Height



PDU CABLE NA/MEX/TW/JPPDU CABLE NA/MEX/TW/JP

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

J9728A#B2B

Configuration		
PDU CABLE ROW		J9728A#B2C
C15 PDU Jumper	r Cord (ROW)	
High Volt Switch to Wal	ll Power Cord	J9728A#B2E
NEMA L6-20P Co	ord (NA/MEX/JP/TW)	
HP 2920-48G-P0E+ Sw	vitch	J9729A
	ensing 10/100/1000 PoE+ ports	See
<ul><li>4 dual-personali</li><li>min=0 \ max=4 S</li></ul>		Configuration Note:1, 2
•	W 100-240VAC to 54VDC PS included	Note.1, 2
• 1U - Height		
PDU CABLE NA/MEX/TV	N/JP	J9729A#B2B
<ul> <li>C15 PDU Jumper</li> </ul>	r Cord (NA/MEX/TW/JP)	
PDU CABLE ROW		J9729A#B2C
C15 PDU Jumper	r Cord (ROW)	337 E31111 EE
High Volt Cwitch to Wal	II Dower Cord	107204#825
<ul><li>High Volt Switch to Wal</li><li>NEMA L6-20P Co</li></ul>	ord (NA/MEX/JP/TW)	J9729A#B2E
HP 2920-48G-P0E+ 74		J9836A
	nsing 10/100/1000 PoE+ ports rsonality 10/100/1000 PoE+ ports	See Configuration
<ul><li>min=0 \ max=4 S</li></ul>	SFP Transceivers	Note:1, 2
<ul><li>1 - HP X332 1050</li><li>1U - Height</li></ul>	OW 110-240VAC to 54VDC PS included	
_		
PDU CABLE NA/MEX/TV		J9836A#B2B
• C15 PDO Jumper	r Cord (NA/MEX/TW/JP)	
PDU CABLE ROW		J9836A#B2C
C15 PDU Jumper	r Cord (ROW)	
High Volt Switch to Wal	ll Power Cord	J9836A#B2E
NEMA L6-20P Co	ord (NA/MEX/JP/TW)	
Configuration Rules		
comigaration nates		
	The following Transceivers install into this Module Switch:	
Note 1	HP X121 1G SFP LC LH Transceiver HP X121 1G SFP LC LX Transceiver	J4860C J4859C
	HP X121 IG SFP LC LX Transceiver	J4858C
	HP X122 1G SFP LC BX-D Transceiver	J9142B
	HP X122 1G SFP LC BX-U Transceiver	J9143B



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

Note 2

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

## **Rack Level Integration CTO Models**

HP 2920-24G Switch  24 RJ-45 autosensing 10/100/1000 ports  4 dual-personality ports\ min=0 \ max=4 SFP Transceivers  1 - HP X331 165W 100-240VAC to 12VDC PS included  1U - Height	J9726A#0D1 See Configuration Note:1, 3, 4, 5
PDU CABLE NA/MEX/TW/JP  • C15 PDU Jumper Cord (NA/MEX/TW/JP)	J9726A#B2B

## PDU CABLE ROW

J9726A#B2C

• C15 PDU Jumper Cord (ROW)

HP 2920-24G-P0E+ Switch	J9727A#0D1
<ul> <li>24 RJ-45 autosensing 10/100/1000 PoE+ ports</li> </ul>	See
4 dual-personality ports	Configuration
<ul> <li>min=0 \ max=4 SFP Transceivers</li> </ul>	Note:1, 3, 4, 5
<ul> <li>1 - HP X332 575W 100-240VAC to 54VDC PS included</li> </ul>	

• 1U - Height

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

J9727A#B2B

#### PDU CABLE ROW J9727A#B2C

• C15 PDU Jumper Cord (ROW)

HP 2920-48G Switch	J9728A#0D1
<ul> <li>48 RJ-45 autosensing 10/100/1000 ports</li> </ul>	See
<ul> <li>4 dual-personality ports</li> </ul>	Configuration

• min=0 \ max=4 SFP Transceivers Note:1, 3, 4, 5 • 1 - HP X331 165W 100-240VAC to 12VDC PS included

• 1U - Height

#### PDU CABLE NA/MEX/TW/JP J9728A#B2B

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

PDU CABLE ROW J9728A#B2C



## Configuration

C15 PDU Jumper Cord (ROW)

HP 2920-48G-P0E+ Switch	J9729A#0D1
<ul> <li>48 RJ-45 autosensing 10/100/1000 PoE+ ports</li> </ul>	See
4 dual-personality ports	Configuration
<ul> <li>min=0 \ max=4 SFP Transceivers</li> </ul>	Note:1, 3, 4, 5

1 - HP X332 575W 100-240VAC to 54VDC PS included

• 1U - Height

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

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

PDU CABLE ROW J9729A#B2C

C15 PDU Jumper Cord (ROW)

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

44 RJ-45 autosensing 10/100/1000 PoE+ ports
 4 RJ-45 dual-personality 10/100/1000 PoE+ ports
 min=0 \ max=4 SFP Transceivers
 Note:1, 3, 4, 5

1 - HP X332 1050W 110-240VAC to 54VDC PS included

• 1U - Height

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

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

PDU CABLE ROW J9836A#B2C

C15 PDU Jumper Cord (ROW)

## **Configuration Rules**

Note 1 The following Transceivers install into this Module (Use #0D1 quoted to switch if switch is

CTO) - if applicable:

HP X121 1G SFP LC LH Transceiver J4860C HP X121 1G SFP LC LX Transceiver J4859C HP X121 1G SFP LC SX Transceiver J4858C HP X122 1G SFP LC BX-D Transceiver J9142B HP X122 1G SFP LC BX-U Transceiver J9143B HP X121 1G SFP RJ45 T Transceiver J8177C HP X111 100M SFP LC FX Transceiver J9054C HP X112 100M SFP LC BX-D Transceiver J9099B HP X112 100M SFP LC BX-U Transceiver J9100B

Note 3 If this switch is factory installed in HP Racks, then the J9583A#0D1 is required.

CLIC Only - Allow the J9583AZ in all regions

Note 4 Localization required on orders without #B2B or #B2C options



## Configuration

Note 5 If HP CTO Switch Chassis is selected for Rack Level Integration, Then the CTO Switch Chassis needs to

integrate (with #0D1) to the HP Rack.

Remarks Drop down under power supply should offer the following options and results:

Switch/Router/Power Supply to PDU Power Cord - #B2B in North America, Mexico, Taiwan, and Japan or #B2C

ROW. (Watson Default B2B or B2C for Rack Level CTO)

Switch/Router/Power Supply to Wall Power Cord - Localized Option (Watson Default for BTO and Box Level

CTO)

## **Internal Power Supplies**

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

HP X331 165W 100-240VAC to 12VDC PS J9739A#0D1

• 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

C15 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord

J9739A#B2E

• NEMA L6-20P Cord (NA/MEX/JP/TW)

HP X332 575W 100-240VAC to 54VDC PS J9738A#0D1

• includes 1 x c15, 575w (Spare Only)

Configuration
Note:2, 3, 4

PDU CABLE NA/MEX/TW/JP J9738A#B2B

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

PDU CABLE ROW J9738A#B2C

C15 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord J9738A#B2E

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

HP X332 1050W 100-240VAC to 54VDC PS J9737A

• includes 1 x c15, 1050w (Spare or Upgrade Only)

See

Configuration

Note:2, 3, 4

## Configuration

PDU CABLE NA/MEX/TW/JP

J9737A#B2B

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

PDU CABLE ROW

J9737A#B2C

C15 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord

J9737A#B2E

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

**Configuration Rules** 

Note 1 This power supply is only supported on the J9726A and J9728A.

Note 2 This power supply is only supported on the J9727A ,J9729A and J9836A.

Note 3 Localization required on orders without #B2B ,#B2C or #B2E options.

Note 4 If #B2E is selected Then replace Localized option with #B2E for power supply and with #B2E for switch.

(Offered only in NA, Mexico,, Taiwan, and Japan)

Remarks Drop down under power supply should offer the following options and results:

Switch/Router/Power Supply to PDU Power Cord - #B2B in North America, Mexico, Taiwan, and Japan or #B2C

ROW. (Watson Default B2B or B2C for Rack Level CTO)

Switch/Router/Power Supply to Wall Power Cord - Localized Option (Watson Default for BTO and Box Level

CTO)

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

Mexico, Taiwan, and Japan)

**Localization** X332 575W 100-240VAC to 54VDC PS, CL - Chile - English localization

J9738A#A1X

Power Cord: Quantity :1, CEI 23-50, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet .Part

Store #: 8120-6980

X332 575W 100-240VAC to 54VDC PS, US - U.S. - English localization

J9738A#ABA

Power Cord: Quantity: 1, NEMA 5-15P, C15 STRAIGHT, 125 V, 15 A, 2.5 meters, 8.21 feet

,Part Store #: 8121-0973

X332 575 W 100-240VAC to 54VDC PS, EU - Europe - English localization

J9738A#ABB

Power Cord: Quantity:1, CEE 7-VII, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet, Part

Store #: 8120-6811

X332 575W 100-240VAC to 54VDC PS, AU - Australia - English localization

J9738A#ABG

Power Cord: Quantity: 1, AS/NZS 3112, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet

Part Store #: 8121-0834

X332 575W 100-240VAC to 54VDC PS, BR - Brazil - Portuguese localization

J9738A#AC4

Power Cord: Quantity: 1, NBR 14136 Fig13, C13 STRAIGHT, 250 V, 2.5 A, 2.5 meters, 8.21

feet ,Part Store #: 8121-1069

X332 575W 100-240VAC to 54VDC PS, KR - Korea - English localization

J9738A#AC6

Power Cord: Quantity:1, CEE 7-VII, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part

Store #: 8120-6811



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



Power Cord: Quantity :1, NBR 14136 Fig13, C13 STRAIGHT, 250 V, 2.5 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-1069	
X331 165W 100-240VAC to 12VDC PS, KR - Korea - English localization	J9739A#AC6
Power Cord: Quantity:1, CEE 7-VII, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part	
Store #: 8120-6811	
X331 165W 100-240VAC to 12VDC PS, UK - United Kingdom - English localization	J9739A#ACC
Power Cord: Quantity :1, BS 1363/A, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part	
Store #: 8120-6809	
X331 165W 100-240VAC to 12VDC PS, SZ - Switzerland - English localization	J9739A#ACD
Power Cord: Quantity :1, SEV 6534-2 Type 12, C13 STRAIGHT, 250 V, 10 A, 2.25 meters,	
7.39 feet ,Part Store #: 8120-6815	
X331 165W 100-240VAC to 12VDC PS, DK - Denmark - English localization	J9739A#ACE
Power Cord: Quantity :1, DK 2-5A, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6814	
X331 165W 100-240VAC to 12VDC PS, JP - Japan - English localization	J9739A#ACF
Power Cord: Quantity:1, JIS C 8303, C13 STRAIGHT, 125 V, 12 A, 2.3 meters, 7.55 feet ,Part	J97 J9A#ACI
Store #: 8120-4753	
X331 165W 100-240VAC to 12VDC PS, IN - India - English localization	J9739A#ACJ
Power Cord: Quantity:1, IS 1293, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part	
Store #: 8121-0780	
X331 165W 100-240VAC to 12VDC PS, ZA - South Africa - English localization	J9739A#ACQ
Power Cord: Quantity:1, SABS 164, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part	
Store #: 8120-6813	
X331 165W 100-240VAC to 12VDC PS, IL - Israel - English localization	J9739A#AKJ
Power Cord: Quantity :1, SI 32 90-DEG, C13 STRAIGHT, 250 V, 10 A, 2.5 meters, 8.21 feet	
,Part Store #: 8121-1035	107704 !! 414!
X331 165W 100-240VAC to 12VDC PS, TH - Thailand - English localization	J9739A#AKL
Power Cord: Quantity:1, NEMA 5-15P, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8121-0668	
X331 165W 100-240VAC to 12VDC PS, CN - China - English localization	J9739A#AKM
Power Cord: Quantity:1, GB 1002, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part	JJIJJAHAKNI
Store #: 8120-8707	
X331 165W 100-240VAC to 12VDC PS, TW - Taiwan - English localization	J9739A#ARB
Power Cord: Quantity :1, CNS 690 Type 2(1), C13 STRAIGHT, 125 V, 13 A, 2.5 meters, 8.21	
feet ,Part Store #: 8121-0974	
X331 165W 100-240VAC to 12VDC PS, MY - Malaysia - English localization	J9739A#ARE
Power Cord: Quantity :1, BS 1363/A, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part	
Store #: 8120-6809	
X331 165W 100-240VAC to 12VDC PS, AR - Argentina - English localization	J9739A#ARM
Power Cord: Quantity :1, IRAM 2073, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part	
Store #: 8120-6869	1077644444
2920-24G Switch, CL - Chile - English localization	J9726A#A1X
Power Cord: Quantity :1, CEI 23-50, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-6980	
2920-24G Switch, US - U.S English localization	J9726A#ABA
Power Cord: Quantity :1, NEMA 5-15P, C15 STRAIGHT, 125 V, 15 A, 2.5 meters, 8.21 feet	JJ / LUM#ADA
Part Store #: 8121-0914	



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



Power Cord: Quantity :1, IRAM 2073, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-6869	
2920-24G Switch, JmpCbl-NA/JP/TW - JmpCbl-NA/JP/TW	J9726A#B2B
Power Cord: Quantity:1, C14 STRAIGHT, C15 STRAIGHT, 250 V, 10 A, 2.5 meters, 8.21 feet	
,Part Store #: 8121-1091	
2920-24G Switch, JmpCbl-ROW - JmpCbl-ROW	J9726A#B2C
Power Cord: Quantity:1, C14 STRAIGHT, C15 STRAIGHT, 250 V, 10 A, 2.5 meters, 8.21 feet	
,Part Store #: 8121-1094	
2920-24G Switch, 220V-NA - L6-20 220V-NA	J9726A#B2E
Power Cord: Quantity:1, NEMA 6-15P, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet	
,Part Store #: 8120-3996	
2920-24G-POE+ Switch, CL - Chile - English localization	J9727A#A1X
Power Cord: Quantity :1, CEI 23-50, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part	
Store #: 8120-6980	
2920-24G-POE+ Switch, US - U.S English localization	J9727A#ABA
Power Cord: Quantity :1, NEMA 5-15P, C15 STRAIGHT, 125 V, 15 A, 2.5 meters, 8.21 feet	
,Part Store #: 8121-0914	107274#ADD
2920-24G-POE+ Switch, EU - Europe - English localization	J9727A#ABB
Power Cord: Quantity :1, CEE 7-VII, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part	
Store #: 8120-6811	10727A#ABC
2920-24G-POE+ Switch, AU - Australia - English localization	J9727A#ABG
Power Cord: Quantity :1, AS/NZS 3112, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8121-0834	
2920-24G-POE+ Switch, BR - Brazil - Portuguese localization	J9727A#AC4
Power Cord: Quantity :1, NBR 14136 Fig13, C13 STRAIGHT, 250 V, 2.5 A, 2.5 meters, 8.21	JJILIAWACA
feet ,Part Store #: 8121-1069	
2920-24G-POE+ Switch, KR - Korea - English localization	J9727A#AC6
Power Cord: Quantity:1, CEE 7-VII, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part	
Store #: 8120-6811	
2920-24G-POE+ Switch, UK - United Kingdom - English localization	J9727A#ACC
Power Cord: Quantity :1, BS 1363/A, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part	
Store #: 8120-6809	
2920-24G-POE+ Switch, SZ - Switzerland - English localization	J9727A#ACD
Power Cord: Quantity :1, SEV 6534-2 Type 12, C13 STRAIGHT, 250 V, 10 A, 2.25 meters,	
7.39 feet ,Part Store #: 8120-6815	
2920-24G-POE+ Switch, DK - Denmark - English localization	J9727A#ACE
Power Cord: Quantity :1, DK 2-5A, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part	
Store #: 8120-6814	
2920-24G-POE+ Switch, JP - Japan - English localization	J9727A#ACF
Power Cord: Quantity :1, JIS C 8303, C13 STRAIGHT, 125 V, 12 A, 2.3 meters, 7.55 feet ,Part	
Store #: 8120-4753	
2920-24G-POE+ Switch, IN - India - English localization	J9727A#ACJ
Power Cord: Quantity :1, IS 1293, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8121-0780	
Power Cord: Quantity :1, SABS 164, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6813	J9727A#ACQ
2920-24G-POE+ Switch, IL - Israel - English localization	J9727A#AKJ
,	



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-P0E+ 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-P0E+ 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	107274 !! 4 D.F.
2920-24G-P0E+ 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-P0E+ 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	331 £ 1 A#AIN!*I
Store #: 8120-6869	
2920-24G-P0E+ 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-P0E+ 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-P0E+ 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	J3/20A#ADA
Part Store #: 8121-0914	
2920-48G Switch, EU - Europe - English localization	J9728A#ABB
Power Cord: Quantity:1, CEE 7-VII, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part	
Store #: 8120-6811	
2920-48G Switch, AU - Australia - English localization	J9728A#ABG
Power Cord: Quantity :1, AS/NZS 3112, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet	
,Part Store #: 8121-0834	
2920-48G Switch, BR - Brazil - Portuguese localization	J9728A#AC4
Power Cord: Quantity :1, NBR 14136 Fig13, C13 STRAIGHT, 250 V, 2.5 A, 2.5 meters, 8.21	
feet ,Part Store #: 8121-1069	107774
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	JJ1 LUNWACC
Store #: 8120-6809	



2920-48G Switch, SZ - Switzerland - English localization Power Cord: Quantity :1, SEV 6534-2 Type 12, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6815	J9728A#ACD
2920-48G Switch, DK - Denmark - English localization Power Cord: Quantity :1, DK 2-5A, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6814	J9728A#ACE
2920-48G Switch, JP - Japan - English localization Power Cord: Quantity:1, JIS C 8303, C13 STRAIGHT, 125 V, 12 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-4753	J9728A#ACF
2920-48G Switch, IN - India - English localization Power Cord: Quantity :1, IS 1293, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8121-0780	J9728A#ACJ
2920-48G Switch, ZA - South Africa - English localization Power Cord: Quantity:1, SABS 164, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6813	J9728A#ACQ
2920-48G Switch, IL - Israel - English localization Power Cord: Quantity :1, SI 32 90-DEG, C13 STRAIGHT, 250 V, 10 A, 2.5 meters, 8.21 feet	J9728A#AKJ
,Part Store #: 8121-1035 2920-48G Switch, TH - Thailand - English localization Power Cord: Quantity :1, NEMA 5-15P, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet	J9728A#AKL
,Part Store #: 8121-0668 2920-48G Switch, CN - China - English localization Power Cord: Quantity :1, GB 1002, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part	J9728A#AKM
Store #: 8120-8707 2920-48G Switch, TW - Taiwan - English localization Power Cord: Quantity :1, CNS 690 Type 2(1), C13 STRAIGHT, 125 V, 13 A, 2.5 meters, 8.21	J9728A#ARB
feet ,Part Store #: 8121-0974 2920-48G Switch, MY - Malaysia - English localization	J9728A#ARE
Power Cord: Quantity:1, BS 1363/A, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-6809 2920-48G Switch, AR - Argentina - English localization	J9728A#ARM
Power Cord: Quantity :1, IRAM 2073, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-6869 2920-48G Switch, JmpCbl-NA/JP/TW - JmpCbl-NA/JP/TW	J9728A#B2B
Power Cord: Quantity :1, C14 STRAIGHT, C15 STRAIGHT, 250 V, 10 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-1091 2920-48G Switch, JmpCbl-ROW - JmpCbl-ROW	J9728A#B2C
Power Cord: Quantity :1, C14 STRAIGHT, C15 STRAIGHT, 250 V, 10 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-1094 2920-48G Switch, 220V-NA - L6-20 220V-NA	J9728A#B2E
Power Cord: Quantity :1, NEMA 6-15P, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-3996	
2920-48G-POE+ Switch, CL - Chile - English localization Power Cord: Quantity :1, CEI 23-50, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-6980	J9729A#A1X
2920-48G-P0E+ 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-P0E+ 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-P0E+ 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-P0E+ 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-P0E+ 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-P0E+ Switch, JP - Japan - English localization	J9729A#ACF
Power Cord: Quantity :1, JIS C 8303, C13 STRAIGHT, 125 V, 12 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-4753	
2920-48G-POE+ Switch, IN - India - English localization	J9729A#ACJ
Power Cord: Quantity :1, IS 1293, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8121-0780	
2920-48G-POE+ Switch, ZA - South Africa - English localization	J9729A#ACQ
Power Cord: Quantity :1, SABS 164, C13 STRAIGHT, 250 V, 10 A, 2.25 meters, 7.39 feet ,Part Store #: 8120-6813	
2920-48G-POE+ Switch, IL - Israel - English localization	J9729A#AKJ
Power Cord: Quantity :1, SI 32 90-DEG, C13 STRAIGHT, 250 V, 10 A, 2.5 meters, 8.21 feet ,Part Store #: 8121-1035	
2920-48G-POE+ Switch, TH - Thailand - English localization	J9729A#AKL
Power Cord: Quantity :1, NEMA 5-15P, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8121-0668	
2920-48G-POE+ Switch, CN - China - English localization	J9729A#AKM
Power Cord: Quantity :1, GB 1002, C13 STRAIGHT, 250 V, 10 A, 2.3 meters, 7.55 feet ,Part Store #: 8120-8707	
2920-48G-P0E+ 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-P0E+ Switch, AR - Argentina - English localization	J9729A#ARM
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## Configuration

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

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

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

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

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

■ 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 quot	ed 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 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



## Configuration

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
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



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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**

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

## **Switch Enclosure Options**

## **Mounting Kit**

HP X410 1U Univ 4-post Rack Mnt Kit

J9583A See Configuration Note:1

## **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

Height = 1Uincludes 1 x c13, 800w

See Configuration Note:1, 3, 4, 5

J9805A

HP X331 165W 100-240VAC to 12VDC PS

• includes 1 x c15, 165w See Configuration

Note:2

J9739A

PDU CABLE NA/MEX/TW/JP

J9739A#B2B

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

PDU CABLE ROW J9739A#B2C

• C15 PDU Jumper Cord (ROW)



## Configuration

High Volt Switch to Wall Power Cord

includes 1 x c15, 575w

J9739A#B2E

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

HP X332 575W 100-240VAC to 54VDC PS

J9738A

See Configuration

Note:2

PDU CABLE NA/MEX/TW/JP

J9738A#B2B

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

PDU CABLE ROW

J9738A#B2C

C15 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord

J9738A#B2E

HP X332 1050W 100-240VAC to 54VDC PS

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

J9737A

includes 1 x c15, 1050w

See Configuration Note:2

PDU CABLE NA/MEX/TW/JP

J9737A#B2B

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

PDU CABLE ROW

J9737A#B2C

C15 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord

J9737A#B2E

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

## **Configuration Rules**

Note 1 Can take up to Three internal power supplies. (J9737A, J9738A and J9739A) System (std 0 // max

3) User Selection (min 1 // max 3) per Power Supply enclosure. Mixing or matching of the 3

different power supplies is supported in the Chassis.

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

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

Note 4 Up to eight (8) Switch Chassis can be connected to this External Redundant Power Source.

Power supply slot 1 supports up to 4 cables Power supply slot 2 supports up to 2 cables Power supply slot 3 supports up to 2 cables

Supported on J9726A, J9727A, J9728A, J9729A and J9836A switches only.

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



## Configuration

Remarks: For J9726A, and J9728A, the power supply in J9805A must be J9739A (165W).

For J9727A and J9729A, the power supply in J9805A must be J9737A (1050W) or J9738A (575W).

For J9836A, the power supply in J9805A must be J9737A (1050W).

Drop down under power supply should offer the following options and results:

Switch/Router/Power Supply to PDU Power Cord - #B2B in North America, Mexico, Taiwan, and

Japan or #B2C ROW. (Watson Default B2B or B2C for Rack Level CTO)

Switch/Router/Power Supply to Wall Power Cord - Localized Option (Watson Default for BTO and

**Box Level CTO)** 

High Volt Switch/Router/Power Supply to Wall Power Cord - #B2E Option. (Offered only in North

America, Mexico, Taiwan, and Japan)

## **External/Redundant Power Cables**

HP 640 EPS/RPS 1m Cable

J9806A See Configuration Note:1

## **Configuration Rules**

Note 1

1, 2, 3 or 4 cables per AC Power Supply used with J9805A supported. System (std 0 // max 8) User

Selection (min 1 // max 8) per Power Supply enclosure.

Power supply slot 1 supports up to 4 cables Power supply slot 2 supports up to 2 cables Power supply slot 3 supports up to 2 cables



## Technical Specifications

## HP 2920-24G Switch (J9726A)

I/O ports and slots 20 RJ-45 autosensing 10/100/1000 ports; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full

> only (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T) 4 RJ-45 dual-personality 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX,

IEEE 802.3ab Type 1000BASE-T)

1 dual-personality (RJ-45 or USB micro-B)

1 USB 1.1

1 RJ-45 out-of-band management port

2 module slots

1 stacking module slot

**Power supplies** 1 power supply slot

1 minimum power supply required

includes: 1 x J9739A (HP X331 165W 100-240VAC to 12VDC Modular Power Supply)

**Physical characteristics Dimensions** 17.42(w) x 13.23(d) x 1.75(h) in (44.25 x 33.6 x 4.45 cm) (1U height)

> Weight 11.57 lb (5.25 kg)

**Memory and processor** Tri Core ARM1176 @ 625 MHz, 512 MB SDRAM, 1 GB flash MB; packet buffer size: 11.25 MB (6.75 MB

dynamic egress + 4.5 MB ingress)

**Performance** 100 Mb Latency < 9.0 µs (FIFO 64-byte packets)

> 1000 Mb Latency < 3.3 µs (FIFO 64-byte packets) 10 Gbps Latency < 3.3 µs (FIFO 64-byte packets)

**Throughput** 95.2 million pps

**Switching capacity** 128 Gb/s

Routing table size 2048 entries (IPv4), 256 entries (IPv6)

MAC address table size 16000 entries

**Environment** Operating temperature 32°F to 131°F (0°C to 55°C)

Operating relative

humidity

15% to 95%, noncondensing

Non-operating/

-40°F to 158°F (-40°C to 70°C)

Storage temperature

Non-operating/ 15% to 95%, noncondensing

Storage relative humidity

**Altitude** up to 10,000 ft (3 km)

**Acoustic** Power: 57 dB, Pressure: 41.4 dB

**Electrical characteristics** Frequency 50/60 Hz

> **Maximum heat** 198 BTU/hr (208.89 kJ/hr)

dissipation

AC voltage 100-240 VAC

**Maximum power rating** 58 W **Idle** power 26 W



## **Technical Specifications**

Safety CE Labeled; EN 60825-1 Safety of Laser Products-Part 1; FCC Part 15, Subpart B; GOST; EU RoHS

Compliant; EN 55022 Class A; EN 55024: 1998; C-Tick; ICES-003, Class A; VCCI Class A; IEC 60950-1 :Second

Edition: IEC 60825-1; EN62479:2010; CSA C22.2 No. 60950-1-07 2nd Edition; EN 60950-

1:2006+A11:2009+A1:2010+A12:2011; IEC 60950-1 (ed.2): am1

**Emissions** FCC part 15 Class A; VCCI Class A; EN 55022/CISPR 22 Class A

**Immunity EN** EN 55024, CISPR 24

 ESD
 IEC 61000-4-2

 Radiated
 IEC 61000-4-3

 EFT/Burst
 IEC 61000-4-4

 Surge
 IEC 61000-4-5

 Conducted
 IEC 61000-4-6

 Power frequency
 IEC 61000-4-8

magnetic field

Voltage dips and IEC 61000-4-11

interruptions

**Harmonics** IEC 61000-3-2 **Flicker** IEC 61000-3-3

Management HP PCM+; IMC - Intelligent Management Center; command-line interface; Web browser; configuration

menu; out-of-band management (RJ-45 Ethernet); SNMP Manager; Telnet; RMON1; FTP; in-line and out-

of-band; out-of-band management (serial RS-232C or Micro USB)

**Services** Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions

and product numbers. For details about services and response times in your area, please contact your local

HP sales office.

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

I/O ports and slots 20 RJ-45 autosensing 10/100/1000 PoE+ ports; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T:

full only (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE

802.3at PoE+)

4 RJ-45 dual-personality 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type

100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+)

1 dual-personality (RJ-45 or USB micro-B)

1 USB 1.1

1 RJ-45 out-of-band management port

2 module slots

1 stacking module slot

**Power supplies** 1 power supply slot

1 minimum power supply required

includes: 1 x J9738A (HP X332 575W 100-240VAC to 54VDC Modular Power Supply)

**Physical characteristics Dimensions** 17.42(w) x 13.23(d) x 1.75(h) in (44.25 x 33.6 x 4.45 cm) (1U height)

**Weight** 12.04 lb (5.46 kg)

Memory and processor Tri Core ARM1176 @ 625 MHz, 512 MB SDRAM, 1 GB flash; packet buffer size: 11.25 MB (6.5 MB dynamic

egress + 4.5 MB ingress)

**Performance** 100 Mb Latency < 9.0 μs (FIFO 64-byte packets)

**1000 Mb Latency** < 3.3 μs (FIFO 64-byte packets)

## **Technical Specifications**

**10 Gbps Latency** < 3.3 μs (FIFO 64-byte packets)

**Throughput** 95.2 million pps

Switching capacity 128 Gb/s

**Routing table size** 2048 entries (IPv4), 256 entries (IPv6)

MAC address table size 16000 entries

**Environment Operating temperature** 32°F to 131°F (0°C to 55°C)

Operating relative

humidity

15% to 95%, noncondensing

-40°F to 158°F (-40°C to 70°C)

Non-operating/
Storage temperature

**Non-operating/** 15% to 95%, noncondensing

Storage relative humidity

Altitude up to 10,000 ft (3 km)

**Acoustic** Power: 61 dB, Pressure: 44.9 dB

**Electrical characteristics** Frequency 50/60 Hz

Maximum heat 358 BTU/hr (377.69 kJ/hr)

dissipation

AC voltage 100-240 VAC

Maximum power rating475 WIdle power42 WPoE power370 W

Safety CE Labeled; EN 60825-1 Safety of Laser Products-Part 1; FCC Part 15, Subpart B; GOST; EU RoHS

Compliant; EN 55022 Class A; EN 55024: 1998; C-Tick; ICES-003, Class A; VCCI Class A; IEC 60950-1 :Second

Edition; IEC 60825-1; EN62479:2010; CSA C22.2 No. 60950-1-07 2nd Edition; EN 60950-

1:2006+A11:2009+A1:2010+A12:2011; IEC 60950-1 (ed.2): am1

**Emissions** FCC part 15 Class A; VCCI Class A; EN 55022/CISPR 22 Class A

**Immunity EN** EN 55024, CISPR 24

 ESD
 IEC 61000-4-2

 Radiated
 IEC 61000-4-3

 EFT/Burst
 IEC 61000-4-4

 Surge
 IEC 61000-4-5

 Conducted
 IEC 61000-4-6

 Power frequency
 IEC 61000-4-8

magnetic field

Voltage dips and IEC 61000-4-11

interruptions

**Harmonics** IEC 61000-3-2 **Flicker** IEC 61000-3-3

Management HP PCM+; IMC - Intelligent Management Center; command-line interface; Web browser; configuration

menu; out-of-band management (RJ-45 Ethernet); SNMP Manager; Telnet; RMON1; FTP; in-line and out-

of-band; out-of-band management (serial RS-232C or Micro USB)

## **Technical Specifications**

**Services** Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions

and product numbers. For details about services and response times in your area, please contact your local

HP sales office.

HP 2920-48G Switch (J9728A)

I/O ports and slots 44 RJ-45 autosensing 10/100/1000 ports; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full

only (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T) 4 RJ-45 dual-personality 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX,

IEEE 802.3ab Type 1000BASE-T)

1 dual-personality (RJ-45 or USB micro-B)

1 USB 1.1

1 RJ-45 out-of-band management port

2 module slots

1 stacking module slot

**Power supplies** 1 power supply slot

1 minimum power supply required

includes: 1 x J9739A (HP X331 165W 100-240VAC to 12VDC Modular Power Supply)

**Physical characteristics Dimensions** 17.42(w) x 13.23(d) x 1.75(h) in (44.25 x 33.6 x 4.45 cm) (1U height)

**Weight** 11.95 lb (5.42 kg)

Memory and processor Tri Core ARM1176 @ 625 MHz, 512 MB SDRAM, 1 GB flash; packet buffer size: 11.25 MB (6.75 MB dynamic

egress + 4.5 MB ingress)

**Performance** 100 Mb Latency < 9.0 μs (FIFO 64-byte packets)

 1000 Mb Latency
 < 3.3 μs (FIFO 64-byte packets)</td>

 10 Gbps Latency
 < 3.2 μs (FIFO 64-byte packets)</td>

**Throughput** 130.9 million pps

**Switching capacity** 176 Gb/s

**Routing table size** 2048 entries (IPv4), 256 entries (IPv6)

MAC address table size 16000 entries

**Environment Operating temperature** 32°F to 131°F (0°C to 55°C)

Operating relative

humidity

15% to 95%, noncondensing

**Non-operating/** -40°F to 158°F (-40°C to 70°C)

Storage temperature

**Non-operating/** 15% to 95%, noncondensing

Storage relative humidity

Altitude up to 10,000 ft (3 km)

**Acoustic** Power: 57 dB, Pressure: 41.8 dB

**Electrical characteristics** Frequency 50/60 Hz

Maximum heat 239 BTU/hr (252.15 kJ/hr)

dissipation

AC voltage 100-240 VAC

Maximum power rating 70 W



## **Technical Specifications**

Idle power 27 W

Safety CE Labeled; EN 60825-1 Safety of Laser Products-Part 1; FCC Part 15, Subpart B; GOST; EU RoHS

IEC 61000-4-2

Compliant; EN 55022 Class A; EN 55024: 1998; C-Tick; ICES-003, Class A; VCCI Class A; IEC 60825-1; IEC

60950-1, Second Edition; EN62479:2010; CSA C22.2 No. 60950-1-07 2nd Edition; EN 60950-

1:2006+A11:2009+A1:2010+A12:2011; IEC 60950-1 (ed.2): am1

**Emissions** FCC part 15 Class A; VCCI Class A; EN 55022/CISPR 22 Class A

**Immunity EN** EN 55024, CISPR 24

**ESD** 

 Radiated
 IEC 61000-4-3

 EFT/Burst
 IEC 61000-4-4

 Surge
 IEC 61000-4-5

 Conducted
 IEC 61000-4-6

 Power frequency
 IEC 61000-4-8

magnetic field

**Voltage dips and** IEC 61000-4-11

interruptions

**Harmonics** IEC 61000-3-2 **Flicker** IEC 61000-3-3

Management HP PCM+; IMC - Intelligent Management Center; command-line interface; Web browser; configuration

menu; out-of-band management (RJ-45 Ethernet); SNMP Manager; Telnet; RMON1; FTP; in-line and out-

of-band; out-of-band management (serial RS-232C or Micro USB)

Services Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions

and product numbers. For details about services and response times in your area, please contact your local

HP sales office.

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

I/O ports and slots 44 RJ-45 autosensing 10/100/1000 PoE+ ports; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T:

full only (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE

802.3at PoE+)

4 RJ-45 dual-personality 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type

100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+)

1 dual-personality (RJ-45 or USB micro-B)

1 USB 1.1

1 RJ-45 out-of-band management port

2 module slots

1 stacking module slot

**Power supplies** 1 power supply slot

1 minimum power supply required

includes: 1 x J9738A (HP X332 575W 100-240VAC to 54VDC Modular Power Supply)

**Physical characteristics Dimensions** 17.42(w) x 13.23(d) x 1.73(h) in (44.25 x 33.6 x 4.39 cm) (1U height)

**Weight** 12.57 lb (5.7 kg)

Memory and processor Tri Core ARM1176 @ 625 MHz, 512 MB SDRAM, 1 GB flash; packet buffer size: 11.25 MB (6.75 MB dynamic

egress + 4.5 MB ingress)

**Performance** 100 Mb Latency < 9.0 μs (FIFO 64-byte packets)



## **Technical Specifications**

1000 Mb Latency
 3.2 μs (FIFO 64-byte packets)
 10 Gbps Latency
 3.2 μs (FIFO 64-byte packets)

**Throughput** 130.9 million pps

**Switching capacity** 176 Gb/s

**Routing table size** 2048 entries (IPv4), 256 entries (IPv6)

MAC address table size 16000 entries

**Environment Operating temperature** 32°F to 131°F (0°C to 55°C)

Operating relative

humidity

15% to 95%, noncondensing

**Non-operating/** -40°F to 158°F (-40°C to 70°C)

Storage temperature

**Non-operating/** 15% to 95%, noncondensing

Storage relative humidity

Altitude up to 10,000 ft (3 km)

**Acoustic** Power: 62 dB, Pressure: 45.2 dB

**Electrical characteristics** Frequency 50/60 Hz

Maximum heat 399 BTU/hr (420.95 kJ/hr)

dissipation

AC voltage 100-240 VAC

Maximum power rating 487 W Idle power 46 W PoE power 370 W

Safety CE Labeled; EN 60825-1 Safety of Laser Products-Part 1; FCC Part 15, Subpart B; GOST; EU RoHS

Compliant; EN 55022 Class A; EN 55024: 1998; C-Tick; ICES-003, Class A; VCCI Class A; IEC 60825-1; IEC

60950-1, Second Edition; EN62479:2010; CSA C22.2 No. 60950-1-07 2nd Edition; EN 60950-

1:2006+A11:2009+A1:2010+A12:2011; IEC 60950-1 (ed.2): am1

**Emissions** FCC part 15 Class A; VCCI Class A; EN 55022/CISPR 22 Class A

**Immunity EN** EN 55024, CISPR 24

 ESD
 IEC 61000-4-2

 Radiated
 IEC 61000-4-3

 EFT/Burst
 IEC 61000-4-4

 Surge
 IEC 61000-4-5

 Conducted
 IEC 61000-4-6

 Power frequency
 IEC 61000-4-8

magnetic field

Voltage dips and IEC 61000-4-11

interruptions

**Harmonics** IEC 61000-3-2 **Flicker** IEC 61000-3-3



## **Technical Specifications**

Management HP PCM+; IMC - Intelligent Management Center; command-line interface; Web browser; configuration

menu; out-of-band management (RJ-45 Ethernet); SNMP Manager; Telnet; RMON1; FTP; in-line and out-

of-band; out-of-band management (serial RS-232C or Micro USB)

Services Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions

and product numbers. For details about services and response times in your area, please contact your local

HP sales office.

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

I/O ports and slots 44 RJ-45 autosensing 10/100/1000 PoE+ ports; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T:

full only (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE

802.3at PoE+)

4 RJ-45 dual-personality 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type

100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3at PoE+)

1 dual-personality (RJ-45 or USB micro-B)

1 USB 1.1

1 RJ-45 out-of-band management port

2 module slots

1 stacking module slot

**Power supplies** 1 power supply slot

1 minimum power supply required

includes: 1 x J9737A (HP X332 1050W 110-240VAC to 54VDC Power Supply)

**Physical characteristics Dimensions** 17.42(w) x 13.23(d) x 1.73(h) in (44.25 x 33.6 x 4.39 cm) (1U height)

**Weight** 12.86 lb (5.83 kg)

Memory and processor Tri Core ARM1176 @ 625 MHz, 512 MB SDRAM, 1 GB flash; packet buffer size: 11.25 MB

(6.75 MB dynamic egress + 4.5 MB ingress)

**Performance** 100 Mb Latency < 9.0 μs (FIFO 64-byte packets)

1000 Mb Latency < 3.2 μs (FIFO 64-byte packets)
10 Gbps Latency < 3.2 μs (FIFO 64-byte packets)

**Throughput** 130.9 million pps

**Switching capacity** 176 Gb/s

**Routing table size** 2048 entries (IPv4), 256 entries (IPv6)

MAC address table size 16000 entries

**Environment Operating temperature** 32°F to 131°F (0°C to 55°C)

Operating relative

humidity

15% to 95%, noncondensing

Non-operating/ -40°F to 158°F (-40°C to 70°C)

Storage temperature

**Non-operating/** 15% to 95%, noncondensing

Storage relative humidity

**Altitude** up to 10,000 ft (3 km)

Acoustic Power: -53 dB, Pressure: -38.3 dB

**Electrical characteristics** Frequency 50/60 Hz

## **Technical Specifications**

**Maximum heat** 399 BTU/hr (420.95 kJ/hr)

dissipation

**AC** voltage 100-240 VAC

Maximum power rating 487 W Idle power 46 W PoE power 740 W

Safety CE Labeled; EN 60825-1 Safety of Laser Products-Part 1; FCC Part 15, Subpart B; GOST; EU RoHS

Compliant; EN 55022 Class A; EN 55024: 1998; C-Tick; ICES-003, Class A; VCCI Class A; IEC 60950-1 :Second

Edition: IEC 60825-1; EN62479:2010; CSA C22.2 No. 60950-1-07 2nd Edition; EN 60950-

1:2006+A11:2009+A1:2010+A12:2011; IEC 60950-1 (ed.2): am1

**Emissions** FCC part 15 Class A; VCCI Class A; EN 55022/CISPR 22 Class A

**Immunity** EN EN 55024, CISPR 24

> **ESD** IEC 61000-4-2 Radiated IEC 61000-4-3 **EFT/Burst** IEC 61000-4-4 IEC 61000-4-5 Surge Conducted IEC 61000-4-6 **Power frequency** IEC 61000-4-8

magnetic field

Voltage dips and IEC 61000-4-11

interruptions

**Harmonics** IEC 61000-3-2 Flicker IEC 61000-3-3

Management HP PCM+; IMC - Intelligent Management Center; command-line interface; Web browser; configuration

menu; out-of-band management (RJ-45 Ethernet); SNMP Manager; Telnet; RMON1; FTP; in-line and out-

of-band; out-of-band management (serial RS-232C or Micro USB)

Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions Services

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



## **Technical Specifications**

Statistics only)

RFC 3416 (SNMP Protocol Operations v2)

RFC 3417 (SNMP Transport Mappings)

HTML and telnet management

HTTP, SSHv1, and Telnet

Multiple Configuration Files

Multiple Software Images

SNMP v3 and RMON RFC support

SSHv1/SSHv2 Secure Shell

TACACS/TACACS+

Web UI

## **General protocols**

IEEE 802.1AX-2008 Link Aggregation

IEEE 802.1D MAC Bridges

IEEE 802.1p Priority

IEEE 802.1Q VLANs

IEEE 802.1s Multiple Spanning Trees

IEEE 802.1v VLAN classification by Protocol and Port

IEEE 802.1w Rapid Reconfiguration of Spanning Tree

IEEE 802.3ab 1000BASE-T

IEEE 802.3ad Link Aggregation Control Protocol (LACP)

IEEE 802.3af Power over Ethernet

IEEE 802.3at PoE+

IEEE 802.3az Energy Efficient Ethernet

**IEEE 802.3x Flow Control** 

RFC 768 UDP

RFC 783 TFTP Protocol (revision 2)

RFC 792 ICMP

RFC 793 TCP

RFC 826 ARP

**RFC 854 TELNET** 

**RFC 868 Time Protocol** 

**RFC 951 BOOTP** 

RFC 1058 RIPv1

RFC 1256 ICMP Router Discovery Protocol (IRDP)

RFC 1350 TFTP Protocol (revision 2)

RFC 1519 CIDR

**RFC 1542 BOOTP Extensions** 

RFC 2030 Simple Network Time Protocol (SNTP) v4

RFC 2131 DHCP

RFC 2236 IGMP Snooping

RFC 2453 RIPv2

RFC 2865 Remote Authentication Dial In User Service (RADIUS)

**RFC 2866 RADIUS Accounting** 

RFC 3046 DHCP Relay Agent Information Option

RFC 3411 An Architecture for Describing Simple Network Management Protocol (SNMP) Management Frameworks

RFC 3412 Message Processing and Dispatching for the Simple Network Management Protocol (SNMP)

RFC 3413 Simple Network Management Protocol (SNMP) Applications

RFC 3414 User-based Security Model (USM) for version 3



## **Technical Specifications**

of the Simple Network Management Protocol (SNMPv3)

RFC 3415 View-based Access Control Model (VACM) for

the Simple Network Management Protocol (SNMP)

RFC 3416 Protocol Operations for SNMP

RFC 3417 Transport Mappings for the Simple Network Management Protocol (SNMP)

RFC 3418 Management Information Base (MIB) for the Simple Network Management Protocol (SNMP)

RFC 3576 Ext to RADIUS (CoA only)

RFC 4541 Considerations for Internet Group

Management Protocol (IGMP) and Multicast Listener Discovery (MLD) Snooping Switches

RFC 4675 RADIUS VLAN & Priority

RFC 4861 Neighbor Discovery for IP version 6 (IPv6)

RFC 4862 IPv6 Stateless Address Autoconfiguration

UDLD (Uni-directional Link Detection)

### **IP** multicast

RFC 1112 IGMP

RFC 2236 IGMPv2

RFC 2710 Multicast Listener Discovery (MLD) for IPv6

RFC 3376 IGMPv3 (host joins only)

RFC 4541 Considerations for Internet Group

Management Protocol (IGMP) and Multicast Listener

Discovery (MLD) Snooping Switches

### IPv6

RFC 1981 IPv6 Path MTU Discovery

RFC 2460 IPv6 Specification

RFC 2710 Multicast Listener Discovery (MLD) for IPv6

RFC 2925 Definitions of Managed Objects for Remote Ping, Traceroute, and Lookup Operations (Ping only)

RFC 2925 Remote Operations MIB (Ping only)

RFC 3019 MLDv1 MIB

RFC 3315 DHCPv6 (client and relay)

RFC 3513 IPv6 Addressing Architecture

RFC 3596 DNS Extension for IPv6

RFC 3810 MLDv2 (host joins only)

RFC 4022 MIB for TCP

RFC 4113 MIB for UDP

RFC 4251 SSHv6 Architecture

RFC 4252 SSHv6 Authentication

RFC 4253 SSHv6 Transport Layer

RFC 4254 SSHv6 Connection

RFC 4293 MIB for IP

RFC 4419 Key Exchange for SSH

RFC 4443 ICMPv6

RFC 4541 IGMP & MLD Snooping Switch

RFC 4861 IPv6 Neighbor Discovery

RFC 4862 IPv6 Stateless Address Auto-configuration

### MIBs

IEEE 802.1ap (MSTP and STP MIB's only)

RFC 1156 (TCP/IP MIB)

RFC 1157 A Simple Network Management Protocol (SNMP)



### **Technical Specifications**

RFC 1213 MIB II

RFC 1493 Bridge MIB

RFC 1724 RIPv2 MIB

RFC 2021 RMONv2 MIB

RFC 2578 Structure of Management Information Version 2 (SMIv2)

RFC 2579 Textual Conventions for SMIv2

RFC 2580 Conformance Statements for SMIv2

RFC 2613 SMON MIB

**RFC 2618 RADIUS Client MIB** 

RFC 2620 RADIUS Accounting MIB

RFC 2665 Ethernet-Like-MIB

RFC 2668 802.3 MAU MIB

RFC 2674 802.1p and IEEE 802.1Q Bridge MIB

RFC 2737 Entity MIB (Version 2)

RFC 2819 RMON MIB

RFC 2863 The Interfaces Group MIB

RFC 2925 Ping MIB

RFC 2933 IGMP MIB

RFC 3414 SNMP-User based-SM MIB

RFC 3415 SNMP-View based-ACM MIB

RFC 3417 Simple Network Management Protocol (SNMP) over IEEE 802 Networks

RFC 3418 MIB for SNMPv3

#### **Network management**

IEEE 802.1AB Link Layer Discovery Protocol (LLDP)

RFC 1155 Structure of Management Information

RFC 1157 SNMPv1

RFC 2021 Remote Network Monitoring Management

Information Base Version 2 using SMIv2

RFC 2576 Coexistence between SNMP versions

RFC 2578 Structure of Management Information Version

2 (SMIv2)

RFC 2579 Textual Conventions for SMIv2

RFC 2580 Conformance Statements for SMIv2

RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events)

RFC 2819 Remote Network Monitoring Management Information Base

RFC 2856 Textual Conventions for Additional High

**Capacity Data Types** 

RFC 2925 Definitions of Managed Objects for Remote

Ping, Traceroute, and Lookup Operations

RFC 3164 BSD syslog Protocol

RFC 3176 sFlow

RFC 3411 SNMP Management Frameworks

RFC 3412 SNMPv3 Message Processing

RFC 3414 SNMPv3 User-based Security Model (USM)

RFC 3415 SNMPv3 View-based Access Control Model VACM)

ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED)

SNMPv1/v2c/v3

**XRMON** 

#### QoS/CoS



### **Technical Specifications**

IEEE 802.1P (CoS)

RFC 2474 DiffServ Precedence, including 8 queues/port

RFC 2597 DiffServ Assured Forwarding (AF)

RFC 2598 DiffServ Expedited Forwarding (EF)

**Ingress Rate Limiting** 

#### Security

IEEE 802.1X Port Based Network Access Control

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

RFC 1321 The MD5 Message-Digest Algorithm

RFC 1334 PPP Authentication Protocols (PAP)

RFC 1492 An Access Control Protocol, Sometimes Called TACACS

RFC 1492 TACACS+

RFC 1994 PPP Challenge Handshake Authentication

Protocol (CHAP)

RFC 2082 RIP-2 MD5 Authentication

RFC 2104 Keyed-Hashing for Message Authentication

**RFC 2138 RADIUS Authentication** 

**RFC 2139 RADIUS Accounting** 

RFC 2246 Transport Layer Security (TLS)

RFC 2548 Microsoft Vendor-specific RADIUS Attributes

**RFC 2618 RADIUS Authentication Client MIB** 

RFC 2620 RADIUS Accounting Client MIB

RFC 2716 PPP EAP TLS Authentication Protocol

RFC 2818 HTTP Over TLS

RFC 2865 RADIUS (client only)

**RFC 2865 RADIUS Authentication** 

**RFC 2866 RADIUS Accounting** 

RFC 2867 RADIUS Accounting Modifications for Tunnel Protocol Support

RFC 2868 RADIUS Attributes for Tunnel Protocol Support

**RFC 2869 RADIUS Extensions** 

RFC 2882 NAS Requirements: Extended RADIUS Practices

RFC 3162 RADIUS and IPv6

RFC 3576 Dynamic Authorization Extensions to RADIUS

RFC 3579 RADIUS Support For Extensible Authentication Protocol (EAP)

RFC 3580 IEEE 802.1X Remote Authentication Dial In

User Service (RADIUS) Usage Guidelines

**RFC 4576 RADIUS Attributes** 

Access Control Lists (ACLs)

draft-grant-tacacs-02 (TACACS)

Guest VLAN for 802.1x

**MAC Authentication** 

MAC Lockdown

**MAC Lockout** 

Port Security

Secure Sockets Laver (SSL)

SSHv2 Secure Shell

Web Authentication



### **Accessory Product Details**

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

## HP 0.5 m Multimode OM3 Cabling LC/LC Optical Cable

(AJ833A)

#### Notes

#### Cable type:

 $50/125~\mu m$  (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m

#### Maximum distance:

10Gbps Transfer Rate (Ethernet): 300m

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

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

**Services** 



### **Accessory Product Details**

**HP 1 m Multimode OM3** LC/LC Optical Cable (AJ834A)

Cabling

**Notes** 

Cable type:

50/125 µm (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m

#### Maximum distance:

10Gbps Transfer Rate (Ethernet): 300m

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

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

**Services** 



### **Accessory Product Details**

HP 2 m Multimode OM3 LC/LC Optical Cable (AJ835A) Cabling

**Notes** 

Cable type:

 $50/125 \, \mu m$  (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m;

#### **Maximum distance**:

10Gbps Transfer Rate (Ethernet): 300m

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

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

**Services** 



### **Accessory Product Details**

**HP 5 m Multimode OM3** LC/LC Optical Cable

Cabling

(AJ836A)

Cable type:

50/125 µm core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m;

#### Maximum distance:

10Gbps Transfer Rate (Ethernet): 300m

Cable Specs: This specification defines the detail requirements for a tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex

connectors on other end.

• Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um

 Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.

 Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links.

• CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows.

BULK CABLE & CABLE ASSEMBLY CONFIGURATION:

• Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.

Jacket Color: Aqua for OM3 multimode per TIA 598

**Boot Color: White** 

Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters.

Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.

Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg

**Services** 

**Notes** 

### **Accessory Product Details**

# HP 15 m Multimode OM3 Cabling LC/LC Optical Cable

(AJ837A)

### Notes

#### Cable type:

 $50/125 \, \mu m$  (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m;

#### Maximum distance:

10Gbps Transfer Rate (Ethernet): 300m

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

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

**Services** 



### **Accessory Product Details**

# HP 30 m Multimode OM3 Cabling LC/LC Optical Cable

(AJ838A)

### Notes

#### Cable type:

 $50/125 \, \mu m$  (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m;

#### Maximum distance:

10Gbps Transfer Rate (Ethernet): 300m

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

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

**Services** 



### **Accessory Product Details**

### HP 50 m Multimode OM3 Cabling LC/LC Optical Cable

(AJ839A)

### **Notes**

#### Cable type:

50/125 µm (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m;

#### Maximum distance:

10Gbps Transfer Rate (Ethernet): 300m

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

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

**Services** 



### **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.

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

Services

Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

HP Premier Flex LC/LC Multi-mode 0M4 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** 

### **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.
- $\bullet$  Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m
- Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45

**Services** 

Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

HP Premier Flex LC/LC Multi-mode 0M4 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** 

### **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.
- $\bullet$  Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m
- Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45

Services

Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

HP Premier Flex LC/LC Multi-mode 0M4 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.
- $\bullet$  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** 

### **Accessory Product Details**

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

(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.

**Services** Refer to the HP website at: www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services

and response times in your area, please contact your local HP sales office.

**HP Identity Driven** Manager 3.0 Software--500-User License (J9438A) RADIUS server support

Identity Driven Manager 3.0 software and license for managing up to 500 users.

Microsoft Network Policy Server on Windows Server 2008 (32-bit)

Microsoft Internet Authentication Service (IAS) on Windows Server 2003 (32-

bit)

FreeRADIUS supplied with Red Hat Enterprise Linux (4.7 and 5.2)

RADIUS on the Network Access Controller 800

FreeRADIUS supplied with SuSE Linux Enterprise Server (9.3 and 10.2)

**Features** 

Intuitive Explorer-style interface OpenView NNM integration

Application of policies by user identity

- Auto VLAN assignment
- Auto set quality of service by user
- Auto set bandwidth assignment by user

Rule-based access rights deployment

Dynamic rights assignment based on:

- Time
- Location
- User system

Auto-discovery of:

- RADIUS servers
- Realms
- Users

**Notes** 

Additional specifications

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

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

Please see HP PCM Plus 3.0 for hardware and software system



### **Accessory Product Details**

requirements.

**Services** 

3-Year, 9x5 SW phone support, software updates (UQ124E) 3-year, 24x7 SW phone support, software updates (UQ125E)

Refer to the HP website at www.hp.com/networking/services for details on

the

service-level descriptions and product numbers. For details about services and

response times in your area, please contact your local HP sales office.

HP Identity Driven
Manager 3.0 Software-Additional 1,000-User
License (J9440A)

License to add support for managing an additional 1,000 users with the Identity Driven Manager 3.0 product.

**RADIUS server support** 

**Features** 

**Notes** 

Additional specifications

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

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

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

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

Services

3-year, 24x7 SW phone support, software updates (UQ119E) 3-Year, 9x5 SW phone support, software updates (UQ118E)



### **Accessory Product Details**

HP Identity Driven Manager 3.0 Software--Unlimited-User License (J9439A) Identity Driven Manager 3.0 software and license for managing an unlimited number of users.

**RADIUS** server support

Microsoft Network Policy Server on Windows Server 2008 (32-bit)

Microsoft Internet Authentication Service (IAS) on Windows Server 2003 (32-

bit)

FreeRADIUS supplied with Red Hat Enterprise Linux (4.7 and 5.2)

RADIUS on the Network Access Controller 800

FreeRADIUS supplied with SuSE Linux Enterprise Server (9.3 and 10.2)

**Features** Intuitive Explorer-style interface

OpenView NNM integration

Application of policies by user identity

Auto VLAN assignment

• Auto set quality of service by user

Auto set bandwidth assignment by user

Rule-based access rights deployment

Dynamic rights assignment based on:

Time

Location

User system

Auto-discovery of:

RADIUS servers

Realms

Users

Notes

Additional specifications

• Supports environments with up to 10,000 users.

 Supports up to 10 RADIUS servers with HP Identity Driven Manager agents installed.

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

**Services** 

Please see HP PCM Plus 3.0 for hardware and software system requirements.

3-year, 24x7 SW phone support, software updates (UQ133E) 3-Year, 9x5 SW phone support, software updates (UQ132E)

3-Year, 9x5 SW phone support, software updates (UQ132E)

Refer to the HP website at www.hp.com/networking/services for details on

service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

### **Accessory Product Details**

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

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