#### Overview

### **HP 1920 Switch Series**

#### Models

HP 1920-8G Switch	JG920.
HP 1920-8G-PoE+ (65W) Switch	JG921.
HP 1920-8G-PoE+ (180W) Switch	JG922
HP 1920-16G Switch	JG923.
HP 1920-24G Switch	JG924
HP 1920-24G-PoE+ (180W) Switch	JG925
HP 1920-24G-PoE+ (370W) Switch	JG926
HP 1920-48G Switch	JG927.
HP 1920-48G-PoE+ (370W) Switch	JG928

### **Key features**

- Customized operation using intuitive Web interface
- Layer 3 static routing with 32 routes for network segmentation and expansion
- Access control lists for granular security control
- Spanning Tree: STP, RSTP, and MSTP
- HP Limited Lifetime Warranty 2.0

### **Product overview**

The HP 1920 Switch Series consists of advanced smart-managed fixed-configuration Gigabit switches designed for small businesses in an easy-to-administer solution. By utilizing the latest design in silicon technology, this series is one of the most power efficient in the market.

The series has nine switches: four non-PoE models and five PoE+ models. All models are equipped with additional Gigabit SFP ports for fiber connectivity. The 8- and 24-port PoE+ models are available with PoE (at two different levels) or without PoE.

The HP 1920 Switch Series provides a great value, and includes features to satisfy even the most advanced small business network. All models support rack mounting or desktop operation. Customizable features include basic Layer 2 features like VLANs and link aggregation, as well as advanced features such as Layer 3 static routing, IPv6, ACLs, and Spanning Tree Protocols. The switches come with a limited lifetime warranty covering the unit, fans, and power supplies, as well as 24x7 phone support for the first three years of ownership.

### **Features and benefits**

#### Management

- Simple Web management allows for easy management of the switch—even by nontechnical users—through an intuitive Web GUI; supports HTTP and HTTP Secure (HTTPS)
- Single IP management enables management of up to 32 HP 1920 switches using a single Web interface; simplifies management of multiple devices
- SNMPv1, v2c, and v3

facilitates management of the switch, as the device can be discovered and monitored from an SNMP management station

- Management Security
  restricts access to critical configuration commands; offers multiple privilege levels with password protection; ACLs
  provide Telnet and SNMP access; local and remote syslog capabilities allow logging of all access
- Complete session logging
   provides detailed information for problem identification and resolution



#### Overview

- Port mirroring
  - enables traffic on a port to be simultaneously sent to a network analyzer for monitoring
- Dual flash images
   provides independent primary and secondary operating system files for backup while upgrading
- Network Time Protocol (NTP)

 Network Time Protocol (NTP) synchronizes timekeeping among distributed time servers and clients; keeps timekeeping consistent among all clockdependent devices within the network so that the devices can provide diverse applications based on the consistent time

Limited CLI

enables users to quickly deploy and troubleshoot devices in the network

- Default DHCP client mode allows the switch to be directly connected to a network, enabling plug-and-play operation; in absence of a DHCP server on
- the network, the switch will fall back to a unique static address determined by the switch's MAC address FTP, TFTP, and SFTP support

offers different mechanisms for configuration updates; FTP allows bidirectional transfers over a TCP/IP network; trivial FTP (TFTP) is a simpler method using User Datagram Protocol (UDP); Secure File Transfer Protocol (SFTP) runs over an SSH tunnel to provide additional security

• **Remote monitoring (RMON)** uses standard SNMP to monitor essential network functions; supports events, alarm, history, and statistics group plus a private alarm extension group

#### Quality of Service (QoS)

• Traffic prioritization

provides time-sensitive packets (like VoIP and video) with priority over other traffic based on DSCP or IEEE 802.1p classification; packets are mapped to eight hardware queues for more effective throughput

• IEEE 802.1p/Q

delivers data to devices based on the priority and type of traffic; supports IEEE 802.1Q

- 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
- Broadcast control

allows limitation of broadcast traffic rate to cut down on unwanted network broadcast traffic

- Advanced Classifier based QoS classifies traffic using multiple match criteria based on Layer 2, 3, and 4 information; applies QoS policies such as setting priority level and rate limit to selected traffic on a per-port basis
- Rate limiting

sets per-port ingress enforced maximums and per-port, per-queue minimums

Powerful QoS feature (

supports the following congestion actions: strict priority queuing (SP), weighted round robin (WRR) queuing, and SP+WRR

#### Connectivity

- IPv6
  - o IPv6 host

enables switches to be managed and deployed at the IPv6 network's edge

- o IPv6 routing
  - supports IPv6 static routes
- MLD snooping

forwards IPv6 multicast traffic to the appropriate interface, preventing traffic flooding

- IPv6 ACL/QoS supports ACL and OoS for IPv6 network traffic
- IEEE 802.3X flow control

provides a flow throttling mechanism propagated through the network to prevent packet loss at a congested node

IEEE 802.3at Power over Ethernet (PoE+)



#### Overview

provides upto 30W per port, which 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; lowers the cost of additional electrical cabling and circuits that would otherwise be necessary in IP phone and WLAN deployments.

- Cable diagnostics
   detects cable issues remotely using a browser-based tool
- Flow control
   provides back pressure using standard IEEE 902.3x r
  - provides back pressure using standard IEEE 802.3x, reducing congestion in heavy traffic situations
- Auto MDI/MDI-X

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

#### Security

- Advanced access control lists (ACLs)
   enables network traffic filtering and enhances network control using MAC- and IP-based ACLs; time-based ACLs allow for
   greater flexibility with managing network access
- IEEE 802.1X and RADIUS network logins controls port-based access for authentication and accountability
- Secure Socket Layer (SSL) encrypts all HTTP traffic, allowing safe access to the browser-based management GUI in the switch
- **Port Isolation** The port isolation feature isolates Layer 2 traffic for data privacy and security without using VLANs. This feature can also be used to isolate the hosts in a VLAN from one another.
- Port Security
   Combines and extends IEEE 802.1X and MAC authentication to provide MAC-based network access control
- **ARP attack protection** The ARP detection feature enables access devices to block ARP packets from unauthorized clients to prevent user spoofing and gateway spoofing attacks.
- Automatic VLAN assignment assigns users automatically to the appropriate VLAN based on their identity, location and time of day
- STP BPDU port protection blocks Bridge Protocol Data Units (BPDUs) on ports that do not require BPDUs, preventing forged BPDU attacks
- **STP root guard** protects the root bridge from malicious attacks or configuration mistakes
- Automatic denial-of-service protection monitors for malicious attacks and protects the network by blocking the attacks
- Management password provides security so that only authorized access to the Web browser interface is allowed

#### Performance

- Half- and full-duplex auto-negotiating capability on every port doubles the throughput on every port
- 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
- IGMP snooping
  - improves network performance through multicast filtering, instead of flooding traffic to all ports
- Fiber uplink
   provides greater distance connectivity using Gigabit Ethernet fiber uplinks

#### Layer 2 switching

Spanning Tree Protocol (STP)



#### Overview

supports standard IEEE 802.1D STP, IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) for faster convergence, and IEEE 802.1s Multiple Spanning Tree Protocol (MSTP)

- **BPDU filtering** drops BPDU packets when STP is enabled globally but disabled on a specific port
- Jumbo frame support supports up to 10 kilobyte frame size to improve the performance of large data transfers
- VLAN support and tagging supports IEEE 802.1Q with 4,094 simultaneous VLAN IDs

#### Layer 3 services

Address Resolution Protocol (ARP)

determines the MAC address of another IP host in the same subnet; supports static ARPs; gratuitous ARP allows detection of duplicate IP addresses; proxy ARP allows normal ARP operation between subnets or when subnets are separated by a Layer 2 network

• DHCP relay

simplifies management of DHCP addresses in networks with multiple subnets

#### Layer 3 routing

#### • Static IPv4/IPv6 routing

provides basic routing (supporting up to 32 static routes and 8 virtual VLAN interfaces); allows manual routing configuration

#### **Resiliency and high availability**

• Available redundant power supply

provides additional PoE of up to 795W for high-power applications like PTZ IP cameras, Video IP phones; the HP RPS1600 Redundant Power System (JG136A), which is sold separately, is for use with the HP 1920-24G-PoE+ (180W) Switch, HP 1920-24G-PoE+ (370W) Switch, and HP 1920-48G-PoE+ (370W) Switch models only

• Link aggregation

groups together multiple ports (up to a maximum of eight ports per trunk) automatically using Link Aggregation Control Protocol (LACP), or manually, to form an ultra-high-bandwidth connection to the network backbone; helps prevent traffic bottlenecks. Note: 8 port models support 4 trunks, 16 and 24 port models support 8 trunks, 48 port models support 16 trunks.

#### Convergence

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

- PoE allocations
   supports multiple methods (automatic, IEEE 802.3af class, LLDP-MED, or user-specified) to allocate PoE power for more
   efficient energy savings
- Auto voice VLAN recognizes IP phones and automatically assigns voice traffic to dedicated VLAN for IP phones

#### **Additional information**

• Green initiative support

provides support for RoHS and WEEE regulations

• **Green IT and power** improves energy efficiency through the use of the latest advances in silicon development; shuts off unused ports and



#### Overview

utilizes variable-speed fans, reducing energy costs

1051-891-20

• **Energy Efficient Ethernet** Compliant with IEEE 802.3az standard requirements to save energy during periods of low data activity.

#### Warranty and support

- Limited Lifetime Warranty v2.0 Advance hardware replacement with next-business-day delivery (available in most countries). See www.hp.com/networking/warrantysummary for duration details.
- Electronic and telephone support (for Limited Lifetime Warranty 2.0) limited 24x7 telephone support is available from HP for the first 3 years; limited electronic and business hours telephone support is available from HP for the entire warranty period; to reach our support centers, refer to www.hp.com/networking/contact-support; for details on the duration of support provided with your product purchase, refer to www.hp.com/networking/warrantysummary

### 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 1920-8G Switch <ul> <li>8 RJ-45 auto-negotiating 10/100/1000 ports</li> <li>2 SFP 1000 Mbps ports</li> <li>min=0 \ max=2 SFP Transceivers</li> <li>1U - Height</li> </ul>	JG920A See Configuration Note:1, 2
PDU Cable NA/MX/TW/JP <ul> <li>C15 PDU Jumper Cord (NA/MX/TW/JP)</li> </ul> <li>PDU Cable ROW <ul> <li>C15 PDU Jumper Cord (POW)</li> </ul> </li>	JG920A #B2B
• CTS PD0 Juliper Cord (ROW)	JG920A #B2C
HP 1920-8G-PoE+ (65W) Switch • 8 RJ-45 auto-negotiating 10/100/1000 PoE+ ports • 2 SFP 1000 Mbps ports • min=0 \ max=2 SFP Transceivers • 1U - Height	JG921A See Configuration Note:1, 2
PDU Cable NA/MX/TW/JP <ul> <li>C15 PDU Jumper Cord (NA/MX/TW/JP)</li> </ul>	JG921A #B2B
PDU Cable ROW <ul> <li>C15 PDU Jumper Cord (ROW)</li> </ul>	JG921A #B2C
HP 1920-8G-PoE+ (180W) Switch • 8 RJ-45 auto-negotiating 10/100/1000 PoE+ ports • 2 SFP 1000 Mbps ports • min=0 \ max=2 SFP Transceivers • 1U - Height	JG922A See Configuration Note:1, 2
PDU Cable NA/MX/TW/JP • C15 PDU Jumper Cord (NA/MX/TW/JP)	JG922A#B2B
PDU Cable ROW  • C15 PDU Jumper Cord (ROW)	JG922A#B2C
HP 1920-16G Switch • 16 RJ-45 auto-negotiating 10/100/1000 ports • 4 SFP 1000 Mbps ports • min=0 \ max=4 SFP Transceivers • 1U - Height	JG923A See Configuration Note:1, 2
<ul> <li>PDU Cable NA/MX/TW/JP</li> <li>C15 PDU Jumper Cord (NA/MX/TW/JP)</li> </ul>	JG923A#B2B

## Configuration

<ul> <li>PDU Cable ROW</li> <li>C15 PDU Jumper Cord (ROW)</li> </ul>	JG923A#B2C
<ul> <li>HP 1920-24G Switch</li> <li>24 RJ-45 auto-negotiating 10/100/1000 ports</li> </ul>	JG924A See Configuration
<ul> <li>4 SFP 1000 Mbps ports</li> <li>min=0 \ max=4 SFP Transceivers</li> <li>1U - Height</li> </ul>	Note:1, 2
PDU Cable NA/MX/TW/JP <ul> <li>C15 PDU Jumper Cord (NA/MX/TW/JP)</li> </ul>	JG924A#B2B
PDU Cable ROW • C15 PDU Jumper Cord (ROW)	JG924A#B2C
C15 PDU Jumper Cord (ROW)	
HP 1920-24G-PoE+ (180W) Switch • 24 RJ-45 auto-negotiating 10/100/1000 PoE+ ports • 4 SFP 1000 Mbps ports • min=0 \ max=4 SFP Transceivers • 1U - Height PDI ( Cable NA/MX/TW/ IP	JG925A See Configuration Note:1, 2
PDU Cable NA/MX/TW/JP • C15 PDU Jumper Cord (NA/MX/TW/JP)	JG925A#B2B
PDU Cable ROW <ul> <li>C15 PDU Jumper Cord (ROW)</li> </ul>	JG925A#B2C
HP 1920-24G-PoE+ (370W) Switch 24 RJ-45 auto-negotiating 10/100/1000 PoE+ ports 4 SFP 1000 Mbps ports min=0 \ max=4 SFP Transceivers 1U - Height	JG926A See Configuration Note:1, 2
PDU Cable NA/MX/TW/JP <ul> <li>C15 PDU Jumper Cord (NA/MX/TW/JP)</li> </ul>	JG926A#B2B
PDU Cable ROW <ul> <li>C15 PDU Jumper Cord (ROW)</li> </ul>	JG926A#B2C
HP 1920-48G Switch <ul> <li>48 RJ-45 auto-negotiating 10/100/1000 ports</li> <li>4 SFP 1000 Mbps ports</li> <li>min=0 \ max=4 SFP Transceivers</li> <li>1U - Height</li> </ul>	JG927A See Configuration Note:1, 2
<ul> <li>PDU Cable NA/MX/TW/JP</li> <li>C15 PDU Jumper Cord (NA/MX/TW/JP)</li> </ul>	JG927A#B2B
PDU Cable ROW	JG927A#B2C



•

C15 PDU Jumper Cord (ROW)

### HP 1920 Switch Series

### Configuration

HP 1920-48G-PoE+ (370)	JG928A See Configuration Note:1, 2	
PDU Cable NA/MX/TW/JP		JG928A#B2B
C15 PDU Jumper	Cord (NA/MX/TW/JP)	
	$c^{O'}$	1000044000
<ul> <li>PDU Cable ROW</li> <li>C15 PDU Jumper</li> </ul>		JG928A#B2C
• CTS PD0 Juliper		
Configuration Rules:		
Note 1	The following Transceivers install into this switch:	
	HP X121 1G SFP LC SX Transceiver	J4858C
	HP X121 1G SFP LC LX Transceiver	J4859C
	HP X121 1G SFP RJ45 T Transceiver	J8177C
	HP X120 1G SFP LC SX Transceiver	JD118B
	HP X120 1G SFP LC LX Transceiver	JD119B
	HP X120 1G SFP RJ45 T Transceiver	JD089B
Note 2	Localization (Wall Power Cord) required on orders without #B2B or #B2C (PDU Powe Localization Menu)	r Cord). (See
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, T or #B2C ROW. (Watson Default B2B or B2C for Rack Level CTO) Switch/Router/Power Supply to Wall Power Cord - Localized Option (Watson Default	
Transceivers	Level CTO)	

#### SFP Transceivers

HP X121 1G SFP LC SX Transceiver	J4858C
HP X121 1G SFP LC LX Transceiver	J4859C
HP X121 1G SFP RJ45 T Transceiver	J8177C
HP X120 1G SFP LC SX Transceiver	JD118B
HP X120 1G SFP LC LX Transceiver	JD119B
HP X120 1G SFP RJ45 T Transceiver	JD089B

## Cables

#### **Multi-Mode Cables**

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



## Configuration

HP 2 m Multimode OM3 LC/LC FC Cable HP 5 m Multimode OM3 LC/LC FC Cable HP 15 m Multimode OM3 LC/LC FC Cable HP 30 m Multimode OM3 LC/LC FC Cable HP 50 m Multimode OM3 LC/LC FC Cable HP Premier Flex LC/LC OM4 2f 1m Cbl HP Premier Flex LC/LC OM4 2f 2m Cbl HP Premier Flex LC/LC OM4 2f 5m Cbl HP Premier Flex LC/LC OM4 2f 30m Cbl HP Premier Flex LC/LC OM4 2f 30m Cbl HP Premier Flex LC/LC OM4 2f 50m Cbl

## **Switch Enclosure Options**

#### **External/Redundant Power Supplies**

HP RPS1600 Redundant Power System

- Height = 1U
- includes 1 x c13, 1600w and Power Supply port

#### HP RPS1600 1600W AC Power Supply

• Installs into JG136A only

### Configuration Rules:

Note 1	If this power supply is selected, The JG136A - HP A-RPS1600 Redundant Power System must be on order or onsite.		
Note 2	Localization required.		
Note 3	Each switch will only support 1 JG136A and 1 JG137A Power supply systems.		
Note 4	This power supply only supported on switch JG926A and JG928A.		
External/Redundant Pow	ver Cables		
HP X290 1000 A JD5 2m F	PS Cable JD187A See Configuration Note:1		
Remarks:	These cables are used to connect the External Power System to Switch.		
Configuration Rules:			
Note 1	This Cable is only supported on switch JG926A and JG928A when used with the RPS 1600 (JG136A)		

AJ835A

AJ836A

AJ837A

AJ838A

AJ839A

**OK732A** 

QK733A

QK734A

QK735A

QK736A

QK737A

JG136A See Configuration Note:2, 3, 4

#### JG137A See Configuration Note:1, 3

Configuration

MMM 2000 MMM 2000 MM 2



## **Technical Specifications**

I/O ports and slots	8 RJ-45 auto-negotiating TX, IEEE 802.3ab Type 10	10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE 00BASE-T)
	2 SFP 1000 Mbps ports	
	• •	autosensing 10/100/1000 ports plus 2 1000BASE-X SFP ports, or a
Additional ports and slots	1 RJ-45 console port to ac	ccess limited CLI port
Physical characteristics	Dimensions	10.47(w) x 6.38(d) x 1.73(h) in (26.6 x 16.2 x 4.4 cm) (1U height)
	Weight	1.98 lb (0.9 kg)
Memory and processor	MIPS @ 500 MHz, 32 MB fl	lash, 128 MB SDRAM; packet buffer size: 4.1 Mb
Mounting and enclosure	Mounts in an EIA standard	1 19-inch telco rack or equipment cabinet (hardware included), Wall Mount
Performance	100 Mb Latency	< 5 µs
	1000 Mb Latency	< 5 µs
	Throughput	14.8 Mpps (64-byte packets)
	Routing/Switching capacity	20 Gbps
	Routing table size	32 entries (IPv4), 32 entries (IPv6)
	MAC address table size	8192 entries
Reliability	MTBF (years)	128.20
Environment	Operating temperature	32°F to 104°F (0°C to 40°C)
	Operating relative humidity	10% to 90%, noncondensing
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Nonoperating/Storage relative humidity	10% to 95%, noncondensing
	Altitude	up to 16,404 ft (5 km)
	Acoustic 6	Pressure: 0 dB No Fan
<b>Electrical characteristics</b>	Frequency	50/60 Hz
	AC voltage	100 - 240 VAC
	Maximum power rating	9 W
	Notes	Maximum power rating and maximum heat dissipation are the worst-cas theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.
Safety	UL 60950; IEC 60950-1; E	N 60950-1; CAN/CSA-C22.2 No. 60950-1-03
Emissions	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 61000-3-2 2000, 61000-3-3; ICES-003 Class A	
Management	IMC – Intelligent Management Center; limited command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB	
Notes	SFP port and copper ports work simultaneously, independent of each other, to provide a total of 10 Gigabit switching ports.	
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.	



### **Technical Specifications**

#### HP 1920-8G-PoE+ (65W) Switch (JG921A)

IIF 1920-80-FUL+ (05W/ 5		
I/O ports and slots		10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type b Type 1000BASE-T, IEEE 802.3af PoE, IEEE 802.3at)
	2 SFP 1000 Mbps ports	
	Supports a maximum of 8 combination	autosensing 10/100/1000 ports plus 2 1000BASE-X SFP ports, or a
Additional ports and slots	1 RJ-45 console port to ac	cess limited CLI port
Physical characteristics	Dimensions	12.99(w) x 9.06(d) x 1.73(h) in (33 x 23 x 4.4 cm) (1U height)
	Weight	6.5 lb (2.95 kg)
Memory and processor	MIPS @ 500 MHz, 32 MB fl	ash, 128 MB SDRAM; packet buffer size: 4.1 Mb
Mounting and enclosure	Mounts in an EIA standard	19-inch telco rack or equipment cabinet (hardware included)
Performance	100 Mb Latency	< 5 µs
	1000 Mb Latency	< 5 µs
	Throughput	14.8 Mpps (64-byte packets)
	Routing/Switching capacity	20 Gbps
	Routing table size	32 entries (IPv4), 32 entries (IPv6)
	MAC address table size	8192 entries
Reliability	MTBF (years)	76.33
Environment	Operating temperature	32°F to 104°F (0°C to 40°C)
	Operating relative humidity	10% to 90%, noncondensing
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Nonoperating/Storage relative humidity	10% to 95%, noncondensing
	Altitude	up to 16,404 ft (5 km)
	Acoustic	Pressure: 0 dB No Fan
<b>Electrical characteristics</b>	Frequency	50/60 Hz
	AC voltage	100 - 240 VAC
	Maximum power rating	94 W
	PoE power	65 W PoE+
× C	Notes	Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. PoE power is the power supplied by the internal power supply. It is
		dependent on the type and quantity of power supplies.
Safety	UL 60950; IEC 60950-1; EI	N 60950-1; CAN/CSA-C22.2 No. 60950-1-03
Emissions	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 61000-3-2 2000, 61000-3-3; ICES-003 Class A	
Management	IMC - Intelligent Management Center; limited command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB	
Notes	SFP port and copper ports work simultaneously, independent of each other, to provide a total of 10 Gigabit switching ports.	
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	



## **Technical Specifications**

contact your local HP sales office.

HP 1920-8G-PoE+ (180W)	Switch (JG922A)		
I/O ports and slots	8 RJ-45 auto-negotiating 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3af PoE, IEEE 802.3at)		
	2 SFP 1000 Mbps ports		
	Supports a maximum of 8 combination	3 autosensing 10/100/1000 ports plus 2 1000BASE-X SFP ports, or a	
Additional ports and slots	1 RJ-45 console port to ac	ccess limited CLI port	
Physical characteristics	Dimensions	12.99(w) x 9.06(d) x 1.73(h) in (33 x 23 x 4.4 cm) (1U height)	
	Weight	7.05 lb (3.2 kg)	
Memory and processor	MIPS @ 500 MHz, 32 MB f	lash, 128 MB SDRAM; packet buffer size: 4.1 Mb	
Mounting and enclosure	Mounts in an EIA standard	d 19-inch telco rack or equipment cabinet (hardware included)	
Performance	100 Mb Latency	< 5 µs	
	1000 Mb Latency	< 5 µs	
	Throughput	14.8 Mpps (64-byte packets)	
	Routing/Switching capacity	20 Gbps	
	Routing table size	32 entries (IPv4), 32 entries (IPv6)	
	MAC address table size	8192 entries	
Reliability	MTBF (years)	64.51	
Environment	Operating temperature	32°F to 104°F (0°C to 40°C)	
	Operating relative humidity	10% to 90%, noncondensing	
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	
	Nonoperating/Storage relative humidity	10% to 95%, noncondensing	
	Altitude	up to 16,404 ft (5 km)	
	Acoustic	Low-speed fan: 43.6 dB, High-speed fan: 51.5 dB; ISO 7779	
Electrical characteristics	Frequency	50/60 Hz	
	AC voltage	100 - 240 VAC	
X	Maximum power rating	235 W	
4.6	PoE power	180 W PoE+	
	Notes	Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. PoE power is the power supplied by the internal power supply. It is dependent on the type and quantity of power supplies.	
Safety	UL 60950; IEC 60950-1; E	N 60950-1; CAN/CSA-C22.2 No. 60950-1-03	
Emissions	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 61000-3-2 2000, 61000-3-3; ICES-003 Class A		
Management	IMC - Intelligent Management Center; limited command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB		
Notes	SFP port and copper ports work simultaneously, independent of each other, to provide a total of 10 Gigabit switching ports.		



## **Technical Specifications**

Services		t www.hp.com/networking/services for details on the service-level numbers. For details about services and response times in your area, please is office.
HP 1920-16G Switch (JG92	:3A)	
I/O ports and slots	16 RJ-45 auto-negotiating 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T) 4 SFP 1000 Mbps ports Supports a maximum of 16 autosensing 10/100/1000 ports plus 4 1000BASE-X SFP ports, or a	
Additional parts and	combination	
Additional ports and slots	1 RJ-45 console port to ac	
Physical characteristics	Dimensions	17.32(w) x 6.81(d) x 1.73(h) in (44 x 17.3 x 4.4 cm) (1U height)
	Weight	4.74 lb (2.15 kg)
Memory and processor	MIPS @ 500 MHz, 32 MB fl	lash, 128 MB SDRAM; packet buffer size: 4.1 Mb
Mounting and enclosure	Mounts in an EIA standard	19-inch telco rack or equipment cabinet (hardware included)
Performance	100 Mb Latency	< 5 µs
	1000 Mb Latency	< 5 µs
	Throughput	29.8 Mpps (64-byte packets)
	Routing/Switching	40 Gbps
	capacity	
	Routing table size	32 entries (IPv4), 32 entries (IPv6)
	MAC address table size	8192 entries
Reliability	MTBF (years)	125
Environment	Operating temperature	32°F to 104°F (0°C to 40°C)
	Operating relative	10% to 90%, noncondensing
	humidity Nonoperating/Storage	-40°F to 158°F (-40°C to 70°C)
	temperature Nonoperating/Storage	10% to 95%, noncondensing
	relative humidity	
	Altitude	up to 16,404 ft (5 km)
	Acoustic	No Fan
Electrical characteristics	* · / ·	50/60 Hz
	AC voltage	100 - 240 VAC
	Maximum power rating	13 W
	Notes	Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.
Safety	UL 60950; IEC 60950-1; El	N 60950-1; CAN/CSA-C22.2 No. 60950-1-03
Emissions	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 61000-3-2 2000, 61000-3-3; ICES-003 Class A	
Management	IMC - Intelligent Management Center; limited command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB	
Notes		ts can work simultaneously, independent of each other, to provide a total of ple ports.
Services		t www.hp.com/networking/services for details on the service-level

### **Technical Specifications**

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

HP 1920-24G Switch (JG92	24A)		
I/O ports and slots	24 RJ-45 auto-negotiating 100BASE-TX, IEEE 802.3a	ig 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type ab Type 1000BASE-T)	
	4 SFP 1000 Mbps ports		
	Supports a maximum of 2 combination	24 autosensing 10/100/1000 ports plus 4 1000BASE-X SFP ports, or a	
Additional ports and slots	1 RJ-45 console port to ac	ccess limited CLI port	
Physical characteristics	Dimensions	17.32(w) x 6.81(d) x 1.73(h) in (44 x 17.3 x 4.4 cm) (1U height)	
	Weight	4.96 lb (2.25 kg)	
Memory and processor	MIPS @ 500 MHz, 32 MB fl	lash, 128 MB SDRAM; packet buffer size: 4.1 Mb	
Mounting and enclosure	Mounts in an EIA standard	d 19-inch telco rack or equipment cabinet (hardware included)	
Performance	100 Mb Latency	< 5 µs	
	1000 Mb Latency	< 5 µs	
	Throughput	41.7 Mpps (64-byte packets)	
	Routing/Switching capacity	56 Gbps	
	Routing table size	32 entries (IPv4), 32 entries (IPv6)	
	MAC address table size	8192 entries	
Reliability	MTBF (years)	120.48	
Environment	Operating temperature	32°F to 104°F (0°C to 40°C)	
	Operating relative humidity	10% to 90%, noncondensing	
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	
	Nonoperating/Storage relative humidity	10% to 95%, noncondensing	
	Altitude	up to 16,404 ft (5 km)	
	Acoustic	No Fan	
<b>Electrical characteristics</b>	Frequency	50/60 Hz	
$\lambda$	AC voltage	100 - 240 VAC	
	Maximum power rating	19 W	
×	Notes	Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.	
Safety	UL 60950; IEC 60950-1: E	EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03	
Emissions	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 61000-3-2 2000, 61000-3-3; ICES-003 Class A		
Management	IMC – Intelligent Management Center; limited command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB		
Notes	SFP ports and copper ports can work simultaneously, independent of each other, to provide a total of 28 Gigabit Ethernet-capable ports.		
Services	Refer to the HP website at	efer to the HP website at <a href="http://www.hp.com/networking/services">www.hp.com/networking/services</a> for details on the service-level escriptions and product numbers. For details about services and response times in your area, please	

## **Technical Specifications**

contact your local HP sales office.

HP 1920-24G-PoE+ (180W	<b>/) Switch</b> (JG925A)			
I/O ports and slots	24 RJ-45 auto-negotiating 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3af PoE, IEEE 802.3at)			
	4 SFP 1000 Mbps ports			
	Supports a maximum of 2 combination	24 autosensing 10/100/1000 ports plus 4 1000BASE-X SFP ports, or a		
Additional ports and slots	1 RJ-45 console port to a	ccess limited CLI port		
Physical characteristics	Dimensions	17.32(w) x 9.37(d) x 1.73(h) in (44 x 23.8 x 4.4 cm) (1U height)		
	Weight	7.5 lb (3.4 kg)		
Memory and processor	MIPS @ 500 MHz, 32 MB f	lash, 128 MB SDRAM; packet buffer size: 4.1 Mb		
Mounting and enclosure	Mounts in an EIA standard	d 19-inch telco rack or equipment cabinet (hardware included)		
Performance	100 Mb Latency	< 5 µs		
	1000 Mb Latency	< 5 µs		
	Throughput	41.7 Mpps (64-byte packets)		
	Routing/Switching capacity	56 Gbps		
	Routing table size	32 entries (IPv4), 32 entries (IPv6)		
	MAC address table size	8192 entries		
Reliability	MTBF (years)	68.96		
Environment	Operating temperature	32°F to 104°F (0°C to 40°C)		
	Operating relative humidity	10% to 90%, noncondensing		
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)		
	Nonoperating/Storage relative humidity	10% to 95%, noncondensing		
	Altitude	up to 16,404 ft (5 km)		
	Acoustic	Power: 44.9 dB, Pressure: 53.3 dB; ISO 7779		
<b>Electrical characteristics</b>	Frequency	50/60 Hz		
	AC voltage	100 - 240 VAC		
X	Maximum power rating	235 W		
	PoE power	180 W PoE+		
	Notes	Maximum power rating and maximum heat dissipation are the worst-cas theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. PoE power is the power supplied by the internal power supply. It is dependent on the type and quantity of power supplies.		
Safety	UL 60950; IEC 60950-1: E	N 60950-1; CAN/CSA-C22.2 No. 60950-1-03		
Emissions	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 61000-3-2 2000, 61000-3-3; ICES-003 Class A			
Management	IMC – Intelligent Management Center; limited command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB			
Notes	SFP ports and copper ports work simultaneously, independent of each other, to provide a total of Gigabit switching ports.			



### **Technical Specifications**

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 1920-24G-PoE+ (370W	<b>/) Switch</b> (JG926A)				
I/O ports and slots	24 RJ-45 auto-negotiating 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3af PoE, IEEE 802.3at)				
	4 SFP 1000 Mbps ports				
	Supports a maximum of 2 combination	4 autosensing 10/100/1000 ports plus 4 1000BASE-X SFP ports, or a			
Additional ports and slots	1 RJ-45 console port to access limited CLI port				
Physical characteristics	Dimensions	17.32(w) x 10.24(d) x 1.73(h) in (44 x 26 x 4.4 cm) (1U height)			
	Weight	7.5 lb (3.4 kg)			
Memory and processor	MIPS @ 500 MHz, 32 MB fl	lash, 128 MB SDRAM; packet buffer size: 4.1 Mb			
Mounting and enclosure	Mounts in an EIA standard	19-inch telco rack or equipment cabinet (hardware included)			
Performance	100 Mb Latency	< 5 µs			
	1000 Mb Latency	< 5 µs			
	Throughput	up to 41.7 Mpps (64-byte packets)			
	Routing/Switching capacity	56 Gbps			
	Routing table size	32 entries (IPv4), 32 entries (IPv6)			
	MAC address table size	8192 entries			
Reliability	MTBF (years)				
Environment	Operating temperature	32°F to 104°F (0°C to 40°C)			
	Operating relative humidity	10% to 90%, noncondensing			
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)			
	Nonoperating/Storage relative humidity	10% to 95%, noncondensing			
	Altitude	up to 16,404 ft (5 km)			
	Acoustic	Low-speed fan: 44.9 dB, High-speed fan: 53.3 dB; ISO 7779			
Electrical characteristics	Frequency	50/60 Hz			
	AC voltage	100 - 240 VAC			
710	Maximum power rating	474 W			
	PoE power	370 W PoE+			
	Notes	Maximum power rating and maximum heat dissipation are the worst-cas theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and			
		all modules populated. PoE power is the power supplied by the internal power supply. It is dependent on the type and quantity of power supplies and may be supplemented with the use of an external power supply (EPS). When supplemented with the use of an HP RPS1600 Redundant Power System, up to 795 W of PoE+ can be supplied. Unit max. power consumption with RPS is 833 W.			
Safety	UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03				



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Emissions	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 61000-3-2 2000, 61000-3-3; ICES-003 Class A		
Management	IMC - Intelligent Management Center; limited command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB		
Notes	SFP ports and copper ports can work simultaneously, independent of each other, to provide a total of 28 Gigabit switching ports.		
Services		t www.hp.com/networking/services for details on the service-level numbers. For details about services and response times in your area, please as office.	
HP 1920-48G Switch (JG9)	27A)	c.9	
I/O ports and slots	48 RJ-45 auto-negotiating 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T)		
	4 SFP 1000 Mbps ports		
	Supports a maximum of 4 combination	8 autosensing 10/100/1000 ports plus 4 1000BASE-X SFP ports, or a	
Additional ports and slots	1 RJ-45 console port to ac	ccess limited CLI port	
Physical characteristics	Dimensions	17.32(w) x 9.37(d) x 1.73(h) in (44 x 23.8 x 4.4 cm) (1U height)	
	Weight	6.94 lb (3.15 kg)	
Memory and processor	MIPS @ 650 MHz, 32 MB f	lash, 128 MB SDRAM; packet buffer size: 12 Mb	
Mounting and enclosure	Mounts in an EIA standard	19-inch telco rack or equipment cabinet (hardware included)	
Performance	100 Mb Latency	< 5 µs	
	1000 Mb Latency	< 5 µs	
	Throughput	77.4 Mpps (64-byte packets)	
	Routing/Switching capacity	104 Gbps	
	Routing table size	32 entries (IPv4), 32 entries (IPv6)	
	MAC address table size	16384 entries	
Reliability	MTBF (years)	76.92	
Environment	Operating temperature	32°F to 104°F (0°C to 40°C)	
	Operating relative humidity	10% to 90%, noncondensing	
$\rightarrow$	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	
4	Nonoperating/Storage relative humidity	10% to 95%, noncondensing	
	Altitude		
	Acoustic	Pressure: 49.7 dB; ISO 7779	
<b>Electrical characteristics</b>	Frequency	50/60 Hz	
		Achieved Miercom Certified Green Award	
	AC voltage	100 - 240 VAC	
	Maximum power rating	32 W	
	Notes	Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.	
Safety	UL 60950; IEC 60950-1; E	N 60950-1; CAN/CSA-C22.2 No. 60950-1-03	

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Emissions	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 61000-3-2 2000, 61000-3-3; ICES-003 Class A		
Management	IMC - Intelligent Management Center; limited command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB		
Notes	SFP ports and copper ports work simultaneously, independent of each other, to provide a total of 52 Gigabit Ethernet-capable ports.		
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 1920-48G-PoE+ (370W	/) Switch (JG928A)	69/	
I/O ports and slots		g 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type b Type 1000BASE-T, IEEE 802.3af PoE, IEEE 802.3at)	
	4 SFP 1000 Mbps ports		
	Supports a maximum of 4 combination	8 autosensing 10/100/1000 ports plus 4 1000BASE-X SFP ports, or a	
Additional ports and slots	1 RJ-45 console port to ac	cess limited CLI port	
Physical characteristics	Dimensions	17.32(w) x 17.32(d) x 1.73(h) in (44 x 44 x 4.4 cm) (1U height)	
	Weight	9.48 lb (4.3 kg)	
Memory and processor	MIPS @ 650 MHz, 32 MB fl	ash, 128 MB SDRAM; packet buffer size: 12 Mb	
Mounting and enclosure	Mounts in an EIA standard	19-inch telco rack or equipment cabinet (hardware included)	
Performance	100 Mb Latency	< 5 µs	
	1000 Mb Latency	< 5 µs	
	Throughput	up to 77.4 Mpps (64-byte packets)	
	Routing/Switching	104 Gbps	
	capacity		
	Routing table size	32 entries (IPv4), 32 entries (IPv6)	
	MAC address table size	16384 entries	
Reliability	MTBF (years)	44.44	
Environment	Operating temperature	32°F to 104°F (0°C to 40°C)	
	Operating relative humidity	10% to 90%, noncondensing	
$\geq$	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	
× ×	Nonoperating/Storage relative humidity	10% to 95%, noncondensing	
$\sim$	Altitude	up to 16,404 ft (5 km)	
	Acoustic	Low-speed fan: 47 dB, High-speed fan: 49.3 dB; ISO 7779	
<b>Electrical characteristics</b>	Frequency	50/60 Hz	
	AC voltage	100 - 240 VAC	
	Maximum power rating	492 W	
	PoE power	370 W PoE+	
	Notes	Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. PoE power is the power supplied by the internal power supply. It is	



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	dependent on the type and quantity of power supplies and may be
	supplemented with the use of an external power supply (EPS).
	When supplemented with the use of an HP RPS1600 Redundant Power
	System, up to 795 W of PoE+ can be supplied. Unit max. power
	consumption with RPS is 876W.
Safety	UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03
-	
Emissions	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 61000-3-2 2000, 61000-3-3; ICES-003 Class A
Management	IMC - Intelligent Management Center; limited command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB
Notes	SFP ports and copper ports can work simultaneously, independent of each other, to provide a total of 52 Gigabit switching ports.
Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level
	descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.
Standards and protocols	Device management
(applies to all products in	
series)	Web UI
561657	web of
	General protocols
	IEEE 802.1D MAC Bridges
	IEEE 802.1p Priority
	IEEE 802.1Q VLANs
	IEEE 802.1s (MSTP)
	IEEE 802.1w Rapid Reconfiguration of Spanning Tree
	IEEE 802.3 Type 10BASE-T
	IEEE 802.3ab 1000BASE-T
	IEEE 802.3ad Link Aggregation Control Protocol (LACP)
	IEEE 802.3i 10BASE-T
	IEEE 802.3x Flow Control
	IEEE 802.3z 1000BASE-X
	MIBs
	RFC 1213 MIB II
	RFC 1493 Bridge MIB
	RFC 2021 RMONv2 MIB
	RFC 2233 Interface MIB
X	RFC 2233 Interfaces MIB
	RFC 2571 SNMP Framework MIB
$\neq$ , (	RFC 2572 SNMP-MPD MIB
	RFC 2573 SNMP-Notification MIB
	RFC 2573 SNMP-Notification MiB
	RFC 2613 SMON MIB
	RFC 2618 RADIUS Client MIB
	RFC 2620 RADIUS Accounting MIB
	RFC 2665 Ethernet-Like-MIB
	RFC 2667 IP Tunnel MIB
	RFC 2668 802.3 MAU MIB
	RFC 2674 802.1p and IEEE 802.1Q Bridge MIB
	RFC 2737 Entity MIB (Version 2)
	RFC 3414 SNMP-User based-SM MIB
	RFC 3415 SNMP-View based-ACM MIB
	RFC 3418 MIB for SNMPv3

RFC 3418 MIB for SNMPv3



## **Technical Specifications**

#### Network management

IEEE 802.1AB Link Layer Discovery Protocol (LLDP) **IEEE 802.1D (STP)** RFC 1215 SNMP Generic traps

#### QoS/Cos

MM.2000intio.co.k IEEE 802.1P (CoS) RFC 2474 DiffServ Precedence, including 8 queues/port

#### Security

IEEE 802.1X Port Based Network Access Control

1051-891-2000



### Accessories

HP 1920 Switch Series	Transceivers	
accessories	HP X121 1G SFP LC SX Transceiver	J4858C
	HP X121 1G SFP LC LX Transceiver	J4859C
	HP X121 1G SFP RJ45 T Transceiver	J8177C
	HP X120 1G SFP LC SX Transceiver	JD118B
	HP X120 1G SFP LC LX Transceiver	JD119B
	HP X120 1G SFP RJ45 T Transceiver	JD089B
	Cables	
	HP LC to LC Multi-mode OM3 2-Fiber 0.5m 1-Pack Fiber Optic Cable	AJ833A
	HP LC to LC Multi-mode OM3 2-Fiber 1.0m 1-Pack Fiber Optic Cable 🔿 🗡	AJ834A
	HP LC to LC Multi-mode OM3 2-Fiber 2.0m 1-Pack Fiber Optic Cable	AJ835A
	HP LC to LC Multi-mode OM3 2-Fiber 5.0m 1-Pack Fiber Optic Cable	AJ836A
	HP LC to LC Multi-mode OM3 2-Fiber 15.0m 1-Pack Fiber Optic Cable	AJ837A
	HP LC to LC Multi-mode OM3 2-Fiber 30.0m 1-Pack Fiber Optic Cable	AJ838A
	HP LC to LC Multi-mode OM3 2-Fiber 50.0m 1-Pack Fiber Optic Cable	AJ839A
	HP Premier Flex LC/LC Multi-mode OM4 2 fiber 1m Cable	QK732A
	HP Premier Flex LC/LC Multi-mode OM4 2 fiber 2m Cable	QK733A
	HP Premier Flex LC/LC Multi-mode OM4 2 fiber 5m Cable	QK734A
	HP Premier Flex LC/LC Multi-mode OM4 2 fiber 15m Cable	QK735A
	HP Premier Flex LC/LC Multi-mode OM4 2 fiber 30m Cable	QK736A
	HP Premier Flex LC/LC Multi-mode OM4 2 fiber 50m Cable	QK737A
	HP 1920-48G-PoE+ (370W) Switch (JG928A)	
	HP X121 1G SFP LC SX Transceiver	J4858C
	HP X121 1G SFP LC LX Transceiver	J4859C
	HP X121 1G SFP RJ45 T Transceiver	J8177C
	HP X120 1G SFP LC SX Transceiver	JD118B
	HP X120 1G SFP LC LX Transceiver	JD119B
	HP X120 1G SFP RJ45 T Transceiver	JD089B
	HP LC to LC Multi-mode OM3 2-Fiber 0.5m 1-Pack Fiber Optic Cable	AJ833A
	HP LC to LC Multi-mode OM3 2-Fiber 1.0m 1-Pack Fiber Optic Cable	AJ834A
	HP LC to LC Multi-mode OM3 2-Fiber 2.0m 1-Pack Fiber Optic Cable	AJ835A
	HP LC to LC Multi-mode OM3 2-Fiber 5.0m 1-Pack Fiber Optic Cable	AJ836A
× (	CHP LC to LC Multi-mode OM3 2-Fiber 15.0m 1-Pack Fiber Optic Cable	AJ837A
	HP LC to LC Multi-mode OM3 2-Fiber 30.0m 1-Pack Fiber Optic Cable	AJ838A
	HP LC to LC Multi-mode OM3 2-Fiber 50.0m 1-Pack Fiber Optic Cable	AJ839A
	HP Premier Flex LC/LC Multi-mode OM4 2 fiber 1m Cable	QK732A
	HP Premier Flex LC/LC Multi-mode OM4 2 fiber 2m Cable	QK733A
	HP Premier Flex LC/LC Multi-mode OM4 2 fiber 5m Cable	QK734A
	HP Premier Flex LC/LC Multi-mode OM4 2 fiber 15m Cable	QK735A
	HP Premier Flex LC/LC Multi-mode OM4 2 fiber 30m Cable	QK736A
	HP Premier Flex LC/LC Multi-mode OM4 2 fiber 50m Cable	QK737A



## **Accessory Product Details**

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

HP X121 1G SFP LC SX	Ports	1 LC 1000BASE-SX port; Duplex: full only
Transceiver (J4858C)	Physical characteristics	Dimensions: 2.24(d) x 0.54(w) x 0.48(h) in. (5.69 x 1.37 x 1.22 cm) Weight: 0.04 lb. (0.02 kg)
A small form-factor		Transceiver form factor: SFP
pluggable (SFP) Gigabit SX	Environment	Operating temperature: 32°F to 158°F (0°C to 70°C)
transceiver that provides a		Operating relative humidity: 5% to 85%, noncondensing
full-duplex Gigabit		Nonoperating/Storage temperature: -40°F to 203°F (-40°C to 85°C)
solution		Altitude: up to 10,000 ft. (3 km)
up to 550 m on multimode	<b>Floctrical characteristics</b>	Power consumption typical: 0.4 W
fiber.		Power consumption maximum: 0.7 W
	Cabling	
	Cabling	Туре:
		<ul> <li>62.5/125 μm or 50/125 μm (core/cladding) diameter, graded- index, low metal content, multimode fiber optic, complying with ITU-T G.651 and ISO/IEC 793-2 Type A1b or A1a, respectively;</li> </ul>
		Maximum distance:
		Plaximum distance.
		<ul> <li>2-220 m (62.5 μm core diameter, 160 MHz*km bandwidth</li> <li>2-275 m (62.5 μm core diameter, 200 MHz*km bandwidth</li> <li>2-500 m (50 μm core diameter, 400 MHz*km bandwidth)</li> <li>2-550 m (50 μm core diameter, 500 MHz*km bandwidth)</li> </ul>
		Cable length: 2-550m
		Fiber type: Multi Mode
	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 X121 1G SFP LC LX	Ports	1 LC 1000BASE-LX port (IEEE 802.3z Type 1000BASE-LX); Duplex: full only
Transceiver (J4859C)	Physical characteristics	Dimensions: 2.24(d) x 0.54(w) x 0.486(h) in. (5.69 x 1.37 x 1.23 cm) Weight:0.04 lb. (0.02 kg)
HP X121 1G SFP LC LX	Environment	Operating temperature: 32°F to 158°F (0°C to 70°C)
Transceiver: An SFP		Operating relative humidity: 0% to 85%, noncondensing
format		Nonoperating/Storage temperature: -40°F to 212°F (-40°C to 100°C)
gigabit transceiver with LC		Altitude: up to 10,000 ft. (3 km)
connectors using LX //	Cabling	Туре:
		<ul> <li>Either single mode or multimode; 62.5/125 µm or 50/125 µm (core/cladding) diameter, graded-index, low metal content, multimode fiber optic, complying with ITU-T G.651 and ISO/IEC 793-2 Type A1b or A1a, respectively; Low metal content, single- mode fiber-optic, complying with ITU-T G.652 and ISO/IEC 793-2 Type B1;</li> </ul>

Maximum distance:



		<ul> <li>2-550 m (multimode 62.5 μm core diameter, 500 MHz*km bandwidth)</li> <li>2-550 m (multimode 50 μm core diameter, 400 MHz*km bandwidth)</li> <li>2-550 m (multimode 50 μm core diameter, 500 MHz*km bandwidth)</li> <li>2-10,000 m (single-mode fiber)</li> </ul>		
	Notes	A mode conditioning patch cord may be needed in some multimode fiber installations. Wavelength: 1310nm Power Consumption: < 500mW Typical		
	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 X121 1G SFP RJ45 T Transceiver (J8177C)	Ports	1 RJ-45 1000BASE-T port (IEEE 802.3ab Type 1000BASE-T); Duplex: full only		
HP X121 1G SFP RJ45 T	Physical characteristics	Dimensions: 2.71(d) x 0.54(w) x 0.55(h) in. (6.88 x 1.37 x 1.4 cm) Weight: 0.06 lb. (0.03 kg)		
Transceiver: An SFP format	Environment	Operating temperature: 32°F to 158°F (0°C to 70°C); with 100 LFM airflow over the SFP module		
gigabit transceiver with RJ45 connectors using		Operating relative humidity: 0% to 95% @ 75°F (25°C), noncondensing		
1000BaseT technology.		Nonoperating/Storage temperature: -40°F to 185°F (-40°C to 85°C)		
		Nonoperating/Storage relative humidity: 0% to 95% @ 77°F (25°C), noncondensing		
		Altitude: up to 10,000 ft. (3000 km)		
		$\mathcal{N}$		
	Cabling	Cable type: 1000BASE-T: Category 5 (5E or better recommended), 100 Ù differential 4-pair unshielded twisted pair (UTP) or shielded twisted pair (STP) balanced, complying with IEEE 802.3ab 1000BASE-T;		
	03	Maximum distance:		
+ 1		• 100 m		
	Notes	Power consumption is nominally 1 watt. For supported platforms and minimum software requirements to support this product, see the document titled "Support for the J8177C 1000Base-T Mini-GBIC" on the "HP Mini-GBICs and SFPs" Manuals Web page. The J8177C Gigabit copper mini-GBIC is not supported on dual-personality ports. The J8177C is capable of 100 Mb operation. This is supported on only the HP E8200zl, E5400zl, and HP E6200-24G-mGBIC yl Switches using software version K.12.21 or later. Use the "auto-100" port setting to enable 100 Mb operation. Important: The earlier J8177B does not support 100 Mb operation. When used in the Switch gl 20-Port 10/100/1000 Module (J4908A), the J8177C mini-GBIC can be installed in either the upper or lower mini-GBIC		



	Services	on the service-level desc	at www.hp.com/ne criptions and produ	<mark>tworking/services</mark> for details ict numbers. For details about lease contact your local HP	
HP X120 1G SFP LC SX	Ports	1 LC 1000BASE-SX port			
<b>Transceiver</b> (JD118B)	Connectivity	Connector type	LC		
		Wavelength	850 nm		
A small form-factor pluggable (SFP) Gigabit SX transceiver that provides	Physical characteristics	Dimensions	2.17(d) x 0.6(w) cm)	x 0.46(h) in. (5.51 x 1.52 x 1.17	
a full-duplex Gigabit		Full configuration weig	ht 0.04 lb. (0.02 kg	g)	
solution up to 550m on a Multimode fiber.	Electrical characteristics	Power consumption typical	0.8 W		
		Power consumption maximum	1.0 W		
	Cabling	Maximum distance: • FDDI Grade distance = • OM1 = 275m • OM2 = 500m • OM3 = Not Specified by			
		Cable length	up to 550m		
		Fiber type	Multi Mode		
	Services	Refer to the HP website at www.hp.com/networking/services for de the service-level descriptions and product numbers. For details abor services and response times in your area, please contact your local l sales office.			
HP X120 1G SFP LC LX	Ports	1 SFP 1000BASE-LX port (IEEE 802.3z Type 1000BASE-LX)		1000BASE-LX)	
<b>Transceiver</b> (JD119B)	Connectivity	Connector type	LC		
		Wavelength	1300 nm		
A small form-factor pluggable (SFP) Gigabig LX transceiver that	Physical characteristics	Dimensions	2.17(d) x 0.6(w) cm)	x 0.46(h) in. (5.51 x 1.52 x 1.17	
provides a full duplex		Full configuration weig	<b>ht</b> 0.04 lb. (0.02 kg	g)	
Gigabit solution up to 550m on MMF or 10Km on	Electrical characteristics	Power consumption typical	0.8 W		
SMF		Power consumption maximum	1.0 W		
	Cabling	Cable type: Either single mode or me	ultimode;		
		Maximum distance: • 550m for Multimode • 10km for Singlemode			
		Fiber type	Both		
	Services	Refer to the HP website at www.hp.com/networking/services for details of 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 X120 1G SFP Ports		1 R I-45 1000F	RASE-T port (IEEE 802	.3ab Type 1000BASE-T)		
RJ45 T	Connectivity	Connector typ	•	RJ-45		
Transceiver	Physical	Dimensions		2.71(d) x 0.54(w) x 0.55(h) in. (6.88 x 1.37 x 1.4 cm)		
(JD089B)	characteristics	Full configura	tion weight	0.07 lb. (0.03 kg)		
	Electrical	-	nption typical	0.8 W		
	characteristics		nption maximum	1.0 W		
	Cabling	Cable type:		1.0 W		
		1000BASE-T: Category 5 (5E or better recommended), 100 Ù differential 4-pair unshielded twisted pair (UTP) or shielded twisted pair (STP) balanced, complying with IEEE 802.3ab 1000BASE-T				
		Maximum dist • 100m	ance:			
	Services	Refer to the HP website at <a href="http://www.hp.com/networking/services">www.hp.com/networking/services</a> for details on the service- level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.				
HP 0 5 m Multim	ode OM3 Cabling		Cable type:			
<b>LC/LC Optical Ca</b> (AJ833A)			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			
			Mania			
		<b>Maximum distance</b> : 10Gbps Transfer Rate (Ethernet): 300m				
	Notes		Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 um			
			fiber optic cable an	d Ethernet assembly with LC duplex connectors on one connectors on other end.		
		N	2.0um Coa	is: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± iting diameter: 245 ± 10um		
			@850/130			
		N/0	@850/130 @850/130	iss: Bandwidth: For Laser sources: 2000/500 MHz-km )Onm. VCSEL Laser sources: 600 / 600 meters )Onm for Gigabit Ethernet compliant links.		
			multimode	e cable is duplex zipcord graded index 50/125um e optical fiber and designed to work in both the 850 and vavelength windows.		
	× < ON		<ul> <li>Jacket Mat</li> </ul>	E & CABLE ASSEMBLY CONFIGURATION: terial: Riser Grade - Low Smoke Zero Halogen		
			thermopla	istic. or: Aqua for OM3 multimode per TIA 598		
			<ul> <li>Jacket Col</li> <li>Boot Color</li> </ul>			
				.oss: less than 0.5 dB @ 850 with LED source, 0.003		
				ed for lengths > 30 meters.		
			1310 nm (	Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ @ 23°C as tested in accordance with EIA 455-46.		
			Weight: Ai	r Packed Weight: 1 LB Net Weight: 0.454Kg		
	Services		the service-level de	osite at www.hp.com/networking/services for details on escriptions and product numbers. For details about nse times in your area, please contact your local HP		



		sales office.
HP 1 m Multimode OM3 LC/LC Optical Cable (AJ834A)	Cabling	<b>Cable type</b> : 50/125 μm (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m
		Maximum distance: 10Gbps Transfer Rate (Ethernet): 300m
	Notes	Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.
		<ul> <li>Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um</li> <li>Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.</li> <li>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.</li> <li>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.</li> <li>BULK CABLE &amp; CABLE ASSEMBLY CONFIGURATION:</li> <li>Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.</li> <li>Jacket Color: Aqua for OM3 multimode per TIA 598</li> <li>Boot Color: White</li> <li>Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths &gt; 30 meters.</li> <li>Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.</li> <li>Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg</li> </ul>
	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 2 m Multimode OM3 LC/LC Optical Cable (AJ835A)	Cabling	<b>Cable type</b> : 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;
		<b>Maximum distance</b> : 10Gbps Transfer Rate (Ethernet): 300m
	Notes	Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.
		<ul> <li>Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um</li> <li>Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km</li> </ul>

necessory roddeer	secures	
		<ul> <li>@850/1300nm.</li> <li>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.</li> <li>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.</li> <li>BULK CABLE &amp; CABLE ASSEMBLY CONFIGURATION:</li> <li>Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.</li> <li>Jacket Color: Aqua for OM3 multimode per TIA 598</li> <li>Boot Color: White</li> <li>Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths &gt; 30 meters.</li> <li>Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.</li> <li>Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg</li> </ul>
	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 5 m Multimode OM3 LC/LC Optical Cable (AJ836A)	Cabling	<b>Cable type</b> : 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; <b>Maximum distance</b> :
	Notes	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.
	21.05	<ul> <li>Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um</li> <li>Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.</li> <li>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.</li> <li>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.</li> <li>BULK CABLE &amp; CABLE ASSEMBLY CONFIGURATION:</li> <li>Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.</li> <li>Jacket Color: Aqua for OM3 multimode per TIA 598</li> <li>Boot Color: White</li> <li>Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths &gt; 30 meters.</li> <li>Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @</li> </ul>



Accessory Product D	Details	
		<ul> <li>1310 nm @ 23°C as tested in accordance with EIA 455-46.</li> <li>Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg</li> </ul>
	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 15 m Multimode OM3 LC/LC Optical Cable (AJ837A)	Cabling	<b>Cable type</b> : 50/125 μm (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m;
		Maximum distance: 10Gbps Transfer Rate (Ethernet): 300m
	Notes	Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.
	051	<ul> <li>Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um</li> <li>Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.</li> <li>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.</li> <li>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.</li> <li>BULK CABLE &amp; CABLE ASSEMBLY CONFIGURATION:</li> <li>Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.</li> <li>Jacket Color: Aqua for OM3 multimode per TIA 598</li> <li>Boot Color: White</li> <li>Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths &gt; 30 meters.</li> <li>Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.</li> <li>Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg</li> </ul>
	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 30 m Multimode OM3 LC/LC Optical Cable (AJ838A)	Cabling	<b>Cable type</b> : 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:
	Neter	10Gbps Transfer Rate (Ethernet): 300m
	Notes	Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 um



fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

	Services	<ul> <li>Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um</li> <li>Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.</li> <li>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.</li> <li>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.</li> <li>BULK CABLE &amp; CABLE ASSEMBLY CONFIGURATION:</li> <li>Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.</li> <li>Jacket Color: Aqua for OM3 multimode per TIA 598</li> <li>Boot Color: White</li> <li>Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths &gt; 30 meters.</li> <li>Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.</li> <li>Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg</li> </ul> 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 50 m Multimode OM3 LC/LC Optical Cable (AJ839A)	Cabling	<b>Cable type</b> : 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;
$\geq$	Notes	<b>Maximum distance</b> : 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.
	0	<ul> <li>Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um</li> <li>Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.</li> <li>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.</li> <li>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.</li> <li>BULK CABLE &amp; CABLE ASSEMBLY CONFIGURATION:</li> <li>Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.</li> </ul>



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



### HP 1920 Switch Series

	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 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.
		<ul> <li>Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um</li> <li>Bandwidth: 3000 MHz-km @ 850nm (Laser)</li> <li>Jacket Color: Blue</li> <li>Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic</li> <li>Boot Color: White</li> <li>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.</li> <li>Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths &gt;30m</li> <li>Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45</li> </ul>
	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 15m Cable (QK735A)	Notes	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.
	- <u>8</u> 91	<ul> <li>Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um</li> <li>Bandwidth: 3000 MHz-km @ 850nm (Laser)</li> <li>Jacket Color: Blue</li> <li>Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH)</li> </ul>
	20.	<ul> <li>backet Material: Riser Grade – Low Shoke Zero Halogen (LSZH)</li> <li>thermoplastic</li> <li>Boot Color: White</li> <li>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.</li> </ul>
		<ul> <li>Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths &gt;30m</li> <li>Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45</li> </ul>
	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.
HP Premier Flex LC/LC Multi-mode OM4 2 fiber	Notes	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors



Accessory Froduct E		
<b>30m Cable</b> (QK736A)		on each end.
		<ul> <li>Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um</li> <li>Bandwidth: 3000 MHz-km @ 850nm (Laser)</li> <li>Jacket Color: Blue</li> <li>Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic</li> <li>Boot Color: White</li> <li>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.</li> <li>Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths &gt;30m</li> <li>Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45</li> </ul>
	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 50m Cable (QK737A)	Notes	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.
		<ul> <li>Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um</li> <li>Bandwidth: 3000 MHz-km @ 850nm (Laser)</li> </ul>
		<ul> <li>Jacket Color: Blue</li> <li>Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic</li> <li>Boot Color: White</li> </ul>
	051-89	<ul> <li>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.</li> <li>Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths &gt;30m</li> <li>Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45</li> </ul>
	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.



### Summary of Changes

Date	Version History	Action	Description of Change:
09-Feb-2015	From Version 2 to 3	Added	SKU JG928A added
01-Dec-2014	From Version 1 to 2	Changed	Updated Warranty and support

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

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