# QuickSpecs

## Overview

## **HPE 1910 Switch Series**

### **Models**

HP 1910-48G Switch	JE009A
HP 1910-24G-PoE (365W) Switch	JE007A
HP 1910-24G-PoE(170W) Switch	JE008A
HP 1910-24G Switch	JE006A
HP 1910-16G Switch	JE005A
HP 1910-8G Switch	JG348A
HP 1910-8G-PoE+ (65W) Switch	JG349A
HP 1910-8G-PoE+ (180W) Switch	JG350A
HP 1910-24 Switch	JG538A
HP 1910-8 Switch	JG536A
HP 1910-48 Switch	JG540A
HP 1910-8 -PoE+ Switch	JG537A
HP 1910-24-PoE+ Switch	JG539A

## **Key features**

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

### **Product overview**

The HPE 1910 Switch Series consists of advanced smart-managed fixed-configuration Gigabit and Fast Ethernet 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 13 switches: eight Gigabit Ethernet and five Fast Ethernet models. The 8-, 16-, 24-, and 48-port 10/100/1000 models are equipped with additional Gigabit SFP ports for fiber connectivity; in addition to non-PoE models, the 8- and 24-port Gigabit Ethernet models are available with PoE (at two different levels) or without PoE. The 10/100 models are available with 8, 24 and 48 ports, and come with two additional combination uplink ports. The 8- and 24-port Fast Ethernet models are available with or without PoE.

The HPE 1910 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.

# **Features and benefits**



### **Overview**

### Management

### • Simple Web management

allows for easy management of the switch- even by nontechnical users- through an intuitive Web GUI; http and secure http (https) is supported

• Single IP management

enables management of up to four HPE 1910 devices using a single Web interface; simplifies management of multiple devices

Secure Web GUI

provides a secure, easy-to-use graphical interface for configuring the module via HTTPS

SNMPv1, v2c, and v3

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

Complete session logging

provides detailed information for problem identification and resolution

Dual flash images

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

• Port mirroring

enables traffic on a port to be simultaneously sent to a network analyzer for monitoring

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

### 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

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

advertises and receives management information from adjacent devices on a network, facilitating easy mapping by network

management applications

Limited CLI

enables users to quickly deploy and troubleshoot devices in the network

RMON

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

### Default DHCP client mode

allows the switch to be directly connected to a network, enabling plug-and-play operation; in absence of DHCP server on the network, the switch will fallback to a unique static address determined by the MAC address of the switch

### Quality of Service (QoS)

Broadcast control

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

Rate limiting

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

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 four hardware queues for more effective throughput

### Connectivity

IPv6

IPv6 host

### Overview

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

- IPv6 routing supports IPv6 static routes
- MLD snooping

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

o IPv6 ACL/QoS

supports ACL and QoS for IPv6 network traffic

Auto-MDI/MDIX

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

IEEE 802.3X flow control

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

- IEEE 802.3af Power over Ethernet (PoE) ready provides up to 15.4 W per port to power standards-compliant IP phones, wireless LAN access points, Web cameras, and more (all PoE models)
- IEEE 802.3at Power over Ethernet (PoE+)

provides up to 30 W 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; eliminates the cost of additional electrical cabling and circuits that would otherwise be necessary in IP phone and WLAN deployments.

(**NOTE:** applies to all PoE models, except the two 24G-PoE models which support a pre-standard implementation of PoE+)

• Packet storm protection

protects against broadcast, multicast, or unicast storms with user-defined thresholds

• Cable diagnostics

detects cable issues remotely, using a browser-based tool

### 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

- Secure Sockets Layer (SSL) encrypts all HTTP traffic, allowing secure access to the browser-based management GUI in the switch
- IEEE 802.1X and RADIUS network logins
   controls port-based access for authentication and accountability
- 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 mistake
- 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-/full-duplex auto-negotiating capability on every port doubles the throughput of every port
- Selectable queue configurations

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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 fiber uplinks

### Layer 2 switching

- VLAN support and tagging supports IEEE 802.1Q (4,094 VLAN IDs) and 256 VLANs simultaneously
- Spanning Tree Protocol (STP) 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

### 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

### NEW Static IPv4/IPv6 routing

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

### **Resiliency and high availability**

### • Available redundant power supply

provides additional PoE of up to 740 W for high-power applications like HPE Gigabit Ethernet IntelliJack switches; the HPE RPS1600 Redundant Power System (JG136A), sold separately, is only for use with the 1910-24G-PoE (365W) Switch model

### • Link aggregation

groups together multiple ports (up to a maximum of 2 ports) automatically using Link Aggregation Control Protocol (LACP), or manually, to form an ultra-high-bandwidth connection to the network backbone; helps prevent traffic bottlenecks

### 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

### **Overview**

### 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 regulation
- Green IT and power

improves energy efficiency through the use of the latest advances in silicon development; shuts off unused ports and utilizes variable-speed fans, reducing energy costs

### Warranty and support

### • Limited Lifetime Warranty

See **<u>http://www.hpe.com/networking/warrantysummary</u>** for warranty and support information included with your product purchase.

**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 1910-8 Switch <ul> <li>8 RJ-45 autosensing 10/100 ports</li> <li>2 SFP dual-personality 1000 Mbps ports</li> <li>min=0 \ max=2 SFP Transceivers</li> <li>1U - Height</li> </ul>	JG536A See Configuration <b>NOTE:</b> 2,3
HP 1910-8 -PoE+ Switch • 8 RJ-45 auto-negotiating 10/100 ports • 2 SFP dual-personality 1000 Mbps ports • min=0 \ max=2 SFP Transceivers • 1U - Height	JG537A See Configuration <b>NOTE:</b> 2,3
HP 1910-8G Switch • 8 RJ-45 auto-negotiating 10/100/1000 ports • 1 SFP 1000 Mbps port • min=0 \ max=1 SFP Transceiver • 1U - Height	JG348A See Configuration <b>NOTE:</b> 4,5
PDU Cable NA/MX/TW/JP • C15 PDU Jumper Cord (NA/MX/TW/JP)	JG348A#B2B
<ul> <li>PDU Cable ROW</li> <li>C15 PDU Jumper Cord (ROW)</li> </ul>	JG348A#B2C
HP 1910-8G-PoE+ (65W) Switch • 8 RJ-45 auto-negotiating 10/100/1000 ports • 1 SFP 1000 Mbps port • min=0 \ max=1 SFP Transceiver • 1U - Height	JG349A See Configuration <b>NOTE:</b> 4,5
<ul> <li>PDU Cable NA/MX/TW/JP</li> <li>C15 PDU Jumper Cord (NA/MX/TW/JP)</li> </ul>	JG349A#B2B

JG349A#B2C

• C15 PDU Jumper Cord (ROW)

HP 1910-8G-PoE+ (180W) Switch	JG350A
<ul><li>8 RJ-45 auto-negotiating 10/100/1000 ports</li><li>1 SFP 1000 Mbps port</li></ul>	See Configuration <b>NOTE:</b> 4,5
<ul> <li>min=0 \ max=1 SFP Transceiver</li> <li>1U - Height</li> </ul>	
PDU Cable NA/MX/TW/JP <ul> <li>C15 PDU Jumper Cord (NA/MX/TW/JP)</li> </ul>	JG350A#B2B
PDU Cable ROW	JG350A#B2C
C15 PDU Jumper Cord (ROW)	
HP 1910-16G Switch	JE005A
<ul><li>16 RJ-45 auto-negotiating 10/100/1000 ports</li><li>4 SFP 1000 Mbps port</li></ul>	See Configuration <b>NOTE:</b> 1, 5
<ul> <li>min=0 \ max=4 SFP Transceivers</li> </ul>	
• 1U - Height	
PDU Cable NA/MX/TW/JP	JE005A#B2B
C15 PDU Jumper Cord (NA/MX/TW/JP)	
PDU Cable ROW	JE005A#B2C
C15 PDU Jumper Cord (ROW)	
HP 1910-24G-PoE(170W) Switch	JE008A
<ul><li>24 RJ-45 auto-negotiating 10/100/1000 ports</li><li>4 SFP 1000 Mbps ports</li></ul>	See Configuration <b>NOTE:</b> 1, 5
<ul> <li>min=0 \ max=4 SFP Transceivers</li> </ul>	
• 1U - Height	
PDU Cable NA/MX/TW/JP	JE008A#B2B
C15 PDU Jumper Cord (NA/MX/TW/JP)	
PDU Cable ROW	JE008A#B2C
C15 PDU Jumper Cord (ROW)	

<ul> <li>HP 1910-24G-PoE (365W) Switch</li> <li>24 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>	JE007A See Configuration <b>NOTE:</b> 1, 5
<ul> <li>PDU Cable NA/MX/TW/JP</li> <li>C15 PDU Jumper Cord (NA/MX/TW/JP)</li> </ul>	JEOO7A#B2B
PDU Cable ROW <ul> <li>C15 PDU Jumper Cord (ROW)</li> </ul>	JE007A#B2C
<ul> <li>HP 1910-24G Switch</li> <li>24 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>	JE006A See Configuration <b>NOTE:</b> 1, 5
<ul> <li>PDU Cable NA/MX/TW/JP</li> <li>C15 PDU Jumper Cord (NA/MX/TW/JP)</li> </ul>	JEOO6A#B2B
<ul><li>PDU Cable ROW</li><li>C15 PDU Jumper Cord (ROW)</li></ul>	JEOO6A#B2C
<ul> <li>HP 1910-24 Switch</li> <li>24 RJ-45 autosensing 10/100 ports</li> <li>2 SFP dual-personality 1000 Mbps ports</li> <li>min=0 \ max=2 SFP Transceivers</li> <li>1U - Height</li> </ul>	JG538A See Configuration <b>NOTE:</b> 2,3
<ul> <li>HP 1910-24-PoE+ Switch</li> <li>24 RJ-45 auto-negotiating 10/100 ports</li> <li>2 SFP dual-personality 1000 Mbps ports</li> <li>min=0 \ max=2 SFP Transceivers</li> <li>1U - Height</li> </ul>	JG539A See Configuration <b>NOTE:</b> 2,3
HP 1910-48G Switch	JE009A

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Configuration			
<ul> <li>4 SFP 1000 Mb</li> <li>min=0 \ max=4</li> <li>1U - Height</li> </ul>	ps ports SFP Transceivers	<b>NOTE:</b> 1, 5	
PDU Cable NA/MX/TW/. • C15 PDU Jumpe	JP er Cord (NA/MX/TW/JP)	JE009A#B2B	
PDU Cable ROW • C15 PDU Jumpe			
<ul><li>2 RJ-45 autoser</li><li>2 SFP 1000 Mb</li></ul>	ensing 10/100 ports nsing10/100/1000 ports ps ports SFP Transceivers	JG540A See Configuration <b>NOTE:</b> 2,3	
Configuration Rules:			
Note 1	The following Transceivers install into this switch: HP X121 1G SFP LC SX Transceiver HP X121 1G SFP LC LX Transceiver HP X121 1G SFP RJ45 T Transceiver HP X120 1G SFP LC SX Transceiver HP X120 1G SFP LC LX Transceiver HP X125 1G SFP RJ45 T Transceiver HP X125 1G SFP LC LH40 1310nm Transceiver HP X120 1G SFP LC LH40 1550nm Transceiver HP X125 1G SFP LC LH70 Transceiver HP X120 1G SFP LC BX 10-U Transceiver HP X120 1G SFP LC BX 10-U Transceiver	J4858C J4859C J8177C JD118B JD119B JD089A JD061A JD062A JD063B JD098B JD099B	
Note 2	Localization required. (See Localization Menu for list.)		
Note 3	The following Transceivers install into this switch: HP X121 1G SFP LC SX Transceiver HP X121 1G SFP LC LX Transceiver HP X120 1G SFP LC LX Transceiver	J4858C J4859C JD119B	
Note 4	The following Transceivers install into this switch: HP X121 1G SFP LC SX Transceiver HP X121 1G SFP LC LX Transceiver HP X121 1G SFP RJ45 T Transceiver	J4858C J4859C 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 X125 1G SFP LC LH40 1310nm Transceiver	JD061A
	HP X120 1G SFP LC LH40 1550nm Transceiver	JD062A
	HP X125 1G SFP LC LH70 Transceiver	JD063B
Note 5	Localization (Wall Power Cord) required on orders without #B2B or	r #B2C (PDU Power Cord). (See

Localization Menu)

# Internal or External Power Supplies(Model Dependant)

Internal Power supplies Included

### **External Redundant Power Supplies**

HP RPS1600 Redundant Power System	JG136A
• Height = 1U	See Configuration
<ul> <li>includes 1 x c13, 1600w and Power Supply port</li> </ul>	<b>NOTE:</b> 2,3,4

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 JE007A.

## Options for the HP 1600 External RPS Power Supply

HP X290 1000 A JD5 2m RPS Cable

JD187A See Configuration **NOTE:**1

JG137A See Configuration

**NOTE:**1,3

Remark: These cables are used to connect the External Power System to Switch.

Configuration Rules:

Note 1

This Cable is only supported on switch JE007A when used with the RPS 1600 (JG136A)

### Transceivers

### 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
HP X120 1G SFP LC BX 10-U Transceiver	JD098B
HP X120 1G SFP LC BX 10-D Transceiver	JD099B
HP X125 1G SFP LC LH40 1310nm Transceiver	JD061A
HP X120 1G SFP LC LH40 1550nm Transceiver	JD062A
HP X125 1G SFP LC LH70 Transceiver	JD063B

# Cables

### **Multi-Mode 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

Ports	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 1 RJ-45 console port to access limited CLI port Supports a maximum of 48 autosensing 10/100/1000 ports plus 4 1000BASE-X SFP ports, or a combination 4 SFP 1000 Mbps ports Supports a maximum of 48 autosensing 10/100/1000 ports plus 4 1000BASE-X SFP ports, or a		
	combination		
Physical characteristics	Dimensions	17.4(w) x 10.24(d) x 1.7(h) in (44.2 x 26.01 x 4.32 cm) (1U height)	
	Weight	6.8 lb (3.08 kg)	
Memory and processor	Module	ARM @ 333 MHz, 128 MB flash, 128 MB RAM; packet buffer size: 512 KB	
Mounting and enclosure	Mounts in an EIA-standard	19 in. telco rack or equipment cabinet (hardware included)	
Performance	100 Mb Latency	< 5 <b>µ</b> s	
	1000 Mb Latency	< 5 µs	
	Throughput	up to 77.4 Mpps (64-byte packets)	
	Routing/Switching capacity	104 Gbps	
	Routing table size	32 entries (IPv4), 32 entries (IPv6)	
	MAC address table size	8192 entries	
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)	
	Operating relative humidity	10% to 90%, non-condensing	
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	
	Nonoperating/Storage relative humidity	10% to 95%, non-condensing	
<b>Electrical characteristics</b>	Frequency	50/60 Hz	
Achieved Miercom	Voltage	100-240 VAC	
Certified Green Award	Maximum power rating	59.8 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; Ef	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 Managem IEEE 802.3 Ethernet MIB	ent Center; limited command-line interface; Web browser; SNMP Manager;	
Notes	SFP ports and copper ports work simultaneously, independent of each other to give a total of 52		

Technical Specifica	tions	
Services	Gigabit-capable ports. Refer to the Hewlett Packard Enterprise website at <b>http://www.hpe.com/networking/services</b> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office	
HP 1910-24G-PoE (365 W	<b>/) Switch</b> (JE007A)	
Ports	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) 4 SFP 1000 Mbps ports 1 RJ-45 console port to access limited CLI port Supports a maximum of 24 autosensing 10/100/1000 ports plus 4 1000BASE-X SFP ports, or a combination	
Physical characteristics	Dimensions	17.4(w) x 16.54(d) x 1.7(h) in (44.2 x 42.01 x 4.32 cm) (1U height)
	Weight	6.8 lb (3.08 kg)
Memory and processor	Module	ARM @ 333 MHz, 128 MB flash, 128 MB RAM; packet buffer size: 512 KB
Mounting and enclosure	Mounts in an EIA-standard	d 19 in. 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
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	10% to 90%, non-condensing
	Non-operating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non-operating/Storage relative humidity	10% to 95%, non-condensing
Electrical characteristics	Frequency	50 / 60 Hz
	Voltage	100-240 VAC
	Maximum power rating	523 W
	PoE power	365 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 al 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).
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 ( 61000-3-3; ICES-003 Class	Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 61000-3-2 2000, s 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 give a total of 28 Gigabit-capable ports.
Services	Refer to the Hewlett Packard Enterprise website at <b>http://www.hpe.com/networking/services</b> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office

### HP 1910-24G-PoE (170 W) Switch (JE008A)

Ports	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) 4 SFP 1000 Mbps ports	
	1 RJ-45 console port to acc Supports a maximum of 24 combination	cess limited CLI port + autosensing 10/100/1000 ports plus 4 1000BASE-X SFP ports, or a
Physical characteristics	Dimensions	17.4(w) x 16.54(d) x 1.7(h) in (44.2 x 42.01 x 4.32 cm) (1U height)
	Weight	6.8 lb (3.08 kg)
Memory and processor	Module	ARM @ 333 MHz, 128 MB flash, 128 MB RAM; packet buffer size: 512 KB
Mounting and enclosure	Mounts in an EIA-standarc	19 in. telco rack or equipment cabinet (hardware included)
Performance	100 Mb Latency	< 5 <b>µ</b> s
	1000 Mb Latency	< 5 <b>µ</b> s
	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
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	10% to 90%, non-condensing
	Non-operating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non-operating/Storage relative humidity	10% to 95%, non-condensing
Electrical characteristics	Frequency	50 / 60 Hz
	Voltage	100-240 VAC
	Maximum power rating	255 W
	PoE power	170 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. 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; 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 give a total of 28 Gigabit-capable ports.
Services	Refer to the Hewlett Packard Enterprise website at <b>http://www.hpe.com/networking/services</b> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office
HP 1910-24G Switc	h (JE006A)
Ports	24 RJ-45 auto-negotiating 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type

Ports	24 RJ-45 auto-negotiating 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3 u Type		
	100BASE-TX, IEEE 802.3ab Type 1000BASE-T) 4 SFP 1000 Mbps ports		
	1 RJ-45 console port to acc	cess limited CLI port	
	Supports a maximum of 24 combination	$_{\pm}$ autosensing 10/100/1000 ports plus 4 1000BASE-X SFP ports, or a	
Physical characteristics	Dimensions	17.4(w) x 6.3(d) x 1.7(h) in (44.2 x 16 x 4.32 cm) (1U height)	
	Weight	6.8 lb (3.08 kg)	
Memory and processor	Module	ARM @ 333 MHz, 128 MB flash, 128 MB RAM; packet buffer size: 512 KB	
Mounting and enclosure	Mounts in an EIA-standard	19 in. telco rack or equipment cabinet (hardware included)	
Performance	100 Mb Latency	< 5 µs	
	1000 Mb Latency	< 5 µs	
	Throughput	up to 41.7 million pps	
	Routing/Switching capacity	56 Gbps	
	Routing table size	32 entries	
	MAC address table size	8192 entries	
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)	
	Operating relative humidity	10% to 90%, non-condensing	
	Non-operating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	
	Non-operating/Storage relative humidity	10% to 95%, non-condensing	
Electrical characteristics	Frequency	50/60 Hz	
	Voltage	100-240 VAC	
	Maximum power rating	31.5 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	SFP ports and copper ports can work simultaneously, independent of each other to give a total of 28 Gigabit-capable ports.
Services	Refer to the Hewlett Packard Enterprise website at <u>http://www.hpe.com/networking/services</u> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office

# **HP 1910-16G Switch** (JE005A)

	03/0	
Ports	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	
	1 RJ-45 console port to acc	cess limited CLI port
	Supports a maximum of 16 combination	autosensing 10/100/1000 ports plus 4 1000BASE-X SFP ports, or a
Physical characteristics	Dimensions	17.4(w) x 6.3(d) x 1.7(h) in (44.2 x 16 x 4.32 cm) (1U height)
	Weight	6.8 lb (3.08 kg)
Memory and processor	Module	ARM @ 333 MHz, 128 MB flash, 128 MB RAM; packet buffer size: 512 KB
Mounting and enclosure	Mounts in an EIA-standard	1 19 in. telco rack or equipment cabinet (hardware included)
Performance	100 Mb Latency	< 5 µs
	1000 Mb Latency	< 5 µs
	Throughput	up to 29.8 million pps
	Routing/Switching capacity	40 Gbps
	Routing table size	32 entries
	MAC address table size	8192 entries
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	10% to 90%, non-condensing
	Non-operating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non-operating/Storage relative humidity	10% to 95%, non-condensing
Electrical characteristics	Frequency	50 / 60 Hz
	Voltage	100-240 VAC
	Maximum power rating	25.1 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; EN	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	

Technical Specifications			
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 give a total of 20 Gigabit-capable ports.		
Services	details on the service-level	ard Enterprise website at <b>http://www.hpe.com/networking/services</b> for I descriptions and product numbers. For details about services and response contact your local Hewlett Packard Enterprise sales office	
<b>HP 1910-8G Switch</b> (JG34	-8A)		
Ports	8 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) 1 SFP 1000 Mbps port 1 RJ-45 console port to access limited CLI port Supports a maximum of 8 autosensing 10/100/1000 ports plus 1 1000BASE-X SFP ports, or a combination		
Physical characteristics	Dimensions	8.27(w) x 8.27(d) x 1.72(h) in (21 x 21 x 4.36 cm) (1U height)	
	Weight	4.41 lb (2 kg), Fully loaded	
Memory and processor	Module	ARM @ 333 MHz, 128 MB flash, 128 MB RAM; packet buffer size: 512 KB	
Mounting and enclosure	Mounts in an EIA-standard	1 19 in. telco rack or equipment cabinet (hardware included)	
Performance	100 Mb Latency	< 5 µs	
	1000 Mb Latency	< 5 µs	
	Throughput	up to 13.4 million pps	
	Routing/Switching capacity	18 Gbps	
	Routing table size	32 entries	
	MAC address table size	8192 entries	
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)	
	Operating relative humidity	10% to 90%, non-condensing	
	Non-operating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	
	Non-operating/Storage relative humidity	10% to 95%, non-condensing	
Electrical characteristics	Voltage	100-240 VAC	
	Maximum power rating	14.4 W	
	Frequency	50/60 Hz	
		d maximum heat dissipation are the worst-case theoretical maximum ning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all odules 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	SFP port and copper ports	work simultaneously, independent of each other to give a total of 9 Gigabit-	

Technical Specificat	tions	
Services	capable ports. Refer to the Hewlett Packard Enterprise website at <b>http://www.hpe.com/networking/services</b> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office	
HP 1910-8G-PoE+ (65W)	Switch (JG349A)	
Ports	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) 1 SFP 1000 Mbps port 1 RJ-45 console port to access limited CLI port Supports a maximum of 8 autosensing 10/100/1000 ports plus 1 1000BASE-X SFP ports, or a combination	
Physical characteristics	Dimensions	10.24(w) x 11.81(d) x 1.72(h) in (26 x 30 x 4.36 cm) (1U height)
	Weight	6.61 lb (3 kg), Fully loaded
Memory and processor	Module	ARM @ 333 MHz, 128 MB flash, 128 MB RAM; packet buffer size: 512 KB
Mounting and enclosure	Mounts in an EIA-standard	d 19 in. telco rack or equipment cabinet (hardware included)
Performance	100 Mb Latency	< 5 µs
	1000 Mb Latency	< 5 µs
	Throughput	up to 13.4 million pps
	Routing/Switching capacity	18 Gbps
	Routing table size	32 entries
	MAC address table size	8192 entries
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	10% to 90%, non-condensing
	Non-operating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non-operating/Storage relative humidity	10% to 95%, non-condensing
<b>Electrical characteristics</b>	Voltage	100-240 VAC
	Maximum power rating	93 W
	PoE power	65 W
	Frequency	50/60 Hz
	numbers provided for plan ports plugged in, and all m	upplied by the internal power supply. It is dependent
Safety		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 Managem IEEE 802.3 Ethernet MIB	nent Center; limited command-line interface; Web browser; SNMP Manager;

Technical Specifica	tions		
Notes	SFP port and copper ports work simultaneously, independent of each other to give a total of 9 Gigabit- capable ports.		
Services	Refer to the Hewlett Packard Enterprise website at <b>http://www.hpe.com/networking/services</b> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office		
HP 1910-8G-PoE+ (180W	<b>) Switch</b> (JG350A)		
Ports	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) 1 SFP 1000 Mbps port 1 RJ-45 console port to access limited CLI port Supports a maximum of 8 autosensing 10/100/1000 ports plus 1 1000BASE-X SFP ports, or a combination		
Physical characteristics	Dimensions	10.24(w) x 11.81(d) x 1.72(h) in (26 x 30 x 4.36 cm) (1U height)	
	Weight	6.61 lb (3 kg), Fully loaded	
Memory and processor	Module	ARM @ 333 MHz, 128 MB flash, 128 MB RAM; packet buffer size: 512 KB	
Mounting and enclosure	Mounts in an EIA-standard	d 19 in. telco rack or equipment cabinet (hardware included)	
Performance	100 Mb Latency	< 5 µs	
	1000 Mb Latency	< 5 µs	
	Throughput	up to 13.4 million pps	
	Routing/Switching capacity	18 Gbps	
	Routing table size	32 entries	
	MAC address table size	8192 entries	
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)	
	Operating relative humidity	10% to 90%, non-condensing	
	Non-operating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	
	Non-operating/Storage relative humidity	10% to 95%, non-condensing	
<b>Electrical characteristics</b>	Frequency	50/60 Hz	
	Voltage	100-240 VAC	
	Maximum power rating	228 W	
	PoE power	180 W	
	numbers provided for plan ports plugged in, and all m	ipplied by the internal power supply. It is dependent on the type and	
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	SFP port and copper ports work simultaneously, independent of each other to give a total of 9 Gigabit- capable ports.
Services	Refer to the Hewlett Packard Enterprise website at <b>http://www.hpe.com/networking/services</b> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office

### **HP 1910-24 Switch** (JG538A)

Ports		00 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX);	
	Duplex: half or full		
	2 SFP dual-personality 100 1 RJ-45 console port to acc	00 Mbps ports (IEEE 802.3ab Type 1000BASE-T)	
		$_{\pm}$ autosensing 10/100 ports plus 2 1000BASE-X SFP ports, with optional	
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	4.85 lb (2.2 kg)	
Memory and processor	Module	MIPS @ 500 MHz, 32 MB flash, 128 MB RAM; packet buffer size: 512 KB	
Mounting and enclosure	Mounts in an EIA-standard	1 19 in. telco rack or equipment cabinet (hardware included)	
Performance	100 Mb Latency	< 5 <b>µ</b> s	
	1000 Mb Latency	< 5 <b>µ</b> s	
	Throughput	up to 6.6 Mpps (64-byte packets)	
	Routing/Switching	8.8 Gb/s	
	capacity		
	Routing table size	32 entries (IPv4), 32 entries (IPv6)	
	MAC address table size	8192 entries	
Environment	Operating temperature	32°F to 104°F (0°C to 40°C)	
	Operating relative humidity	10% to 90%, noncondensing	
	Non-operating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	
	Non-operating/Storage relative humidity	10% to 95%, noncondensing	
<b>Electrical characteristics</b>	Frequency	50/60 Hz	
	Voltage	100-240 VAC	
	Maximum power rating	12 W	
		d maximum heat dissipation are the worst-case theoretical maximum ining the infrastructure with fully loaded PoE (if equipped), 100% traffic, all odules populated.	
Safety	IEC 60950-1; EN 60950-1;	UL 60950-1 2nd Edition; CSA C22.2 No. 60950-1-07 2nd Edition	
Emissions	FCC part 15 Class A; VCCI ( 61000-3-3; ICES-003 Class	Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 61000-3-2 2000, s A	
Management	IMC - Intelligent Managem IEEE 802.3 Ethernet MIB	ent Center; limited command-line interface; Web browser; SNMP Manager;	
Notes	The HP 1910-24G Switch (	JEOO6A) was formerly sold as the 3Com Baseline Plus 2928 (3CRBSG2893) Page 20	

	and may ship with this pro SFP ports and copper port Gigabit-capable ports.	duct labeling. is can work simultaneously, independent of each other to give a total of 28	
Services	0 1 1	ard Enterprise website at <b>http://www.hpe.com/networking/services</b> for	
	details on the service-level descriptions and product numbers. For details about services and respor times in your area, please contact your local Hewlett Packard Enterprise sales office		
<b>HP 1910-8 Switch</b> (JG536)	A)		
Ports	8 RJ-45 autosensing 10/10	0 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type	
	100BASE-TX); Duplex: hal		
	2 SFP dual-personality 100 1 RJ-45 console port to acc	00 Mbps ports (IEEE 802.3ab Type 1000BASE-T)	
	•	autosensing 10/100 ports plus 2 1000BASE-X SFP ports, or a combination	
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	2.2 lb (1 kg)	
Memory and processor	Module	MIPS @ 500 MHz, 32 MB flash, 128 MB RAM; packet buffer size: 512 KB	
	Mounts in an EIA-standard	19 in. telco rack or equipment cabinet (hardware included)	
Performance	100 Mb Latency	< 5 µs	
	1000 Mb Latency	<pre>&lt; 5 µs</pre>	
	, Throughput	up to 4.2 Mpps (64-byte packets)	
	Routing/Switching	5.6 Gb/s	
	capacity		
	Routing table size	32 entries (IPv4), 32 entries (IPv6)	
	MAC address table size	8192 entries	
Environment	Operating temperature	32°F to 104°F (0°C to 40°C)	
	Operating relative humidity	10% to 90%, noncondensing	
	Non-operating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	
	Non-operating/Storage relative humidity	10% to 95%, noncondensing	
<b>Electrical characteristics</b>	Frequency	50/60 Hz	
	Voltage	100-240 VAC	
	Maximum power rating	8 W	
		d maximum heat dissipation are the worst-case theoretical maximum ning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all odules populated.	
Safety	IEC 60950-1; EN 60950-1;	UL 60950-1 2nd Edition; CSA C22.2 No. 60950-1-07 2nd Edition	
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	The HP 1910-24G Switch ( and may ship with this pro	JE006A) was formerly sold as the 3Com Baseline Plus 2928 (3CRBSG2893) duct labeling.	

Services	Refer to the Hewlett Packard Enterprise website at <b>http://www.hpe.com/networking/services</b> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office
	SFP ports and copper ports can work simultaneously, independent of each other to give a total of 28 Gigabit-capable ports.

### HP 1910-48 Switch (JG540A)

Ports	<ul> <li>48 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX); Duplex: half or full</li> <li>2 SFP 1000 Mbps ports</li> <li>2 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type</li> <li>100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full;</li> <li>1000BASE-T: full only</li> <li>1 RJ-45 console port to access limited CLI port</li> <li>Supports a maximum of 48 autosensing 10/100 ports plus 2 1000BASE-X SFP ports plus 2 autosensing</li> <li>10/100/1000 ports, or a combination</li> </ul>	
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	5.07 lb (2.3 kg)
Memory and processor	Module	MIPS @ 500 MHz, 32 MB flash, 128 MB RAM; packet buffer size: 1.5 MB
Mounting and enclosure	Mounts in an EIA-standard	19 in. telco rack or equipment cabinet (hardware included)
Performance	100 Mb Latency	< 5 µs
	1000 Mb Latency	< 5 µs
	Throughput	up to 13.1 Mpps (64-byte packets)
	Routing/Switching capacity	17.6 Gb/s
	Routing table size	32 entries (IPv4), 32 entries (IPv6)
	MAC address table size	8192 entries
Environment	Operating temperature	32°F to 104°F (0°C to 40°C)
	Operating relative humidity	10% to 90%, noncondensing
	Non-operating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non-operating/Storage relative humidity	10% to 95%, noncondensing
<b>Electrical characteristics</b>	Frequency	50/60 Hz
	Voltage	100-240 VAC
	Maximum power rating	22 W
	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% to ports plugged in, and all modules populated.	
Safety	IEC 60950-1; EN 60950-1; UL 60950-1 2nd Edition; CSA C22.2 No. 60950-1-07 2nd Edition	
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	The HP 1910-24G Switch (JE006A) was formerly sold as the 3Com Baseline Plus 2928 (3CRBSG2893) and may ship with this product labeling. SFP ports and copper ports can work simultaneously, independent of each other to give a total of 28
	Gigabit-capable ports.
Services	Refer to the Hewlett Packard Enterprise website at <u>http://www.hpe.com/networking/services</u> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office

### HP 1910-8-PoE+ Switch (JG537A)

Ports	8 RJ-45 autosensing 10/100 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3at PoE+); Duplex: half or full 2 SFP dual-personality 1000 Mbps ports (IEEE 802.3ab Type 1000BASE-T) 1 RJ-45 console port to access limited CLI port Supports a maximum of 8 autosensing 10/100 ports plus 2 1000BASE-X SFP ports, or a combination	
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	4.63 lb (2.1 kg)
Memory and processor	Module	MIPS @ 500 MHz, 32 MB flash, 128 MB RAM; packet buffer size: 512 KB
Mounting and enclosure	Mounts in an EIA-standarc	l 19 in. telco rack or equipment cabinet (hardware included)
Performance	100 Mb Latency	< 5 µs
	1000 Mb Latency	< 5 µs
	Throughput	up to 4.2 Mpps (64-byte packets)
	Routing/Switching capacity	5.6 Gb/s
	Routing table size	32 entries (IPv4), 32 entries (IPv6)
	MAC address table size	8192 entries
Environment	Operating temperature	32°F to 104°F (0°C to 40°C)
	Operating relative humidity	10% to 90%, noncondensing
	Non-operating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non-operating/Storage relative humidity	10% to 95%, noncondensing
Electrical characteristics	Frequency	50/60 Hz
	Voltage	100-240 VAC
	Maximum power rating	90 W
	PoE power	62 W
	Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. PoE Power is the power supplied by the internal power supply, it is dependent on the type and quantity of power supplies and may be supplemented with the use of an External Power Supply (EPS).	
Safety	IEC 60950-1; EN 60950-1;	UL 60950-1 2nd Edition; CSA C22.2 No. 60950-1-07 2nd Edition
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	The HP 1910-24G Switch (JE006A) was formerly sold as the 3Com Baseline Plus 2928 (3CRBSG2893) and may ship with this product labeling. SFP ports and copper ports can work simultaneously, independent of each other to give a total of 28 Gigabit-capable ports.
Services	Refer to the Hewlett Packard Enterprise website at <b>http://www.hpe.com/networking/services</b> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office

### HP 1910-24-PoE+ Switch (JG539A)

Ports	24 RJ-45 autosensing 10/100 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3at PoE+); Duplex: half or full 2 SFP dual-personality 1000 Mbps ports (IEEE 802.3ab Type 1000BASE-T) 1 RJ-45 console port to access limited CLI port Supports a maximum of 24 autosensing 10/100 ports plus 2 1000BASE-X SFP ports, or a combination	
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	7.28 lb (3.3 kg)
Memory and processor	Module	MIPS @ 500 MHz, 32 MB flash, 128 MB RAM; packet buffer size: 512 KB
Mounting and enclosure	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included)	
Performance	100 Mb Latency	< 5 µs
	1000 Mb Latency	< 5 µs
	Throughput	up to 6.6 Mpps (64-byte packets)
	Routing/Switching capacity	8.8 Gb/s
	Routing table size	32 entries (IPv4), 32 entries (IPv6)
	MAC address table size	8192 entries
Environment	Operating temperature	32°F to 104°F (0°C to 40°C)
	Operating relative humidity	10% to 90%, non-condensing
	Non-operating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Non-operating/Storage relative humidity	10% to 95%, noncondensing
Electrical characteristics	Frequency	50/60 Hz
	Voltage	100-240 VAC
	Maximum power rating	220 W
	PoE power	180 W
	Maximum power rating an	d maximum heat dissination are the worst-case theoretical maximum

Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.

PoE Power is the power supplied by the internal power supply, it is dependent on the type and quantity of power supplies and may be supplemented with the use of an External Power Supply (EPS).

Safety	IEC 60950-1; EN 60950-1; UL 60950-1 2nd Edition; CSA C22.2 No. 60950-1-07 2nd Edition
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	The HP 1910-24G Switch (JE006A) was formerly sold as the 3Com Baseline Plus 2928 (3CRBSG2893) and may ship with this product labeling. SFP ports and copper ports can work simultaneously, independent of each other to give a total of 28 Gigabit-capable ports.
Services	Refer to the Hewlett Packard Enterprise website at <u>http://www.hpe.com/networking/services</u> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office

### Standards and protocols Device management

(applies to all products in RFC 2819 RMON series)

### **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 RFC 2233 Interfaces MIB RFC 2571 SNMP Framework MIB RFC 2572 SNMP-MPD MIB RFC 2573 SNMP-Notification MIB RFC 2573 SNMP-Target 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

### **Network management**

IEEE 802.1AB Link Layer Discovery Protocol (LLDP) IEEE 802.1D (STP)

### QoS/Cos

IEEE 802.1p (CoS)

### Security

IEEE 802.1X Port Based Network Access Control

# Accessories

HPE 1910 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
	<u>HP Premier Flex LC/LC Multi-mode OM4 2 fiber 2m Cable</u>	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
	<u>HP Premier Flex LC/LC Multi-mode OM4 2 fiber 30m Cable</u>	QK736A
	HP Premier Flex LC/LC Multi-mode OM4 2 fiber 50m Cable	QK737A

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

HP X121 1G SFP LC SX Transceiver (J4858C) A small form-factor pluggable (SFP) Gigabit SX transceiver that provides a full-duplex Gigabit solution	1	1 LC 1000BASE-SX port; Duplex: full only 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) Transceiver form factor: SFP Operating temperature: 32°F to 158°F (0°C to 70°C) Operating relative humidity: 5% to 85%, noncondensing Nonoperating/Storage temperature: -40°F to 203°F (-40°C to 85°C) Altitude: up to 10,000 ft. (3 km)
up to 550 m on multimode fiber.	Electrical characteristics	Power consumption typical: 0.4 W Power consumption maximum: 0.7 W
	Cabling	Туре:
		• 62.5/125 $\mu m$ or 50/125 $\mu m$ (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;
		Maximum 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>
	Services	Cable length: 2-550m Fiber type: Multi Mode Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office
HP X121 1G SFP LC LX Transceiver (J4859C)	Ports Physical characteristics	1 LC 1000BASE-LX port (IEEE 802.3z Type 1000BASE-LX); Duplex: full only 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 Transceiver: An SFP format gigabit transceiver with LC connectors using LX technology.	Environment Cabling	Operating temperature: 32°F to 158°F (0°C to 70°C) Operating relative humidity: 0% to 85%, noncondensing Nonoperating/Storage temperature: -40°F to 212°F (-40°C to 100°C) Altitude: up to 10,000 ft. (3 km) Type:
		<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</li> </ul>

		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;
		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 Hewlett Packard Enterprise website at <u>http://www.hpe.com/networking/services</u> for details on the service- level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise 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)
	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;
		Maximum distance:
		• 100 m
	Notes	Power consumption is nominally 1 watt. For supported platforms and minimum software requirements to support

# Accessory Product Details this product, see the document titled "Support for the J8177C 1000Base-T<br/>Mini-GBIC" on the "HP Mini-GBICs and SFPs" Manuals Web page.<br/>The J8177C Gigabit copper mini-GBIC is not supported on dual-personality<br/>ports.<br/>The J8177C is capable of 100 Mb operation. This is supported on only the<br/>HP E8200zl, E5400zl, and HP E6200-24G-mGBIC yl Switches using<br/>software version K.12.21 or later. Use the "auto-100" port setting to enable<br/>100 Mb operation.<br/>Important: The earlier J8177B does not support 100 Mb operation. When<br/>used in the Switch gl 20-Port 10/100/1000 Module (J4908A), the J8177C<br/>mini-GBIC can be installed in either the upper or lower mini-GBIC<br/>port, but will block access to the other port. Services Refer to the Hewlett Packard Enterprise website at

**http://www.hpe.com/networking/services** for details on the servicelevel descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office

HP X120 1G SFP LC SX	Ports	1 LC 1000BASE-SX port		
Transceiver (JD118B)	Connectivity	Connector type	LC	
		Wavelength	850 nm	
A small form-factor pluggable (SFP) Gigabit SX transceiver that	Physical characteristics	Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)	
provides a full-duplex Gigabit solution up to		Full configuration weight	0.04 lb. (0.02 kg)	
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 = 220m • OM1 = 275m • OM2 = 500m • OM3 = Not Specified by standard		
		Cable length	up to 550m	
		Fiber type	Multi Mode	
	Services	Refer to the Hewlett Pac	kard Enterprise website at	
		<b>http://www.hpe.com/networking/services</b> for details on the service- level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office		
HP X120 1G SFP LC LX	Ports	1 SFP 1000BASE-LX port (IEEE 802.3z Type 1000BASE-LX)		
Transceiver (JD119B)	Connectivity	Connector type	LC	
		Wavelength	1300 nm	
A small form-factor pluggable (SFP) Gigabig	Physical characteristics	Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)	

LX transceiver the provides a full du	uplex		Full configuration weight	0.04 lb. (0.02 kg)
Gigabit solution up to 550m on MMF or 10Km		ectrical characteristic	s Power consumption typical	0.8 W
on SMF			Power consumption	1.0 W
			maximum	
	Ca	bling	Cable type: Either single mode or m	ultimode;
			Maximum distance: • 550m for Multimode • 10km for Singlemode	
			Fiber type	Both
	Se	rvices	http://www.hpe.com/ level descriptions and p	ckard Enterprise website at inetworking/services for details on the service- roduct numbers. For details about services and area, please contact your local Hewlett Packard
HP X120 1G SFF	P Ports	1 RJ-45 1000B	ASE-T port (IEEE 802.3ab	Type 1000BASE-T)
RJ45 T	Connectivi	ty Connector ty	pe RJ-	-45
	Physical	Dimensions	2.7	1(d) x 0.54(w) x 0.55(h) in. (6.88 x 1.37 x 1.4 cm)
(JD089B)	characteris	tics Full configura	ation weight 0.0	)7 lb. (0.03 kg)
	Electrical	Power consu	mption typical 0.8	S W
	characteris	tics Power consu	mption maximum 1.0	W
Cabling				ecommended), 100 Ù differential 4-pair unshielded air (STP) balanced, complying with IEEE 802.3ab
		Maximum dist • 100m	ance:	
		h <b>pe.com/networking/sei</b> umbers. For details about :	<b>rvices</b> for details on the service-level descriptions services and response times in your area, please	

Cable (AJ833A)

50/125  $\mu\text{m}$  (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
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

# **Accessory Product Details**

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: Bandwidth: For Laser sources: 2000/500 MHz-km @850/1300nm VCSEL Laser sources: 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links.</li> <li>CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber and designed to work in both the 850 and 1300 nm wavelength windows.</li> <li>BULK CABLE &amp; CABLE ASSEMBLY CONFIGURATION:</li> <li>Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.</li> <li>Jacket Color: Aqua for OM3 multimode per TIA 598</li> <li>Boot Color: White</li> <li>Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths &gt; 30 meters.</li> <li>Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.</li> <li>Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg</li> </ul> Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details about services and response times in your area, please contact your local Hewlett Packard
HP 1 m Multimode OM3 LC/LC Optical Cable (AJ834A)	Cabling	Enterprise sales office 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
	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.
		<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> </ul>

Accessory Product	Details	
		<ul> <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 Hewlett Packard Enterprise website at <u>http://www.hpe.com/networking/services</u> for details on the service- level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office
HP 2 m Multimode OM3 LC/LC Optical Cable (AJ835A)	Cabling	Cable type: 50/125 $\mu\text{m}$ (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:
	Notes	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.
		<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 Hewlett Packard Enterprise website at

Accessory Product	Details	
		<b>http://www.hpe.com/networking/services</b> for details on the service- level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office
HP 5 m Multimode OM3 LC/LC Optical Cable (AJ836A)	Cabling	Cable type: 50/125 $\mu\text{m}$ 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
	Notes	Cable Specs: This specification defines the detail requirements for a tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.
		<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 Hewlett Packard Enterprise website at http://www.hpe.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 Hewlett Packard Enterprise sales office
HP 15 m Multimode OM3 LC/LC Optical Cable (AJ837A)	3 Cabling	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.

### Maximum distance:

### 10Gbps Transfer Rate (Ethernet): 300m Notes Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end. Dimensions: Core diameter: $50 \pm 3.0$ um Cladding diameter: $125 \pm 3.0$ 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 Refer to the Hewlett Packard Enterprise website at Services http://www.hpe.com/networking/services for details on the servicelevel descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office Cabling HP 30 m Multimode Cable type: OM3 LC/LC Optical $50/125 \,\mu$ m (core/cladding) diameter, mulitimode fiber optic, with effective Cable (AJ838A) modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m; Maximum distance: 10Gbps Transfer Rate (Ethernet): 300m Notes Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end. Dimensions: Core diameter: $50 \pm 3.0$ um Cladding diameter: $125 \pm 3.0$ 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.

		<ul> <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 Hewlett Packard Enterprise website at		
		<b>http://www.hpe.com/networking/services</b> for details on the service- level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office		
HP 50 m Multimode	Cabling	Cable type:		
OM3 LC/LC Optical Cable (AJ839A)		50/125 $\mu\text{m}$ (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		
	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> </ul>		

Accessory Product	Details	
		• Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg
	Services	Refer to the Hewlett Packard Enterprise website at <u>http://www.hpe.com/networking/services</u> for details on the service- level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 1m Cable (QK732A)		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 Hewlett Packard Enterprise website at http://www.hpe.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 Hewlett Packard Enterprise sales office
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 2m Cable (QK733A)		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 Hewlett Packard Enterprise website at http://www.hpe.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 Hewlett Packard Enterprise 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)</li> </ul>
		<ul> <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> <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 Hewlett Packard Enterprise website at http://www.hpe.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 Hewlett Packard Enterprise 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.
		<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 Hewlett Packard Enterprise website at http://www.hpe.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 Hewlett Packard Enterprise sales office
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)
		<ul> <li>Jacket Color: Blue</li> <li>Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic</li> <li>Boot Color: White</li> </ul>
		• 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.
		<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 Hewlett Packard Enterprise website at
		<b>http://www.hpe.com/networking/services</b> for details on the service- level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise 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>Bandwidm: 5000 Min2-Kin @ 030nm (Laser)</li> <li>Jacket Color: Blue</li> <li>Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic</li> <li>Boot Color: White</li> </ul>
		<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</li> </ul>
	Services	@ 23°C as tested in accordance with EIA 455-45 Refer to the Hewlett Packard Enterprise website at <u>http://www.hpe.com/networking/services</u> for details on the service- level descriptions and product numbers. For details about convices and
		level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard

Enterprise sales office

# Summary of Changes

Date	Version History	Action	Description of Change:
01-Dec-2015	From Version 14 to 15	Changed	Overview, Features and Benefits and Technical
			Specifications updated.
01-Dec-2014	From Version 12 to 14	Changed	Updated Warranty and support and Product Overview
25-Feb-2014	From Version 11 to 12	Changed	Internal and External Power Supplies, Transceivers, and
			Cables were revised.
09-Dec-2013	From Version 10 to 11	Changed	Configuration was revised.
09-Oct-2013	From Version 9 to 10	Removed	HP X124 1G SFP LC SX and HP X124 1G SFP LC LX
			Transceivers were removed.
11-Sep-2013	From Version 8 to 9	Added	Configuration was added.
10-Jun-2013	From Version 7 to 8	Added	OM4 cables were added.
14-May-2012	From Version 6 to 7	Changed	Features and Benefits were updated
			The product description and Key Features were also updated
			3 new models were added.
26-Sep-2011	From Version 4 to 6	Changed	The QuickSpecs was completely revised, including
			changing the title.
20-Jun-2011	From Version 2 to 4	Changed	Features and Benefits were updated
			The product description and Key Features were also updated
20-Oct-2010	From Version 1 to 2	Changed	Features and Benefits were reorganized and updated Layer 3 routing
			Ports, Notes, Services note and General Protocols were revised throughout Models
			PremierFlex Cables were added

## **Summary of Changes**



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