Overview

Models

HP 1910-48G Switch	JE009A
HP 1910-24G-PoE (365 W) Switch	JE007A
HP 1910-24G-PoE (170 W) 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 routes for network segmentation and expansion
- Access control lists for granular security control
- Spanning Tree: STP, RSTP, and MSTP
- Lifetime warranty

Product overview

The HP 1910 Switch Series are 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 models: eight gigabit and five Fast Ethernet. 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 models are available with two different levels of PoE, or without. The 10/100 models are available with 8, 24 and 48 ports, and come with two additional combo uplink ports; the 8- and 24-port fast ethernet models are available with or without PoE.

The HP 1910 Switch Series is a great value, with 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. These switches come with a lifetime warranty covering the unit, fans, power supplies and 24X7 phone support for first three years.

Features and benefits

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



Overview

- Single IP management
- enables management of up to four HP 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 simultan

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 clock-dependent 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

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

Overview

- 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
 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

Overview

• 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 BDDU packets when STD is enabled globally but a

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 HP Gigabit Ethernet IntelliJack switches; the HP 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

• 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



Overview

Warranty and support

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

†HP warranty includes repair or replacement of hardware for as long as you own the product, with next business day advance replacement (available in most countries). The disk drive included with HP AllianceOne Advanced Services and Services zl Modules, HP Threat Management Services zl Module, HP AllianceOne Extended zl Module with Riverbed Steelhead, HP MSM765zl Mobility Controller and HP Survivable Branch Communication zl Module powered by Microsoft Lync has a five-year hardware warranty. For details, refer to the Software license and hardware warranty statements at www.hp.com/networking/warranty.



Configuration

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

HP 1910-8 Switch • 8 RJ-45 autosensing 10/100 ports • 2 SFP dual-personality 1000 Mbps ports • min=0 \ max=2 SFP Transceivers • 1U - Height	JG536A See Configuration Note: 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 Note: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 Note: 2,4
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 Note: 2,4
HP 1910-8G-PoE+ (180W) Switch • 8 RJ-45 auto-negotiating 10/100/1000 ports • 1 SFP 1000 Mbps port • min=0 \ max=1 SFP Transceiver • 1U - Height	JG350A See Configuration Note:2,4
HP 1910-16G Switch • 16 RJ-45 auto-negotiating 10/100/1000 ports • 4 SFP 1000 Mbps port • min=0 \ max=4 SFP Transceivers • 1U - Height	JE005A See Configuration Note:1, 2
HP 1910-24G-PoE (170W) Switch 24 RJ-45 auto-negotiating 10/100/1000 ports 4 SFP 1000 Mbps ports min=0 \ max=4 SFP Transceivers 1U - Height	JE008A See Configuration Note:1, 2
HP 1910-24G-PoE (365W) Switch	JE007A



Configuration	
 24 RJ-45 auto-negotiating 10/100/1000 ports 4 SFP 1000 Mbps ports min=0 \ max=4 SFP Transceivers 1U - Height 	See Configuration Note:1, 2
HP 1910-24G Switch • 24 RJ-45 auto-negotiating 10/100/1000 ports • 4 SFP 1000 Mbps ports • min=0 \ max=4 SFP Transceivers • 1U - Height	JE006A See Configuration Note:1, 2
HP 1910-24 Switch • 24 RJ-45 autosensing 10/100 ports • 2 SFP dual-personality 1000 Mbps ports • min=0 \ max=2 SFP Transceivers • 1U - Height	JG538A See Configuration Note:2,3
HP 1910-24-PoE+ Switch • 24 RJ-45 auto-negotiating 10/100 ports • 2 SFP dual-personality 1000 Mbps ports • min=0 \ max=2 SFP Transceivers • 1U - Height	JG539A See Configuration Note: 2,3
HP 1910-48G Switch • 48 RJ-45 auto-negotiating 10/100/1000 ports • 4 SFP 1000 Mbps ports • min=0 \ max=4 SFP Transceivers • 1U - Height	JE009A See Configuration Note:1, 2
HP 1910-48 Switch • 48 RJ-45 autosensing 10/100 ports • 2 RJ-45 autosensing10/100/1000 ports • 2 SFP 1000 Mbps ports	JG540A See Configuration Note: 2,3

- min=0 \ max=2 SFP Transceivers
- 1U Height

Configuration

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	JD089A
	HP X125 1G SFP LC LH40 1310nm XCVR	JD061A
	HP X120 1G SFP LC LH40 1550nm XCVR	JD062A
	HP X125 1G SFP LC LH70 Transceiver	JD063B
	HP X120 1G SFP LC BX 10-U Transceiver	JD098B
	HP X120 1G SFP LC BX 10-D Transceiver	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	J4858C
	HP X121 1G SFP LC LX Transceiver	J4859C
	HP X120 1G SFP LC LX Transceiver	JD119B
Note 4	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
	HP X125 1G SFP LC LH40 1310nm XCVR	JD061A
	HP X120 1G SFP LC LH40 1550nm XCVR	JD062A
	HP X125 1G SFP LC LH70 Transceiver	JD063B



Configuration

Internal Power Supplies

No Power supplies

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 XCVR	JD061A
HP X120 1G SFP LC LH40 1550nm XCVR	JD062A
HP X125 1G SFP LC LH70 Transceiver	JD063B

Cables

Multi-Mode Cables

833A
834A
835A
836A
837A
838A
839A

Switch Ports and Performance

Configuration

Model Name	10/100 MB RJ-45 Ports	10/100/1000 MB RJ-45 Ports	10/100/1000 MB RJ-45 OR 1000 MB SFP+ Combo Ports	1000 MB SFP+ Ports	Switching Capacity in Gigabits Per Second (Gbps)	Switching Capacity Maximum in Millions of Packets per Second (Mpps) for 64-byte Packets
1910-8	8		1		3.6 Gbps	2.7 Mpps
1910-8-PoE+	8 (PoE+)		1		3.6 Gbps	2.7 Mpps
1910-24	24		2		8.8 Gbps	6.6 Mpps
1910-24-PoE+	24 (PoE+)		2		8.8 Gbps	6.6 Mpps
1910-48	48		2		13.6 Gbps	10.1 Mpps
1910-8G		8		1	18 Gbps	13.4 Mpps
1910-8G-PoE+ (65W)		8 (PoE+)		1	18 Gbps	13.4 Mpps
1910-8G-PoE+ (180W)		8 (PoE+)		1	18 Gbps	13.4 Mpps
1910-16G		16		4	40 Gbps	29.8 Mpps
1910-24G		24		4	56 Gbps	41.7 Mpps
1910-24G- PoE(170W)		24 (PoE)		4	56 Gbps	41.7 Mpps
1910-24G-PoE (365W)		24 (PoE)		4	56 Gbps	41.7 Mpps
1910-48G		48		4	104 Gbps	77.4 Mpps

Supported Transceivers

Model Name	LX Fiber	SX Fiber	RJ45 1GBase-T	Other
1910-8	J4859C	J4858C	N/A	
	JD119B	JD493A		
	JD494A			
1910-8-PoE+	J4859C	J4858C	N/A	
	JD119B	JD493A		
	JD494A			
1910-24	J4859C	J4858C	N/A	
	JD119B	JD493A		
	JD494A			
1910-24-PoE+	J4859C	J4858C	N/A	
	JD119B	JD493A		
	JD494A			
1910-48	J4859C	J4858C	N/A	
	JD119B	JD493A		
	JD494A			
1910-8G	J4859C	J4858C	J8177C	JD061A
	JD119B	JD118B	JD089B	JD062A
	JD494A	JD493A		JD063B



Configuration

1910-8G-PoE+ (65W)	J4859C	J4858C	J8177C	JD061A
	JD119B	JD118B	JD089B	JD062A
	JD494A	JD493A		JD063B
1910-8G-PoE+ (180W)	J4859C	J4858C	J8177C	JD061A
	JD119B	JD118B	JD089B	JD062A
	JD494A	JD493A		JD063B
1910-16G	J4859C	J4858C	J8177C	JD061A
	JD118A	JD118A	JD089B	JD062A
	JD119B	JD118B	0231A085	JD063B
	JD494A	JD493A		JD098B
	0231A563	0231A562		JD099B
1910-24G	J4859C	J4858C	J8177C	JD061A
	JD118A	JD118A	JD089B	JD062A
	JD119B	JD118B	0231A085	JD063B
	JD494A	JD493A		JD098B
	0231A563	0231A562		JD099B
1910-24G-PoE(170W)	J4859C	J4858C	J8177C	JD061A
	JD118A	JD118A	JD089B	JD062A
	JD119B	JD118B	0231A085	JD063B
	JD494A	JD493A		JD098B
	0231A563	0231A562		JD099B
1910-24G-PoE (365W)	J4859C	J4858C	J8177C	JD061A
	JD118A	JD118A	JD089B	JD062A
	JD119B	JD118B	0231A085	JD063B
	JD494A	JD493A		JD098B
	0231A563	0231A562		JD099B
1910-48G	J4859C	J4858C	J8177C	JD061A
	JD118A	JD118A	JD089B	JD062A
	JD119B	JD118B	0231A085	JD063B
	JD494A	JD493A		JD098B
	0231A563	0231A562		JD099B

Power over Ethernet

Model Name	PoE IEEE 802.3af	PoE+ IEEE 802.3at	IntelliJack PoE+	PoE Available Power
1910-8-PoE+	yes	yes	yes	62 Watts
1910-24-PoE+	yes	yes	yes	154 Watts
1910-8G-PoE+ (65W)	yes	yes	yes	65 Watts
1910-8G-PoE+ (180W)	yes	yes	yes	180 Watts
1910-24G-PoE(170W)	yes		yes	170 Watts
1910-24G-PoE (365W)	yes		yes	365 Watts



Technical Specifications

HP 1910-48G Switch (JE009A)

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		
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	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 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	
Electrical characteristics		50/60 Hz	
Achieved Miercom Certified	Voltage	100-240 VAC	
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; EN	l 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 give a total of 52 Gigabit-capable ports.		
Services	3-year, 4-hour onsite, 13x5 coverage for hardware (UV786E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UW485E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UW036E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UW488E)		



Technical Specifications

3-year, 24x7 SW phone support, software updates (UV807E) 3-year, 24x7 SW phone support, software updates (UV789E) 1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (HR682E) 1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR683E) 1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (HR684E) Installation with minimum configuration, system-based pricing (UY901E) Installation with HP-provided configuration, system-based pricing (UY902E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UV787E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UV805E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UW034E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UW486E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW037E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW489E) 4-year, 24x7 SW phone support, software updates (UV790E) 4-year, 24x7 SW phone support, software updates (UV808E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UV788E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UV806E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UW035E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UW487E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW038E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW490E) 5-year, 24x7 SW phone support, software updates (UV791E) 5-year, 24x7 SW phone support, software updates (UV809E) 3 Yr 6 hr Call-to-Repair Onsite (UW491E) 3 Yr 6 hr Call-to-Repair Onsite (UW039E) 4 Yr 6 hr Call-to-Repair Onsite (UW492E) 4 Yr 6 hr Call-to-Repair Onsite (UW040E) 5 Yr 6 hr Call-to-Repair Onsite (UW493E) 5 Yr 6 hr Call-to-Repair Onsite (UW041E) 1-year, 6 hour Call-To-Repair Onsite for hardware (HR686E)

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 1910-24G-PoE (365 W) Switch (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	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included)		
Performance	100 Mb Latency < 5 µs		



Technical Specifications

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	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 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	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; VCCI Class 61000-3-3; ICES-003 Class	ass A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 61000-3-2 2000, A
Management	IMC - Intelligent Manageme IEEE 802.3 Ethernet MIB	ent Center; limited command-line interface; Web browser; SNMP Manager;
Notes	SFP ports and copper ports can work simultaneously, independent of each other to give a total of 28 Gigabit-capable ports.	
Services	 3-year, 4-hour onsite, 24x7 coverage for hardware (UW485E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UW036E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UW488E) 3-year, 24x7 SW phone support, software updates (UV807E) 3-year, 24x7 SW phone support, software updates (UV789E) 1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (HR682E) 1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR683E) 1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (HR684E) Installation with minimum configuration, system-based pricing (UY901E) Installation with minimum configuration, system-based pricing (UY902E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UV787E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UV805E) 	

Technical Specifications

4-year, 4-hour onsite, 24x7 coverage for hardware (UW034E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UW486E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW037E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW489E) 4-year, 24x7 SW phone support, software updates (UV790E) 4-year, 24x7 SW phone support, software updates (UV808E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UV788E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UV806E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UW035E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UW487E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW038E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW490E) 5-year, 24x7 SW phone support, software updates (UV791E) 5-year, 24x7 SW phone support, software updates (UV809E) 3 Yr 6 hr Call-to-Repair Onsite (UW491E) 3 Yr 6 hr Call-to-Repair Onsite (UW039E) 4 Yr 6 hr Call-to-Repair Onsite (UW492E) 4 Yr 6 hr Call-to-Repair Onsite (UW040E) 5 Yr 6 hr Call-to-Repair Onsite (UW493E) 5 Yr 6 hr Call-to-Repair Onsite (UW041E) 1-year, 6 hour Call-To-Repair Onsite for hardware (HR686E)

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.

24 RJ-45 auto-negotiating 10/100/1000 PoE ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3 u Type Ports 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 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 Mpps (64-byte packets) **Routing/Switching** 56 Gbps capacity **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)

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



Technical Specifications

	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	Gigabit-capable ports. 3-year, 4-hour onsite, 24x7 coverage for hardware (UW485E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UW036E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UW488E) 3-year, 24x7 SW phone support, software updates (UV807E) 3-year, 24x7 SW phone support, software updates (UV789E) 1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR682E) 1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR683E) 1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR683E) 1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (HR684E) Installation with minimum configuration, system-based pricing (UY901E) Installation with HP-provided configuration, system-based pricing (UY902E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UV787E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UW034E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UW034E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UW034E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW037E) 4-year, 24x7 SW phone support, software updates (UV790E) 4-year, 24x7 SW phone support, software updates (UV708E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UV788E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UV805E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UW035E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UW035E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UW035E) 5-year, 4-hour	



Technical Specifications

	-	(7 coverage for hardware, 24x7 software phone (UW490E)
		ipport, software updates (UV791E)
		ipport, software updates (UV809E) seite (UW491E)
	3 Yr 6 hr Call-to-Repair Onsite (UW491E) 3 Yr 6 hr Call-to-Repair Onsite (UW039E) 4 Yr 6 hr Call-to-Repair Onsite (UW492E) 4 Yr 6 hr Call-to-Repair Onsite (UW040E)	
	5 Yr 6 hr Call-to-Repair Or	
	5 Yr 6 hr Call-to-Repair Or	
	1-year, 6 hour Call-To-Re	pair Onsite for hardware (HR686E)
		www.hp.com/networking/services for details on the service-level descriptions details about services and response times in your area, please contact your local
HP 1910-24G Switch (JEOC	06A)	
Ports	24 RJ-45 auto-negotiating 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-T IEEE 802.3ab Type 1000BASE-T) 4 SFP 1000 Mbps ports	
	1 RJ-45 console port to ac Supports a maximum of 2 combination	cess limited CLI port 4 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	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
	-	



Technical Specifications

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	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 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 port Gigabit-capable ports.	s can work simultaneously, independent of each other to give a total of 28	
Services	3-year, 4-hour onsite, 24× 3-year, 4-hour onsite, 24× 3-year, 24×7 SW phone su 3-year, 24×7 SW phone su 3-year, 24×7 SW phone su 1-year, post-warranty, 4- 1-year, post-warranty, 4- (HR684E) Installation with minimum Installation with HP-provi 4-year, 4-hour onsite, 13× 4-year, 4-hour onsite, 24× 4-year, 4-hour onsite, 24× 5-year, 24×7 SW phone su 5-year, 24×7 SW phone su	nsite (UW039E) nsite (UW492E) nsite (UW040E) nsite (UW493E)	

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 1910-16G Switch (JE005A)		
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 access limited CLI port Supports a maximum of 16 autosensing 10/100/1000 ports plus 4 1000BASE-X SFP ports, or a combination	
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	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 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	l 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 20 Gigabit-capable ports.	
Services	3-year, 4-hour onsite, 24x	5 coverage for hardware (UV786E) 7 coverage for hardware (UW485E) 7 coverage for hardware, 24x7 SW phone support and SW updates (UW036E)



Technical Specifications

3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UW488E) 3-year, 24x7 SW phone support, software updates (UV807E) 3-year, 24x7 SW phone support, software updates (UV789E) 1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (HR682E) 1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR683E) 1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (HR684E) Installation with minimum configuration, system-based pricing (UY901E) Installation with HP-provided configuration, system-based pricing (UY902E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UV787E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UV805E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UW034E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UW486E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW037E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW489E) 4-year, 24x7 SW phone support, software updates (UV790E) 4-year, 24x7 SW phone support, software updates (UV808E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UV788E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UV806E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UW035E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UW487E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW038E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UW490E) 5-year, 24x7 SW phone support, software updates (UV791E) 5-year, 24x7 SW phone support, software updates (UV809E) 3 Yr 6 hr Call-to-Repair Onsite (UW491E) 3 Yr 6 hr Call-to-Repair Onsite (UW039E) 4 Yr 6 hr Call-to-Repair Onsite (UW492E) 4 Yr 6 hr Call-to-Repair Onsite (UW040E) 5 Yr 6 hr Call-to-Repair Onsite (UW493E) 5 Yr 6 hr Call-to-Repair Onsite (UW041E) 1-year, 6 hour Call-To-Repair Onsite for hardware (HR686E)

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 1910-8G Switch (JG348	BA)	
Ports	IEEE 802.3ab Type 1000BA 1 SFP 1000 Mbps port 1 RJ-45 console port to acc	
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	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 13.4 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 numbers infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged ted.
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 port and copper ports capable ports.	work simultaneously, independent of each other to give a total of 9 Gigabit-
Services		: www.hp.com/networking/services for details on the service-level numbers. For details about services and response times in your area, please s office.

HP 1910-8G-PoE+ (65W) Switch (JG349A)



Technical Specifications

Services		www.hp.com/networking/services for details on the service-level umbers. For details about services and response times in your area, please office.
Notes	SFP port and copper ports work simultaneously, independent of each other to give a total of 9 Gigabit- capable ports.	
Management	IMC - Intelligent Management Center; limited command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB	
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	
Safety		60950-1; CAN/CSA-C22.2 No. 60950-1-03
	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.	
	Frequency	50/60 Hz
	PoE power	65 W
	Maximum power rating	93 W
Electrical characteristics	Voltage	100-240 VAC
	Non-operating/Storage relative humidity	10% to 95%, non-condensing
	Non-operating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Operating relative humidity	10% to 90%, non-condensing
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	MAC address table size	8192 entries
	Routing table size	32 entries
	Routing/Switching capacity	18 Gbps
	Throughput	up to 13.4 million pps
	1000 Mb Latency	< 5 µs
Performance	100 Mb Latency	< 5 µs
Mounting	Mounts in an EIA-standard	19 in. telco rack or equipment cabinet (hardware included)
Memory and processor	Module	ARM @ 333 MHz, 128 MB flash, 128 MB RAM; packet buffer size: 512 KB
	Weight	6.61 lb (3 kg), Fully loaded
Physical characteristics	Dimensions	$10.24(w) \times 11.81(d) \times 1.72(h)$ in (26 x 30 x 4.36 cm) (10 height)
	1 SFP 1000 Mbps port 1 RJ-45 console port to acc Supports a maximum of 8 a	ess limited CLI port autosensing 10/100/1000 ports plus 1 1000BASE-X SFP ports, or a combination



Technical Specifications

HP 1910-8G-PoE+ (180W) Switch (JG350A)

HP 1910-8G-POE+ (180W)	Switch (JUSSOA)	
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	
	••	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	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 13.4 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	Frequency	50/60 Hz
	Voltage	100-240 VAC
	Maximum power rating	228 W
	PoE power	180 W
	provided for planning the i in, and all modules popula	d maximum heat dissipation are the worst-case theoretical maximum numbers nfrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged ted. pplied by the internal power supply. It is dependent on the type and quantity of
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 Manageme 802.3 Ethernet MIB	ent Center; limited command-line interface; Web browser; SNMP Manager; IEEE
Notes	SFP port and copper ports capable ports.	work simultaneously, independent of each other to give a total of 9 Gigabit-
Services		www.hp.com/networking/services for details on the service-level descriptions details about services and response times in your area, please contact your local



Technical Specifications

HP 1910-24 Switch (JG538	BA)	
Ports	24 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX); 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, with optional module	
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	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%, 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	12 W
		d maximum heat dissipation are the worst-case theoretical maximum numbers nfrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged ted.
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	may ship with this product	IEO06A) was formerly sold as the 3Com Baseline Plus 2928 (3CRBSG2893) and labeling. s can work simultaneously, independent of each other to give a total of 28



Technical Specifications

Services

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

HP 1910-8 Switch (JG536A)		
Ports	8 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX); 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	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
Mounting	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 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	8 W
		d maximum heat dissipation are the worst-case theoretical maximum numbers nfrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged ted.
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 Managem IEEE 802.3 Ethernet MIB	ent Center; limited command-line interface; Web browser; SNMP Manager;



Technical Specifications

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 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 1910-48 Switch (JG540A) Ports 48 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX); Duplex: half or full 2 SFP 1000 Mbps ports 2 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3 u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only 1 RJ-45 console port to access limited CLI port Supports a maximum of 48 autosensing 10/100 ports plus 2 1000BASE-X SFP ports plus 2 autosensing 10/100/1000 ports, or a combination **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 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 17.6 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** 10% to 90%, noncondensing humidity Non-operating/Storage -40°F to 158°F (-40°C to 70°C) temperature Non-operating/Storage 10% to 95%, noncondensing relative humidity **Electrical characteristics** Frequency 50/60 Hz 100-240 VAC Voltage 22 W Maximum power rating 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 IEC 60950-1; EN 60950-1; UL 60950-1 2nd Edition; CSA C22.2 No. 60950-1-07 2nd Edition



Technical Specifications

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 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 1910-8-PoE+ Switch (J	G537A)	
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	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 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



Technical Specifications

	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 a 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 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 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	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	



Technical Specifications

Electrical characteristics	Frequency	50/60 Hz
	Voltage	100-240 VAC
	Maximum power rating	220 W
	PoE power	180 W
	provided for planning the in in, and all modules populat PoE Power is the power su	d maximum heat dissipation are the worst-case theoretical maximum numbers nfrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged ted. pplied by the internal power supply, it is dependent on the type and quantity of e supplemented with the use of a 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 Cl 61000-3-2 2000, 61000-3	ass A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN -3; ICES-003 Class A
Management	IMC - Intelligent Manageme SNMP Manager; IEEE 802.3	ent Center; limited command-line interface; Web browser; Ethernet MIB
Notes	may ship with this product	IE006A) was formerly sold as the 3Com Baseline Plus 2928 (3CRBSG2893) and labeling. s can work simultaneously, independent of each other to give a total of 28
Services		www.hp.com/networking/services for details on the service-level umbers. For details about services and response times in your area, please office.

Standards and protocols Device management

(applies to all products in series)

RFC 2819 RMON

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



Technical Specifications

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 2665 Ethernet-Like-MIB RFC 2668 802.3 MAU 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

HP 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 X124 1G SFP LC SX Transceiver	JD493A
	HP X124 1G SFP LC LX Transceiver	JD494A
	HP X120 1G SFP RJ45 T Transceiver	JD089B
	Cables	
	HP .5m Multi-mode OM3 LC/LC Optical Cable	AJ833A
	HP 1m Multi-mode OM3 LC/LC Optical Cable	AJ834A
	HP 2m Multi-mode OM3 LC/LC Optical Cable	AJ835A
	HP 5m Multi-mode OM3 LC/LC Optical Cable	AJ836A
	HP 15m Multi-mode OM3 LC/LC Optical Cable	AJ837A
	HP 30m Multi-mode 0M3 LC/LC Optical Cable	AJ838A
	HP 50m Multi-mode 0M3 LC/LC Optical 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: $2.24(d) \times 0.54(w) \times 0.48(h)$ in. $(5.69 \times 1.37 \times 1.22 \text{ cm})$
	inysical characteristics	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 full-duplex Gigabit solution		Operating relative humidity: 5% to 85%, noncondensing
up to 550 m on multimode		Nonoperating/Storage temperature: -40°F to 203°F (-40°C to 85°C)
fiber.		Altitude: up to 10,000 ft. (3 km)
	Electrical characteristics	
		Power consumption maximum: 0.7 W
	Cabling	Туре:
		 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;
		Maximum distance:
		 2-220 m (62.5 μm core diameter, 160 MHz*km bandwidth 2-275 m (62.5 μm core diameter, 200 MHz*km bandwidth 2-500 m (50 μm core diameter, 400 MHz*km bandwidth) 2-550 m (50 μm core diameter, 500 MHz*km bandwidth)
		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 format gigabit transceiver with LC		Operating relative humidity: 0% to 85%, noncondensing
connectors using LX		Nonoperating/Storage temperature: -40°F to 212°F (-40°C to 100°C)
technology.		Altitude: up to 10,000 ft. (3 km)
	Cabling	Туре:
		 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;
		Maximum distance:

Maximum distance:



Accessory Product De	etails	
		 2-550 m (multimode 62.5 µm core diameter, 500 MHz*km bandwidth) 2-550 m (multimode 50 µm core diameter, 400 MHz*km bandwidth) 2-550 m (multimode 50 µm core diameter, 500 MHz*km bandwidth) 2-10,000 m (single-mode fiber)
	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	Ports	1 RJ-45 1000BASE-T port (IEEE 802.3ab Type 1000BASE-T); Duplex: full only
Transceiver (J8177C)	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)
HP X121 1G SFP RJ45 T Transceiver: An SFP format gigabit transceiver with	Environment	Operating temperature: 32°F to 158°F (0°C to 70°C); with 100 LFM airflow over the SFP module
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 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
		port, but will block access to the other port.



Accessory Product Details

	Services	the service-level description	www.hp.com/networking/services for details on ns and product numbers. For details about services area, please contact your local HP 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	Physical characteristics	Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)
transceiver that provides a		Full configuration weight	0.04 lb. (0.02 kg)
full-duplex Gigabit 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 = 220 • OM1 = 275m • OM2 = 500m • OM3 = Not Specified by st	
		Cable length	up to 550m
		Fiber type	Multi Mode
	Services	the service-level descriptio	www.hp.com/networking/services for details on ns and product numbers. For details about services area, please contact your local HP 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 LX transceiver that provides a full duplex Gigabit solution up to 550m on MMF or 10Km on SMF	Physical characteristics	Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)
		Full configuration weight	0.04 lb. (0.02 kg)
	Electrical characteristics	Power consumption typical	0.8 W
		Power consumption maximum	1.0 W
	Cabling	Cable type: Either single mode or multi	mode;
		Maximum distance: • 550m for Multimode • 10km for Singlemode	



Accessory Product Details

	Services	the service-level descriptio	www.hp.com/networking/services for details on ns and product numbers. For details about services area, please contact your local HP sales office.
HP X124 1G SFP LC SX	Ports	1 LC 1000BASE-SX port	
Transceiver (JD493A)	Connectivity	Connector type	LC
		Wavelength	850 nm
JD493A HP X124 1G SFP LC 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		Full configuration weight	0.04 lb. (0.02 kg)
Gigabit solution up to 550m on Multi Mode fiber.	Electrical characteristics	Power consumption typical	0.8 W
		Power consumption maximum	1.0 W
	Cabling	Maximum distance: • 220m-550m	
		Fiber type	Multi Mode
	Services	the service-level descriptio	www.hp.com/networking/services for details on ns and product numbers. For details about services rarea, please contact your local HP sales office.
HP X124 1G SFP LC LX	Ports	1 LC 1000BASE-LX port (IEEE 802.3z Type 1000BASE-LX)	
Transceiver (JD494A)	Connectivity	Connector type	LC
		Wavelength	1300 nm
	Physical characteristics	Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)
		Full configuration weight	0.04 lb. (0.02 kg)
		Transceiver form factor	SFP
	Electrical characteristics	Power consumption typical	0.8 W
		Power consumption maximum	1.0 W
	Cabling	Maximum distance: • 500m for Multimode • 10km for Singlemode	
	Services	the service-level descriptio	www.hp.com/networking/services for details on ns and product numbers. For details about services area, please contact your local HP sales office.



Accessory Product De	etails		
HP X120 1G SFP RJ45 T Transceiver (JD089B)	Ports Connectivity	Connector type	IEEE 802.3ab Type 1000BASE-T) RJ-45
	Physical characteristics	Dimensions	2.71(d) x 0.54(w) x 0.55(h) in. (6.88 x 1.37 x 1.4 cm)
		Full configuration weight	0.07 lb. (0.03 kg)
	Electrical characteristics	Power consumption typical	0.8 W
		Power consumption maximum	1.0 W
	Cabling		E or better recommended), 100 Ù differential 4- r (UTP) or shielded twisted pair (STP) balanced, ab 1000BASE-T
		Maximum distance: • 100m	
	Services	the service-level descriptio	www.hp.com/networking/services for details on ns and product numbers. For details about services rarea, please contact your local HP sales office.
•		diameter, mulitimode fiber optic, with effective 4Hz/km as detailed in TIA-492AAAC for distances of	
		Maximum distance : 10Gbps Transfer Rate (Ethe	ernet): 300m
	Notes		I duplex fiber optic multimode OM3 50/125 um net assembly with LC duplex connectors on one end on other end.
		Coating diameter: 24	
		 Optical glass: Bandw @850/1300nm. 	idth: For LED sources: 1500/500 MHz-km
			vidth: For Laser sources: 2000/500 MHz-km EL Laser sources: 600 / 600 meters @850/1300nm compliant links.
			luplex zipcord graded index 50/125um multimode igned to work in both the 850 and 1300 nm s
		BULK CABLE & CABLE	ASSEMBLY CONFIGURATION: r Grade - Low Smoke Zero Halogen thermoplastic.
		 Jacket Color: Aqua for 	or OM3 multimode per TIA 598
		 Boot Color: White Insertion Loss: less t 	han 0.5 dB @ 850 with LED source, 0.003 dB/M
		added for lengths > 3Maximum Cable atte	30 meters. nuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310



Accessory Product D	Details	
		 nm @ 23°C as tested in accordance with EIA 455-46. Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg
	Services	Refer to the HP website at www.hp.com/networking/services 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 1 m Multimode OM3 LC/LC Optical Cable (AJ834A)	Cabling	Cable type : 50/125 μm (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m
		Maximum distance : 10Gbps Transfer Rate (Ethernet): 300m
	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 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm. Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links. CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows. BULK CABLE & CABLE ASSEMBLY CONFIGURATION: Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic. Jacket Color: Aqua for OM3 multimode per TIA 598 Boot Color: White Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters. Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46. Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg
	Services	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.



Accessory Product Details			
HP 2 m Multimode OM3 LC/LC Optical Cable (AJ835A)	Cabling	Cable type : 50/125 μm (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m;	
		Maximum distance : 10Gbps Transfer Rate (Ethernet): 300m	
	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 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm. Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links. CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows. BULK CABLE & CABLE ASSEMBLY CONFIGURATION: Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic. Jacket Color: Aqua for OM3 multimode per TIA 598 Boot Color: White Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters. Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46. Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg 	
	Services	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.	

Accessory Product D	etails	
HP 5 m Multimode OM3 LC/LC Optical Cable (AJ836A)	Cabling	Cable type : 50/125 μm core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m;
		Maximum distance: 10Gbps Transfer Rate (Ethernet): 300m
	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.
		 Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm. Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links. CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows. BULK CABLE & CABLE ASSEMBLY CONFIGURATION: Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic. Jacket Color: Aqua for OM3 multimode per TIA 598 Boot Color: White Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters. Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46. Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg
	Services	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.



Accessory Product Details		
HP 15 m Multimode OM3 LC/LC Optical Cable (AJ837A)	Cabling	Cable type : 50/125 μm (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m;
		Maximum distance : 10Gbps Transfer Rate (Ethernet): 300m
	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 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm. Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links. CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows. BULK CABLE & CABLE ASSEMBLY CONFIGURATION: Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic. Jacket Color: Aqua for OM3 multimode per TIA 598 Boot Color: White Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters. Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46. Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg
	Services	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.

Accessory Product Details		
HP 30 m Multimode OM3 LC/LC Optical Cable (AJ838A)	Cabling	Cable type : 50/125 μm (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m;
		Maximum distance : 10Gbps Transfer Rate (Ethernet): 300m
	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 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm. Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links. CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows. BULK CABLE & CABLE ASSEMBLY CONFIGURATION: Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic. Jacket Color: Aqua for OM3 multimode per TIA 598 Boot Color: White Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters. Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46. Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg
	Services	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.



Accessory Product Details		
HP 50 m Multimode OM3 LC/LC Optical Cable (AJ839A)	Cabling	Cable type : 50/125 μm (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m;
		Maximum distance : 10Gbps Transfer Rate (Ethernet): 300m
	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 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm. Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links. CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows. BULK CABLE & CABLE ASSEMBLY CONFIGURATION: Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic. Jacket Color: Aqua for OM3 multimode per TIA 598 Boot Color: White Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths > 30 meters. Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46. Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg
	Services	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.



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



Accessory Product D	etails	
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 5m Cable (QK734A)	Notes	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.
		 Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um
		• Bandwidth: 3000 MHz-km @ 850nm (Laser)
		 Jacket Color: Blue Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic Boot Color: White
		• Outer Jacket Print: HP PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable.
		 Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m
		• Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45
	Services	Refer to the HP website at www.hp.com/networking/services 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 on each end.
15m Cable (QK735A)		 Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um
		• Bandwidth: 3000 MHz-km @ 850nm (Laser)
		Jacket Color: Blue Jacket Material: Bisor Crade Low Smoke Zero Halegen (LSZII) thermosplastic
		 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.



Accessory Product Details

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 on each end.
30m Cable (QK736A)		 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 Multi-mode OM4 2 fiber 50m Cable (QK737A)	Notes	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.
		 Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um Bandwidth: 3000 MHz-km @ 850nm (Laser)
		 Jacket Color: Blue Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic Boot Color: White
		 Outer Jacket Print: HP PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable. Insertion Loss: Less than 0.5dB @ 850nm with LED source, 0.003dB/m added for lengths >30m
		• Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45
	Services	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.

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