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

## Key features

- Customized operation using intuitive Web interface
- Layer 3 static routing with 32 routes
- Access control lists
- Spanning Tree: STP, RSTP, and MSTP
- Lifetime warranty

## Product overview

HP 1910 switches are advanced smart managed fixed-configuration Gigabit Ethernet lite Layer 3 switches designed for small businesses looking for key enhanced features in an easy-to-administer solution. The series has eight models: 8-, 16-, 24-, and 48-port 10/100/1000 non-PoE models; and two 8-port and two 24-port 10/100/1000 PoE models. All switches have additional true Gigabit SFP ports for fiber connectivity. HP 1910 models support rack mounting or desktop operation and use variable-speed fans for quiet operation. The HP 1910 switches operate at full wire-speed IPv6, supporting QoS traffic prioritization and security features such as 802.1X network login, access control lists, and denial-of-service prevention. Customizable features include VLANs and link aggregation trunking, as well as advanced features such as Layer 3 static routing and Spanning Tree Protocols (STP, RSTP, and MSTP). The HP 1910 switches come with a lifetime warranty covering the unit, fans, and power supplies.

## Features and benefits

### 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 guaranteed minimums
- Traffic prioritization: provides time-sensitive packets with priority based on DSCP or IEEE 802.1p classification; packets are mapped to four hardware queues for more effective throughput

### Management

- Simple Web management: intuitive Web GUI (http/https) allows for easy management of device by even nontechnical users
- Single IP management: enables management of up to 32 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: devices can be discovered and monitored from an SNMP management station
- Complete session logging: provides detailed information for problem identification and resolution
- Dual flash images: provide 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: multiple privilege levels with password protection restrict access to critical configuration commands; 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 consistent timekeeping 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): automated device discovery protocol provides easy mapping of network management
- applications
   DHCP options: client allows automatic setting of IP address
- 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

#### Connectivity

- Auto-MDI/MDIX: automatically adjusts for straight-through or crossover cables on all 10/100/1000 ports
- Non-shared SFP ports: four true SFP mini-GBIC ports provide optional fiber connectivity such as Gigabit-SX and -LX; also supports SFP 1G RJ-45 copper connections
- 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: PWR models can provide up to 15.4 W per port to power standards-compliant IP phones, wireless LAN access points, Web cameras, and more
- Packet storm protection: protects against broadcast, multicast, or unicast storms with user-defined thresholds
- Cable diagnostics: remotely detect cable issues using a browser-based tool
- IPv6:
  - $_{\mbox{O}}$  IPv6 host: enables switches to be managed and deployed at the IPv6 network's edge
  - O IPv6 static routes:
    - **MLD snooping**: forwards IPv6 multicast traffic to the appropriate interface, preventing traffic flooding

## Overview

**IPv6 ACL/QoS**: supports ACL and QoS for IPv6 network traffic

## Performance

- Half-/Full-duplex auto-negotiating capability on every port: doubles the throughput of every port
- Selectable queue configurations: allow you to increase performance by selecting the number of queues and associated memory buffering that best meet the requirements of your network applications
- **IGMP snooping**: multicast filtering improves network performance, instead of flooding traffic to all ports
- Fiber uplink: provides greater distance connectivity using Gigabit fiber uplinks

## Resiliency and high availability

- Redundant power supply (365 W power model only): RPS power supply provides additional PoE of up to 740 W for high power applications like Gigabit Ethernet IntelliJack switches; the HP RPS 1600 Power Supply (JG136A) is sold separately
- 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 bottleneck

### Layer 2 switching

- VLAN support and tagging: supports IEEE 802.1Q (4,094 VLAN IDs) and 256 VLANs simultaneously
- Spanning Tree: fully supports standard IEEE 802.1D Spanning Tree Protocol, IEEE 802.1w Rapid Spanning Tree Protocol for faster convergence, and IEEE 802.1s Multiple Spanning Tree Protocol
- 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

#### Security

- Advanced access control lists (ACLs): MAC and IP-based ACLs enable network traffic filtering and enhance network control; 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: control port-based access for authentication and accountability
- Automatic VLAN assignment: automatically assigns users to the appropriate VLAN based on their identity and location and the time of day
- STP BPDU port protection: blocks Bridge Protocol Data Units (BPDUs) on ports that do not require BPDUs, preventing forged BPDU attacks
- STP Root Guard: protects the root bridge from malicious attacks or configuration mistakes
- Automatic denial-of-service protection: monitors for malicious attacks and protects the network by blocking the attacks
- Management password: provides security so that only authorized access to the Web browser interface is allowed

#### Convergence

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

#### Additional information

- Green initiative support: provides support for RoHS and WEEE regulations
- Green IT and power: use the latest advances in silicon development, shut off unused ports, and use variable-speed fans to improve energy efficiency

### Warranty and support

- Lifetime warranty: for as long as you own the product with advance replacement and next-business-day delivery (available in most countries)†
- Electronic and telephone support: limited electronic and telephone support is available from HP; 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.

HP 1910-48G Switch (JE009A)

HP 1910-48G Switch (J	E009A)		
Ports	48 RJ-45 auto-negotiating 100BASE-TX, IEEE 802.	g 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 3ab Type 1000BASE-T)	
	4 SFP 1000 Mbps ports		
	Supports a maximum of combination	48 autosensing 10/100/1000 ports plus 4 1000BASE-X SFP ports, or a	
Physical	Dimensions	17.4(w) x 10.24(d) x 1.7(h) in (44.2 x 26.01 x 4.32 cm) (1U height)	
characteristics	Weight	6.8 lb (3.08 kg)	
Memory and processo	r Module	ARM @ 333 MHz, 128 MB flash, 128 MB RAM; packet buffer size: 512 KB	
Mounting	Mounts in an EIA-standa	rd 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 million pps	
	Routing/Switching capacity	104 Gbps	
	Routing table size	32 entries	
Environment	-	9 32°F to 113°F (0°C to 45°C)	
Environment			
	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	Voltage	100-240 VAC	
characteristics	Maximum power rating	<b>j</b> 59.8 W	
Achieved Miercom	Frequency	50/60 Hz	
Certified Green Award	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; VC 61000-3-2 2000, 61000-3	CI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN -3; ICES-003 Class A	
Management	IMC - Intelligent Manage Manager; IEEE 802.3 Ett	ment Center; limited command-line interface; Web browser; SNMP nernet MIB	
Notes	The HP 1910-48G Switch	n (JE009A) was formerly sold as the 3Com Baseline Plus 2952	
	, , ,	ship with this product labeling.	
		rts work simultaneously, independent of each other to give a total of 52	
•	Gigabit-capable ports		
Services	•	<5 coverage for hardware (UV786E) <5 coverage for hardware (UV804E)	
	•	(7 coverage for hardware (UW033E)	
	•	(7 coverage for hardware (UW485E)	
	3-year, 4-hour onsite, 24	x7 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 s	support, software updates (UV807E)	
		support, software updates (UV789E)	
	•	nour onsite, 13x5 coverage for hardware (HR682E)	
	1-year, post-warranty, 4-h	nour onsite, 24x7 coverage for hardware (HR683E)	
	• • •	nour onsite, 24x7 coverage for hardware, 24x7 software phone support	
	(HR684E)	(5 coverage for hardware (UV787E)	
	•	(5 coverage for hardware (UV805E)	
	•	(7 coverage for hardware (UW034E)	
	4-year, 4-hour onsite, 24>	7 coverage for hardware (UW486E)	
	•	(7 coverage for hardware, 24x7 software phone (UW037E)	
	•	k7 coverage for hardware, 24x7 software phone (UW489E) Support software updates (LIV/Z90E)	
	•	support, software updates (UV790E) support, software updates (UV808E)	
	•	(5 coverage for hardware (UV788E)	
	•	(5 coverage for hardware (UV806E)	
	5-year, 4-hour onsite, 24>	7 coverage for hardware (UW035E)	
	•	(7 coverage for hardware (UW487E)	
	5-year, 4-hour onsite, 24>	x7 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 (UW493E)
5 Yr 6 hr Call-to-Repair Onsite (UW041E)
1-year, 6 hour Call-To-Repair Onsite for hardware (HR686E)
1-year, 24x7 software phone support, software updates (HR685E)

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) 24 RJ-45 auto-negotiating 10/100/1000 PoE ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Ports Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3af PoE) 4 SFP 1000 Mbps ports Supports a maximum of 24 autosensing 10/100/1000 ports plus 4 1000BASE-X SFP ports, or a combination Physical Dimensions 17.4(w) x 16.54(d) x 1.7(h) in (44.2 x 42.01 x 4.32 cm) (1U height) characteristics 6.8 lb (3.08 kg) Weight 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 56 Gbps capacity Routing table size 32 entries Environment Operating temperature 32°F to 113°F (0°C to 45°C) Operating relative 10% to 90%, non-condensing humidity Non-operating/Storage -40°F to 158°F (-40°C to 70°C) temperature Non-operating/Storage 10% to 95%, non-condensing relative humidity Electrical Voltage 100-240 VAC characteristics Maximum power rating 523 W PoE power 365 W Frequency 50 / 60 Hz Notes Maximum power rating and maximum heat dissipation are the worstcase 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). UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03 Safetv 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 IMC - Intelligent Management Center; limited command-line interface; Web browser; SNMP Management Manager; IEEE 802.3 Ethernet MIB The HP 1910-24G-PoE (365 W) Switch (JE007A) was formerly sold as the 3Com Baseline Plus Notes 2928 HPWR (3CRBSG28HPWR93) 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 3-year, 4-hour onsite, 13x5 coverage for hardware (UV786E) Services 3-year, 4-hour onsite, 13x5 coverage for hardware (UV804E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UW033E) 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

## **Technical Specifications**

(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 (UW451E) 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) 1-year, 24x7 software phone support, software updates (HR685E) 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 (170 W) Switch (JE008A) 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 Supports a maximum of 24 autosensing 10/100/1000 ports plus 4 1000BASE-X SFP ports, or a combination 17.4(w) x 16.54(d) x 1.7(h) in (44.2 x 42.01 x 4.32 cm) (1U height) Dimensions characteristics 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 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 56 Gbps capacity Routing table size 32 entries Operating temperature 32°F to 113°F (0°C to 45°C) Environment Operating relative 10% to 90%, non-condensing humidity Non-operating/Storage -40°F to 158°F (-40°C to 70°C) temperature Non-operating/Storage 10% to 95%, non-condensing relative humidity 100-240 VAC Voltage characteristics Maximum power rating 255 W

Electrical

Ports

Physical

Mounting

170 W

50 / 60 Hz

**PoE power** 

Frequency

	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	LIL 60050: IEC 60050-1:	power supplies. EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03
Emissions		CCI 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 Manage Manager; IEEE 802.3 Et	ement Center; limited command-line interface; Web browser; SNMP chernet MIB
Notes	The HP 1910-24G-PoE 2928	(170 W) Switch (JE008A) was formerly sold as the 3Com Baseline Plus
	SFP ports and copper po	93) and may ship with this product labeling. orts work simultaneously, independent of each other to give a total of 28
Samiaaa	Gigabit-capable ports.	vE coverage for bordware (LIV/786E)
Services	•	x5 coverage for hardware (UV786E) x5 coverage for hardware (UV804E)
	•	x7 coverage for hardware (UW033E)
	•	x7 coverage for hardware (UW485E)
	3-year, 4-hour onsite, 24 (UW036E)	x7 coverage for hardware, 24x7 SW phone support and SW updates
	3-year, 4-hour onsite, 24 (UW488E)	x7 coverage for hardware, 24x7 SW phone support and SW updates
	•	support, software updates (UV807E)
		support, software updates (UV789E)
		hour onsite, 13x5 coverage for hardware (HR682E)
		hour onsite, 24x7 coverage for hardware (HR683E) hour onsite, 24x7 coverage for hardware, 24x7 software phone support
	· /	x5 coverage for hardware (UV787E)
	4-year, 4-hour onsite, 13	x5 coverage for hardware (UV805E)
	4-year, 4-hour onsite, 24	x7 coverage for hardware (UW034E)
	•	x7 coverage for hardware (UW486E)
		x7 coverage for hardware, 24x7 software phone (UW037E)
	•	x7 coverage for hardware, 24x7 software phone (UW489E) support, software updates (UV790E)
	•	support, software updates (UV808E)
	•	x5 coverage for hardware (UV788E)
	5-year, 4-hour onsite, 13	x5 coverage for hardware (UV806E)
	5-year, 4-hour onsite, 24	x7 coverage for hardware (UW035E)
	•	x7 coverage for hardware (UW487E)
	•	x7 coverage for hardware, 24x7 software phone (UW038E)
	•	x7 coverage for hardware, 24x7 software phone (UW490E)
	•	support, software updates (UV791E) support, software updates (UV809E)
	3 Yr 6 hr Call-to-Repair (	
	3 Yr 6 hr Call-to-Repair (	
	4 Yr 6 hr Call-to-Repair (	Onsite (UW492E)
	4 Yr 6 hr Call-to-Repair (	
	5 Yr 6 hr Call-to-Repair (	
	5 Yr 6 hr Call-to-Repair (	
	•	epair Onsite for hardware (HR686E) none support, software updates (HR685E)
		at www.hp.com/networking/services for details on the service-level t numbers. For details about services and response times in your area,
	please contact your loca	
HP 1910-24G Switch (JE	E006A)	
Ports		ng 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type .3ab Type 1000BASE-T)
	4 SFP 1000 Mbps ports	
		24 autosensing 10/100/1000 ports plus 4 1000BASE-X SFP ports, or a
Physical		$17 A(w) \times 6 2(d) \times 1 7(b) in (AA 2 \times 46 \times 4.22 \text{ cm}) (AU b - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -$
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)
Memory and processor	Weight <sup>.</sup> Module	6.8 lb (3.08 kg) ARM @ 333 MHz, 128 MB flash, 128 MB RAM; packet buffer size: 512
Mounting	Mounto in an ELA stards	KB

Mounting Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware include
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## **Technical Specifications**

•		
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
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	a -40°F to 158°F (-40°C to 70°C)
	Non-operating/Storage relative humidity	a 10% to 95%, non-condensing
Electrical	Voltage	100-240 VAC
characteristics	Maximum power ratin	<b>g</b> 31.5 W
	Frequency	50/60 Hz
	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; V0 61000-3-2 2000, 61000-3	CCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 3-3; ICES-003 Class A
Management	IMC - Intelligent Manage Manager; IEEE 802.3 Et	ment Center; limited command-line interface; Web browser; SNMP hernet MIB
Notes	(3CRBSG2893) and may	h (JE006A) was formerly sold as the 3Com Baseline Plus 2928 y ship with this product labeling. orts can work simultaneously, independent of each other to give a total of
	3-year, 4-hour onsite, 24: 3-year, 4-hour onsite, 24: 3-year, 4-hour onsite, 24: (UW036E) 3-year, 4-hour onsite, 24: (UW488E) 3-year, 24x7 SW phone 3-year, 24x7 SW phone 1-year, post-warranty, 4- 1-year, post-warranty, 4- 1-year, post-warranty, 4- (HR684E) 4-year, 4-hour onsite, 13: 4-year, 4-hour onsite, 24: 4-year, 24x7 SW phone 5-year, 4-hour onsite, 13: 5-year, 4-hour onsite, 13: 5-year, 4-hour onsite, 24: 4-year, 24x7 SW phone 5-year, 4-hour onsite, 13: 5-year, 4-hour onsite, 13: 5-year, 4-hour onsite, 24: 5-year, 4-hour onsite, 24: 5-year, 4-hour onsite, 24: 5-year, 4-hour onsite, 24: 5-year, 24x7 SW phone 5-year, 24x7 SW phone 3 Yr 6 hr Call-to-Repair C 3 Yr 6 hr Call-to-Repair C 4 Yr 6 hr Call-to-Repair C 5 Yr 6 hr Call-to-Repair C 5 Yr 6 hr Call-to-Repair C 5 Yr 6 hr Call-to-Repair C	Onsite (UW039E) Onsite (UW492E) Onsite (UW040E) Onsite (UW493E)
	1-year, 6 hour Call-To-Re 1-year, 24x7 software ph	epair 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,

**Technical Specifications** 

please contact your local HP sales office.

HP 1910-16G Switch (JI	E005A)	
Ports	16 RJ-45 auto-negotiating	g 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type
	100BASE-TX, IEEE 802.	3ab Type 1000BASE-T)
	4 SFP 1000 Mbps ports Supports a maximum of combination	16 autosensing 10/100/1000 ports plus 4 1000BASE-X SFP ports, or a
Physical	Dimensions	17.4(w) x 6.3(d) x 1.7(h) in (44.2 x 16 x 4.32 cm) (1U height)
characteristics	Weight	6.8 lb (3.08 kg)
Memory and processo	<sup>r</sup> Module	ARM @ 333 MHz, 128 MB flash, 128 MB RAM; packet buffer size: 512 KB
Mounting	Mounts in an EIA-standa	rd 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
Environment	Operating temperature	9 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	Voltage	100-240 VAC
characteristics	Maximum power rating	<b>g</b> 25.1 W
	Frequency	50 / 60 Hz
	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; VC 61000-3-2 2000, 61000-3	CCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 8-3; ICES-003 Class A
Management	IMC - Intelligent Manager Manager; IEEE 802.3 Eth	ment Center; limited command-line interface; Web browser; SNMP nernet MIB
Notes	(3CRBSG2093) and may	n (JE005A) was formerly sold as the 3Com Baseline Plus PWR 2920 v ship with this product labeling. orts can work simultaneously, independent of each other to give a total of
Services	<b>o</b> 1 1	k5 coverage for hardware (UV786E)
	•	(5 coverage for hardware (UV804E)
	•	<pre>&lt;7 coverage for hardware (UW033E)</pre>
		<7 coverage for hardware (UW485E) x7 coverage for hardware, 24x7 SW phone support and SW updates
	(UW036E)	
	3-year, 4-hour onsite, 24) (UW488E)	x7 coverage for hardware, 24x7 SW phone support and SW updates
	•	support, software updates (UV807E)
	•	support, software updates (UV789E) nour onsite, 13x5 coverage for hardware (HR682E)
	• • •	nour onsite, 24x7 coverage for hardware (HR683E)
	1-year, post-warranty, 4-ł (HR684E)	nour onsite, 24x7 coverage for hardware, 24x7 software phone support
		n configuration, system-based pricing (UW451E) <5 coverage for hardware (UV787E)
	•	(5 coverage for hardware (UV805E)
	4-year, 4-hour onsite, 24x	(7 coverage for hardware (UW034E)
	•	k7 coverage for hardware (UW486E) k7 coverage for hardware, 24x7 software phone (LIW037E)
	•	K7 coverage for hardware, 24x7 software phone (UW037E) K7 coverage for hardware, 24x7 software phone (UW489E)
		support, software updates (UV790E)
		support, software updates (UV808E)
	•	<5 coverage for hardware (UV788E) <5 coverage for hardware (UV806E)
	, <u>, , , , , , , , , , , , , , , , , , </u>	

Memory and processor	5-year, 4-hour onsite, 24x 5-year, 4-hour onsite, 24x 5-year, 4-hour onsite, 24x 5-year, 24x7 SW phone s 5-year, 24x7 SW phone s 3 Yr 6 hr Call-to-Repair C 3 Yr 6 hr Call-to-Repair C 4 Yr 6 hr Call-to-Repair C 5 Yr 6 hr Call-to-Repair C 5 Yr 6 hr Call-to-Repair C 5 Yr 6 hr Call-to-Repair C 1-year, 6 hour Call-To-Re 1-year, 24x7 software pho Refer to the HP website a descriptions and product please contact your local 848A)	Onsite (UW039E) Onsite (UW0492E) Onsite (UW040E) Onsite (UW040E) Onsite (UW041E) pair Onsite for hardware (HR686E) one support, software updates (HR685E) at: www.hp.com/networking/services for details on the service-level numbers. For details about services and response times in your area,
Ports Physical characteristics Memory and processor Mounting	5-year, 4-hour onsite, 24x 5-year, 4-hour onsite, 24x 5-year, 24x7 SW phone s 5-year, 24x7 SW phone s 3 Yr 6 hr Call-to-Repair C 4 Yr 6 hr Call-to-Repair C 4 Yr 6 hr Call-to-Repair C 5 Yr 6 hr Call-to-Repair C 5 Yr 6 hr Call-to-Repair C 5 Yr 6 hr Call-to-Repair C 1-year, 6 hour Call-To-Re 1-year, 24x7 software pho Refer to the HP website a descriptions and product please contact your local 348A) 8 RJ-45 auto-negotiating 100BASE-TX, IEEE 802.3	<ul> <li>A7 coverage for hardware, 24x7 software phone (UW038E)</li> <li>A7 coverage for hardware, 24x7 software phone (UW490E)</li> <li>Bupport, software updates (UV791E)</li> <li>Bupport, software updates (UV809E)</li> <li>Densite (UW491E)</li> <li>Densite (UW039E)</li> <li>Densite (UW492E)</li> <li>Densite (UW492E)</li> <li>Densite (UW493E)</li> <li>Densite (UW493E)</li> <li>Densite (UW041E)</li> <li>Densite for hardware (HR686E)</li> <li>Dens support, software updates (HR685E)</li> <li>Densite support, software updates (HR685E)</li> </ul>
Ports Physical characteristics Memory and processor Mounting	5-year, 4-hour onsite, 24x 5-year, 24x7 SW phone s 5-year, 24x7 SW phone s 3 Yr 6 hr Call-to-Repair C 4 Yr 6 hr Call-to-Repair C 5 Yr 6 hr Call-to-Repair C 5 Yr 6 hr Call-to-Repair C 5 Yr 6 hr Call-to-Repair C 1-year, 6 hour Call-To-Re 1-year, 24x7 software pho Refer to the HP website a descriptions and product please contact your local 348A) 8 RJ-45 auto-negotiating 100BASE-TX, IEEE 802.3	A7 coverage for hardware, 24x7 software phone (UW490E) support, software updates (UV791E) support, software updates (UV809E) Onsite (UW491E) Onsite (UW039E) Onsite (UW492E) Onsite (UW492E) Onsite (UW493E) Onsite (UW493E) Onsite (UW041E) pair Onsite for hardware (HR686E) one support, software updates (HR685E) at: www.hp.com/networking/services for details on the service-level numbers. For details about services and response times in your area,
Ports Physical characteristics Memory and processor Mounting	5-year, 24x7 SW phone s 5-year, 24x7 SW phone s 3 Yr 6 hr Call-to-Repair C 4 Yr 6 hr Call-to-Repair C 4 Yr 6 hr Call-to-Repair C 5 Yr 6 hr Call-to-Repair C 5 Yr 6 hr Call-to-Repair C 1-year, 6 hour Call-To-Re 1-year, 6 hour Call-To-Re 1-year, 24x7 software pho Refer to the HP website a descriptions and product please contact your local 348A) 8 RJ-45 auto-negotiating 100BASE-TX, IEEE 802.3	support, software updates (UV791E) support, software updates (UV809E) Onsite (UW491E) Onsite (UW039E) Onsite (UW492E) Onsite (UW040E) Onsite (UW040E) Onsite (UW041E) pair Onsite for hardware (HR686E) one support, software updates (HR685E) at: www.hp.com/networking/services for details on the service-level numbers. For details about services and response times in your area,
Ports Physical characteristics Memory and processor Mounting	5-year, 24x7 SW phone s 3 Yr 6 hr Call-to-Repair C 3 Yr 6 hr Call-to-Repair C 4 Yr 6 hr Call-to-Repair C 5 Yr 6 hr Call-to-Repair C 5 Yr 6 hr Call-to-Repair C 5 Yr 6 hr Call-to-Repair C 1-year, 6 hour Call-To-Re 1-year, 24x7 software pho Refer to the HP website a descriptions and product please contact your local 348A) 8 RJ-45 auto-negotiating 100BASE-TX, IEEE 802.3	support, software updates (UV809E) Dinsite (UW491E) Dinsite (UW039E) Dinsite (UW492E) Dinsite (UW040E) Dinsite (UW040E) Dinsite (UW041E) pair Onsite for hardware (HR686E) Dine support, software updates (HR685E) at: www.hp.com/networking/services for details on the service-level numbers. For details about services and response times in your area,
Ports Physical characteristics Memory and processor Mounting	3 Yr 6 hr Call-to-Repair C 3 Yr 6 hr Call-to-Repair C 4 Yr 6 hr Call-to-Repair C 4 Yr 6 hr Call-to-Repair C 5 Yr 6 hr Call-to-Repair C 5 Yr 6 hr Call-to-Repair C 1-year, 6 hour Call-To-Re 1-year, 24x7 software pho Refer to the HP website a descriptions and product please contact your local 348A) 8 RJ-45 auto-negotiating 100BASE-TX, IEEE 802.3	Densite (UW491E) Densite (UW039E) Densite (UW492E) Densite (UW040E) Densite (UW040E) Densite (UW041E) pair Onsite for hardware (HR686E) Dene support, software updates (HR685E) at: www.hp.com/networking/services for details on the service-level numbers. For details about services and response times in your area,
Ports Physical characteristics Memory and processor Mounting	3 Yr 6 hr Call-to-Repair C 4 Yr 6 hr Call-to-Repair C 4 Yr 6 hr Call-to-Repair C 5 Yr 6 hr Call-to-Repair C 5 Yr 6 hr Call-to-Repair C 1-year, 6 hour Call-To-Re 1-year, 24x7 software pho Refer to the HP website a descriptions and product please contact your local 348A) 8 RJ-45 auto-negotiating 100BASE-TX, IEEE 802.3	Onsite (UW039E) Onsite (UW0492E) Onsite (UW040E) Onsite (UW040E) Onsite (UW041E) pair Onsite for hardware (HR686E) one support, software updates (HR685E) at: www.hp.com/networking/services for details on the service-level numbers. For details about services and response times in your area,
Ports Physical characteristics Memory and processor Mounting	4 Yr 6 hr Call-to-Repair C 5 Yr 6 hr Call-to-Repair C 5 Yr 6 hr Call-to-Repair C 1-year, 6 hour Call-To-Re 1-year, 24x7 software pho Refer to the HP website a descriptions and product please contact your local 348A) 8 RJ-45 auto-negotiating 100BASE-TX, IEEE 802.3	Onsite (UW040E) Onsite (UW493E) Onsite (UW041E) pair Onsite for hardware (HR686E) one support, software updates (HR685E) at: www.hp.com/networking/services for details on the service-level numbers. For details about services and response times in your area,
Ports Physical characteristics Memory and processor Mounting	5 Yr 6 hr Call-to-Repair C 5 Yr 6 hr Call-to-Repair C 1-year, 6 hour Call-To-Re 1-year, 24x7 software pho Refer to the HP website a descriptions and product please contact your local 348A) 8 RJ-45 auto-negotiating 100BASE-TX, IEEE 802.3	Onsite (UW493E) Onsite (UW041E) pair Onsite for hardware (HR686E) one support, software updates (HR685E) at: www.hp.com/networking/services for details on the service-level numbers. For details about services and response times in your area,
Ports Physical characteristics Memory and processor Mounting	5 Yr 6 hr Call-to-Repair C 1-year, 6 hour Call-To-Re 1-year, 24x7 software pho Refer to the HP website a descriptions and product please contact your local 348A) 8 RJ-45 auto-negotiating 100BASE-TX, IEEE 802.3	Densite (UW041E) pair Onsite for hardware (HR686E) one support, software updates (HR685E) at: www.hp.com/networking/services for details on the service-level numbers. For details about services and response times in your area,
Ports Physical characteristics Memory and processor Mounting	1-year, 6 hour Call-To-Re 1-year, 24x7 software pho Refer to the HP website a descriptions and product please contact your local 348A) 8 RJ-45 auto-negotiating 100BASE-TX, IEEE 802.3	pair Onsite for hardware (HR686E) one support, software updates (HR685E) at: www.hp.com/networking/services for details on the service-level numbers. For details about services and response times in your area,
Ports Physical characteristics Memory and processor Mounting	1-year, 24x7 software photographic content of the HP website a descriptions and product please contact your local 348A) 8 RJ-45 auto-negotiating 100BASE-TX, IEEE 802.3	one support, software updates (HR685E) at: www.hp.com/networking/services for details on the service-level numbers. For details about services and response times in your area,
Ports Physical characteristics Memory and processor Mounting	descriptions and product please contact your local 348A) 8 RJ-45 auto-negotiating 100BASE-TX, IEEE 802.3	numbers. For details about services and response times in your area,
Ports Physical characteristics Memory and processor Mounting	descriptions and product please contact your local 348A) 8 RJ-45 auto-negotiating 100BASE-TX, IEEE 802.3	numbers. For details about services and response times in your area,
Ports Physical characteristics Memory and processor Mounting	please contact your local 348A) 8 RJ-45 auto-negotiating 100BASE-TX, IEEE 802.3	
Ports Physical characteristics Memory and processor Mounting	348A) 8 RJ-45 auto-negotiating 100BASE-TX, IEEE 802.3	HP sales office.
Ports Physical characteristics Memory and processor Mounting	8 RJ-45 auto-negotiating 100BASE-TX, IEEE 802.3	
Physical characteristics Memory and processor Mounting	100BASE-TX, IEEE 802.3	
characteristics Memory and processor Mounting	1 SFP 1000 Mbps port	10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 3ab Type 1000BASE-T)
characteristics Memory and processor Mounting		
characteristics Memory and processor Mounting	Supports a maximum of a combination	3 autosensing 10/100/1000 ports plus 1 1000BASE-X SFP ports, or a
Memory and processor Mounting	Dimensions	8.27(w) x 8.27(d) x 1.72(h) in (21 x 21 x 4.36 cm) (1U height)
Mounting	Weight	4.41 lb (2 kg), Fully loaded
-	Module	ARM @ 333 MHz, 128 MB flash, 128 MB RAM; packet buffer size: 512 KB
Performance	Mounts in an EIA-standar	rd 19 in. telco rack or equipment cabinet (hardware included)
	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		32°F to 113°F (0°C to 45°C)
	Operating relative	10% to 90%, non-condensing
	humidity	
	temperature	-40°F to 158°F (-40°C to 70°C)
	Non-operating/Storage relative humidity	10% to 95%, non-condensing
Electrical	Voltage	100-240 VAC
characteristics	Maximum power rating	14.4 W
	Frequency	50/60 Hz
		nd maximum heat dissipation are the worst-case theoretical maximum nning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all modules populated.
Safety	UL 60950; IEC 60950-1; I	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 port	ts work simultaneously, independent of each other to give a total of 9
Services	Gigabit-capable ports.	at: www.hp.com/networking/services for details on the service-level numbers. For details about services and response times in your area,

HP 1910-8G-PoE+ (65V	N) 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)

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		
		8 autosensing 10/100/1000 ports plus 1 1000BASE-X SFP ports, or a	
Physical	Dimensions	10.24(w) x 11.81(d) x 1.72(h) in (26 x 30 x 4.36 cm) (1U height)	
characteristics	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-standa	rd 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	e 8192 entries	
Environment	<b>Operating temperature</b> 32°F to 113°F (0°C to 45°C)		
	Operating relative humidity	10% to 90%, non-condensing	
	Non-operating/Storage temperature	e -40°F to 158°F (-40°C to 70°C)	
	Non-operating/Storage relative humidity	a 10% to 95%, non-condensing	
Electrical	Voltage	100-240 VAC	
characteristics	Maximum power rating	<b>g</b> 93 W	
	PoE power	65 W	
	Frequency	50/60 Hz	
	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 port and copper por Gigabit-capable ports.	ts work simultaneously, independent of each other to give a total of 9	
Services		at: www.hp.com/networking/services for details on the service-level numbers. For details about services and response times in your area, I HP sales office.	

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		
	Supports a maximum of combination	<sup>5</sup> 8 autosensing 10/100/1000 ports plus 1 1000BASE-X SFP ports, or a	
Physical	Dimensions	10.24(w) x 11.81(d) x 1.72(h) in (26 x 30 x 4.36 cm) (1U height)	
characteristics	Weight	6.61 lb (3 kg), Fully loaded	
lemory and processor	Module	ARM @ 333 MHz, 128 MB flash, 128 MB RAM; packet buffer size: 51 KB	
lounting	Mounts in an EIA-standa	ard 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 siz	ze 8192 entries	
Environment	Operating temperatur	<b>e</b> 32°F to 113°F (0°C to 45°C)	
	Operating relative humidity	10% to 90%, non-condensing	
	Non-operating/Storag temperature	e -40°F to 158°F (-40°C to 70°C)	
	Non-operating/Storag relative humidity	e 10% to 95%, non-condensing	
Electrical	Voltage	100-240 VAC	
haracteristics	Maximum power ratin	<b>ng</b> 228 W	
	PoE power	180 W	
	Frequency	50/60 Hz	
	numbers provided for pla all ports plugged in, and	supplied by the internal power supply. It is dependent on the type and	
Safety	UL 60950; IEC 60950-1;	; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03	
Emissions	FCC part 15 Class A; V 61000-3-2 2000, 61000-	CCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 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 po Gigabit-capable ports.	rts work simultaneously, independent of each other to give a total of 9	
Services		e at: www.hp.com/networking/services for details on the service-level at numbers. For details about services and response times in your area, al HP sales office.	



## HP 1910 Switch Series

## **Technical Specifications**

Standards and
protocols
(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 802.3x Flow Control IEEE 802.3z 1000BASE-X

### MIBs

**Device management** 

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 REC 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) RFC 1215 SNMP Generic traps

#### 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 OM3 LC/LC Optical Cable	AJ838A
	HP 50m Multi-mode OM3 LC/LC Optical Cable	AJ839A
	HP 0.5 m PremierFlex OM3+ LC/LC Optical Cable	BK837A
	HP 1 m PremierFlex OM3+ LC/LC Optical Cable	BK838A
	HP 2 m PremierFlex OM3+ LC/LC Optical Cable	BK839A
	HP 5 m PremierFlex OM3+ LC/LC Optical Cable	BK840A
	HP 15 m PremierFlex OM3+ LC/LC Optical Cable	BK841A
	HP 30 m PremierFlex OM3+ LC/LC Optical Cable	BK842A
	HP 50 m PremierFlex OM3+ LC/LC Optical Cable	BK843A

# Accessory Product Details

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

HP X121 1G SFP LC SX	Ports	1 LC 1000BASE-SX port; Duplex: full only
Transceiver (J4858C)	Physical characteristics	Dimensions: 2.24(d) x 0.54(w) x 0.48(h) in. (5.69 x 1.37 x 1.22 cm) Weight: 0.04 lb. (0.02 kg)
A small form-factor pluggable (SFP) Gigabit SX		Transceiver form factor: SFP
transceiver that provides a full-	Environment	Operating temperature: 32°F to 158°F (0°C to 70°C)
duplex Gigabit solution		Operating relative humidity: 5% to 85%, noncondensing
up to 550 m on multimode fiber	-	Nonoperating/Storage temperature: -40°F to 203°F (-40°C to 85°C) Altitude: up to 10,000 ft. (3 km)
	Electrical characteristics	Power consumption typical: 0.4 W
		Power consumption maximum: 0.7 W
	Cabling	Type:
	odoning	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
		<ul> <li>62.5/125 µm or 50/125 µm (core/cladding) diameter, graded-index, low metal content, multimode fiber optic, complying with ITU-T G.651 and ISO/IEC 793-2 Type</li> </ul>
		A1b or A1a, respectively;
		Maximum distance:
		<ul> <li>2-220 m (62.5 μm core diameter, 160 MHz*km bandwidth</li> </ul>
		<ul> <li>2-275 m (62.5 μm core diameter, 200 MHz*km bandwidth</li> </ul>
		<ul> <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>
		<ul> <li>2-550 m (50 μm core diameter, 500 MHz*km bandwidth)</li> <li>Cable length: 2.550m</li> </ul>
		Cable length: 2-550m Fiber type: Multi Mode
	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level
		descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.
HP X121 1G SFP LC LX	Ports	1 LC 1000BASE-LX port (IEEE 802.3z Type 1000BASE-LX); Duplex: full only
Transceiver (J4859C)	Physical characteristics	Dimensions: 2.24(d) x 0.54(w) x 0.486(h) in. (5.69 x 1.37 x 1.23 cm) Weight:0.04 lb. (0.02 kg)
HP X121 1G SFP LC LX	Environment	Operating temperature: 32°F to 158°F (0°C to 70°C)
Transceiver: An SFP 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:
		<ul> <li>Either single mode or multimode; 62.5/125 μm or 50/125 μm (core/cladding) diameter, graded-index, low metal content, multimode fiber optic, complying with ITU T G.651 and ISO/IEC 793-2 Type A1b or A1a, respectively; Low metal content, single-mode fiber-optic, complying with ITU-T G.652 and ISO/IEC 793-2 Type B1;</li> </ul>
		Maximum distance:
		<ul> <li>2-550 m (multimode 62.5 μm core diameter, 500 MHz*km bandwidth)</li> <li>2-550 m (multimode 50 μm core diameter, 400 MHz*km bandwidth)</li> <li>2-550 m (multimode 50 μm core diameter, 500 MHz*km bandwidth)</li> </ul>
		• 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 Transceiver (J8177C)	Ports	1 RJ-45 1000BASE-T p full only	ort (IEEE 802.3ab Type 1000BASE-T); Duplex:
HP X121 1G SFP RJ45	Physical characteristics	Dimensions: 2.71(d) x 0 Weight: 0.06 lb. (0.03 k	0.54(w) x 0.55(h) in. (6.88 x 1.37 x 1.4 cm) g)
T Transceiver: An SFP format gigabit transceiver with	Environment	Operating temperature: airflow over the SFP mo	32°F to 158°F (0°C to 70°C); with 100 LFM dule
RJ45 connectors using		Operating relative humic	dity: 0% to 95% @ 75°F (25°C), noncondensing
1000BaseT technology.		Nonoperating/Storage te	emperature: -40°F to 185°F (-40°C to 85°C)
			elative humidity: 0% to 95% @ 77°F (25°C),
		Altitude: up to 10,000 ft.	. (3000 km)
	Cabling	Cable type: 1000BASE-T <sup>-</sup> Category	5 (5E or better recommended), 100 Ù
		differential 4-pair unshie	elded twisted pair (UTP) or shielded twisted pair ving with IEEE 802.3ab 1000BASE-T;
		Maximum distance:	
		• 100 m	
	Notes	this product, see the do 1000Base-T Mini-GBIC Web page.	nominally 1 watt. and minimum software requirements to support cument titled "Support for the J8177C " on the "HP Mini-GBICs and SFPs" Manuals oper mini-GBIC is not supported on dual-
		the HP E8200zl, E5400 software version K.12.2 enable 100 Mb operation Important: The earlier J& When used in the Switc	8177B does not support 100 Mb operation. h gl 20-Port 10/100/1000 Module (J4908A), the be installed in either the upper or lower mini-
	Services	Refer to the HP website on the service-level des	e at www.hp.com/networking/services for details criptions and product numbers. For details about times in your area, please contact your local HP
HP X120 1G SFP LC SX	( Ports	1 LC 1000BASE-SX por	rt
<b>Fransceiver</b> (JD118B)	Connectivity	Connector type	LC
		Wavelength	850 nm
A small form-factor oluggable (SFP) Gigabit	Physical characteristics	Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)
SX transceiver that provides a full-duplex Gigabit solution up to 550m on a Multimode fiber.		Full configuration weight	0.04 lb. (0.02 kg)
	Electrical characteristics	Power consumption typical	0.8 W
		Power consumption maximum	1.0 W
	Cabling	Maximum distance: • FDDI Grade distance = • OM1 = 275m • OM2 = 500m • OM3 = Not Specified I	
		Cable length	up to 550m
		Fiber type	Multi Mode
	Services	on the service-level des	e at www.hp.com/networking/services for details criptions and product numbers. For details about times in your area, please contact your local HP

HP X120 1G SFP LC LX	Ports	1 SFP 1000BASE-LX pc	ort (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 that provides a full duplex		Full configuration weight	0.04 lb. (0.02 kg)
Gigabit solution up to 550m on MMF or 10Km	Electrical characteristics	Power consumption typical	0.8 W
on SMF		Power consumption maximum	1.0 W
	Cabling	Cable type: Either single mode or m	ultimode;
		Maximum distance: • 550m for Multimode • 10km for Singlemode	
		Fiber type	Both
	Services	on the service-level dese	at www.hp.com/networking/services for details criptions and product numbers. For details about imes in your area, please contact your local HP
HP X124 1G SFP LC SX	( Ports	1 LC 1000BASE-SX por	t
Transceiver (JD493A)	Connectivity	Connector type	LC
	2	Wavelength	850 nm
JD493A HP X124 1G SFP LC SX Transceiver	Physical characteristics	Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)
that provides a full duplex		Full configuration weight	0.04 lb. (0.02 kg)
Gigabit solution up to 550m on Multi Mode	Electrical characteristics	Power consumption typical	0.8 W
fiber.		Power consumption maximum	1.0 W
	Cabling	Maximum distance: • 220m-550m	
		Fiber type	Multi Mode
	Services	on the service-level dese	at www.hp.com/networking/services for details criptions and product numbers. For details about imes in your area, please contact your local HP
HP X124 1G SFP LC LX	Ports	1 LC 1000BASE-LX port	t (IEEE 802.3z Type 1000BASE-LX)
Transceiver (JD494A)	Connectivity	Connector type	LC
	<b> </b>	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 facto	orSFP
	Electrical characteristics	Power consumption typical	0.8 W
		Power consumption maximum	1.0 W
	Cabling	Maximum distance: • 500m for Multimode • 10km for Singlemode	
	Services	on the service-level dese	at www.hp.com/networking/services for details criptions and product numbers. For details about imes in your area, please contact your local HP

HP X120 1G SFP RJ45	Ports	1 RJ-45 1000BASE-T n	ort (IEEE 802.3ab Type 1000BASE-T)	
T Transceiver (JD089B)		Connector type 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	differential 4-pair unshie	5 (5E or better recommended), 100 Ù elded twisted pair (UTP) or shielded twisted pair ving with IEEE 802.3ab 1000BASE-T	
		Maximum distance: <ul> <li>100m</li> </ul>		
	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details abou services and response times in your area, please contact your local HF sales office.		
HP 0.5 m Multimode OM3 LC/LC Optical Cable (AJ833A)	Cabling		ng) diameter, mulitimode fiber optic, with Ith of 2000 MHz/km as detailed in TIA-492AAAC 00 m	
		<b>Maximum distance</b> : 10Gbps Transfer Rate (I	Ethernet): 300m	
	Notes	um fiber optic cable and	ered duplex fiber optic multimode OM3 50/125 Ethernet assembly with LC duplex connectors lex connectors on other end.	
			e diameter: 50 $\pm$ 3.0um Cladding diameter: 125 $\pm$ ameter: 245 $\pm$ 10um	
		<ul> <li>Optical glass: Bar @850/1300nm.</li> </ul>	ndwidth: For LED sources: 1500/500 MHz-km	
		@850/1300nm. V @850/1300nm fo	ndwidth: For Laser sources: 2000/500 MHz-km CSEL Laser sources: 600 / 600 meters r Gigabit Ethernet compliant links. e is duplex zipcord graded index 50/125um	
		1300 nm wavelen BULK CABLE & C	CABLE ASSEMBLY CONFIGURATION:	
		thermoplastic.	Riser Grade - Low Smoke Zero Halogen a for OM3 multimode per TIA 598	
		<ul><li>Boot Color: White</li><li>Insertion Loss: less</li></ul>	-	
		<ul> <li>Maximum Cable a</li> </ul>	astested in accordance with EIA 455-46.	
		-	ed Weight: 1 LB Net Weight: 0.454Kg	

HP 1 m Multimode OM3Cabling	Cable type:
<b>_C/LC Optical Cable</b> AJ834A)	50/125 μm (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m
	<b>Maximum distance</b> : 10Gbps Transfer Rate (Ethernet): 300m
Notes	Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.
	<ul> <li>Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um</li> <li>Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @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>
Services	<ul> <li>Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg</li> <li>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</li> </ul>
	sales office.
HP 2 m Multimode OM3Cabling	sales office. Cable type:
_C/LC Optical Cable	
C/LC Optical Cable	<b>Cable type</b> : 50/125 μm (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m; <b>Maximum distance</b> :
HP 2 m Multimode OM3Cabling _C/LC Optical Cable (AJ835A) Notes	Cable type: $50/125 \ \mu m$ (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m;
-C/LC Optical Cable AJ835A)	<ul> <li>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;</li> <li>Maximum distance: 10Gbps Transfer Rate (Ethernet): 300m Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors</li> </ul>

HP 5 m Multimode OI LC/LC Optical Cable (AJ836A)	M3Cabling	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;
		<b>Maximum distance</b> : 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> </ul>
		<ul> <li>Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.</li> <li>Jacket Color: Aqua for OM3 multimode per TIA 598</li> <li>Boot Color: White</li> <li>Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths &gt; 30 meters.</li> <li>Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.</li> <li>Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg</li> </ul>
	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.
HP 15 m Multimode DM3 LC/LC Optical Cable (AJ837A)	Cabling	<b>Cable type</b> : 50/125 μm (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m;
		Maximum distance:
	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> </ul>
		<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 @</li> </ul>
		<ul> <li>1310 nm @ 23°C as tested in accordance with EIA 455-46.</li> <li>Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg</li> </ul>
	Services	Refer to the HP website at: www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

HP 30 m Multimode OM3 LC/LC Optical Cable (AJ838A)	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:
	Notes	10Gbps Transfer Rate (Ethernet): 300m
	NOLES	Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.
	Services	<ul> <li>Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um</li> <li>Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.</li> <li>Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links.</li> <li>CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows.</li> <li>BULK CABLE &amp; CABLE ASSEMBLY CONFIGURATION:</li> <li>Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.</li> <li>Jacket Color: Aqua for OM3 multimode per TIA 598</li> <li>Boot Color: White</li> <li>Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths &gt; 30 meters.</li> <li>Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.</li> <li>Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg</li> </ul>
	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 50 m Multimode OM3 LC/LC Optical Cable (AJ839A)	Cabling	<b>Cable type</b> : 50/125 μm (core/cladding) diameter, mulitimode fiber optic, with effective modal bandwidth of 2000 MHz/km as detailed in TIA-492AAAC for distances of up to 300 m;
		<b>Maximum distance</b> : 10Gbps Transfer Rate (Ethernet): 300m
	Notes	Cable Specs: Tight buffered duplex fiber optic multimode OM3 50/125 um fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.
		<ul> <li>Dimensions: Core diameter: 50 ± 3.0um Cladding diameter: 125 ± 2.0um Coating diameter: 245 ± 10um</li> <li>Optical Glass Bandwidth: For LED sources: 1500/500 MHz-km @850/1300nm.</li> <li>Optical Glass: For Laser sources: 2000/500 MHz-km @850/1300nm. VCSEL Laser sources: Shall achieve 600 / 600 meters @850/1300nm for Gigabit Ethernet compliant links.</li> <li>CABLE: The cable is duplex zipcord graded index 50/125um multimode optical fiber. The cable is designed to work in both the 850 and 1300 nm wavelength windows.</li> <li>BULK CABLE &amp; CABLE ASSEMBLY CONFIGURATION:</li> <li>Jacket Material: Riser Grade - Low Smoke Zero Halogen thermoplastic.</li> <li>Jacket Color: Aqua for OM3 multimode per TIA 598</li> <li>Boot Color: White</li> <li>Insertion Loss: less than 0.5 dB @ 850 with LED source, 0.003 dB/M added for lengths &gt; 30 meters.</li> <li>Maximum Cable attenuation: 3.0 dB/km @ 850 nm, 1.0 dB/Km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46.</li> <li>Weight: Air Packed Weight: 1 LB Net Weight: 0.454Kg</li> </ul>
	Services	Refer to the HP website at: www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.



HP 0.5 m PremierFlex OM3+ LC/LC Optical Cable (BK837A)	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;</li> <li>Coating diameter: 245 ± 10um</li> </ul>
		• Bandwidth: 3000 MHz-km @ 850nm (Laser) • Jacket Color: Blue
		Jacket Golor. Blue     Jacket Material: Riser Grade - Low Smoke Zero Halogen (LSZH)     thermoplastic.
		<ul> <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 longitudal 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> </ul>
		<ul> <li>Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310 nm @ 23°C as tested in accordance with EIA 455-46</li> </ul>
	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.
HP 1 m PremierFlex OM3+ LC/LC Optical Cable (BK838A)	Notes	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.
		<ul> <li>Core Diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um</li> <li>Bandwidth: 3000 MHz-km @ 850nm (Laser)</li> </ul>
		<ul> <li>Jacket Color: Blue</li> <li>Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic</li> <li>Boot Color: White</li> </ul>
		<ul> <li>Outer Jacket Print: HP PremierFlex OM3+ Fiber Optic Cable,</li> <li>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,</li> <li>0.003dB/m added for lengths &gt;30m</li> </ul>
		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 2 m PremierFlex OM3+ LC/LC Optical Cable (BK839A)	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
		<ul> <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>
		thermoplastic <ul> <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> </ul>
		<ul> <li>Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45</li> </ul>
	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

Accessory Product	Details	
HP 5 m PremierFlex OM3+ LC/LC Optical Cable (BK840A)	Notes	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.
		<ul> <li>Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um</li> <li>Bandwidth: 3000 MHz-km @ 850nm (Laser)</li> </ul>
		<ul> <li>Jacket Color: Blue</li> <li>Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH)</li> </ul>
		thermoplastic <ul> <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> </ul>
		<ul> <li>Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @ 1310nm @ 23°C as tested in accordance with EIA 455-45</li> </ul>
	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.
HP 15 m PremierFlex OM3+ LC/LC Optical Cable (BK841A)	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> </ul>
		• Bandwidth: 3000 MHz-km @ 850nm (Laser)
		<ul> <li>Jacket Color: Blue</li> <li>Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH)</li> </ul>
		thermoplastic
		<ul> <li>Boot Color: White</li> <li>Outer Jacket Print: HP PremierFlex OM3+ Fiber Optic Cable,</li> </ul>
		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
		<ul> <li>Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @</li> <li>1310nm @ 23°C as tested in accordance with EIA 455-45</li> </ul>
	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.
HP 30 m PremierFlex OM3+ LC/LC Optical Cable (BK842A)	Notes	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.
		<ul> <li>Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating diameter: 245 ± 10um</li> <li>Bandwidth: 3000 MHz-km @ 850nm (Laser)</li> </ul>
		<ul> <li>Jacket Color: Blue</li> <li>Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH)</li> </ul>
		thermoplastic <ul> <li>Boot Color: White</li> </ul>
		<ul> <li>Outer Jacket Print: HP PremierFlex OM3+ Fiber Optic Cable,</li> <li>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,</li> <li>0.003dB/m added for lengths &gt;30m</li> </ul>
		<ul> <li>Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @</li> <li>1310nm @ 23°C as tested in accordance with EIA 455-45</li> </ul>
	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.

IP 50 m PremierFlex Notes	Cable Specs: Graded-index, "bendable" fiber optic multimode OM3+
0M3+ LC/LC Optical	50/125um duplex cable and Ethernet assembly with LC duplex
able (BK843A)	connectors on each end.
	Core diameter: 50um ±3um, Cladding diameter: 125um ±2um; Coating
	diameter: 245 ± 10um
	<ul> <li>Bandwidth: 3000 MHz-km @ 850nm (Laser)</li> </ul>
	Jacket Color: Blue
	<ul> <li>Jacket Material: Riser Grade – Low Smoke Zero Halogen (LSZH)</li> </ul>
	thermoplastic
	Boot Color: White
	<ul> <li>Outer Jacket Print: HP PremierFlex OM3+ Fiber Optic Cable,</li> </ul>
	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,</li> </ul>
	0.003dB/m added for lengths >30m
	<ul> <li>Maximum Cable Attenuation: 3.0 dB/km @ 850nm, 1.0 dB/km @</li> </ul>
	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.

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

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