

Overview

Models

HP 1810-8G v2 Switch	J9802A
HP 1810-24G v2 Switch	J9803A
HP 1810-48G Switch	J9660A
HP 1810-8 v2 Switch	J9800A
HP 1810-24 v2 Switch	J9801A

Key features

- Customized operation using intuitive Web interface
- Flexible connection and deployment options
- Layer 2 operation at wire speeds
- Fanless design for quiet operation
- Limited Lifetime warranty

Product overview

HP 1810 Switch Series devices are smart-managed, fixed-configuration Gigabit Ethernet and Fast Ethernet Layer 2 switches designed for small businesses looking for key features in an easy-to-administer solution. The series includes 8- and 24-port Gigabit Ethernet and Fast Ethernet models and a 48-port Gigabit Ethernet switch. Some models include SFP ports for fiber connectivity and some are fanless, making them ideal for office deployments. All 1810 Switches support flexible installation options, including mounting on walls, under tables, or on desktops. The 8-port Gigabit Ethernet model can be powered by an upstream Power over Ethernet (PoE) switch for environments where no line power is available. Customizable features include VLANs, Spanning Tree, and link aggregation trunking. 8- and 24-port switches offer Rapid Spanning Tree Protocol (RSTP) and DSCP QoS policies. The 8- and 24-port models also include the latest energy-saving capabilities—Energy Efficient Ethernet (EEE) and idle-port power down. The HP 1810 Switch Series have a limited lifetime warranty.

Features and Benefits

Connectivity

- **Auto-MDI/MDIX**
automatically adjusts for straight-through or crossover cables on all ports
- **Packet storm protection**
protects against broadcast, multicast, or unicast storms with user-defined thresholds
- **IEEE 802.3af PoE-powered device option**
obtains power provided by a standard PoE device connected to Port 1. Deploy the switch wherever an Ethernet cable can reach as a power outlet is not needed (8-port GbE model only)
- **SFP ports for fiber connectivity**
provides fiber connections for uplinks and other connections across longer distances than what copper cabling can support. SFP ports operate in addition to available copper Ethernet ports, providing a higher total number of available ports vs. Combo ports which are either a copper or fiber connection

Overview

Performance

- **Half-/Full-duplex auto-negotiating capability on every port**
doubles the throughput of every port
- **Link aggregation (trunking)**
brings together groups of 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—the 8-port models have four trunks of four links each, the 24-port models have eight trunks of four links each, and the 1810-48G switch has 16 trunks of eight links each

Quality of Service (QoS)

- **Traffic prioritization (IEEE 802.1p)**
allows real-time traffic classification with eight priority levels mapped to four queues
- **IEEE 802.1p prioritization with DSCP**
delivers data from the switch to devices based on the priority and type of traffic using Differentiated Services Code Point (DSCP)—available only with v2 switch models
- **Broadcast control**
allows limitation of broadcast traffic rate to cut down on unwanted network broadcast traffic

Layer 2 switching

- **VLAN support and tagging**
support up to 64 port-based VLANs and dynamic configuration of IEEE 802.1Q VLAN tagging, providing security between workgroups
- **Jumbo packet support**
improves the performance of large data transfers—supports frame size of up to 9220 bytes

Resiliency and high availability

- **IEEE 802.1D Spanning Tree Protocol (STP) and IEEE 802.1W Rapid Spanning Tree Protocol (RSTP)**
provides redundant links while preventing network loops—available only with v2 switch models

Security

- **Secure Sockets Layer (SSL)**
encrypts all HTTP traffic, allowing secure access to the browser-based management GUI in the switch
- **Automatic denial-of-service protection**
monitors six types of 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

Ease of use

- **Locator LED (switch)**
allows users to set the locator LED on a specific switch to either turn on, blink, or turn off—simplifies troubleshooting by making it easy to locate a particular switch within a rack of similar switches
- **Comprehensive LED display with per-port indicators**
provides an at-a-glance view of status, activity, speed, and full-duplex operation

Overview

Flexibility

- **Flexible installation**
allows mounting on wall, desktop, or under-table
- **Rack mountable (24- and 48-port models)**
offers a rack-mounting option with included hardware
- **Kensington lock slot**
allows switches to be physically secured in open-space deployments

Management

- **Simple Web management**
allows easy management of devices by even nontechnical users with its intuitive Web GUI
- **Secure Web GUI**
provides a secure, easy-to-use graphical interface for configuring the module via HTTPS
- **SNMPv1, v2c**
enables devices to be discovered and monitored from an SNMP management station
- **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
- **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

Additional information

- **Energy savings**
utilizes Energy Efficient Ethernet (EEE) IEEE 802.3az standard for lower power consumption[†]available only with v2 switch models
- **Green IT and power**
places inactive ports automatically in low power mode and its LED in power-down mode to conserve energy
- **Green initiative support**
provides support for RoHS and WEEE regulations

Warranty and support

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

Configuration

Build To Order²

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

HP 1810-8 v2 Switch	J9800A
<ul style="list-style-type: none">• 7 RJ-45 autosensing 10/100 ports• 1 RJ-45 autosensing 10/100/1000 port• 1U - Height	See Configuration Note²
HP 1810-8G v2 Switch	J9802A
<ul style="list-style-type: none">• 8 RJ-45 autosensing 10/100/1000 ports• 1U - Height	See Configuration Note²
HP 1810-24 v2 Switch	J9801A
<ul style="list-style-type: none">• 22 RJ-45 autosensing 10/100 ports• 2 RJ-45 autosensing 10/100/1000 ports• 2 SFP autosensing 100/1000 ports• 1U - Height	See Configuration Note^{1, 3}
PDU Cable NA/MX/TW/JP	J9801A#B2B
<ul style="list-style-type: none">• C15 PDU Jumper Cord (NA/MX/TW/JP)	
PDU Cable ROW	J9801A#B2C
<ul style="list-style-type: none">• C15 PDU Jumper Cord (ROW)	
HP 1810-24G v2 Switch	J9803A
<ul style="list-style-type: none">• 24 RJ-45 autosensing 10/100/1000 ports• 2 SFP 100/1000 ports• 1U - Height	See Configuration Note^{1, 3}
PDU Cable NA/MX/TW/JP	J9803A#B2B
<ul style="list-style-type: none">• C15 PDU Jumper Cord (NA/MX/TW/JP)	
PDU Cable ROW	J9803A#B2C
<ul style="list-style-type: none">• C15 PDU Jumper Cord (ROW)	
HP 1810-48G Switch	J9660A
<ul style="list-style-type: none">• 48 autosensing 10/100/1000 ports• 4 SFP 100/1000 Mbps ports• 1U - Height	See Configuration Note^{1, 3}
PDU Cable NA/MX/TW/JP	J9660A#B2B

Configuration

- [C15 PDU Jumper Cord \(NA/MX/TW/JP\)](#)

PDU Cable ROW

J9660A#B2C

- [C15 PDU Jumper Cord \(ROW\)](#)

Configuration Rules²

- Note 1 The following Transceivers install into this switch²
- | | |
|------------------------------------|--------|
| HP X121 1G SFP LC SX Transceiver | J4858C |
| HP X121 1G SFP LC LX Transceiver | J4859C |
| HP X111 100M SFP LC FX Transceiver | J9054C |
| HP X121 1G SFP RJ45 T Transceiver | J8177C |
- Note 2 Localization required. (See Localization Menu for list.)
- Note 3 Localization (Wall Power Cord) required on orders without #B2B or #B2C (PDU Power Cord). (See Localization Menu)

CTO Models

HP 1810-48G Switch

J9660A

- [48 autosensing 10/100 ports](#)
- [4 SFP 100/1000 Mbps ports](#)
- [1U - Height](#)

[See Configuration Note¹, 2, 3](#)

PDU Cable NA/MX/TW/JP

J9660A#B2B

- [C15 PDU Jumper Cord \(NA/MX/TW/JP\)](#)

PDU Cable ROW

J9660A#B2C

- [C15 PDU Jumper Cord \(ROW\)](#)

Configuration Rules²

- Note 1 The following Transceivers install into this switch²
- | | |
|------------------------------------|--------|
| HP X121 1G SFP LC SX Transceiver | J4858C |
| HP X121 1G SFP LC LX Transceiver | J4859C |
| HP X111 100M SFP LC FX Transceiver | J9054C |
| HP X121 1G SFP RJ45 T Transceiver | J8177C |
- Note 2 Localization (Wall Power Cord) required on orders without #B2B or #B2C (PDU Power Cord). (See Localization Menu)



Configuration

Note 3 If this switch is factory installed in HP Universal Racks, Then the J9583A#0D1 is required.
EMEA then J9583A#0D1 is required.
APD, Japan and China then J9583A#0D1 is required.

CLIC Only - Allow the J9583AZ in all regions.

Internal or External Power Supplies (Model Dependant)

Power supplies Included

Enter the following menu selections as integrated to the CTO Model X server above if order is factory built.

Transceivers

SFP Transceivers

HP X121 1G SFP LC SX Transceiver	J4858C
HP X121 1G SFP LC LX Transceiver	J4859C
HP X111 100M SFP LC FX Transceiver	J9054C
HP X121 1G SFP RJ45 T Transceiver	J8177C

Cables

Multi-Mode Cables

HP .5m Multi-mode OM3 LC/LC FC Cable	AJ833A
HP 1m Multi-mode OM3 LC/LC FC Cable	AJ834A
HP 2 m Multimode OM3 LC/LC FC Cable	AJ835A
HP 5 m Multimode OM3 LC/LC FC Cable	AJ836A
HP 15 m Multimode OM3 LC/LC FC Cable	AJ837A
HP 30 m Multimode OM3 LC/LC FC Cable	AJ838A

Configuration

HP 50 m Multimode OM3 LC/LC FC Cable AJ839A

OM4 Cables

HP Premier Flex LC/LC OM4 2f 1m Cbl QK732A

HP Premier Flex LC/LC OM4 2f 2m Cbl QK733A

HP Premier Flex LC/LC OM4 2f 5m Cbl QK734A

HP Premier Flex LC/LC OM4 2f 15m Cbl QK735A

HP Premier Flex LC/LC OM4 2f 30m Cbl QK736A

HP Premier Flex LC/LC OM4 2f 50m Cbl QK737A

HP Premier Flex LC/LC OM4 2f 1m Cbl QK732A

HP Premier Flex LC/LC OM4 2f 2m Cbl QK733A

HP Premier Flex LC/LC OM4 2f 5m Cbl QK734A

HP Premier Flex LC/LC OM4 2f 15m Cbl QK735A

HP Premier Flex LC/LC OM4 2f 30m Cbl QK736A

HP Premier Flex LC/LC OM4 2f 50m Cbl QK737A

Switch Enclosure Options

Rack Mount Kit

HP X410 1U Univ 4-post Rack Mnt Kit J9583A

[See Configuration Note¹](#)

[Configuration Rules²](#)

Note 1 If this Mounting Kit is order with #0D1 then it integrates to the HP Universal Rack. (not the switch)

Technical Specifications

HP 1810-8G v2 Switch (J9802A)	Ports	8 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T)†Duplex‡ 10BASE-T/100BASE-TX=half or full†1000BASE-T=full only
		Supports a maximum of 8 autosensing 10/100/1000 ports
	Physical characteristics	
	Dimensions	7.93(w) x 4.65(d) x 1.73(h) in (20.14 x 11.81 x 4.39 cm) (1U height)
	Weight	0.84 lb (.38 kg)
	Memory and processor	128 MB RAM, 8 MB flash‡packet buffer size=512 KB
	Mounting	wall, desktop and under table mounting
	Performance	
	100 Mb Latency	< 3.3 μs (64-byte packets)
	1000 Mb Latency	< 2.3 μs (64-byte packets)
	Throughput	up to 11.9 million pps
	Switching capacity	16 Gbps
	MAC address table size	8000 entries
	Environment	
	Operating temperature	32°F to 104°F (0°C to 40°C)
	Operating relative humidity	15% to 95% @ 104°F (40°C)
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Nonoperating/Storage relative humidity	15% to 95% @ 140°F (60°C)
	Altitude	up to 10,000 ft. (3 km)
	Acoustic	Power=0 dB no fan
	Electrical characteristics	
	Voltage	100-127/200-240 VAC
	Current	0.5 A
	Maximum power rating	7.2 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 60950-1‡IEC 60950‡EN 60950
	Emissions	EN 55022 Class A‡CISPR 22 Class A‡VCCI V-3‡FCC (CFR 47, Part 15) Subpart B Class A‡VCCI V-4
	Immunity	
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4

Technical Specifications

	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	IEC 61000-3-2
	Flicker	IEC 61000-3-3
Management	Web browser	
Notes	Use only supported genuine HP mini-GBICs with your switch.	
Services	3-year, 4-hour onsite, 13x5 coverage for hardware (UE256E)	
	3-year, 4-hour onsite, 24x7 coverage for hardware (UE257E)	
	3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UE258E)	
	3-year, 24x7 SW phone support, software updates (UE260E)	
	Installation with minimum configuration, system-based pricing (U4826E)	
	Installation with HP-provided configuration, system-based pricing (U4830E)	
	4-year, 4-hour onsite, 13x5 coverage for hardware (UR846E)	
	4-year, 4-hour onsite, 24x7 coverage for hardware (UR847E)	
	4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR848E)	
	4-year, 24x7 SW phone support, software updates (UR849E)	
	5-year, 4-hour onsite, 13x5 coverage for hardware (UR850E)	
	5-year, 4-hour onsite, 24x7 coverage for hardware (UR851E)	
	5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR852E)	
	5-year, 24x7 SW phone support, software updates (UR853E)	
	3 Yr 6 hr Call-to-Repair Onsite (UW383E)	
	4 Yr 6 hr Call-to-Repair Onsite (UW384E)	
	5 Yr 6 hr Call-to-Repair Onsite (UW385E)	
	1-year, 4-hour onsite, 13x5 coverage for hardware (HR899E)	
	1-year, 4-hour onsite, 24x7 coverage for hardware (HR900E)	
	1-year, 6 hour Call-To-Repair Onsite for hardware (HR903E)	
	1-year, 24x7 software phone support, software updates (HR902E)	
	1-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support and software updates (HR901E)	
	1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HU347E)	
	1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HU348E)	
	3-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HU349E)	
	3-year, 24x7 software phone support, software updates + 4 hour Hardware	

Technical Specifications

Exchange (HU350E)
 4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS810E)
 4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS811E)
 5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS812E)
 5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS813E)

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 1810-24G v2 Switch (J9803A)	Ports	24 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T)†Duplex=10BASE-T/100BASE-TX=half or full†1000BASE-T=full only
		2 SFP 100/1000 Mbps ports
		Supports a maximum of 24 autosensing 10/100/1000 ports plus 2 SFP ports
	Physical characteristics	
	Dimensions	12.99(w) x 6.81(d) x 1.73(h) in (32.99 x 17.3 x 4.39 cm) (1U height)
	Weight	2.54 lb (1.15 kg)
	Memory and processor	128 MB RAM, 8 MB flash†packet buffer size=512 KB
	Mounting	Mounts in an EIA-standard 19 in. telco rack (hardware included), horizontal surface, wall and under table mounting
	Performance	
	100 Mb Latency	< 3.3µs (64-byte packets)
	1000 Mb Latency	< 2.2µs (64-byte packets)
	Throughput	up to 38.7 million pps
	Switching capacity	52 Gbps
	MAC address table size	8000 entries
	Environment	
	Operating temperature	32°F to 104°F (0°C to 40°C)
	Operating relative humidity	15% to 95% @ 104°F (40°C)
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Nonoperating/Storage relative humidity	15% to 95% @ 140°F (60°C)
	Altitude	up to 10,000 ft. (3 km)
	Acoustic	Power=0 dB no fan
	Electrical characteristics	
	Voltage	100-127/200-240 VAC

Technical Specifications

	Current	0.4/0.3 A
	Maximum power rating	22 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 60950-1 [†] IEC 60950 [†] EN 60950
Emissions		EN 55022 Class A [†] CISPR 22 Class A [†] VCCI V-3 [†] FCC (CFR 47, Part 15) Subpart B Class A [†] VCCI V-4
Immunity	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	IEC 61000-3-2
	Flicker	IEC 61000-3-3
Management		Web browser
Notes		Use only supported genuine HP mini-GBICs with your switch.
Services		3-year, 4-hour onsite, 13x5 coverage for hardware (U4683E)
		3-year, 4-hour onsite, 24x7 coverage for hardware (U4835E)
		3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (U6321E)
		3-year, 24x7 SW phone support, software updates (UF792E)
		1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (HR849E)
		1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HR850E)
		1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (HR851E)
		Installation with minimum configuration, system-based pricing (U4826E)
		Installation with HP-provided configuration, system-based pricing (U4830E)
		4-year, 4-hour onsite, 13x5 coverage for hardware (UR948E)
		4-year, 4-hour onsite, 24x7 coverage for hardware (UR949E)
		4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR950E)
		4-year, 24x7 SW phone support, software updates (UR951E)

Technical Specifications

- 5-year, 4-hour onsite, 13x5 coverage for hardware (UR952E)
- 5-year, 4-hour onsite, 24x7 coverage for hardware (UR953E)
- 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR954E)
- 5-year, 24x7 SW phone support, software updates (UR955E)
- 3 Yr 6 hr Call-to-Repair Onsite (UW368E)
- 4 Yr 6 hr Call-to-Repair Onsite (UW369E)
- 5 Yr 6 hr Call-to-Repair Onsite (UW370E)
- 1-year, 6 hour Call-To-Repair Onsite for hardware (HR853E)
- 1-year, 24x7 software phone support, software updates (HR852E)
- 1-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support and software updates (HR851E)
- 1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS554E)
- 1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HS555E)
- 3-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS556E)
- 3-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS557E)
- 4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS558E)
- 4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS559E)
- 5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS560E)
- 5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS561E)

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 1810-48G Switch
(J9660A)

Ports

48 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T)†Duplex‡
10BASE-T/100BASE-TX‡half or full†1000BASE-T‡full only
4 SFP 100/1000 Mbps ports

Supports a maximum of 48 autosensing 10/100/1000 ports plus 4 SFP ports

Physical characteristics

Dimensions

17.4(w) x 9.75(d) x 1.75(h) in
(44.2 x 24.77 x 4.45 cm) (1U height)

Weight

6.31 lb (2.86 kg)

Memory and processor

8 MB flash, 64 MB SDRAM†packet buffer size‡1.5 MB



Technical Specifications

Mounting	Mounts in an EIA-standard 19 in. telco rack (hardware included)±wall, desktop, tabletop, and under-table mounting	
Performance	100 Mb Latency	< 8.4 µs (64-byte packets)
	1000 Mb Latency	< 3.2 µs (64-byte packets)
	Throughput	up to 77.4 million pps (64-byte packets)
	Switching capacity	104 Gbps
	MAC address table size	16000 entries
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Nonoperating/Storage relative humidity	15% to 90% @ 149°F (65°C), noncondensing
	Altitude	up to 10,000 ft. (3 km)
	Acoustic	Power±22 dB single fan
Electrical characteristics	Maximum heat dissipation	204 BTU/hr (215.22 kJ/hr)
	Voltage	100-127/200-240 VAC
	Current	0.9/0.5 A
	Maximum power rating	60 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	CSA 22.2 No. 60950±EN 60950/IEC 60950±UL 60950	
Emissions	EN 55022 Class A±CISPR 22 Class A±VCCI V-3±FCC (CFR 47, Part 15) Subpart B Class A±VCCI V-4	
Immunity	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8

Technical Specifications

	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	IEC 61000-3-2
	Flicker	IEC 61000-3-3
Management	Web browser	
Notes	Use only supported genuine HP mini-GBICs with your switch.	
Services	<p>3-year, 4-hour onsite, 13x5 coverage for hardware (HS854E)</p> <p>3-year, 4-hour onsite, 24x7 coverage for hardware (HS856E)</p> <p>3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (U6321E)</p> <p>3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (HS858E)</p> <p>3-year, 24x7 SW phone support, software updates (UF792E)</p> <p>3-year, 24x7 SW phone support, software updates (HS859E)</p> <p>1-year, post-warranty, 4-hour onsite, 13x5 coverage for hardware (HS846E)</p> <p>1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware (HS848E)</p> <p>1-year, post-warranty, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (HS850E)</p> <p>Installation with minimum configuration, system-based pricing (U4826E)</p> <p>Installation with HP-provided configuration, system-based pricing (U4830E)</p> <p>4-year, 4-hour onsite, 13x5 coverage for hardware (HS862E)</p> <p>4-year, 4-hour onsite, 24x7 coverage for hardware (HS864E)</p> <p>4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (HS866E)</p> <p>4-year, 24x7 SW phone support, software updates (HS867E)</p> <p>5-year, 4-hour onsite, 13x5 coverage for hardware (HS870E)</p> <p>5-year, 4-hour onsite, 24x7 coverage for hardware (HS872E)</p> <p>5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (HS874E)</p> <p>5-year, 24x7 SW phone support, software updates (HS875E)</p> <p>3 Yr 6 hr Call-to-Repair Onsite (HS860E)</p> <p>3 Yr 6 hr Call-to-Repair Onsite (UW368E)</p> <p>4 Yr 6 hr Call-to-Repair Onsite (HS868E)</p> <p>5 Yr 6 hr Call-to-Repair Onsite (HS876E)</p> <p>1-year, 6 hour Call-To-Repair Onsite for hardware (HS852E)</p> <p>1-year, 24x7 software phone support, software updates (HS851E)</p>	

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 1810-8 v2 Switch

Ports

7 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u)



Technical Specifications

(J9800A)

Type 100BASE-TX[†]Duplex[†]half or full
 1 RJ-45 autosensing 10/100/1000 port (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T)[†]Duplex[†]10BASE-T/100BASE-TX[†]half or full[†]1000BASE-T[†]full only
 Supports a maximum of 7 autosensing 10/100 ports plus 1 autosensing 10/100/1000 ports

Physical characteristics	Dimensions	7.93(w) x 4.65(d) x 1.73(h) in (20.14 x 11.81 x 4.39 cm) (1U height)
	Weight	0.77 lb (.35 kg)
Memory and processor	128 MB RAM, 8 MB flash [†] packet buffer size [†] 512 KB	
Mounting	wall, desktop and under table mounting	
Performance	100 Mb Latency	< 3.3 μ s (64-byte packets)
	Throughput	up to 2.5 million pps
	Switching capacity	3.4 Gbps
	MAC address table size	8000 entries
Environment	Operating temperature	32°F to 104°F (0°C to 40°C)
	Operating relative humidity	15% to 95% @ 104°F (40°C)
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Nonoperating/Storage relative humidity	15% to 95% @ 140°F (60°C)
	Altitude	up to 10,000 ft. (3 km)
Electrical characteristics	Acoustic	Power [†] 0 dB no fan
	Voltage	100-240 VAC
	Current	0.5 A
	Maximum power rating	4.8 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 60950-1 [†] IEC 60950 [†] EN 60950	
Emissions	EN 55022 Class A [†] CISPR 22 Class A [†] VCCI V-3 [†] FCC (CFR 47, Part 15) Subpart B Class A [†] VCCI V-4	
Immunity	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4

Technical Specifications

	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	IEC 61000-3-2
	Flicker	IEC 61000-3-3
Management	Web browser	
Notes	Use only supported genuine HP mini-GBICs with your switch.	
Services	3-year, 4-hour onsite, 13x5 coverage for hardware (UE256E)	
	3-year, 4-hour onsite, 24x7 coverage for hardware (UE257E)	
	3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (UE258E)	
	3-year, 24x7 SW phone support, software updates (UE260E)	
	Installation with minimum configuration, system-based pricing (U4826E)	
	Installation with HP-provided configuration, system-based pricing (U4830E)	
	4-year, 4-hour onsite, 13x5 coverage for hardware (UR846E)	
	4-year, 4-hour onsite, 24x7 coverage for hardware (UR847E)	
	4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR848E)	
	4-year, 24x7 SW phone support, software updates (UR849E)	
	5-year, 4-hour onsite, 13x5 coverage for hardware (UR850E)	
	5-year, 4-hour onsite, 24x7 coverage for hardware (UR851E)	
	5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR852E)	
	5-year, 24x7 SW phone support, software updates (UR853E)	
	3 Yr 6 hr Call-to-Repair Onsite (UW383E)	
	4 Yr 6 hr Call-to-Repair Onsite (UW384E)	
	5 Yr 6 hr Call-to-Repair Onsite (UW385E)	
	1-year, 4-hour onsite, 13x5 coverage for hardware (HR899E)	
	1-year, 4-hour onsite, 24x7 coverage for hardware (HR900E)	
	1-year, 6 hour Call-To-Repair Onsite for hardware (HR903E)	
	1-year, 24x7 software phone support, software updates (HR902E)	
	1-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support and software updates (HR901E)	
	1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HU347E)	
	1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HU348E)	
	3-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HU349E)	
	3-year, 24x7 software phone support, software updates + 4 hour Hardware	

Technical Specifications

Exchange (HU350E)
 4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS810E)
 4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS811E)
 5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS812E)
 5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS813E)

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 1810-24 v2 Switch (J9801A)	Ports	<p>22 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX)±Duplex±half or full</p> <p>2 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T)±Duplex±10BASE-T/100BASE-TX±half or full±1000BASE-T±full only</p> <p>2 SFP 100/1000 Mbps ports</p> <p>Supports a maximum of 22 autosensing 10/100 ports plus 2 autosensing 10/100/1000 ports plus 2 SFP port</p>
	Physical characteristics	<p>Dimensions 12.99(w) x 6.81(d) x 1.73(h) in (32.99 x 17.3 x 4.39 cm) (1U height)</p> <p>Weight 2.2 lb (1 kg)</p>
	Memory and processor	128 MB RAM, 8 MB flash±packet buffer size±512 KB
	Mounting	Mounts in an EIA-standard 19 in. telco rack (hardware included), horizontal surface, wall and under table mounting
	Performance	<p>100 Mb Latency < 3.4µs (64-byte packets)</p> <p>Throughput up to 9.2 million pps</p> <p>Switching capacity 12.4 Gbps</p> <p>MAC address table size 8000 entries</p>
	Environment	<p>Operating temperature 32°F to 104°F (0°C to 40°C)</p> <p>Operating relative humidity 15% to 95% @ 104°F (40°C)</p> <p>Nonoperating/Storage temperature -40°F to 158°F (-40°C to 70°C)</p> <p>Nonoperating/Storage relative humidity 15% to 95% @ 140°F (60°C)</p> <p>Altitude up to 10,000 ft. (3 km)</p>

Technical Specifications

	Acoustic	Power=0 dB no fan
Electrical characteristics	Voltage	100-127/200-240 VAC
	Current	0.4/0.3 A
	Maximum power rating	22 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 60950-1=IEC 60950=EN 60950	
Emissions	EN 55022 Class A=CISPR 22 Class A=VCCI V-3=FCC (CFR 47, Part 15) Subpart B Class A=VCCI V-4	
Immunity	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	IEC 61000-3-2
	Flicker	IEC 61000-3-3
	Management	Web browser
Notes	Use only supported genuine HP mini-GBICs with your switch.	
Services	3-year, 4-hour onsite, 13x5 coverage for hardware (U4683E)	
	3-year, 4-hour onsite, 24x7 coverage for hardware (U4835E)	
	3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 SW phone support and SW updates (U6321E)	
	3-year, 24x7 SW phone support, software updates (UF792E)	
	Installation with minimum configuration, system-based pricing (U4826E)	
	Installation with HP-provided configuration, system-based pricing (U4830E)	
	4-year, 4-hour onsite, 13x5 coverage for hardware (UR948E)	
	4-year, 4-hour onsite, 24x7 coverage for hardware (UR949E)	
	4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR950E)	
	4-year, 24x7 SW phone support, software updates (UR951E)	
5-year, 4-hour onsite, 13x5 coverage for hardware (UR952E)		
5-year, 4-hour onsite, 24x7 coverage for hardware (UR953E)		

Technical Specifications

5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR954E)

5-year, 24x7 SW phone support, software updates (UR955E)

3 Yr 6 hr Call-to-Repair Onsite (UW368E)

4 Yr 6 hr Call-to-Repair Onsite (UW369E)

5 Yr 6 hr Call-to-Repair Onsite (UW370E)

1-year, 4-hour onsite, 13x5 coverage for hardware (HR849E)

1-year, 4-hour onsite, 24x7 coverage for hardware (HR850E)

1-year, 6 hour Call-To-Repair Onsite for hardware (HR853E)

1-year, 24x7 software phone support, software updates (HR852E)

1-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support and software updates (HR851E)

1-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS554E)

1-year, 24x7 software phone support, software updates + 4 hour hardware exchange (HS555E)

3-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS556E)

3-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS557E)

4-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS558E)

4-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS559E)

5-year, 24x7 software phone support, software updates + Next Business Day Hardware Exchange (HS560E)

5-year, 24x7 software phone support, software updates + 4 hour Hardware Exchange (HS561E)

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

Standards and protocols **Denial of service protection**

(applies to all products in series) CPU DoS Protection

General protocols

IEEE 802.1p Priority

IEEE 802.1Q VLANs

IEEE 802.3ad Link Aggregation Control Protocol (LACP)

IEEE 802.3x Flow Control

RFC 1534 DHCP/BOOTP Interoperation

RFC 2030 Simple Network Time Protocol (SNTP) v4

Network management

IEEE 802.1AB Link Layer Discovery Protocol (LLDP)

Accessories

HP 1810 Switch Series accessories

Cables

HP LC to LC Multi-mode OM3 2-Fiber 0.5m 1-Pack Fiber Optic Cable	AJ833A
HP LC to LC Multi-mode OM3 2-Fiber 1.0m 1-Pack Fiber Optic Cable	AJ834A
HP LC to LC Multi-mode OM3 2-Fiber 2.0m 1-Pack Fiber Optic Cable	AJ835A
HP LC to LC Multi-mode OM3 2-Fiber 5.0m 1-Pack Fiber Optic Cable	AJ836A
HP LC to LC Multi-mode OM3 2-Fiber 15.0m 1-Pack Fiber Optic Cable	AJ837A
HP LC to LC Multi-mode OM3 2-Fiber 30.0m 1-Pack Fiber Optic Cable	AJ838A
HP LC to LC Multi-mode OM3 2-Fiber 50.0m 1-Pack Fiber Optic Cable	AJ839A
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 1m Cable	QK732A
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 2m Cable	QK733A
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 5m Cable	QK734A
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 15m Cable	QK735A
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 30m Cable	QK736A
HP Premier Flex LC/LC Multi-mode OM4 2 fiber 50m Cable	QK737A

Mounting Kit

HP X410 1U Universal 4-post Rack Mounting Kit	J9583A
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HP 1810-24G v2 Switch (J9803A)

HP X111 100M SFP LC FX Transceiver	J9054C
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 1810-48G Switch (J9660A)

HP X111 100M SFP LC FX Transceiver	J9054C
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 1810-24 v2 Switch (J9801A)

HP X111 100M SFP LC FX Transceiver	J9054C
HP X121 1G SFP LC SX Transceiver	J4858C
HP X121 1G SFP LC LX Transceiver	J4859C
HP X121 1G SFP RJ45 T Transceiver	J8177C

Accessory Product Details

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

HP 0.5 m Multimode OM3 LC/LC Optical Cable
(AJ833A)

Notes

Cable type

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

Maximum distance

10Gbps Transfer Rate (Ethernet) = 300m

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

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

Services

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

Cabling

Cable type-

50/125 μm (core/cladding) diameter, multimode 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 μm fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions-Core diameter- $50 \pm 3.0\mu\text{m}$ Cladding diameter- $125 \pm 2.0\mu\text{m}$ Coating diameter- $245 \pm 10\mu\text{m}$
- 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 zip cord graded index 50/125 μm 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, multimode 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 µm fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions⁻Core diameter⁻50 ± 3.0µm Cladding diameter⁻125 ± 2.0µm Coating diameter⁻245 ± 10µm
- 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 zip cord graded index 50/125µm 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 5 m Multimode OM3
LC/LC Optical Cable**
(AJ836A)

Cabling

Cable type⁻

50/125 µm core/cladding) diameter, multimode 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 µm fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions⁻Core diameter⁻50 ± 3.0µm Cladding diameter⁻125 ± 2.0µm Coating diameter⁻245 ± 10µm
- 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 zip cord graded index 50/125µm 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 **Cabling**
(AJ837A)

Cable type

50/125 µm (core/cladding) diameter, multimode 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 µm fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions = Core diameter = 50 ± 3.0µm Cladding diameter = 125 ± 2.0µm Coating diameter = 245 ± 10µm
- 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 zip cord graded index 50/125µm 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, multimode 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 μm fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- Dimensions = Core diameter = $50 \pm 3.0\mu\text{m}$ Cladding diameter = $125 \pm 2.0\mu\text{m}$ Coating diameter = $245 \pm 10\mu\text{m}$
- 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 zip cord graded index 50/125 μm 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 **Cabling**
(AJ839A)

Cable type

50/125 µm (core/cladding) diameter, multimode 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 µm fiber optic cable and Ethernet assembly with LC duplex connectors on one end and LC duplex connectors on other end.

- **Dimensions** = Core diameter = 50 ± 3.0µm Cladding diameter = 125 ± 2.0µm Coating diameter = 245 ± 10µm
- **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 zip cord graded index 50/125µm 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 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
2m Cable (QK733A)**

Notes

Cable Specs=Graded-index, Bendable fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.

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

Services

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
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
15m Cable (QK735A)**

Notes

Cable Specs=Graded-index, Bendable fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.

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

Services

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
30m Cable (QK736A)**

Notes

Cable Specs=Graded-index, Bendable fiber optic multimode OM3+ 50/125um duplex cable and Ethernet assembly with LC duplex connectors on each end.

- Core diameter=50um ±3um, Cladding diameter=125um ±2um, Coating diameter=245 ± 10um
- Bandwidth=3000 MHz-km @ 850nm (Laser)
- Jacket Color=Blue
- Jacket Material=Riser Grade – Low Smoke Zero Halogen (LSZH) thermoplastic
- Boot Color=White
- Outer Jacket Print=HP PremierFlex OM3+ Fiber Optic Cable, 50/125um, Type OFNR (UL), LSZH, cUL, OFN FT4, ROHS. Cable also has a longitudinal white stripe that runs the entire length of the cable.
- 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.

Accessory Product Details

HP X410 1U Universal 4-post Rack Mounting Kit (J9583A) **Notes**

The rack mounting kit supports the 1U, full width switches in the following switch series and the power supply—V1810 Series, E2510 Series, E2520 Series, E2610 Series, E2810 Series, E2910 Series, E3500 Series, and the E620 Power Supply This universal rack mounting kit is design to fit the following racks—HP 10K 10642, HP 10K 10842, Panduit CN, Panduit CS, Wrightline Vantage S2, APC Netshelter 600mm, and APC Netshelter 800mm. It may well fit many other brands and models too.

Services

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

HP X111 100M SFP LC FX Transceiver (J9054C) **Ports**
Physical characteristics

1 LC 100BASE-FX port (IEEE 802.3u Type 100BASE-FX) [†]Duplex—half or full
Dimensions—2.7(d) x 0.54(w) x 0.48(h) in. (6.86 x 1.38 x 1.22 cm)
Weight—0.06 lb. (0.03 kg)

HP X111 100M SFP LC FX Transceiver—An SFP format 100-megabit transceiver with LC connectors using FX technology.

Environment

Operating temperature—32°F to 158°F (0°C to 70°C)
Operating relative humidity—5% to 95%
Nonoperating/Storage temperature—-40°F to 185°F (-40°C to 85°C)
Nonoperating/Storage relative humidity—5% to 85%
Altitude—up to 10,000 ft. (3 km)

Cabling

Cable type—
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 km (full duplex) or 412 m (half duplex)

Notes

Transmitter wavelength—1310nm
Power consumption is 1.1 watt maximum.
For supported platforms and minimum software requirements to support this product, see the document titled [Support for the J9054C 100-FX SFP-LC Transceiver](#) on the [ProCurve Mini-GBICs and SFPs](#) [Manuals](#) Web page.

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

<p>HP X121 1G SFP LC SX Transceiver (J4858C)</p>	<p>Ports Physical characteristics</p>	<p>1 LC 1000BASE-SX port[†]Duplex[†]-full only Dimensions[†]-2.24(d) x 0.54(w) x 0.48(h) in. (5.69 x 1.37 x 1.22 cm) Weight[†]-0.04 lb. (0.02 kg) Transceiver form factor[†]-SFP</p>
<p>A small form-factor pluggable (SFP) Gigabit SX transceiver that provides a full-duplex Gigabit solution up to 550 m on multimode fiber.</p>	<p>Environment</p>	<p>Operating temperature[†]-32°F to 158°F (0°C to 70°C) Operating relative humidity[†]-5% to 85%, noncondensing Nonoperating/Storage temperature[†]-40°F to 203°F (-40°C to 85°C) Altitude[†]-up to 10,000 ft. (3 km)</p>
	<p>Electrical characteristics</p>	<p>Power consumption typical[†]-0.4 W Power consumption maximum[†]-0.7 W</p>
	<p>Cabling</p>	<p>Type[†]</p> <ul style="list-style-type: none"> • 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[†] <p>Maximum distance[†]</p> <ul style="list-style-type: none"> • 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) <p>Cable length[†]-2-550m Fiber type[†]-Multi Mode</p>
	<p>Services</p>	<p>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.</p>

<p>HP X121 1G SFP LC LX Transceiver (J4859C)</p>	<p>Ports Physical characteristics</p>	<p>1 LC 1000BASE-LX port (IEEE 802.3z Type 1000BASE-LX)[†]Duplex[†]-full only Dimensions[†]-2.24(d) x 0.54(w) x 0.486(h) in. (5.69 x 1.37 x 1.23 cm) Weight[†]-0.04 lb. (0.02 kg)</p>
<p>HP X121 1G SFP LC LX Transceiver[†]-An SFP format gigabit transceiver with LC connectors using LX technology.</p>	<p>Environment</p>	<p>Operating temperature[†]-32°F to 158°F (0°C to 70°C) Operating relative humidity[†]-0% to 85%, noncondensing Nonoperating/Storage temperature[†]-40°F to 212°F (-40°C to 100°C) Altitude[†]-up to 10,000 ft. (3 km)</p>
	<p>Cabling</p>	<p>Type[†]</p> <ul style="list-style-type: none"> • 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[†] <p>Maximum distance[†]</p>

Accessory Product Details

- 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 Transceiver (J8177C)

Ports

1 RJ-45 1000BASE-T port (IEEE 802.3ab Type 1000BASE-T)†Duplex=full only

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 RJ45 connectors using 1000BaseT technology.

Environment

Operating temperature=32°F to 158°F (0°C to 70°C)†with 100 LFM airflow over the SFP module)

Operating relative humidity=0% to 95% @ 75°F (25°C), noncondensing

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 † 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 [ProCurve 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 ProCurve Switch 8200zl, 5400zl, and 6200yl Series 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 ProCurve 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.

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

Summary of Changes

Date	Version History	Action	Description of Change
01-Dec-2014	From Version 19 to 20	Changed	Warranty and support updated
06-Oct-2014	From Version 18 to 19	Changed	SKU descriptions updated, minor changes on Technical Specifications
17-Jan-2014	From Version 17 to 18	Changed	CTO Models and Switch Enclosure Options were revised.
09-Dec-2013	From Version 16 to 17	Changed	Changes made throughout the Configuration section.
04-Nov-2013	From Version 15 to 16	Added	OM4 Cables were added to Configuration.
12-Jul-2013	From Version 14 to 15	Added	Configuration was added.

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

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