

Overview

HPE OfficeConnect 1820 Switch Series



Models

HPE OfficeConnect 1820 8G Switch	J9979A
HPE OfficeConnect 1820 8G PoE+ (65W) Switch	J9982A
HPE OfficeConnect 1820 24G Switch	J9980A
HPE OfficeConnect 1820 24G PoE+ (185W) Switch	J9983A
HPE OfficeConnect 1820 48G Switch	J9981A
HPE OfficeConnect 1820 48G PoE+ (370W) Switch	J9984A

Key features

- Customized operation using intuitive Web interface
- Flexible deployment options including wall, under table and desktop mounting
- 24- and 48 port models include SFP ports
- 8-, 24- and 48 port non-PoE+ models are fanless for quiet operation
- Limited lifetime Warranty

Overview

Product overview

HPE OfficeConnect 1820 Switch Series devices are basic, smart-managed, fixed-configuration Gigabit Ethernet Layer 2 switches designed for small businesses looking for key features in an easy-to-administer solution. The series is part of the OfficeConnect portfolio of Hewlett Packard Enterprise small business networking products.

The series consists of six switches including 8-, 24- and 48-port Gigabit Ethernet switches and 8-, 24-, and 48-port Gigabit PoE+ models each providing non-blocking Gigabit per port performance. Some models include SFP ports for fiber connectivity and the 8-, 24-, and 48-port non PoE+ models are fanless, making them ideal for office deployments. All HPE OfficeConnect 1820 Switches support flexible installation options, including mounting on wall, under table, or on desktop. 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.

These Gigabit switches are plug-and-play out of the box, yet network operation can be fine-tuned through features available from a simple Web browser-based GUI, if necessary. Customizable features include VLANs, Rapid Spanning Tree, IGMP Snooping, link aggregation trunking, and DSCP QoS policies. All models include the latest energy-saving capabilities, including Energy Efficient Ethernet (EEE) and idle-port power down. HPE OfficeConnect 1820 Switch Series is covered by a Limited Lifetime Warranty.

Features and Benefits

Management

- **Simple Web management**
Allows for easy management of the switch—even by nontechnical users—through an intuitive Web GUI; supports HTTP and HTTP Secure (HTTPS).
- **SNMPv1, v2c**
Enables devices to be discovered and monitored from an SNMP management station.
- **Port mirroring**
Enables traffic on a port to be simultaneously sent to a network analyzer for monitoring.
- **Dual flash images**
Provides independent primary and secondary operating system files for backup while upgrading.
- **Network Time Protocol (NTP)**
Synchronizes timekeeping among distributed time servers and clients; keeps timekeeping consistent among all clock-dependent devices within the network.
- **Manual network time configuration**
Manually set the date and time on the switch in the absence of an NTP server.
- **Default DHCP client mode**
Allows the switch to be directly connected to a network, enabling plug-and-play operation; in absence of a DHCP server on the network, the switch falls back to a default, fixed IP address.

Quality of Service (QoS)

- **Traffic prioritization**
Provides time-sensitive packets (like VoIP and video) with priority over other traffic based on DSCP or IEEE 802.1p classification; packets are mapped to eight hardware queues for more effective throughput.
- **Broadcast control**
Allows limiting of broadcast traffic rate to reduce unwanted network broadcast traffic.
- **IEEE 802.1p/Q**
Delivers data to devices based on the priority and type of traffic; supports IEEE 802.1Q.

Connectivity

- **Auto-MDI/MDIX**
Automatically adjusts for straight-through or crossover cables on all ports.
- **IEEE 802.3X flow control**

Overview

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

- **Loop protection**

If the switch detects a loop, it disables the source port from forwarding data packets originating from the switch to avoid broadcast storms.

- **SFP ports for fiber connectivity**

Provides fiber connections for uplinks and other connections across longer distances than copper cabling can support; SFP ports are in addition to available copper Ethernet ports, providing a higher total number of available ports. SFP ports available on 24- and 48 port models.

- **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 non-PoE+ model only).

- **IEEE 802.3at Power over Ethernet (PoE+)**

Provides up to 30W per port, which allows support of the latest PoE+-capable devices such as IP phones, wireless access points, and security cameras, as well as any IEEE 802.3af-compliant end device; lowers the cost of additional electrical cabling and circuits that would otherwise be necessary in IP phone and WLAN deployments.

- **PoE+ port availability**

Ports 1-4 provide PoE+ on the HPE 1820-8G-PoE+ (65W) switch. Ports 1 - 12 provide PoE+ on the HPE 1820-24G-PoE+ (180W) switch. Ports 1-24 provide PoE+ on the HPE 1820-48G-PoE+ (370W) switch.

- **Auto PoE power configuration**

The switch automatically assigns the required power to a port for a PD device based on LLDP (Link Layer Discovery Protocol). Optionally, the switch permits manual, per port, PoE power configuration.

- **PoE shut down mode**

A PoE scheduler provides the ability to define the hours of PoE power being supplied on a group of switch ports based on a 24 hour day. The scheduler enables the flexibility to select individual days of a week as well as reoccurrence on a weekly basis with a start and end date.

- **Energy Efficient Ethernet**

Compliant with IEEE 802.3az standard requirements to save energy during periods of low data activity.

- **Auto port shut-down**

The switch saves power by automatically shutting down power to inactive ports. Power is restored on a port upon link detection.

- **Energy savings status**

The switch provides an estimated cumulative energy savings due to green Ethernet features enabled.

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 nine types of malicious attacks and protects the network by blocking these attacks.

- **Management password**

Provides security so that only authorized access to the Web browser interface is allowed.

Performance

- **Half-/full-duplex auto-negotiating capability on every port**

Doubles the throughput of every port.

- **IGMP snooping**

Improves network performance through multicast filtering, instead of flooding traffic to all ports.

Layer 2 switching

- **VLAN support and tagging**

Overview

Supports 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.

- **Link aggregation**

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 support 4 trunks, the 24-port models support 8 trunks and the 48-port models support 16 trunks. The 8- and 24-port switches can support up to 4 ports per trunk, the 48-port switches can support up to 8 ports per trunk

Ease of use

- **Locator LED**

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.

Flexibility

- **Flexible installation**

Allows mounting on wall, desktop, or under-table with supplied hardware.

- **Rack mountable**

All models include rack-mounting hardware for mounting in a standard 19 inch telco rack.

- **Kensington lock slot**

Allows switches to be physically secured in open-space deployments (8-, and 24 port models).

Warranty and support

- **Limited Lifetime Warranty**

See www.hpe.com/officeconnect/support for warranty and support information included with your product purchase.

Configuration

Build To Order:

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

HPE OfficeConnect 1820 8G Switch <ul style="list-style-type: none"> • 8 RJ-45 autosensing 10/100/1000 ports • 1U - Height (Desktop Model) 	J9979A See Configuration NOTE:2
HPE OfficeConnect 1820 24G Switch <ul style="list-style-type: none"> • 24 RJ-45 autosensing 10/100/1000 ports • 2 SFP 100/1000 Mbps ports (min=0 \ max=2 SFP Transceivers) • 1U - Height 	J9980A See Configuration NOTE:1, 3
PDU Cable NA/MEX/TW/JP <ul style="list-style-type: none"> • C15 PDU Jumper Cord (NA/MEX/TW/JP) 	J9980A#B2B
PDU Cable NA/MEX/TW/JP <ul style="list-style-type: none"> • C15 PDU Jumper Cord (ROW) 	J9980A#B2C
High Volt Switch/Router to Wall Power Cord <ul style="list-style-type: none"> • NEMA L6-20P Cord (NA/MEX/JP/TW) 	J9980A#B2E
HPE OfficeConnect 1820 48G Switch <ul style="list-style-type: none"> • 48 RJ-45 autosensing 10/100/1000 ports • 4 SFP 100/1000 Mbps ports (min=0 \ max=4 SFP Transceivers) • 1U - Height 	J9981A See Configuration NOTE:1, 3
PDU Cable NA/MEX/TW/JP <ul style="list-style-type: none"> • C15 PDU Jumper Cord (NA/MEX/TW/JP) 	J9981A#B2B
PDU Cable NA/MEX/TW/JP <ul style="list-style-type: none"> • C15 PDU Jumper Cord (ROW) 	J9981A#B2C
High Volt Switch/Router to Wall Power Cord <ul style="list-style-type: none"> • NEMA L6-20P Cord (NA/MEX/JP/TW) 	J9981A#B2E
HPE OfficeConnect 1820 8G PoE+ (65W) Switch <ul style="list-style-type: none"> • 4 RJ-45 autosensing 10/100/1000 PoE+ ports • 4 RJ-45 autosensing 10/100/1000 ports • 1U - Height (Desktop Model) 	J9982A See Configuration NOTE:2
HPE OfficeConnect 1820 24G PoE+ (185W) Switch <ul style="list-style-type: none"> • 12 RJ-45 autosensing 10/100/1000 PoE+ ports • 12 RJ-45 autosensing 10/100/1000 ports • 2 SFP 100/1000 Mbps ports (min=0 \ max=2 SFP Transceivers) • 1U - Height 	J9983A See Configuration NOTE:1, 3
PDU Cable NA/MEX/TW/JP <ul style="list-style-type: none"> • C15 PDU Jumper Cord (NA/MEX/TW/JP) 	J9983A#B2B

Configuration

PDU Cable NA/MEX/TW/JP	J9983A#B2C
<ul style="list-style-type: none"> • C15 PDU Jumper Cord (ROW) 	
High Volt Switch/Router to Wall Power Cord	J9983A#B2E
<ul style="list-style-type: none"> • NEMA L6-20P Cord (NA/MEX/JP/TW) 	
HPE OfficeConnect 1820 48G PoE+ (370W) Switch	J9984A
<ul style="list-style-type: none"> • 24 RJ-45 autosensing 10/100/1000 PoE+ ports • 24 RJ-45 autosensing 10/100/1000 ports • 4 SFP 100/1000 Mbps ports (min=0 \ max=4 SFP Transceivers) • 1U - Height 	See Configuration NOTE:1, 3
PDU Cable NA/MEX/TW/JP	J9984A#B2B
<ul style="list-style-type: none"> • C15 PDU Jumper Cord (NA/MEX/TW/JP) 	
PDU Cable NA/MEX/TW/JP	J9984A#B2C
<ul style="list-style-type: none"> • C15 PDU Jumper Cord (ROW) 	
High Volt Switch/Router to Wall Power Cord	J9984A#B2E
<ul style="list-style-type: none"> • NEMA L6-20P Cord (NA/MEX/JP/TW) 	

Configuration Rules:

Note 1 The following Transceivers install into this switch:

Aruba 1G SFP LC SX 500m MMF XCVR	J4858D
Aruba 1G SFP LC LX 10km SMF XCVR	J4859D
Aruba 1G SFP RJ45T 100m Cat5e XCVR	J8177D
Aruba 100M SFP LC FX 2KM MMF XCVR	J9054D

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)

Rack Level Integration CTO Models

HPE OfficeConnect 1820 24G Switch	J9980A
<ul style="list-style-type: none"> • 24 RJ-45 autosensing 10/100/1000 ports • 2 SFP 100/1000 Mbps ports (min=0 \ max=2 SFP Transceivers) • 1U - Height 	See Configuration NOTE:1, 2, 3
PDU Cable NA/MEX/TW/JP	J9980A#B2B
<ul style="list-style-type: none"> • C15 PDU Jumper Cord (NA/MEX/TW/JP) 	
PDU Cable NA/MEX/TW/JP	J9980A#B2C
<ul style="list-style-type: none"> • C15 PDU Jumper Cord (ROW) 	
HPE OfficeConnect 1820 48G Switch	J9981A

Configuration

<ul style="list-style-type: none"> • 48 RJ-45 autosensing 10/100/1000 ports • 4 SFP 100/1000 Mbps ports (min=0 \ max=4 SFP Transceivers) • 1U - Height 	See Configuration NOTE: 1, 2, 3
PDU Cable NA/MEX/TW/JP <ul style="list-style-type: none"> • C15 PDU Jumper Cord (NA/MEX/TW/JP) 	J9981A#B2B
PDU Cable NA/MEX/TW/JP <ul style="list-style-type: none"> • C15 PDU Jumper Cord (ROW) 	J9981A#B2C
HPE OfficeConnect 1820 24G PoE+ (185W) Switch <ul style="list-style-type: none"> • 12 RJ-45 autosensing 10/100/1000 PoE+ ports • 12 RJ-45 autosensing 10/100/1000 ports • 2 SFP 100/1000 Mbps ports (min=0 \ max=2 SFP Transceivers) • 1U - Height 	J9983A See Configuration NOTE: 1, 2, 3
PDU Cable NA/MEX/TW/JP <ul style="list-style-type: none"> • C15 PDU Jumper Cord (NA/MEX/TW/JP) 	J9983A#B2B
PDU Cable NA/MEX/TW/JP <ul style="list-style-type: none"> • C15 PDU Jumper Cord (ROW) 	J9983A#B2C
HPE OfficeConnect 1820 48G PoE+ (370W) Switch <ul style="list-style-type: none"> • 24 RJ-45 autosensing 10/100/1000 PoE+ ports • 24 RJ-45 autosensing 10/100/1000 ports • 4 SFP 100/1000 Mbps ports (min=0 \ max=4 SFP Transceivers) • 1U - Height 	J9984A See Configuration NOTE: 1, 2, 3
PDU Cable NA/MEX/TW/JP <ul style="list-style-type: none"> • C15 PDU Jumper Cord (NA/MEX/TW/JP) 	J9984A#B2B
PDU Cable NA/MEX/TW/JP <ul style="list-style-type: none"> • C15 PDU Jumper Cord (ROW) 	J9984A#B2C

Configuration Rules:

- Note 1** The following Transceivers install into this switch (Use #0D1 or #B01 if switch is CTO) - if applicable
- | | |
|------------------------------------|--------|
| Aruba 1G SFP LC SX 500m MMF XCVR | J4858D |
| Aruba 1G SFP LC LX 10km SMF XCVR | J4859D |
| Aruba 1G SFP RJ45T 100m Cat5e XCVR | J8177D |
| Aruba 100M SFP LC FX 2KM MMF XCVR | J9054D |
- Note 2** Localization (Wall Power Cord) required on orders without #B2B, #B2C (PDU Power Cord) . (See Localization Menu)
 REMARK: When Switches/Routers are Factory Racked, Then #B2B, or #B2C should be the Defaulted Power Cable option on the Switches/Routers.
- Note 3** If this switch is factory installed in any HPE Racks, Then the J9583A#0D1 is required.

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

Configuration

Transceivers

SFP Transceivers

Aruba 1G SFP LC SX 500m MMF XCVR	J4858D
Aruba 1G SFP LC LX 10km SMF XCVR	J4859D
Aruba 1G SFP RJ45T 100m Cat5e XCVR	J8177D
Aruba 100M SFP LC FX 2KM MMF XCVR	J9054D

Internal Power Supplies

Power supplies included

Remarks:

Drop down under power supply should offer the following options and results:
Switch/Router/Power Supply to PDU Power Cord - #B2B in North America, Mexico, Taiwan, and Japan or #B2C ROW. (Watson Default B2B or B2C for Rack Level CTO)
Switch/Router/Power Supply to Wall Power Cord - Localized Option (Watson Default for BTO and Box Level CTO)
High Volt Switch/Router/Power Supply to Wall Power Cord - #B2E Option. (Offered only in North America, Mexico, Taiwan, and Japan)

Switch Enclosure Options

Rack Mount Kit

HPE X410 1U Universal 4-post Rackmount Kit

- Supported on J9980A, J9981A, J9983A, J9984A

J9583A
See
Configuration
NOTE:1

Configuration Rules:

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

Technical Specifications

HPE OfficeConnect 1820 8G Switch (J9979A)

I/O ports and slots	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	10(w) x 6.28(d) x 1.73(h) in (25.4 x 15.95 x 4.39 cm) (1U height)
	Weight	1.81 lb (0.82 kg)
Memory and processor	ARM Cortex-A9 @ 400 MHz, 128 MB SDRAM; Packet buffer size: 1.5 MB, 16 MB flash	
Performance	100 Mb Latency	< 7 μ s (LIFO 64-byte packets)
	1000 Mb Latency	< 2.4 μ s (LIFO 64-byte packets)
	Throughput	up to 11.9 Mpps (64-byte packets)
	Switching capacity	16 Gbps
	MAC address table size	8000 entries
Reliability	MTBF (years)	144.93
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 9,842 ft (3 km)
	Acoustic	Power: 0 dB no fan
Electrical characteristics	Frequency	50/60 Hz
	AC Voltage	100 - 240 VAC
	Current	.2 A
	Maximum power rating	12.2 W
	Idle power	10.2 W
	PoE power	
	Notes	Idle power is the actual power consumption of the device with no ports connected. 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; EN 60825; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1	
Emissions	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A F	
Immunity	Generic	EN 55024, CISPR 24
	EN	EN 55024, CISPR 24
	ESD	IEC 61000-4-2

Technical Specifications

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	EN 61000-3-2, IEC 61000-3-2
Flicker	EN 61000-3-3, IEC 61000-3-3

Management Web browser

Notes Use only supported genuine HPE mini-GBICs with your switch

Services Refer to the Hewlett Packard Enterprise website at <http://www.hpe.com/networking/services> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

HPE OfficeConnect 1820 8G PoE+ (65W) Switch (J9982A)

I/O ports and slots 4 RJ-45 autosensing 10/100/1000 PoE+ ports; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only

4 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

Physical characteristics **Dimensions** 10(w) x 6.28(d) x 1.73(h) in (25.4 x 15.95 x 4.39 cm) (1U height)

Weight 2.01 lb (0.91 kg)

Memory and processor ARM Cortex-A9 @ 400 MHz, 128 MB SRAM; Packet buffer size: 1.5 MB, 16 MB flash

Performance **100 Mb Latency** < 7 μ s (LIFO 64-byte packets)
1000 Mb Latency < 2.3 μ s (LIFO 64-byte packets)
Throughput up to 11.9 Mpps (64-byte packets)
Switching capacity 16 Gbps
MAC address table size 8000 entries

Reliability **MTBF (years)** 112.36

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 9,842 ft (3 km)

Acoustic Power: 0 dB no fan

Electrical characteristics **Frequency** 50/60 Hz

AC Voltage 100 - 240 VAC

Current .9 A

Technical Specifications

Maximum power rating	83.9 W
Idle power	12.6 W
PoE power	65 W PoE+
Notes	<p>Idle power is the actual power consumption of the device with no ports connected.</p> <p>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.</p> <p>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).</p>

Safety UL 60950-1; EN 60825; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1

Emissions FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A

Immunity	Generic	EN 55024, CISPR 24
	EN	EN 55024, CISPR 24
	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	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3

Management Web browser

Notes Use only supported genuine HPE mini-GBICs with your switch

Services Refer to the Hewlett Packard Enterprise website at <http://www.hpe.com/networking/services> for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

HPE OfficeConnect 1820 24G Switch (J9980A)

I/O ports and slots 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 (IEEE 802.3z Type 1000BASE-X, IEEE 802.3u Type 100BASE-FX)

Supports a maximum of 24 autosensing 10/100/1000 ports plus 2 SFP 100/1000 slots

Physical characteristics **Dimensions** 17.42(w) x 9.69(d) x 1.73(h) in (44.25 x 24.61 x 4.39 cm) (1U height)

Weight 6 lb (2.72 kg)

Memory and processor ARM Cortex-A9 @ 400 MHz, 128 MB SDRAM; Packet buffer size: 1.5 MB, 16 MB flash

Technical Specifications

Performance	100 Mb Latency	< 7 μ s (LIFO 64-byte packets)
	1000 Mb Latency	< 2 μ s (LIFO 64-byte packets)
	Throughput	up to 38.6 Mpps (64-byte packets)
	Switching capacity	52 Gbps
	MAC address table size	8000 entries
Reliability	MTBF (years)	80.00
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 9,842 ft (3 km)
Electrical characteristics	Acoustic	Power: 0 dB no fan
	Frequency	50/60 Hz
	AC Voltage	100 - 127 / 200 - 240 VAC, rated
	Current	.5/. 3 A
	Maximum power rating	22 W
	Idle power	16.9 W
	PoE power	
	Notes	Idle power is the actual power consumption of the device with no ports connected. 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; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1	
Emissions	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A	
Immunity	Generic	EN 55024, CISPR 24
	EN	EN 55024, CISPR 24
	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	EN 61000-3-2, IEC 61000-3-2
Flicker	EN 61000-3-3, IEC 61000-3-3	
Management	Web browser	

Technical Specifications

Notes	Use only supported genuine HPE mini-GBICs with your switch
Services	Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

HPE OfficeConnect 1820 24G PoE+ (185W) Switch (J9983A)

I/O ports and slots	12 RJ-45 autosensing 10/100/1000 PoE+ ports; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only
	12 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 (IEEE 802.3z Type 1000BASE-X, IEEE 802.3u Type 100BASE-FX)
	Supports a maximum of 24 autosensing 10/100/1000 ports plus 2 SFP 100/1000 slots
Physical characteristics	Dimensions 17.42(w) x 9.69(d) x 1.73(h) in (44.25 x 24.61 x 4.39 cm) (1U height)
	Weight 7.3 lb (3.31 kg)
Memory and processor	ARM Cortex-A9 @ 400 MHz, 128 MB SDRAM; Packet buffer size: 1.5 MB, 16 MB flash
Performance	100 Mb Latency < 7 μs (LIFO 64-byte packets)
	1000 Mb Latency < 2 μs (LIFO 64-byte packets)
	Throughput up to 38.6 Mpps (64-byte packets)
	Switching capacity 52 Gbps
	MAC address table size 8000 entries
	Reliability MTBF (years) 64.52
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 9,842 ft (3 km)
Electrical characteristics	Acoustic Power: 36 dB
	Frequency 50/60 Hz
	Voltage 100 - 127 / 200 - 240 VAC, rated (depending on power supply chosen)
	Current 2.6/1.3 A
	Maximum power rating 240 W
	Idle power 28.3 W
	PoE power 185 W PoE+
	Notes Idle power is the actual power consumption of the device with no ports connected. Maximum power rating and maximum heat dissipation are

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

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

Safety	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1																						
Emissions	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A																						
Immunity	<table border="0"> <tr> <td>Generic</td> <td>EN 55024, CISPR 24</td> </tr> <tr> <td>EN</td> <td>EN 55024, CISPR 24</td> </tr> <tr> <td>ESD</td> <td>IEC 61000-4-2</td> </tr> <tr> <td>Radiated</td> <td>IEC 61000-4-3</td> </tr> <tr> <td>EFT/Burst</td> <td>IEC 61000-4-4</td> </tr> <tr> <td>Surge</td> <td>IEC 61000-4-5</td> </tr> <tr> <td>Conducted</td> <td>IEC 61000-4-6</td> </tr> <tr> <td>Power frequency magnetic field</td> <td>IEC 61000-4-8</td> </tr> <tr> <td>Voltage dips and interruptions</td> <td>IEC 61000-4-11</td> </tr> <tr> <td>Harmonics</td> <td>EN 61000-3-2, IEC 61000-3-2</td> </tr> <tr> <td>Flicker</td> <td>EN 61000-3-3, IEC 61000-3-3</td> </tr> </table>	Generic	EN 55024, CISPR 24	EN	EN 55024, CISPR 24	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	EN 61000-3-2, IEC 61000-3-2	Flicker	EN 61000-3-3, IEC 61000-3-3
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Surge	IEC 61000-4-5																						
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Power frequency magnetic field	IEC 61000-4-8																						
Voltage dips and interruptions	IEC 61000-4-11																						
Harmonics	EN 61000-3-2, IEC 61000-3-2																						
Flicker	EN 61000-3-3, IEC 61000-3-3																						
Management	Web browser																						
Notes	Use only supported genuine HPE mini-GBICs with your switch																						
Services	Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.																						

HPE OfficeConnect 1820 48G Switch (J9981A)

I/O ports and slots	<p>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</p> <p>4 SFP 100/1000 Mbps ports (IEEE 802.3z Type 1000BASE-X, IEEE 802.3u Type 100BASE-FX)</p> <p>Supports a maximum of 48 autosensing 10/100/1000 ports plus 4 SFP ports</p> <p>Supports a maximum of 48 autosensing 10/100/1000 ports plus 4 SFP 100/1000 slots</p>	
Physical characteristics	Dimensions	17.42(w) x 9.69(d) x 1.73(h) in (44.25 x 24.61 x 4.39 cm) (1U height)
	Weight	7.3 lb (3.31 kg)
Memory and processor	ARM Cortex-A9 @ 400 MHz, 128 MB SDRAM; Packet buffer size: 1.5 MB, 16 MB flash	
Performance	100 Mb Latency	< 7 μ s (LIFO 64-byte packets)
	1000 Mb Latency	< 2 μ s (LIFO 64-byte packets)
	Throughput	up to 77.3 Mpps (64-byte packets)
	Switching capacity	104 Gbps

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	MAC address table size	16000 entries
Reliability	MTBF (years)	61.73
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)
Electrical characteristics	Altitude	up to 9,842 ft (3 km)
	Acoustic	Power: 0 dB no fan
	Frequency	50/60 Hz
	Voltage	100 - 127 / 200 - 240 VAC, rated (depending on power supply chosen)
	Current	.8/ .5 A
	Maximum power rating	39 W
	Idle power	28.8 W
	PoE power	
	Notes	Idle power is the actual power consumption of the device with no ports connected. 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; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
Emissions	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A	
Immunity	Generic	EN 55024, CISPR 24
	EN	EN 55024, CISPR 24
	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	EN 61000-3-2, IEC 61000-3-2
Flicker	EN 61000-3-3, IEC 61000-3-3	
Management	Web browser	
Notes	Use only supported genuine HPE mini-GBICs with your switch	
Services	Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.	

Technical Specifications

HPE OfficeConnect 1820 48G PoE+ (370W) Switch (J9984A)

I/O ports and slots	<p>24 RJ-45 autosensing 10/100/1000 PoE+ ports; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only</p> <p>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</p> <p>4 SFP 100/1000 Mbps ports (IEEE 802.3z Type 1000BASE-X, IEEE 802.3u Type 100BASE-FX)</p> <p>Supports a maximum of 48 autosensing 10/100/1000 ports plus 4 SFP 100/1000 slots</p>	
Physical characteristics	Dimensions	17.42(w) x 12.7(d) x 1.73(h) in (44.25 x 32.26 x 4.39 cm) (1U height)
	Weight	9.7 lb (4.4 kg)
Memory and processor	ARM Cortex-A9 @ 400 MHz, 128 MB SDRAM; Packet buffer size: 1.5 MB, 16 MB flash	
Performance	100 Mb Latency	< 7 μ s (LIFO 64-byte packets)
	1000 Mb Latency	< 2 μ s (LIFO 64-byte packets)
	Throughput	up to 77.3 Mpps (64-byte packets)
	Switching capacity	104 Gbps
	MAC address table size	16000 entries
Reliability	MTBF (years)	45.05
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 9,842 ft (3 km)
	Acoustic	Power: 45 dB
Electrical characteristics	Frequency	50/60 Hz
	Voltage	100 - 127 / 200 - 240 VAC, rated (depending on power supply chosen)
	Current	5.1/2.6 A
	Maximum power rating	481 W
	Idle power	54.8 W
	PoE power	370 W PoE+
	Notes	<p>Idle power is the actual power consumption of the device with no ports connected.</p> <p>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.</p> <p>PoE Power is the power supplied by the internal power</p>

Technical Specifications

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

Safety	UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1
Emissions	FCC Class A; EN 55022/CISPR-22 Class A; VCCI Class A
Immunity	<p>Generic EN 55024, CISPR 24</p> <p>EN EN 55024, CISPR 24</p> <p>ESD IEC 61000-4-2</p> <p>Radiated IEC 61000-4-3</p> <p>EFT/Burst IEC 61000-4-4</p> <p>Surge IEC 61000-4-5</p> <p>Conducted IEC 61000-4-6</p> <p>Power frequency magnetic field IEC 61000-4-8</p> <p>Voltage dips and interruptions IEC 61000-4-11</p> <p>Harmonics EN 61000-3-2, IEC 61000-3-2</p> <p>Flicker EN 61000-3-3, IEC 61000-3-3</p>
Management	Web browser
Notes	Use only supported genuine HPE mini-GBICs with your switch
Services	Refer to the Hewlett Packard Enterprise website at http://www.hpe.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

Standards and protocols

(applies to all products in series)

Denial of service protection

CPU DoS Protection

General protocols

IEEE 802.1D Spanning Tree Protocol
 IEEE 802.1p Priority
 IEEE 802.1Q VLANs
 IEEE 802.1W Rapid Spanning Tree Protocol
 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

HPE OfficeConnect 1820 Switch Series accessories

Mounting Kit

HPE X410 1U Universal 4-post Rackmount Kit J9583A

HPE OfficeConnect 1820 24G Switch (J9980A)

Aruba 1G SFP LC SX 500m OM2 MMF Transceiver J4858D

Aruba 1G SFP LC LX 10km SMF Transceiver J4859D

Aruba 1G SFP RJ45 T 100m Cat5e Transceiver J8177D

Aruba 100M SFP LC FX 2km MMF Transceiver J9054D

HPE OfficeConnect 1820 24G PoE+ (185W) Switch (J9983A)

Aruba 1G SFP LC SX 500m OM2 MMF Transceiver J4858D

Aruba 1G SFP LC LX 10km SMF Transceiver J4859D

Aruba 1G SFP RJ45 T 100m Cat5e Transceiver J8177D

Aruba 100M SFP LC FX 2km MMF Transceiver J9054D

HPE OfficeConnect 1820 48G Switch (J9981A)

Aruba 1G SFP LC SX 500m OM2 MMF Transceiver J4858D

Aruba 1G SFP LC LX 10km SMF Transceiver J4859D

Aruba 1G SFP RJ45 T 100m Cat5e Transceiver J8177D

Aruba 100M SFP LC FX 2km MMF Transceiver J9054D

HPE OfficeConnect 1820 48G PoE+ (370W) Switch (J9984A)

Aruba 1G SFP LC SX 500m OM2 MMF Transceiver J4858D

Aruba 1G SFP LC LX 10km SMF Transceiver J4859D

Aruba 1G SFP RJ45 T 100m Cat5e Transceiver J8177D

Aruba 100M SFP LC FX 2km MMF Transceiver J9054D

Summary of Changes

Date	Version History	Action	Description of Change:
07-May-2018	Version 6	Changed	Accessories and Technical Specifications updated
04-Sep-2017	Version 5	Changed	Updates made on Features and benefits
06-May-2016	Version 4	Changed	Document name changed to HPE OfficeConnect 1820 Switch Series. Overview, Features and Benefits, Technical Specifications updated.
22-Apr-2016	Version 3	Changed	SKU descriptions updated on all document
01-Dec-2015	Version 2	Changed	Overview, Features and Benefits and Technical Specifications updated
30-Mar-2015	Version 1	Created	Document creation



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