# QuickSpecs

# **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

# **Product overview**





## **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

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



#### Overview

#### 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

Supports up to 64 port-based VLANs and dynamic configuration of IEEE 802.1Q VLAN tagging, providing security between workgroups.



## **Overview**

# • 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.



# **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.

<ul> <li>HPE OfficeConnect 1820 8G Switch</li> <li>8 RJ-45 autosensing 10/100/1000 ports</li> <li>1U - Height (Desktop Model)</li> </ul>	J9979A See Configuration NOTE:2
<ul> <li>HPE OfficeConnect 1820 24G Switch</li> <li>24 RJ-45 autosensing 10/100/1000 ports</li> <li>2 SFP 100/1000 Mbps ports (min=0 \ max=2 SFP Transceivers)</li> <li>1U - Height</li> </ul>	J9980A See Configuration NOTE:1, 3
PDU Cable NA/MEX/TW/JP  • C15 PDU Jumper Cord (NA/MEX/TW/JP)	J9980A#B2B
PDU Cable NA/MEX/TW/JP  • C15 PDU Jumper Cord (ROW)	J9980A#B2C
High Volt Switch/Router to Wall Power Cord  ■ NEMA L6-20P Cord (NA/MEX/JP/TW)	J9980A#B2E
<ul> <li>HPE OfficeConnect 1820 48G Switch</li> <li>48 RJ-45 autosensing 10/100/1000 ports</li> <li>4 SFP 100/1000 Mbps ports (min=0 \ max=4 SFP Transceivers)</li> <li>1U - Height</li> </ul>	J9981A See Configuration NOTE:1, 3
PDU Cable NA/MEX/TW/JP  • C15 PDU Jumper Cord (NA/MEX/TW/JP)	J9981A#B2B
PDU Cable NA/MEX/TW/JP  • C15 PDU Jumper Cord (ROW)	J9981A#B2C
High Volt Switch/Router to Wall Power Cord  ■ NEMA L6-20P Cord (NA/MEX/JP/TW)	J9981A#B2E
<ul> <li>HPE OfficeConnect 1820 8G PoE+ (65W) Switch</li> <li>4 RJ-45 autosensing 10/100/1000 PoE+ ports</li> <li>4 RJ-45 autosensing 10/100/1000 ports</li> <li>1U - Height (Desktop Model)</li> </ul>	J9982A See Configuration NOTE:2
HPE OfficeConnect 1820 24G PoE+ (185W) Switch  • 12 RJ-45 autosensing 10/100/1000 PoE+ ports	J9983A See

Configuration

**NOTE:**1, 3

12 RJ-45 autosensing 10/100/1000 ports

1U - Height

2 SFP 100/1000 Mbps ports (min=0 \ max=2 SFP Transceivers)



PDU Cable NA/MEX/TW/JP J9983A#B2B

• C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable NA/MEX/TW/JP J9983A#B2C

• C15 PDU Jumper Cord (ROW)

High Volt Switch/Router to Wall Power Cord J9983A#B2E

NEMA L6-20P Cord (NA/MEX/JP/TW)

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

See 24 RJ-45 autosensing 10/100/1000 PoE+ ports Configuration • 24 RJ-45 autosensing 10/100/1000 ports **NOTE:**1, 3 4 SFP 100/1000 Mbps ports (min=0 \ max=4 SFP Transceivers)

1U - Height

PDU Cable NA/MEX/TW/JP J9984A#B2B

• C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable NA/MEX/TW/JP J9984A#B2C

• C15 PDU Jumper Cord (ROW)

High Volt Switch/Router to Wall Power Cord J9984A#B2E

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)

1U - Height

# Rack Level Integration CTO Models

HPE OfficeConnect 1820 24G Switch J9980A

See 24 RJ-45 autosensing 10/100/1000 ports Configuration 2 SFP 100/1000 Mbps ports (min=0 \ max=2 SFP Transceivers) **NOTE:**1, 2, 3

PDU Cable NA/MEX/TW/JP J9980A#B2B

C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable NA/MEX/TW/JP J9980A#B2C



• C15 PDU Jumper Cord (ROW)

HPE OfficeConnect 1820 48G Switch

• 48 RJ-45 autosensing 10/100/1000 ports

• 4 SFP 100/1000 Mbps ports (min=0 \ max=4 SFP Transceivers)

See

Configuration

1U - Height NOTE:1, 2, 3

PDU Cable NA/MEX/TW/JP J9981A#B2B

C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable NA/MEX/TW/JP J9981A#B2C

• C15 PDU Jumper Cord (ROW)

HPE OfficeConnect 1820 24G PoE+ (185W) Switch
 J9983A
 12 RJ-45 autosensing 10/100/1000 PoE+ ports
 See

12 RJ-45 autosensing 10/100/1000 ports
 2 SFP 100/1000 Mbps ports (min=0 \ max=2 SFP Transceivers)

Configuration
NOTE:1, 2, 3

• 1U - Height

PDU Cable NA/MEX/TW/JP J9983A#B2B

• C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable NA/MEX/TW/JP J9983A#B2C

C15 PDU Jumper Cord (ROW)

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

• 24 RJ-45 autosensing 10/100/1000 PoE+ ports

• 24 R I-45 autosensing 10/100/1000 ports

Configuration

24 RJ-45 autosensing 10/100/1000 ports
 4 SFP 100/1000 Mbps ports (min=0 \ max=4 SFP Transceivers)

NOTE:1, 2, 3

• 1U - Height

PDU Cable NA/MEX/TW/JP J9984A#B2B

C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable NA/MEX/TW/JP J9984A#B2C

C15 PDU Jumper Cord (ROW)

## **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

Aruba 1G SFP LC LX 10km SMF XCVR

Aruba 1G SFP RJ45T 100m Cat5e XCVR

Aruba 100M SFP LC FX 2KM MMF XCVR

J4858D

J4859D

J8177D

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.

## **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)



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  $10(w) \times 6.28(d) \times 1.73(h)$  in  $(25.4 \times 15.95 \times 4.39 \text{ cm})$  (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 μs (LIFO 64-byte packets)

**1000 Mb Latency** <  $2.4 \mu s$  (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

ive 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

Radiated IEC 61000-4-3

**EFT/Burst** IEC 61000-4-4 **Surge** IEC 61000-4-5



Conducted IEC 61000-4-6 IEC 61000-4-8 **Power frequency** 

magnetic field

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

Web browser Management

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

**Services** Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.com/networking/services</a> 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  $< 7 \mu s$  (LIFO 64-byte packets)

> 1000 Mb Latency  $< 2.3 \mu s$  (LIFO 64-byte packets) **Throughput** up to 11.9 Mpps (64-byte packets)

16 Gbps Switching capacity MAC address table size 8000 entries

Reliability MTBF (years) 112.36

Operating temperature **Environment** 32°F to 104°F (0°C to 40°C)

Operating relative

15% to 95% @ 104°F (40°C)

humidity

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

> 100 - 240 VAC **AC Voltage**

**Current** .9A Maximum power rating 83.9 W Idle power 12.6 W PoE power 65 W PoE+

Notes Idle power is the actual power consumption of the device with no ports

Maximum power rating and maximum heat dissipation are the worst-case



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

modules populated.

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

**Safety** UL 60950-1; 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
 IEC 61000-4-8

magnetic field

Voltage dips and IEC 61000-4-11

interruptions

**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 <a href="http://www.hpe.com/networking/services">http://www.hpe.com/networking/services</a> 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

**Performance** 100 Mb Latency < 7 μs (LIFO 64-byte packets)

**1000 Mb Latency** < 2  $\mu$ 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

-40°F to 158°F (-40°C to 70°C)

temperature

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

100 - 127 / 200 - 240 VAC, rated **AC Voltage** 

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

EN 55024, CISPR 24 **Immunity** Generic

> ΕN EN 55024, CISPR 24

**ESD** IEC 61000-4-2 **Radiated** IEC 61000-4-3 **EFT/Burst** IEC 61000-4-4 Surae IEC 61000-4-5 **Conducted** IEC 61000-4-6 IEC 61000-4-8 **Power frequency** 

magnetic field

Voltage dips and IEC 61000-4-11

interruptions

**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 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)

**Acoustic** Power: 36 dB

**Electrical characteristics 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 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 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
 IEC 61000-4-8

magnetic field



Voltage dips and interruptions

IEC 61000-4-11

**Harmonics** 

**Flicker** 

EN 61000-3-2, IEC 61000-3-2 EN 61000-3-3. IEC 61000-3-3

Management Web browser

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

Refer to the Hewlett Packard Enterprise website at <a href="http://www.hpe.com/networking/services">http://www.hpe.com/networking/services</a> for **Services** 

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)** 

48 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-I/O ports and slots

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 (IEEE 802.3z Type 1000BASE-X, IEEE 802.3u Type 100BASE-FX)

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

Supports a maximum of 48 autosensing 10/100/1000 ports plus 4 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  $< 7 \mu s$  (LIFO 64-byte packets)

> 1000 Mb Latency  $< 2 \mu s$  (LIFO 64-byte packets)

**Throughput** up to 77.3 Mpps (64-byte packets)

Switching capacity 104 Gbps

MAC address table size 16000 entries

61.73 Reliability MTBF (years)

32°F to 104°F (0°C to 40°C) **Environment** Operating temperature

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

> 100 - 127 / 200 - 240 VAC, rated Voltage

> > (depending on power supply chosen)

Current . 8/. 5 A 39 W Maximum power rating 28.8 W Idle power

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.

UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1 Safety

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

**Immunity** Generic EN 55024, CISPR 24

> ΕN EN 55024, CISPR 24

**ESD** IEC 61000-4-2 **Radiated** IEC 61000-4-3 **EFT/Burst** IEC 61000-4-4 IEC 61000-4-5 Surae IEC 61000-4-6 **Conducted Power frequency** IEC 61000-4-8

magnetic field

IEC 61000-4-11 Voltage dips and

interruptions

**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 <a href="http://www.hpe.com/networking/services">http://www.hpe.com/networking/services</a> 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 PoE+ (370W) Switch (J9984A)

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

1000BASE-T: full only

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

4 SFP 100/1000 Mbps ports (IEEE 802.3z Type 1000BASE-X, IEEE 802.3u Type 100BASE-FX)

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

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  $< 7 \mu s$  (LIFO 64-byte packets)

> 1000 Mb Latency  $< 2 \mu s$  (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

15% to 95% @ 104°F (40°C) humidity

Nonoperating/Storage -40°F to 158°F (-40°C to 70°C)

temperature



Nonoperating/Storage

relative humidity

15% to 95% @ 140°F (60°C)

**Altitude** 

up to 9,842 ft (3 km)

Power: 45 dB Acoustic

**Electrical characteristics Frequency** 50/60 Hz

> 100 - 127 / 200 - 240 VAC, rated Voltage

(depending on power supply chosen)

Current 5.1/2.6 A 481 W Maximum power rating Idle power 54.8 W PoE power 370 W PoE+

**Notes** Idle power is the actual power consumption of the device with no ports

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

modules populated.

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

UL 60950-1; CAN/CSA 22.2 No. 60950-1; EN 60825; IEC 60950-1; EN 60950-1 Safety

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

EN 55024, CISPR 24 **Immunity** Generic

> ΕN 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 IEC 61000-4-6 Conducted **Power frequency** IEC 61000-4-8

magnetic field

Voltage dips and IEC 61000-4-11

interruptions

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

Web browser Management

**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 Denial of service protection

(applies to all products in CPU DoS Protection series)

**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)

J9583A

J4858D



# **Accessories**

**Mounting Kit** 

# **HPE OfficeConnect 1820 Switch Series accessories**

HPF OfficeConnect 1820 24G Switch (19980A)
HPE X410 1U Universal 4-post Rackmount Kit
<u> </u>

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 SEP LC EX 2km MME Transceiver	J9054D

# HPE OfficeConnect 1820 48G Switch (J9981A)

Aruba 1G SFP LC SX 500m OM2 MMF Transceiver

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 LX 10km SMF Transceiver	J4859D
Aruba 1G SFP RJ45 T 100m Cat5e Transceiver	J8177D
Aruba 100M SFP LC FX 2km MMF Transceiver	J9054D

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



# Summary of Changes

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