QuickSpecs

HPE OfficeConnect 1850 Switch Series

Overview

HPE OfficeConnect 1850 Switch Series

Models

HPE OfficeConnect 1850 6XGT and 2XGT/SPF+ Switch	JL169A
HPE OfficeConnect 1850 24G 2XGT Switch	JL170A
HPE OfficeConnect 1850 48G 4XGT Switch	JL171A
HPE OfficeConnect 1850 24G 2XGT PoE+ 185W Switch	JL172A
HPE OfficeConnect 1850 48G 4XGT PoE+ 370W Switch	JL173A

Key features

- 10-Gigabit 10GBASE-T on all models for high-speed interconnect
- Non-PoE and PoE+ 24- and 48 port models
- 8 port 10GBASE-T switch with 2 SFP+ dual-personality ports
- Intuitive Web management interface for easy switch configuration
- Limited Lifetime Warranty

Product overview

HPE OfficeConnect 1850 Switch Series devices are basic smart-managed, fixed-configuration Gigabit plus 10 Gigabit Ethernet Layer 2 switches designed for small businesses looking for high performance 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 five switch models. Four are Gigabit switches each with 10-Gigabit 10GBASE-T uplink ports. One is an 8-port 10-Gigabit aggregator switch. Together, you can build a high bandwidth network with Gigabit edge port switches interconnected at 10-Gigabit speeds. Non-PoE and PoE+ models are available. The 24 port models include 2 10GBASE-T ports; the 48 port models include 4 10GBASE-T ports and an 8 port model includes 8 10GBASE-T ports with 2 dual-personality SFP+ ports. All HPE

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OfficeConnect 1850 Switches support flexible installation options including mounting on wall, under table, or on a desktop.

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. All models include variable speed fans operating only at the speed necessary to maintain operating temperature to reduce excess noise and power consumption by the switch. HPE OfficeConnect 1850 Switch Series includes a Limited Lifetime Warranty. This warranty provides advance hardware replacement with next business day shipment in most countries, limited 24x7 telephone support available from HPE for the first 90 days, and limited electronic and business hours telephone support is available from HPE for the entire warranty period.

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 Virtual LANs (VLANs)

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
- **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.
- **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

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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 – 12 provide PoE+ on the HPE 1850 24G 2XGT PoE+ 185W Switch. Ports 1-24 provide PoE+ on the HPE 1850 48G 4XGT 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 reccurrence 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 efficient cooling**
  all models include variable speed fans operating only at the speed necessary to maintain operating temperature to reduce excess noise and power consumption by the switch
- **Energy savings status**
  the switch provides an estimated cumulative energy savings due to green Ethernet features enabled

Security

- **Secure Socket 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- and 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
- **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

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ultra-high-bandwidth connection to the network backbone; helps prevent traffic bottlenecks; the 8 port model supports 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.

Warranty and support

- **Limited Lifetime Warranty**
  This series comes with a Limited Lifetime Warranty providing advance hardware replacement with next business day shipment in most countries, 24x7 phone support available for the first 90 days, and electronic and business hours phone support for the entire warranty period. See **http://www.hpe.com/networking/warrantysummary** for full 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 1850 6XGT and 2XGT/SPF+ Switch   JL169A
- 6 RJ-45 1/10GBASE-T ports   See Configuration
- 2 Dual Personality SFP+ 1/10GBASE-T ports (min=0 \ max=2 SFP/SFP+ Transceivers)   **NOTE:1, 2**
- 1U - Height

PDU Cable NA/MEX/TW/JP   JL169A#B2B
- C13 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW   JL169A#B2C
- C13 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord   JL169A#B2E
- HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)

No Power Cord   JL169A#AC3
- No Localization Power Cord Selected

HPE OfficeConnect 1850 24G 2XGT Switch   JL170A
- 24 RJ-45 autosensing 10/100/1000 ports   See Configuration
- 2 RJ-45 1/10GBASE-T ports   **NOTE: 2**
- 1U - Height

PDU Cable NA/MEX/TW/JP   JL170A#B2B
- C13 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW   JL170A#B2C
- C13 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord   JL170A#B2E
- HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)

No Power Cord   JL170A#AC3
- No Localization Power Cord Selected

HPE OfficeConnect 1850 48G 4XGT Switch   JL171A
- 48 RJ-45 autosensing 10/100/1000 ports   See Configuration
- 4 RJ-45 1/10GBASE-T ports   **NOTE: 2**
- 1U - Height

PDU Cable NA/MEX/TW/JP   JL171A#B2B
- C13 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW   JL171A#B2C
- C13 PDU Jumper Cord (ROW)

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High Volt Switch to Wall Power Cord   JL171A#B2E
- HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)

No Power Cord   JL171A#AC3
- No Localization Power Cord Selected

HPE OfficeConnect 1850 24G 2XGT PoE+ 185W Switch   JL172A
- 12 RJ-45 autosensing 10/100/1000 PoE+ ports   See Configuration
- 12 RJ-45 autosensing 10/100/1000 ports   **NOTE: 2**
- 2 RJ-45 1/10GBASE-T ports
- 1U - Height

PDU Cable NA/MEX/TW/JP   JL172A#B2B
- C13 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW   JL172A#B2C
- C13 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord   JL172A#B2E
- HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)

No Power Cord   JL172A#AC3
- No Localization Power Cord Selected

HPE OfficeConnect 1850 48G 4XGT PoE+ 370W Switch   JL173A
- 24 RJ-45 autosensing 10/100/1000 PoE+ ports   See Configuration
- 24 RJ-45 autosensing 10/100/1000 ports   **NOTE: 2**
- 4 RJ-45 1/10GBASE-T ports
- 1U - Height

PDU Cable NA/MEX/TW/JP   JL173A#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW   JL173A#B2C
- C15 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord   JL173A#B2E
- HPE 2.5m C15 to NEMA 6-20P 250V Non-locking Power Cord (JL336A)

No Power Cord   JL173A#AC3
- No Localization Power Cord Selected

Configuration Rules:

Note 1   **The following Transceivers install into this switch:**
                                   HPE X121 1G SFP LC SX Transceiver   J4858C
                                   HPE X121 1G SFP LC LX Transceiver   J4859C

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Configuration

HPE X132 10G SFP+ LC SR Transceiver	J9150A
HPE X132 10G SFP+ LC LR Transceiver	J9151A
HPE X132 10G SFP+ LC LRM Transceiver	J9152A

Note 2   **Localization (Wall Power Cord) required on orders without #B2B, #B2C (PDU Power Cord) or #B2E. (See Localization Menu)**
If #AC3 is selected then no Localized Power Cord is required.

Rack Level Integration CTO Models

HPE OfficeConnect 1850 24G 2XGT Switch   JL170A
- 24 RJ-45 autosensing 10/100/1000 ports   See Configuration
- 2 RJ-45 1/10GBASE-T ports   **NOTE:2, 3**
- 1U - Height

PDU Cable NA/MEX/TW/JP   JL170A#B2B
- C13 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW   JL170A#B2C
- C13 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord   JL170A#B2E
- HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)

No Power Cord   JL170A#AC3
- No Localization Power Cord Selected

HPE OfficeConnect 1850 48G 4XGT Switch   JL171A
- 48 RJ-45 autosensing 10/100/1000 ports   See Configuration
- 4 RJ-45 1/10GBASE-T ports   **NOTE: 2, 3**
- 1U - Height

PDU Cable NA/MEX/TW/JP   JL171A#B2B
- C13 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW   JL171A#B2C
- C13 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord   JL171A#B2E
- HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)

No Power Cord   JL171A#AC3
- No Localization Power Cord Selected

HPE OfficeConnect 1850 24G 2XGT PoE+ 185W Switch   JL172A
- 24 RJ-45 autosensing 10/100/1000 PoE+ ports   See Configuration
- 24 RJ-45 autosensing 10/100/1000 ports   **NOTE: 2, 3**
- 2 RJ-45 1/10GBASE-T ports
- 1U - Height

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Configuration

PDU Cable NA/MEX/TW/JP   JL172A#B2B
- C13 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW   JL172A#B2C
- C13 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord   JL172A#B2E
- HPE 2.3M C13 to NEMA L6-20P Power Cord(J9936A)

No Power Cord   JL172A#AC3
- No Localization Power Cord Selected

HPE OfficeConnect 1850 48G 4XGT PoE+ 370W Switch   JL173A
- 48 RJ-45 autosensing 10/100/1000 PoE+ ports   See Configuration
- 48 RJ-45 autosensing 10/100/1000 ports   **NOTE: 2, 3**
- 4 RJ-45 1/10GBASE-T ports
- 1U - Height

PDU Cable NA/MEX/TW/JP   JL173A#B2B
- C15 PDU Jumper Cord (NA/MEX/TW/JP)

PDU Cable ROW   JL173A#B2C
- C15 PDU Jumper Cord (ROW)

High Volt Switch to Wall Power Cord   JL173A#B2E
- HPE 2.5m C15 to NEMA 6-20P 250V Non-locking Power Cord (JL336A)

No Power Cord   JL173A#AC3
- No Localization Power Cord Selected

Configuration Rules:

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.
If #AC3 is selected then no Localized Power Cord is required.

Note 3   **If this switch is factory installed in any HP Racks, Then the J9583A#0D1 is required.**

Remarks   **Drop down under power cords 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 - #B2C 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)
No Power Cord - #AC3 Option

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

Configuration

Transceivers

SFP Transceivers

HPE X121 1G SFP LC SX Transceiver	J4858C
HPE X121 1G SFP LC LX Transceiver	J4859C
HPE X132 10G SFP+ LC SR Transceiver	J9150A
HPE X132 10G SFP+ LC LR Transceiver	J9151A
HPE X132 10G SFP+ LC LRM Transceiver	J9152A

Cables

Multi-Mode Cables

HPE X242 10G SFP+ to SFP+ 1m Direct Attach Copper Cable	J9281B
HPE X242 10G SFP+ to SFP+ 3m Direct Attach Copper Cable	J9283B
HPE X242 10G SFP+ to SFP+ 7m Direct Attach Copper Cable	J9285B
HP 10G X244 XFP to SFP+ 3m Direct Attach Copper Cable	J9301A
HP 10G X244 XFP to SFP+ 5m Direct Attach Copper Cable	J9302A

Switch Enclosure Options

Rail Kit

HPE X410 1U Universal 4-post Rackmount Kit   J9583A
- Supported on JL170A, JL171A, JL172A, JL173A   See Configuration
                                                                      NOTE:1

Configuration Rules:

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

Technical Specifications

HPE OfficeConnect 1850 6XGT and 2XGT/SPF+ Switch (JL169A)

I/O ports and slots	6 RJ-45 1/10GBASE-T ports	
	2 dual-personality ports; each port can be used as either an RJ-45 1/10GBASE-T port or an SFP+ fixed 1000/10000 slot	
Physical characteristics	**Dimensions**	9.96(w) x 10.26(d) x 1.73(h) in (25.3 x 26.07 x 4.4 cm) (1U height)
	Weight	3.84 lb (1.74 kg)
Memory and processor	BCM53412 embedded ARM Cortex-A9 @ 600 MHz, 128 MB DDR3 SDRAM; Packet buffer size: 2 MB	
Performance	**100 Mb Latency**	< 6.8 µs (64-byte packets)
	1000 Mb Latency	< 2.9 µs (64-byte packets)
	10 Gbps Latency	< 6.8 µs (64-byte packets)
	Throughput	up to 119 Mpps
	Switching capacity	160 Gbps
	MAC address table size	16000 entries
Reliability	**MTBF (years)**	64.5
Environment	**Operating temperature**	32°F to 104°F (0°C to 40°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 95% @ 149°F (65°C), noncondensing
	Altitude	up to 9,842 ft (3 km)
	Acoustic	Power: 45 dB
	Airflow direction	Side-to-side
Electrical characteristics	**Frequency**	50/60 Hz
	Voltage	100 - 127 / 200 - 240 VAC, rated
	Current	.9/.5 A
	Maximum power rating	42.8 W
	Idle power	19.4 W
	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; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1; EN 60825-1	
Emissions	VCCI Class A; CNS 13438; ICES-003 Issue5 Class A; FCC CFR 47 Part 15, Class A ; EN 55032: 2015/CISPR-32	
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

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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
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 1850 24G 2XGT Switch (JL170A)

I/O ports and slots	24 RJ-45 auto-negotiating 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only	
	2 RJ-45 1/10GBASE-T ports	
Physical characteristics	**Dimensions**	17.46(w) x 9.7(d) x 1.73(h) in (44.35 x 24.64 x 4.4 cm) (1U height)
	Weight	5.86 lb (2.66 kg)
Memory and processor	BCM53346 embedded ARM Cortex-A9 @ 400 MHz, 128 MB DDR3 SDRAM; Packet buffer size: 1.5 MB	
Performance	**100 Mb Latency**	< 9.1 μs (64-byte packets)
	1000 Mb Latency	< 3.7 μs (64-byte packets)
	10 Gbps Latency	< 3.7 μs (64-byte packets)
	Throughput	up to 65 Mpps (64-byte packets)
	Switching capacity	88 Gbps
	MAC address table size	16000 entries
Reliability	**MTBF (years)**	99
Environment	**Operating temperature**	32°F to 104°F (0°C to 40°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 95% @ 149°F (65°C), noncondensing
	Altitude	up to 9,842 ft (3 km)
	Acoustic	Power: 36 dB
	Airflow direction	Side-to-side
Electrical characteristics	**Frequency**	50/60 Hz
	Voltage	100 - 120 / 200 - 240 VAC, rated (200 - 240 VAC, max)
	Current	.6/.4 A
	Maximum power rating	29.5 W
	Idle power	19.1 W
	Notes	Idle power is the actual power consumption of the device with no ports connected.

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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 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1; EN 60825-1
Emissions		VCCI Class A; CNS 13438; ICES-003 Issue5 Class A; FCC CFR 47 Part 15, Class A ; EN 55032: 2015/CISPR-32
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
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 1850 48G 4XGT Switch (JL171A)

I/O ports and slots		48 RJ-45 auto-negotiating 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only
		4 RJ-45 1/10GBASE-T ports
Physical characteristics	**Dimensions**	17.42(w) x 9.7(d) x 1.73(h) in (44.25 x 24.64 x 4.4 cm) (1U height)
	Weight	7.05 lb (3.2 kg)
Memory and processor		BCM53346 embedded ARM Cortex-A9 @ 400 MHz, 128 MB DDR3 SDRAM; Packet buffer size: 3 MB
Performance	**100 Mb Latency**	< 9.7 μs (64-byte packets)
	1000 Mb Latency	< 3.7 μs (64-byte packets)
	10 Gbps Latency	< 3.7 μs (64-byte packets)
	Throughput	up to 131 Mpps (64-byte packets)
	Switching capacity	176 Gbps
	MAC address table size	16000 entries
Reliability	**MTBF (years)**	79.4
Environment	**Operating temperature**	32°F to 104°F (0°C to 40°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 95% @ 149°F (65°C), noncondensing

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	Altitude	up to 9,842 ft (3 km)
	Acoustic	Power: 34 dB
	Airflow direction	Side-to-side
Electrical characteristics	**Frequency**	50/60 Hz
	Voltage	100 - 127 / 200 - 240 VAC, rated
	Current	1/.6 A
	Maximum power rating	49.3 W
	Idle power	30 W
	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; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1; EN 60825-1
Emissions		VCCI Class A; CNS 13438; ICES-003 Issue5 Class A; FCC CFR 47 Part 15, Class A ; EN 55032: 2015/CISPR-32
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
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 1850 24G 2XGT PoE+ 185W Switch (JL172A)

I/O ports and slots		12 RJ-45 auto-negotiating 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3af PoE, IEEE 802.3at); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only
		12 RJ-45 auto-negotiating 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only
		2 RJ-45 1/10GBASE-T ports
Physical characteristics	**Dimensions**	17.42(w) x 9.7(d) x 1.73(h) in (44.25 x 24.64 x 4.4 cm) (1U height)
	Weight	7.28 lb (3.3 kg)
Memory and processor		BCM53346 embedded ARM Cortex-A9 @ 400 MHz, 128 MB DDR3 SDRAM; Packet buffer size: 1.5 MB

Technical Specifications

Performance	**100 Mb Latency**	< 8.6 µs (64-byte packets)
	1000 Mb Latency	< 3.6 µs (64-byte packets)
	10 Gbps Latency	< 3.6 µs (64-byte packets)
	Throughput	up to 65 Mpps (64-byte packets)
	Switching capacity	88 Gbps
	MAC address table size	16000 entries
Reliability	**MTBF (years)**	71.4
Environment	**Operating temperature**	32°F to 104°F (0°C to 40°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 95% @ 149°F (65°C), noncondensing
	Altitude	up to 9,842 ft (3 km)
	Acoustic	Power: 44 dB
	Airflow direction	Side-to-side
Electrical characteristics	**Frequency**	50/60 Hz
	Voltage	100 - 127 / 200 - 240 VAC, rated
	Current	2.5/1.3 A
	Maximum power rating	222.9 W
	Idle power	24.4 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; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1; EN 60825-1	
Emissions	VCCI Class A; CNS 13438; ICES-003 Issue5 Class A; FCC CFR 47 Part 15, Class A ; EN 55032: 2015/CISPR-32	
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

Technical Specifications

	Harmonics	EN 61000-3-2, IEC 61000-3-2
	Flicker	EN 61000-3-3, IEC 61000-3-3
Management	Web browser	
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 1850 48G 4XGT PoE+ 370W Switch (JL173A)

I/O ports and slots	24 RJ-45 auto-negotiating 10/100/1000 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T, IEEE 802.3af PoE, IEEE 802.3at); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only	
	24 RJ-45 auto-negotiating 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T)	
	4 RJ-45 1/10GBASE-T ports	
Physical characteristics	**Dimensions**	17.42(w) x 12.7(d) x 1.73(h) in (44.25 x 32.26 x 4.4 cm) (1U height)
	Weight	10.3 lb (4.67 kg)
Memory and processor	BCM53346 embedded ARM Cortex-A9 @ 400 MHz, 128 MB DDR3 SDRAM; Packet buffer size: 3 MB	
Performance	**100 Mb Latency**	< 10 μs (64-byte packets)
	1000 Mb Latency	< 3.8 μs (64-byte packets)
	10 Gbps Latency	< 3.8 μs (64-byte packets)
	Throughput	up to 131 Mpps (64-byte packets)
	Switching capacity	176 Gbps
	MAC address table size	16000 entries
Reliability	**MTBF (years)**	57.1
Environment	**Operating temperature**	32°F to 104°F (0°C to 40°C)
	Operating relative humidity	15% to 95% (40°C), noncondensing
	Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
	Nonoperating/Storage relative humidity	15% to 95% @ 149°F (65°C), noncondensing
	Altitude	up to 9,842 ft (3 km)
	Acoustic	Power: 40 dB
	Airflow direction	Side-to-side
Electrical characteristics	**Frequency**	50/60 Hz
	Voltage	100 - 127 / 200 - 240 VAC, rated
	Current	5/2.4 A
	Maximum power rating	446.4 W
	Idle power	46.5 W
	PoE power	370 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.

Technical Specifications

		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; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1; EN 60825-1
Emissions		VCCI Class A; CNS 13438; ICES-003 Issue5 Class A; FCC CFR 47 Part 15, Class A ; EN 55032: 2015/CISPR-32
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
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 802.1AB-2005 Link Layer Discovery Protocol (LLDP) I
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

Accessories

HPE OfficeConnect 1850 Switch Series accessories

HPE OfficeConnect 1850 6XGT and 2XGT/SPF+ Switch (JL169A)

HPE X121 1G SFP LC SX Transceiver	J4858C
HPE X121 1G SFP LC LX Transceiver	J4859C
HPE X132 10G SFP+ LC SR Transceiver	J9150A
HPE X132 10G SFP+ LC LR Transceiver	J9151A
HPE X132 10G SFP+ LC LRM Transceiver	J9152A
HPE X242 10G SFP+ to SFP+ 1m Direct Attach Copper Cable	J9281B
HPE X242 10G SFP+ to SFP+ 3m Direct Attach Copper Cable	J9283B
HPE X242 10G SFP+ to SFP+ 7m Direct Attach Copper Cable	J9285B

HPE OfficeConnect 1850 24G 2XGT Switch (JL170A)

HPE X410 1U Universal 4-post Rackmount Kit	J9583A

HPE OfficeConnect 1850 48G 4XGT Switch (JL171A)

HPE X410 1U Universal 4-post Rackmount Kit	J9583A

HPE OfficeConnect 1850 24G 2XGT PoE+ 185W Switch (JL172A)

HPE X410 1U Universal 4-post Rackmount Kit	J9583A

HPE OfficeConnect 1850 48G 4XGT PoE+ 370W Switch (JL173A)

HPE X410 1U Universal 4-post Rackmount Kit	J9583A

Accessory Product Details

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

HPE X121 1G SFP LC SX Transceiver (J4858C)	**Ports**	1 LC 1000BASE-SX port; Duplex: full only
	Physical characteristics	Dimensions: 2.24(d) x 0.54(w) x 0.48(h) in. (5.69 x 1.37 x 1.22 cm) Weight: 0.04 lb. (0.02 kg) Transceiver form factor: SFP
A small form-factor pluggable (SFP) Gigabit SX transceiver that provides a full-duplex Gigabit solution up to 550 m on multimode fiber.	**Environment**	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)
	Electrical characteristics	Power consumption typical: 0.4 W Power consumption maximum: 0.7 W
	Cabling	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:

- 2-220 m (62.5 μm core diameter, 160 MHz*km bandwidth
- 2-275 m (62.5 μm core diameter, 200 MHz*km bandwidth
- 2-500 m (50 μm core diameter, 400 MHz*km bandwidth)
- 2-550 m (50 μm core diameter, 500 MHz*km bandwidth)

Cable length: 2-550m
Fiber type: Multi Mode

	Services	Refer to the 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 X121 1G SFP LC LX Transceiver (J4859C)	**Ports**	1 LC 1000BASE-LX port (IEEE 802.3z Type 1000BASE-LX); Duplex: full only
	Physical characteristics	Dimensions: 2.24(d) x 0.54(w) x 0.486(h) in. (5.69 x 1.37 x 1.23 cm) Weight:0.04 lb. (0.02 kg)
HPE X121 1G SFP LC LX Transceiver: An SFP format gigabit transceiver with LC connectors using LX technology.	**Environment**	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)
	Cabling	Type:

- 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;

Accessory Product Details

Maximum distance:

- 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 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.

Summary of Changes

Date	Version History	Action	Description of Change:
07-Nov-2016	Version 1	Created	Document creation

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