



HPE OfficeConnect 1920S Switch Series



Key features

- Customized operation using intuitive Web interface
- Layer 3 static routing with 32 routes for network segmentation and expansion
- Access control lists for granular security control
- Spanning Tree Protocol: STP, RSTP, and MSTP
- 8-, 24- and 48-port non-PoE+ models are fanless for quiet operation
- HPE Limited Lifetime Warranty

Product overview

The HPE OfficeConnect 1920S Switch Series consists of advanced smart-managed fixed-configuration Gigabit switches designed for small businesses in an easy-to-administer solution.

The series consists of seven switches including 8-, 24- and 48-port Gigabit Ethernet switches and 8-, 24- and 48-port PoE+ models of which half the ports are PoE+ capable. An additional 24-port PoE+ model is available that provides PoE+ on all 24-ports. All ports provide non-blocking Gigabit 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 1920S 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 switch for environments where no line power is available.

The series is part of the OfficeConnect portfolio of Hewlett Packard Enterprise small business networking products. These switches provide a great value, and includes features to satisfy even the most advanced small business networks. Customizable features include basic Layer 2 features like VLANs and link aggregation, as well as advanced features such as Layer 3 static routing, IPv4 and IPv6 Host mode, ACLs, and Spanning Tree Protocols. HPE OfficeConnect 1920S Switch Series includes 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, and v3

Facilitate management of the switch, as the device can be discovered and monitored from an SNMP management station.

Complete session logging

Provides detailed information for problem identification and resolution.

Port mirroring

Enables traffic on a port or VLAN to be simultaneously sent to a network analyzer for monitoring.

Dual flash images

Provide independent primary and secondary operating system files for backup while upgrading.

Network Time Protocol (NTP)

Synchronizes timekeeping among distributed time servers; keeps timekeeping consistent among all clock-dependent devices within the network so that the devices can provide diverse applications based on the consistent time.

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 the static address 192.168.1.1

FTP and TFTP

Provides different mechanisms for configuration updates; FTP allows bidirectional transfers over a TCP/IP network; trivial FTP (TFTP) is a simpler method using user Datagram Protocol (UDP).

Remote monitoring (RMON)

Remote monitoring (RMON) provides advanced monitoring and reporting capabilities for statistics, history, alarms and events. RMON data is retrieved from the switch through a network management platform over SNMP.

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.

IEEE 802.1p/Q VLAN tagging

Delivers data to devices based on the priority and type of traffic; supports IEEE 802.1Q.

Advanced classifier based QoS

Classifies traffic using multiple match criteria based on Layer 2, 3, and 4 information.

Packet storm protection

Protects against unknown unicast, broadcast and multicast storms with user-defined thresholds.

Rate limiting

Sets per-port ingress enforced maximum or percent minimum bandwidth per queue.

Class of Service (CoS)

Sets the IEEE 802.1p priority tag based on IP address, IP Type of Service (ToS), Layer 3 protocol, TCP/UDP port number or source port.

Powerful QoS feature

Supports the following congestion actions: strict priority queuing (SP) or weighted round robin (WRR) queuing. SP and WRR queuing can be configured on individual switch ports.

Connectivity**IPv6 host**

Enables switches to be managed and deployed at the IPv6 network's edge.

IEEE 802.3X Flow Control

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

IEEE 802.3at Power over Ethernet (PoE+)

Provides up to 30 W per port, which allows support of the latest PoE+ capable devices such as Video IP phones, wireless access points, and advanced pan/tilt/zoom security cameras, as well as any 15.4 W IEEE 802.3af-compliant end device; mitigates 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 are PoE/PoE+ capable on the HPE OfficeConnect 1920S 8G PPOE+ 65W switch; ports 1–12 are PoE/PoE+ capable on the HPE OfficeConnect 1920S 24G 2SFP PPOE+ 185W switch; all ports provide PoE/PoE+ on the HPE OfficeConnect 1920S 24G 2SFP PoE+ 370W switch; ports 1–24 are PoE/PoE+ capable on the HPE OfficeConnect 1920S 48G 4SFP PPOE+ 370W switch.

Auto-PoE power configuration

The switch automatically assigns the required power to a port for a PD device based on Link Layer Discovery Protocol (LLDP). 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 to 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.

PoE power allocation

Support multiple methods (automatic, IEEE 802.3af class, LLDP-MED, or user-specified) to allocate PoE power for more efficient energy savings.

SPF 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. Two SFP ports available on 24 and four SFP ports on 48 port models.

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.

Auto MDI/MDI-X

Adjusts automatically for straight-through or crossover cables on all 10/100/1000 ports.

Energy Efficient Ethernet (EEE)

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 being enabled.

Energy-efficient cooling

Includes variable speed fans operating only at the speed necessary to maintain operating temperature to reduce excess noise and power consumption by the switch.

Security**Access Control Lists (ACLs)**

Enables network traffic filtering by creating an ACL, add rules and match criteria to an ACL, and apply the ACL to permit or deny on one or more interfaces or a VLAN. Up to 50 inbound entries may be configured based on IPv4 source and destination IP and MAC address, Layer 4 ports and protocol type of the IPv4 packet.

RADIUS

The switch support RADIUS authentication and configuration of up to 8 RADIUS servers.

RADIUS Accounting

A robust set of attributes and statistics are available for collecting information from the switch.

IEEE 802.1X access control

Authentication of network users on a per port basis prior to permitting network access. Port VLAN includes RADIUS VLAN assignment, dynamic VLAN creation, guest VLAN or into an unauthenticated VLAN.

Switch 802.1X supplicant

Enables the switch to authenticate itself to a RADIUS server.

Port isolation

Ports in a port isolation group are restricted from forwarding Layer 2 traffic between ports in that group; provides data privacy and security.

Automatic denial-of-service protection

Monitors for malicious attacks and protects the network by blocking the attacks.

Management password

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

Secure Sockets Layer (SSL)

Encrypts all HTTP traffic, secure access to the browser-based management of the switch.

Performance

Half-and full-duplex auto-negotiating capability on every port doubles the throughput of every port.

Selectable queue configurations

Allows for increased performance by selecting the number of queues and associated memory buffering that best meet the requirements of the network applications.

IGMP snooping

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

SFP fiber uplinks

Provides greater distance connectivity using Gigabit fiber uplinks.

Layer 2 switching**Spanning Tree Protocol (STP)**

Supports standard IEEE 802.1D STP, IEEE 802.1w Rapid Spanning Tree Protocol (RSTP) for faster convergence, and IEEE 802.1s Multiple Spanning Tree Protocol (MSTP).

BPDU filtering

Drops BPDU packets when STP is enabled globally but disabled on a specific port

Jumbo frame support

Supports up to 9216 bytes frame size to improve the performance of large data transfers.

VLAN support and tagging

Support for IEEE 802.1Q; 256 VLANs with a VLAN ID range of 2-4093.

Layer 3 services**Address Resolution Protocol (ARP)**

Displays the MAC address of another IP host in the same subnet; supports static ARPs; proxy ARP allows normal ARP operation between subnets or when subnets are separated by a Layer 2 network.

DHCP Relay

Simplifies management of DHCP addresses in networks with multiple subnets.

Layer 3 routing**Static IPv4 routing**

Provides basic routing supporting up to 32 static routes to allow manual routing configuration.

Link aggregation

Groups together multiple ports up to a maximum of eight ports per trunk either automatically using Link Aggregation Control Protocol (LACP), or manually, to form an ultra-high-bandwidth connection to the network backbone; help prevent traffic bottlenecks. The 8 port models support 4 trunks, 16 and 24 port models support 8 trunks, 48 port models support 16 trunks.

Convergence**LLDP-MED (Media Endpoint Discovery)**

Defines a standard extension of LLDP that stores values for parameters such as QoS and VLAN to configure network devices such as IP phones automatically.

Auto-voice VLAN

Recognizes IP phones and automatically assigns voice traffic to dedicated VLAN for IP phones.

Warranty and support

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

HPE OfficeConnect 1920S Switch Series



Specifications	HPE OfficeConnect 1920S 24G 2SFP PoE+ 185W Switch (JL384A)	HPE OfficeConnect 1920S 24G 2SFP PoE+ 370W Switch (JL385A)	HPE OfficeConnect 1920S 48G 4SFP Switch (JL382A)
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)	24 RJ-45 autosensing 10/100/1000 PoE+ ports; 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)	48 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only 4 SFP 100/1000 Mbps ports (IEEE 802.3z Type 1000BASE-X, IEEE 802.3u Type 100BASE-FX)
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)	17.42(w) x 12.7(d) x 1.73(h) in (44.25 x 32.26 x 4.39 cm) (1U height)	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)	9.7 lb (4.4 kg)	7.3 lb (3.31 kg)
Memory and processor	ARM Cortex-A9 @ 400 MHz, 256 MB SDRAM, 64 MB flash; packet buffer: 1.5 MB	ARM Cortex-A9 @ 400 MHz, 256 MB SDRAM, 64 MB flash; packet buffer: 1.5 MB	ARM Cortex-A9 @ 400 MHz, 256 MB SDRAM, 64 MB flash; packet buffer: 1.5 MB
Mounting and enclosure	Mounts in an EIA standard 19-inch telco rack or equipment cabinet (hardware included)	Mounts in an EIA standard 19-inch telco rack or equipment cabinet (hardware included)	Mounts in an EIA standard 19-inch telco rack or equipment cabinet (hardware included)
Performance			
100 Mb Latency	< 7µs	< 7µs	< 7µs
1000 Mb Latency	< 2µs	< 2µs	< 2µs
Throughput	Up to 38.6 Mpps (64-byte packets)	Up to 77.3 Mpps (64-byte packets)	Up to 77.3 Mpps (64-byte packets)
Routing/Switching capacity	52 Gbps	52 Gbps	104 Gbps
Routing table size	32 entries	32 entries	32 entries
MAC address table size	8000 entries	16000 entries	16000 entries
Reliability			
MTBF (years)	64.5	57.1	61.7
Environment			
Operating temperature	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)
Operating relative humidity	15% to 95%, noncondensing @ 104°F (40°C)	15% to 95%, noncondensing @ 104°F (40°C)	15% to 95%, noncondensing @ 104°F (40°C)
Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)
Nonoperating/Storage relative humidity	15% to 95%, noncondensing @ 140°F (60°C)	15% to 95%, noncondensing @ 140°F (60°C)	15% to 95%, noncondensing @ 140°F (60°C)
Altitude	up to 10,000 ft (3 km)	up to 10,000 ft (3 km)	up to 10,000 ft (3 km)
Acoustic	Power: 36 dB	Power: 45 dB	Pressure: 0 dB No Fan
Electrical characteristics			
Frequency	50/60 Hz	50/60 Hz	50/60 Hz
AC voltage	100 - 127/200 - 240 VAC	100 - 127/200 - 240 VAC	100 - 127/200 - 240 VAC
Current	2.6/1.3 A	3.5/1.9 A	.8/5 A
Maximum power rating	207.9 W	435 W	32.2 W
Idle power	19 W	34.2 W	23.3 W
PoE power	185 W PoE+	370 W PoE+	
Notes:	Maximum power rating is the worst-case theoretical maximum value provided for planning the infrastructure with 100% traffic, all ports plugged in.	Maximum power rating is the worst-case theoretical maximum value for planning the infrastructure with fully loaded PoE, 100% traffic and all ports plugged in.	Maximum power rating is the worst-case theoretical maximum value for planning the infrastructure with 100% traffic and all ports plugged in.

HPE OfficeConnect 1920S Switch Series (continued)

Specifications	HPE OfficeConnect 1920S 8G Switch (JL380A)	HPE OfficeConnect 1920S 8G PPoE+ 65W Switch (JL383A)	HPE OfficeConnect 1920S 24G 2SFP Switch (JL381A)
Safety	UL 60950-1; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1; EN 60825-1	UL 60950-1; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1; EN 60825-1	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 Issue 5 Class A; FCC CFR 47 Part 15, Class A; EN 55032: 2015/CISPR-32	VCCI Class A; CNS 13438; ICES-003 Issue 5 Class A; FCC CFR 47 Part 15, Class A; EN 55032: 2015/CISPR-32	VCCI Class A; CNS 13438; ICES-003 Issue 5 Class A; FCC CFR 47 Part 15, Class A; EN 55032: 2015/CISPR-32
Immunity			
Generic	EN 55024, CISPR 24	EN 55024, CISPR 24	EN 55024, CISPR 24
EN	EN 55024, CISPR 24	EN 55024, CISPR 24	EN 55024, CISPR 24
ESD	IEC 61000-4-2	IEC 61000-4-2	IEC 61000-4-2
Radiated	IEC 61000-4-3	IEC 61000-4-3	IEC 61000-4-3
EFT/Burst	IEC 61000-4-4	IEC 61000-4-4	IEC 61000-4-4
Surge	IEC 61000-4-5	IEC 61000-4-5	IEC 61000-4-5
Conducted	IEC 61000-4-6	IEC 61000-4-6	IEC 61000-4-6
Power frequency magnetic field	IEC 61000-4-8	IEC 61000-4-8	IEC 61000-4-8
Voltage dips and interruptions	IEC 61000-4-11	IEC 61000-4-11	IEC 61000-4-11
Harmonics	EN 61000-3-2, IEC 61000-3-2	EN 61000-3-2, IEC 61000-3-2	EN 61000-3-2, IEC 61000-3-2
Flicker	EN 61000-3-3, IEC 61000-3-3	EN 61000-3-3, IEC 61000-3-3	EN 61000-3-3, IEC 61000-3-3
Management	Web browser; SNMP Manager	Web browser; SNMP Manager	Web browser; SNMP Manager
Notes	Use only supported genuine HPE mini-GBICs with your switch.	Use only supported genuine HPE mini-GBICs with your switch.	Use only supported genuine HPE mini-GBICs with your switch.
Services	Refer to the Hewlett Packard Enterprise website at 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.	Refer to the Hewlett Packard Enterprise website at 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.	Refer to the Hewlett Packard Enterprise website at 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.