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# HPE OfficeConnect 1910 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: STP, RSTP, and MSTP
- Limited Lifetime warranty

## **Product overview**

HPE OfficeConnect 1910 Switch Series consists of advanced smart-managed fixedconfiguration Fast Ethernet switches designed for small businesses in an easy-to-administer solution. By utilizing the latest design in silicon technology, this series is one of the most power efficient in the market. The series is part of the OfficeConnect portfolio of Hewlett Packard Enterprise small business networking products.

The series consists of five Fast Ethernet models. The 8- and 24- port models include two dual-personality SFP ports to support fiber connectivity. The 48 port model has 2 dedicated SFP ports plus two 10/100/1000 Ethernet ports. The 8- and 24-port Fast Ethernet models are available with or without PoE.

All models support rack mounting or desktop operation. Customizable features include basic Layer 2 features like VLANs and link aggregation, as well as advanced features such as Layer 3 static routing, IPv6, ACLs, and Spanning Tree Protocols. HPE OfficeConnect 1910 Switch Series includes a Limited Lifetime Warranty.

#### 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)

• Single IP management

Enables management of up to four HPE OfficeConnect 1910 devices using a single Web interface; simplifies management of multiple devices

• Secure Web GUI

Provides a secure, easy-to-use graphical interface for configuring the module via HTTPS

• SNMPv1, v2c, and v3

Facilitates 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

Dual flash images

Provides independent primary and secondary operating system files for backup while upgrading

• Port mirroring

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

• Management security

Restricts access to critical configuration commands; offers multiple privilege levels with password protection; ACLs provide telnet and SNMP access; local and remote syslog capabilities allow logging of all access

• Network Time Protocol (NTP)

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

• IEEE 802.1AB Link Layer Discovery Protocol (LLDP)

Advertises and receives management information from adjacent devices on a network, facilitating easy mapping by network management applications

Limited CLI

Enables users to quickly deploy and troubleshoot devices in the network

• RMON

Provides advanced monitoring and reporting capabilities for statistics, history, alarms, and events

• Default DHCP client mode

Allows the switch to be directly connected to a network, enabling plug-and-play operation; in the absence of a DHCP server on the network, the switch will fall back to a unique static address determined by the switch's MAC address

#### Quality of service (QoS)

• Broadcast control

Allows limitation of broadcast traffic rate to cut down on unwanted network broadcast traffic

• Rate limiting

Sets per-port ingress-enforced maximums and per-port, per-queue minimums

• 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 four hardware queues for more effective throughput

#### Connectivity

- IPv6
  - IPv6 host

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

- IPv6 routing Supports IPv6 static routes
- MLD snooping

Forwards IPv6 multicast traffic to the appropriate interface, preventing traffic flooding

- IPv6 ACL and QoS Supports ACL and QoS for IPv6 network traffic
- Auto-MDI/MDIX

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

• IEEE 802.3x Flow Control

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

• IEEE 802.3af Power over Ethernet (PoE) ready

Provides up to 15.4 W per port to power standards-compliant IP phones, wireless LAN access points, Web cameras, and more (for PoE models)

• 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 IP phones, wireless access points, and security cameras, as well as any IEEE 802.3af compliant end device; reduces the cost of additional electrical cabling and circuits that would otherwise be necessary in IP phone and WLAN deployments

Packet storm protection

Protects against broadcast, multicast, or unicast storms with user-defined thresholds

• Cable diagnostics

Detects cable issues remotely using a browser-based tool

#### Security

• Advanced access control lists (ACLs)

Enables network traffic filtering and enhances network control using MAC- and IP-based ACLs; time-based ACLs allow for greater flexibility with managing network access

• Secure Sockets Layer (SSL)

Encrypts all HTTP traffic, allowing secure access to the browser-based management GUI in the switch

• IEEE 802.1X and RADIUS network logins

Controls port-based access for authentication and accountability

• Automatic VLAN assignment

Assigns users automatically to the appropriate VLAN based on their identity, location, and time of day  $% \left( {{{\rm{AN}}}} \right) = {{\rm{AN}}} \left( {{{\rm{AN}}}} \right) = {{{\rm{AN}}} \left( {{{\rm{AN}}}} \right) = {{{\rm{AN}}}} \left( {{{\rm{AN}}}} \right) = {{{\rm{AN}}} \left( {{{\rm{AN}}}} \right) = {{{\rm{AN}}}} \left( {{{\rm{AN}}}} \right) = {{{\rm{AN}}} \left( {{{\rm{AN}}$ 

• STP BPDU port protection

Blocks Bridge Protocol Data Units (BPDUs) on ports that do not require BPDUs, preventing forged BPDU attacks

• STP root guard

Protects the root bridge from malicious attacks or configuration mistakes

- 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

#### Performance

• Half- or 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 to all ports

• Fiber uplink

Provides greater distance connectivity using Gigabit Ethernet fiber uplinks

#### Layer 2 switching

### • VLAN support and tagging

Supports IEEE 802.1Q (4,094 VLAN IDs) and 256 VLANs simultaneously

• 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 10-kilobyte frame size to improve the performance of large data transfers

#### Layer 3 services

Address Resolution Protocol (ARP)

Determines the MAC address of another IP host in the same subnet; supports static ARPs; gratuitous ARP allows detection of duplicate IP addresses; 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 or IPv6 routing

Provides basic routing (supporting up to 32 static routes and eight virtual VLAN interfaces); allows manual routing configuration

#### **Resiliency and high availability**

• Link aggregation

Groups together multiple 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; (8-port, 24-port and 48- port models support a maximum of 8 ports per trunk; the 8-port models supports 4 trunks; the 24-port model supports 8 trunks; the 48-port model supports 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 automatically configure network devices such as IP phones

• PoE allocations

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

Auto voice VLAN

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

#### Additional information

• Green initiative support

Provides support for RoHS and WEEE regulations

• Green IT and power

Improves energy efficiency through the use of the latest advances in silicon development; shuts off unused ports and utilizes variable-speed fans, reducing energy costs

#### Warranty and support

• Limited Lifetime Warranty

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

# HPE OfficeConnect 1910 Switch Series

		HPE OfficeConnect 1910 24 Switch (JG538A) 24 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX); Duplex: half or full	
Specifications	HPE OfficeConnect 1910 8 PoE+ Switch (JG537A)		
I/O ports and slots	8 RJ-45 autosensing 10/100 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3at PoE+); Duplex: half or full		
	2 dual-personality ports; each port can be used as a RJ 45 10/100/1000 Mbps port (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T) or as a SFP 100/1000 Mbps slot (IEEE 802.3u Type 100BASE-FX, IEEE 802.3z Type 1000BASE-X)	2 dual-personality ports; each port can be used as a RJ 45 10/100/1000 Mbps port (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T) or as a SFP 100/1000 Mbps slot (IEEE 802.3u Type 100BASE-FX, IEEE 802.3z Type 1000BASE-X)	
	1 RJ-45 console port to access limited CLI port	1 RJ-45 console port to access limited CLI port	
	Supports a maximum of 8 autosensing 10/100 ports plus 2 dual-personality ports either RJ-45 10/100/1000 port or SFP 100/1000 slot	Supports a maximum of 24 autosensing 10/100 ports plus 2 dual-personality ports either RJ-45 10/100/1000 port or SFP 100/1000 slot	
Physical characteristics			
Dimensions	12.99(w) x 9.06(d) x 1.73(h) in.	17.32(w) x 6.81(d) x 1.73(h) in.	
Weight	(33 x 23 x 4.4 cm) (1U height) 4.63 lb (2.1 kg)	(44 x 17.3 x 4.4 cm) (1U height) 4.85 lb (2.2 kg)	
Memory and processor	MIPS @ 500 MHz, 32 MB flash, 128 MB RAM; packet buffer size: 512 KB	MIPS @ 500 MHz, 32 MB flash, 128 MB RAM; packet buffer size: 512 KB	
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)	
Performance			
100 Mb Latency	< 5 µs	< 5 µs	
1000 Mb Latency	< 5 µs	< 5 µs	
Throughput	up to 4.2 Mpps (64-byte packets)	up to 6.6 Mpps (64-byte packets)	
Routing/Switching capacity	5.6 Gbps	8.8 Gbps	
Routing table size MAC address table size	32 entries (IPv4), 32 entries (IPv6) 8192 entries	32 entries (IPv4), 32 entries (IPv6) 8192 entries	

Specifications	HPE OfficeConnect 1910 8 PoE+ Switch (JG537A)	HPE OfficeConnect 1910 24 Switch (JG538A)	
Environment Operating temperature Operating relative humidity Non-operating/Storage temperature Non-operating/Storage relative humidity Acoustic	32°F to 104°F (0°C to 40°C) 10% to 90%, noncondensing -40°F to 158°F (-40°C to 70°C) 10% to 95%, noncondensing Pressure: 0 dB No Fan	32°F to 104°F (0°C to 40°C) 10% to 90%, noncondensing -40°F to 158°F (-40°C to 70°C) 10% to 95%, noncondensing Pressure: 0 dB No Fan	
Electrical characteristics Frequency AC voltage Maximum power rating PoE power	50/60 Hz 100–240 VAC 90 W 62 W <b>Notes:</b> 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).	50/60 Hz 100–240 VAC 12 W <b>Notes:</b> 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	IEC 60950-1; EN 60950-1; UL 60950-1 2nd Edition; CSA C22.2 No. 60950-1-07 2nd Edition	IEC 60950-1; EN 60950-1; UL 60950-1 2nd Edition; CSA C22.2 No. 60950-1-07 2nd Edition	
Emissions	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 61000-3-2 2000, 61000-3-3; ICES-003 Class A	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 61000-3-2 2000, 61000-3-3; ICES-003 Class A	
Management	IMC—Intelligent Management Center; limited command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB	IMC—Intelligent Management Center; limited command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB	
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 <b>hpe.com/networking/services</b> 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 1910 Switch Series

Specifications	HPE OfficeConnect 24 PoE+ Switch (JG539A)	HPE OfficeConnect 1910 48 Switch (JG540A)	
I/O ports and slots	24 RJ-45 autosensing 10/100 PoE+ ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3at PoE+); Duplex: half or full	48 RJ-45 autosensing 10/100 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX); Duplex: half or full	
	2 dual-personality ports; each port can be used as a RJ 45 10/100/1000 Mbps port (IEEE 802.3 Type 10BASE-T,	2 SFP 100/1000 Mbps slots (IEEE 802.3u Type 100BASE-FX, IEEE 802.3z Type 1000BASE-X)	
	IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T) or as a SFP 100/1000 Mbps slot (IEEE 802.3u Type 100BASE-FX, IEEE 802.3z Type 1000BASE-X)	2 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Duplex: 10BASE- T/100BASE-TX: half or full; 1000BASE-T: full only	
	1 RJ-45 console port to access limited CLI port	1 RJ-45 console port to access limited CLI port	
	Supports a maximum of 24 autosensing 10/100 ports plus 2 dual-personality ports either RJ-45 10/100/1000 port or SFP 100/1000 slot	Supports a maximum of 48 autosensing 10/100 ports plus 2 autosensing 10/100/1000 ports plus 2 SFP 100/1000 slots	
Physical characteristics			
Dimensions	17.32(w) x 9.37(d) x 1.73(h) in. (44 x 23.8 x 4.4 cm) (1U height)	17.32(w) x 6.81(d) x 1.73(h) in. (44 x 17.3 x 4.4 cm) (1U height)	
Weight	7.28 lb (3.3 kg)	5.07 lb (2.3 kg)	
Memory and processor	MIPS @ 500 MHz, 32 MB flash, 128 MB RAM; packet buffer size: 512 KB	MIPS @ 500 MHz, 32 MB flash, 128 MB RAM; packet buffer size: 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)	
Performance			
100 Mb Latency	< 5 µs	< 5 µs	
1000 Mb Latency	< 5 µs	< 5 µs	
Throughput	up to 6.6 Mpps (64-byte packets)	up to 13.1 Mpps (64-byte packets)	
Routing/Switching capacity Routing table size	8.8 Gbps 32 entries (IPv4), 32 entries (IPv6)	17.6 Gbps 32 entries (IPv4), 32 entries (IPv6)	
MAC address table size	8192 entries	8192 entries	
Environment			
Operating temperature	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)	
Operating relative humidity	10% to 90%, noncondensing	10% to 90%, noncondensing	
Non-operating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)	
Non-operating/Storage relative humidity	-	10% to 95%, noncondensing	
Acoustic	Pressure: 51.3 dB; ISO 7779	Pressure: 0 dB No Fan	

# HPE OfficeConnect 1910 Switch Series

Specifications	HPE OfficeConnect 24 PoE+ Switch (JG539A)	HPE OfficeConnect 1910 48 Switch (JG540A)	
Electrical characteristics Frequency AC voltage Maximum power rating PoE power	50/60 Hz 100–240 VAC 220 W 180 W <b>Notes:</b> 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).	50/60 Hz 100–240 VAC 22 W <b>Notes:</b> 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	IEC 60950-1; EN 60950-1; UL 60950-1 2nd Edition; CSA C22.2 No. 60950-1-07 2nd Edition	IEC 60950-1; EN 60950-1; UL 60950-1 2nd Edition; CSA C22.2 No. 60950-1-07 2nd Edition	
Emissions	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 61000-3-2 2000, 61000-3-3; ICES-003 Class A	FCC part 15 Class A; VCCI Class A; EN 55022 Class A; CISPR 22 Class A; EN 55024; EN 61000-3-2 2000, 61000-3-3; ICES-003 Class A	
Management	IMC—Intelligent Management Center; limited command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB	IMC—Intelligent Management Center; limited command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB	
Services	Refer to the Hewlett Packard Enterprise website at <b>hpe.com/networking/services</b> 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 <b>hpe.com/networking/services</b> 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)

Device management		RFC 2819 RMON	
General protocols	IEEE 802.1D MAC Bridges IEEE 802.1p Priority IEEE 802.1Q VLANs IEEE 802.1s (MSTP)	IEEE 802.1w Rapid Reconfiguration of Spanning Tree IEEE 802.3 Type 10BASE-T IEEE 802.3ab 1000BASE-T IEEE 802.3ad Link Aggregation Control Protocol (LACP)	IEEE 802.3i 10BASE-T IEEE 802.3x Flow Control IEEE 802.3z 1000BASE-X
MIBs	RFC 1213 MIB II RFC 1493 Bridge MIB RFC 2021 RMONv2 MIB RFC 2233 Interface MIB RFC 2233 Interfaces MIB RFC 2571 SNMP Framework MIB RFC 2572 SNMP-MPD MIB	RFC 2573 SNMP-Notification MIB RFC 2573 SNMP-Target MIB RFC 2613 SMON MIB RFC 2618 RADIUS Client MIB RFC 2620 RADIUS Accounting MIB RFC 2665 Ethernet-Like-MIB RFC 2667 IP Tunnel MIB	RFC 2668 802.3 MAU MIB RFC 2674 802.1p and IEEE 802.1Q Bridge MIB RFC 2737 Entity MIB (Version 2) RFC 3414 SNMP-User based-SM MIB RFC 3415 SNMP-View based-ACM MIB RFC 3418 MIB for SNMPv3
Network management	IEEE 802.1AB Link Layer Discovery Protocol (LLDP)	IEEE 802.1D (STP)	RFC 1215 SNMP Generic traps
QoS/CoS		IEEE 802.1p (CoS)	
Security		IEEE 802.1X Port Based Network Access Control	

## **HPE OfficeConnect Switch Series accessories**

Tra	nsc	eiv	ers

HPE X110 100M SFP LC LX Transceiver (JD120B) HPE X120 1G SFP LC SX Transceiver (JD118B) HPE X120 1G SFP LC LX Transceiver (JD119B) HPE X120 1G SFP RJ45 T Transceiver (JD089B)

Learn more at hpe.com/networking/smb



Products within this series have achieved sufficient scores in each of the rated criteria to achieve the Miercom Certified Green distinction Award. See the Specifications section of this series for more information.



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