



HPE 1920 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
- Limited Lifetime warranty

Product overview

The HPE 1920 Switch Series consists of advanced smart-managed fixed-configuration Gigabit 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 has 9 switches: four non-PoE models and five PoE+ models. All models are equipped with additional Gigabit SFP ports for fiber connectivity. The 8-, 24- and 48-port models are available with or without PoE+.

The HPE 1920 Switch Series provides a great value and includes features to satisfy even the most advanced small business network. 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. The switches come with a limited lifetime warranty covering the unit, fans and power supplies.

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)
- Single IP management

Enables management of up to 32 HPE 1920 switches using a single Web interface; simplifies management of multiple devices
- 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 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
- 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
- Limited CLI

Enables users to quickly deploy and troubleshoot devices in the network
- 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 will fall back to a unique static address determined by the switch's MAC address
- FTP, TFTP, and SFTP support

Offer 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); Secure File Transfer Protocol (SFTP) runs over an SSH tunnel to provide additional security
- Remote monitoring (RMON)

Uses standard SNMP to monitor essential network functions; supports events, alarm, history, and statistics group plus a private alarm extension group

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
- 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; applies QoS policies such as setting priority level and rate limit to selected traffic on a per-port basis
- 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
- 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, source port, and DiffServ
- Powerful QoS feature
Supports the following congestion actions: strict priority queuing (SP), weighted round robin (WRR) queuing, and SP+WRR

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/QoS
Supports ACL and QoS for IPv6 network traffic
- 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 IP phones, wireless access points, and security cameras, as well as any 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
- Cable diagnostics
Detects cable issues remotely using a browser-based tool
- Flow Control
Provides back pressure using standard IEEE 802.3x, reducing congestion in heavy traffic situations
- Auto MDI/MDI-X
Adjusts automatically for straight-through or crossover cables on all 10/100/1000 ports

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
- IEEE 802.1X and RADIUS network logins
Controls port-based access for authentication and accountability

- Secure Sockets Layer (SSL)
Encrypts all HTTP traffic, allowing safe access to the browser-based management GUI in the switch
- Port isolation
The port isolation feature isolates Layer 2 traffic for data privacy and security without using VLANs. This feature can also be used to isolate the hosts in a VLAN from one another
- Port security
Combines and extends IEEE 802.1X and MAC authentication to provide MAC-based network access control
- ARP attack protection
The ARP detection feature enables access devices to block ARP packets from unauthorized clients to prevent user spoofing and gateway spoofing attacks
- Automatic VLAN assignment
Assigns users automatically to the appropriate VLAN based on their identity, location, and time of day
- 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-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
- Fiber uplink
Provides greater distance connectivity using Gigabit Ethernet 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 10 kilobyte frame size to improve the performance of large data transfers
- VLAN support and tagging
Support IEEE 802.1Q with 4,094 simultaneous VLAN IDs

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/IPv6 routing

Provides basic routing (supporting up to 32 static routes and 8 virtual VLAN interfaces); allows manual routing configuration

Resiliency and high availability

- Available redundant power supply

Provides additional PoE of up to 795 W for high-power applications like PTZ IP cameras, video IP phones; the HPE RPS1600 Redundant Power System (JG136A), which is sold separately, is for use with the HPE 1920-24G-PoE+ (370W) switch and HPE 1920-48G-PoE+ Switch (370W) Switch models only

- Link aggregation

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

- PoE allocations

Support 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

- Energy Efficient Ethernet

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

Warranty and support

- Limited Lifetime Warranty

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

HPE 1920 Switch Series



HPE 1920-8G Switch (JG920A)



HPE 1920-8G-PoE+ (65W) Switch (JG921A)



HPE 1920-8G-PoE+ (180W) Switch (JG922A)

SPECIFICATIONS

I/O ports and slots

8 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)

2 SFP 1000 Mbps ports

Supports a maximum of 8 autosensing 10/100/1000 ports plus 2 1000BASE-X SFP ports, or a combination

8 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)

2 SFP 1000 Mbps ports

Supports a maximum of 8 autosensing 10/100/1000 ports plus 2 1000BASE-X SFP ports, or a combination

8 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)

2 SFP 1000 Mbps ports

Supports a maximum of 8 autosensing 10/100/1000 ports plus 2 1000BASE-X SFP ports, or a combination

Additional ports and slots

1 RJ-45 console port to access limited CLI port

1 RJ-45 console port to access limited CLI port

1 RJ-45 console port to access limited CLI port

Physical characteristics

Dimensions

10.47(w) x 6.38(d) x 1.73(h) in
(26.6 x 16.2 x 4.4 cm) (1U height)

12.99(w) x 9.06(d) x 1.73(h) in
(33 x 23 x 4.4 cm) (1U height)

12.99(w) x 9.06(d) x 1.73(h) in
(33 x 23 x 4.4 cm) (1U height)

Weight

1.98 lb (0.9 kg)

6.5 lb (2.95 kg)

7.05 lb (3.2 kg)

Memory and processor

MIPS @ 500 MHz, 32 MB flash, 128 MB SDRAM; packet buffer size: 4.1 Mb

MIPS @ 500 MHz, 32 MB flash, 128 MB SDRAM; packet buffer size: 4.1 Mb

MIPS @ 500 MHz, 32 MB flash, 128 MB SDRAM; packet buffer size: 4.1 Mb

Mounting and enclosure

Mounts in an EIA standard 19-inch telco rack or equipment cabinet (hardware included), Wall Mount

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 μ s

< 5 μ s

< 5 μ s

1000 Mb Latency

< 5 μ s

< 5 μ s

< 5 μ s

Throughput

14.8 Mpps (64-byte packets)

14.8 Mpps (64-byte packets)

14.8 Mpps (64-byte packets)

Routing/Switching capacity

20 Gbps

20 Gbps

20 Gbps

Routing table size

32 entries (IPv4), 32 entries (IPv6)

32 entries (IPv4), 32 entries (IPv6)

32 entries (IPv4), 32 entries (IPv6)

MAC address table size

8192 entries

8192 entries

8192 entries

Reliability

MTBF (years)

128.20

76.33

64.51

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

10% to 90%, noncondensing

10% to 90%, noncondensing

10% to 90%, noncondensing

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

10% to 95%, noncondensing

10% to 95%, noncondensing

10% to 95%, noncondensing

Altitude

up to 16,404 ft (5 km)

up to 16,404 ft (5 km)

up to 16,404 ft (5 km)

Acoustic

Pressure: 0 dB No Fan

Pressure: 0 dB No Fan

Low-speed fan: 43.6 dB,
High-speed fan: 51.5 dB; ISO 7779

SPECIFICATIONS	HPE 1920-8G Switch (JG920A)	HPE 1920-8G-PoE+ (65W) Switch (JG921A)	HPE 1920-8G-PoE+ (180W) Switch (JG922A)
Electrical characteristics			
Frequency	50/60 Hz	50/60 Hz	50/60 Hz
AC voltage	100 - 240 VAC	100 - 240 VAC	100 - 240 VAC
Maximum power rating	9 W	94 W	235 W
PoE power		65 W PoE+	180 W PoE+
	Notes 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.	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.	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.
Safety	UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03	UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03	UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03
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	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	IMC—Intelligent Management Center; limited command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB
Notes	SFP port and copper ports work simultaneously, independent of each other, to provide a total of 10 Gigabit switching ports.	SFP port and copper ports work simultaneously, independent of each other, to provide a total of 10 Gigabit switching ports.	SFP port and copper ports work simultaneously, independent of each other, to provide a total of 10 Gigabit switching ports.
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.

HPE 1920 Switch Series



SPECIFICATIONS (CONTINUED)

HPE 1920-16G Switch (JG923A)

HPE 1920-24G Switch (JG924A)

HPE 1920-24G-PoE+ (180W) Switch (JG925A)

I/O ports and slots	16 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 SFP 1000 Mbps ports Supports a maximum of 16 autosensing 10/100/1000 ports plus 4 1000BASE-X SFP ports, or a combination	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 SFP 1000 Mbps ports Supports a maximum of 24 autosensing 10/100/1000 ports plus 4 1000BASE-X SFP ports, or a combination	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) 4 SFP 1000 Mbps ports Supports a maximum of 24 autosensing 10/100/1000 ports plus 4 1000BASE-X SFP ports, or a combination
Additional ports and slots	1 RJ-45 console port to access limited CLI port	1 RJ-45 console port to access limited CLI port	1 RJ-45 console port to access limited CLI port
Physical characteristics			
Dimensions	17.32(w) x 6.81(d) x 1.73(h) in (44 x 17.3 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)	17.32(w) x 9.37(d) x 1.73(h) in (44 x 23.8 x 4.4 cm) (1U height)
Weight	4.74 lb (2.15 kg)	4.96 lb (2.25 kg)	7.5 lb (3.4 kg)
Memory and processor	MIPS @ 500 MHz, 32 MB flash, 128 MB SDRAM; packet buffer size: 4.1 Mb	MIPS @ 500 MHz, 32 MB flash, 128 MB SDRAM; packet buffer size: 4.1 Mb	MIPS @ 500 MHz, 32 MB flash, 128 MB SDRAM; packet buffer size: 4.1 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	< 5 μ s	< 5 μ s	< 5 μ s
1000 Mb Latency	< 5 μ s	< 5 μ s	< 5 μ s
Throughput	29.8 Mpps (64-byte packets)	41.7 Mpps (64-byte packets)	41.7 Mpps (64-byte packets)
Routing/Switching capacity	40 Gbps	56 Gbps	56 Gbps
Routing table size	32 entries (IPv4), 32 entries (IPv6)	32 entries (IPv4), 32 entries (IPv6)	32 entries (IPv4), 32 entries (IPv6)
MAC address table size	8192 entries	8192 entries	8192 entries
Reliability			
MTBF (years)	125	120.48	68.96
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	10% to 90%, noncondensing	10% to 90%, noncondensing	10% to 90%, noncondensing
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	10% to 95%, noncondensing	10% to 95%, noncondensing	10% to 95%, noncondensing
Altitude	up to 16,404 ft (5 km)	up to 16,404 ft (5 km)	up to 16,404 ft (5 km)
Acoustic	No Fan	No Fan	Power: 44.9 dB, Pressure: 53.3 dB; ISO 7779

SPECIFICATIONS (CONTINUED)	HPE 1920-16G Switch (JG923A)	HPE 1920-24G Switch (JG924A)	HPE 1920-24G-PoE+ (180W) Switch (JG925A)
Electrical characteristics	50/60 Hz 100 - 240 VAC 13 W	50/60 Hz 100 - 240 VAC 19 W	50/60 Hz 100 - 240 VAC 235 W 180 W PoE+
Notes	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.	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.	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.
Safety	UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03	UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03	UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03
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	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	IMC—Intelligent Management Center; limited command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB
Notes	SFP ports and copper ports can work simultaneously, independent of each other, to provide a total of 20 Gigabit Ethernet-capable ports.	SFP ports and copper ports can work simultaneously, independent of each other, to provide a total of 28 Gigabit Ethernet-capable ports.	SFP ports and copper ports can work simultaneously, independent of each other, to provide a total of 28 Gigabit Ethernet-capable ports.
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.

HPE 1920 Switch Series



HPE 1920-24G-PoE+ (370W) Switch (JG926A)



HPE 1920-48G Switch (JG927A)



HPE 1920-48G-PoE+ (370W) Switch (JG928A)

SPECIFICATIONS (CONTINUED)

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)

4 SFP 1000 Mbps ports

Supports a maximum of 24 autosensing 10/100/1000 ports plus 4 1000BASE-X SFP ports, or a combination

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)

4 SFP 1000 Mbps ports

Supports a maximum of 48 autosensing 10/100/1000 ports plus 4 1000BASE-X SFP ports, or a combination

48 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)

4 SFP 1000 Mbps ports

Supports a maximum of 48 autosensing 10/100/1000 ports plus 4 1000BASE-X SFP ports, or a combination

Additional ports and slots

1 RJ-45 console port to access limited CLI port

1 RJ-45 console port to access limited CLI port

1 RJ-45 console port to access limited CLI port

Physical characteristics

Dimensions

17.32(w) x 10.24(d) x 1.73(h) in
(44 x 26 x 4.4 cm) (1U height)

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 17.32(d) x 1.73(h) in
(44 x 44 x 4.4 cm) (1U height)

Weight

7.5 lb (3.4 kg)

6.94 lb (3.15 kg)

9.48 lb (4.3 kg)

Memory and processor

MIPS @ 500 MHz, 32 MB flash, 128 MB SDRAM; packet buffer size: 4.1 Mb

MIPS @ 650 MHz, 32 MB flash, 128 MB SDRAM; packet buffer size: 12 Mb

MIPS @ 650 MHz, 32 MB flash, 128 MB SDRAM; packet buffer size: 12 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

< 5 μ s

< 5 μ s

< 5 μ s

1000 Mb Latency

< 5 μ s

< 5 μ s

< 5 μ s

Throughput

up to 41.7 Mpps (64-byte packets)

77.4 Mpps (64-byte packets)

up to 77.4 Mpps (64-byte packets)

Routing/Switching capacity

56 Gbps

104 Gbps

104 Gbps

Routing table size

32 entries (IPv4), 32 entries (IPv6)

32 entries (IPv4), 32 entries (IPv6)

32 entries (IPv4), 32 entries (IPv6)

MAC address table size

8192 entries

16384 entries

16384 entries

Reliability

MTBF (years)

65.78

76.92

44.44

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

10% to 90%, noncondensing

10% to 90%, noncondensing

10% to 90%, noncondensing

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

10% to 95%, noncondensing

10% to 95%, noncondensing

10% to 95%, noncondensing

Altitude

up to 16,404 ft (5 km)

up to 16,404 ft (5 km)

up to 16,404 ft (5 km)

Acoustic

Low-speed fan: 44.9 dB, High-speed fan: 53.3 dB; ISO 7779

Pressure: 50.0 dB; ISO 7779

Low-speed fan: 47 dB, High-speed fan: 49.3 dB; ISO 7779

SPECIFICATIONS (CONTINUED)	HPE 1920-24G-PoE+ (370W) Switch (JG926A)	HPE 1920-48G Switch (JG927A)	HPE 1920-48G-PoE+ (370W) Switch (JG928A)
Electrical characteristics			
Frequency	50/60 Hz	50/60 Hz FYI	50/60 Hz 100 - 240 VAC
AC voltage	100 - 240 VAC	100 - 240 VAC	492 W
Maximum power rating	474 W	32 W	370 W PoE+
PoE power	370 W PoE+		
	<p>Notes</p> <p>Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.</p> <p>PoE power is the power supplied by the internal power supply. It is dependent on the type and quantity of power supplies and may be supplemented with the use of an external power supply (EPS). When supplemented with the use of an HPE RPS1600 Redundant Power System, up to 795 W of PoE+ can be supplied. Unit max. power consumption with RPS is 833 W.</p>	<p>Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.</p>	<p>Maximum power rating and maximum heat dissipation are the worst-case theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.</p> <p>PoE power is the power supplied by the internal power supply. It is dependent on the type and quantity of power supplies and may be supplemented with the use of an external power supply (EPS). When supplemented with the use of an HPE RPS1600 Redundant Power System, up to 795 W of PoE+ can be supplied. Unit max. power consumption with RPS is 876W.</p>
Safety	UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No.60950-1-03	UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03	UL 60950; IEC 60950-1; EN 60950-1; CAN/CSA-C22.2 No. 60950-1-03
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	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	IMC—Intelligent Management Center; limited command-line interface; Web browser; SNMP Manager; IEEE 802.3 Ethernet MIB
Notes	SFP ports and copper ports can work simultaneously, independent of each other, to provide a total of 28 Gigabit switching ports.	SFP ports and copper ports work simultaneously, independent of each other, to provide a total of 52 Gigabit Ethernet-capable ports.	SFP ports and copper ports can work simultaneously, independent of each other, to provide a total of 52 Gigabit switching ports.
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..

Data sheet

STANDARDS AND PROTOCOLS

(applies to all products in series)

Device management	RFC 2819 RMON	Web UI	
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)	RFC 2474 DiffServ Precedence, including 8 queues/port	
Security		IEEE 802.1X Port Based Network Access Control	

HPE 1920 Switch Series accessories

Transceivers	HPE X121 1G SFP LC SX Transceiver (J4858C) HPE X121 1G SFP LC LX Transceiver (J4859C) HPE X121 1G SFP RJ45 T Transceiver (J8177C) HPE X120 1G SFP LC SX Transceiver (JD118B) HPE X120 1G SFP LC LX Transceiver (JD119B) HPE X120 1G SFP RJ45 T Transceiver (JD089B)
Cables	HPE 0.5 m Multimode OM3 LC/LC Optical Cable (AJ833A) HPE 1 m Multimode OM3 LC/LC Optical Cable (AJ834A) HPE 2 m Multimode OM3 LC/LC Optical Cable (AJ835A) HPE 5 m Multimode OM3 LC/LC Optical Cable (AJ836A) HPE 15 m Multimode OM3 LC/LC Optical Cable (AJ837A) HPE 30 m Multimode OM3 LC/LC Optical Cable (AJ838A) HPE 50 m Multimode OM3 LC/LC Optical Cable (AJ839A) HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 1m Cable (QK732A) HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 2m Cable (QK733A) HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 5m Cable (QK734A) HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 15m Cable (QK735A) HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 30m Cable (QK736A) HPE Premier Flex LC/LC Multi-mode OM4 2 fiber 50m Cable (QK737A)



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