



# HPE 1420 Switch Series



## Key features

- Unmanaged plug-and-play Gigabit Ethernet switching
- Green features for low power consumption
- Fanless design for silent operation
- Quality of service capabilities for improved network efficiency
- Limited lifetime warranty

## Product overview

The HPE 1420 Switch Series consists of unmanaged Gigabit Ethernet switches, for small business and others looking for plug-and-play basic Layer 2 connectivity for their network, including low-cost PoE+ and 10-Gigabit uplink models.

The 1420 Switch Series includes four Gigabit switches. All have 10/100/1000 ports for affordable Gigabit connections using copper Cat 5e cabling. There is a 16-port RJ45-only model. There is a 24-port model with two SFP Gigabit ports, ideal where long distances require fiber-based connections. Another 24-port model supports IEEE 802.3at PoE+ on 12 of its ports, able to forward up to 30 W power on these ports to power access points, IP phones, IP cameras, and other PoE-enabled devices. For cost-effective high-speed fiber-based server connections, there is a 24-port 10/100/1000 switch with two SFP+ 10-Gigabit ports.

HPE 1420 switches have quality of service (QoS) support and IEEE 802.3x flow control features that improve network efficiency.

Simplified plug-and-play convenience is supported by features such as auto-MDIX and auto-speed negotiation. Hewlett Packard Enterprise has innovated and combined the latest advances in silicon technology to bring you some of the most power-efficient switches. All models support the Energy Efficient Ethernet IEEE 802.3az standard, as well as auto power-down mode on idle ports and power saving on short-distance cables. With their fanless silent operation, these switches are ideal for office deployment. HPE 1420 switches come with a limited lifetime warranty covering the unit and power supplies.

## Features and benefits

### Ease of use

- Unmanaged

Provides plug-and-play simplicity

- Auto-speed negotiation

Selects individual port speed automatically, depending on client capabilities; removing the need for manual intervention enables simple plug-and-play operation

- Comprehensive LED display with per-port indicators

Provides an at-a-glance view of the status, activity, speed, and full-duplex operation of the switches

- Flow control

Helps ensure reliable communications during full-duplex operation

- HPE/IEEE Auto-MDIX

Automatically adjusts for straight-through or crossover cables on all RJ-45 ports

### Connectivity

- Gigabit Ethernet 10/100/1000 connectivity—high speed Ethernet connections over highly affordable copper Category 5 cabling

- 10-Gigabit fiber connectivity

Future-proof 10-Gigabit technology allows high-speed fiber connection to servers or other switches with connection flexibility using optional SFP+ or SFP transceivers

- 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 (for PoE model)

### Performance

- Energy Efficient Ethernet support

Supports new IEEE 802.3az standard; and allows lower power consumption, when operated with IEEE-compliant client devices in 100 Mbps mode only

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

- Jumbo frame support

Allows frames up to 9,216 bytes to be switched through the network

**Flexibility**

- Fanless design

Enables quiet operation for deployment in open spaces

- Internal power supply

Delivers operational convenience and an environment suitable for business operations

**Quality of service (QoS)**

- IEEE 802.1p prioritization

Delivers data to devices, based on the priority and type of traffic

- DiffServ Code Point (DSCP) support

Allows real-time traffic prioritization, based on L3 TOS/DSCP parameters

**Warranty and support**

- Limited Lifetime Warranty 2.0

See [hpe.com/networking/warrantysummary](https://hpe.com/networking/warrantysummary) for warranty and support information included with your product purchase.

## HPE 1420 Switch Series



**HPE 1420-16G Switch (JH016A)**



**HPE 1420-24G-2SFP Switch (JH017A)**

### SPECIFICATIONS

#### I/O ports and slots

16 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); Media Type: Auto-MDIX;  
Duplex: 10BASE-T/100BASE-TX: half or full;  
1000BASE-T: full only  
Supports a maximum of 16 autosensing 10/100/1000 ports

24 RJ-45 autosensing 10/100/1000 ports  
(IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX,  
IEEE 802.3ab Type 1000BASE-T); Media Type: Auto-MDIX;  
Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only  
2 SFP 100/1000 Mbps ports  
Supports a maximum of 24 autosensing 10/100/1000 ports  
plus 2 SFP ports

#### 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)

17.32(w) x 6.81(d) x 1.73(h) in (44 x 17.3 x 4.4 cm)  
(1U height)

##### Weight

2.65 lb (1.2 kg)

4.85 lb (2.2 kg)

#### Memory and processor

1 MB flash; Packet buffer size: 512 KB

1 MB flash; Packet buffer size: 512 KB

#### Mounting and enclosure

Mounts in an EIA standard 19-inch telco rack (hardware  
included); Wall, desktop and under-table mounting

Mounts in an EIA standard 19-inch telco rack (hardware  
included); Desktop mounting

#### Performance

##### 100 Mb Latency

< 8 µs (LIFO 64-byte packets)

< 8 µs (LIFO 64-byte packets)

##### 1000 Mb Latency

< 16 µs (LIFO 64-byte packets)

< 16 µs (LIFO 64-byte packets)

##### Throughput

up to 23.8 Mpps (64-byte packets)

up to 38.7 Mpps (64-byte packets)

##### Switching capacity

32 Gbps

52 Gbps

##### 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

5% to 95%, noncondensing

5% to 95%, noncondensing

##### Nonoperating/Storage temperature

-40°F to 158°F (-40°C to 70°C)

-40°F to 158°F (-40°C to 70°C)

##### Nonoperating/Storage relative humidity

5% to 95%, noncondensing

5% to 95%, noncondensing

##### Altitude

up to 16,404 ft (5 km)

up to 16,404 ft (5 km)

##### Acoustic

Power: 0 dB No fan

Power: 0 dB No fan

## HPE 1420 Switch Series (continued)

SPECIFICATIONS (CONTINUED)	HPE 1420-16G Switch (JH016A)	HPE 1420-24G-2SFP Switch (JH017A)
<b>Electrical characteristics</b>		
Frequency	50/60 Hz	50/60 Hz
Voltage	100—240 VAC, rated (depending on power supply chosen)	100—240 VAC, rated (depending on power supply chosen)
Current	0.2 A	0.3 A
Maximum power rating	12 W	18 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. This model provides internal power supply. Please select the correct power cord country option.	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. This model provides internal power supply. Please select the correct power cord country option.
<b>Safety</b>	CSA 22.2 No. 60950; UL 60950-1; IEC 60950-1; EN 60950-1	CSA 22.2 No. 60950; UL 60950-1; IEC 60950-1; EN 60950-1
<b>Emissions</b>	FCC Rules Part 15, Subpart B Class A	FCC Rules Part 15, Subpart B Class A
<b>Immunity</b>		
Generic	EN 55022 CISPR 22	EN 55022 CISPR 22
EN	EN 55024, CISPR 24	EN 55024, CISPR 24
ESD	IEC 61000-4-2	IEC 61000-4-2
Radiated	IEC 61000-4-3	IEC 61000-4-3
EFT/Burst	IEC 61000-4-4	IEC 61000-4-4
Surge	IEC 61000-4-5	IEC 61000-4-5
Conducted	IEC 61000-4-6	IEC 61000-4-6
Power frequency magnetic field	IEC 61000-4-8	IEC 61000-4-8
Voltage dips and interruptions	IEC 61000-4-11	IEC 61000-4-11
Harmonics	IEC 61000-3-2	IEC 61000-3-2
Flicker	IEC 61000-3-3	IEC 61000-3-3
<b>Notes</b>		Use only supported genuine HPE transceivers with your switch.
<b>Services</b>	Refer to the Hewlett Packard Enterprise website at <a href="https://hpe.com/networking/services">hpe.com/networking/services</a> for details on the service-level descriptions and product numbers. For details about services, and response times in your area, please contact your local Hewlett Packard Enterprise sales office.	Refer to the Hewlett Packard Enterprise website at <a href="https://hpe.com/networking/services">hpe.com/networking/services</a> for details on the service-level descriptions and product numbers. For details about services, and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

## HPE 1420 Switch Series (continued)



### SPECIFICATIONS (CONTINUED)

#### HPE 1420-24G-2SFP+ 10G Uplink Switch (JH018A)

#### HPE 1420-24G-PoE+ (124W) Switch (JH019A)

#### I/O ports and slots

24 RJ-45 autosensing 10/100/1000 ports  
(IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Media Type: Auto-MDIX;  
Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only  
2 fixed 1000/10000 SFP+ ports  
  
Supports a maximum of 24 autosensing 10/100/1000 ports plus 2 SFP+ ports

24 RJ-45 autosensing 10/100/1000 ports  
(IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-T); Media Type: Auto-MDIX;  
Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only  
  
Supports a maximum of 24 autosensing 10/100/1000 ports

#### 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 9.37(d) x 1.73(h) in (44 x 23.8 x 4.4 cm)  
(1U height)

##### Weight

6.39 lb (2.9 kg)

7.28 lb (3.3 kg)

#### Memory and processor

8 MB flash; Packet buffer size: 1.5 MB

1 MB flash; Packet buffer size: 512 KB

#### Mounting and enclosure

Mounts in an EIA standard 19-inch telco rack (hardware included); Desktop mounting

Mounts in an EIA standard 19-inch telco rack (hardware included); Desktop mounting

#### Performance

100 Mb Latency

< 8 µs (LIFO 64-byte packets)

< 8 µs (LIFO 64-byte packets)

1000 Mb Latency

< 16 µs (LIFO 64-byte packets)

< 16 µs (LIFO 64-byte packets)

10 Gbps Latency

< 2 µs (LIFO 64-byte packets)

Throughput

up to 65.5 Mpps (64-byte packets)

up to 35.7 Mpps (64-byte packets)

Switching capacity

88 Gbps

48 Gbps

MAC address table size

16384 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

5% to 95%, noncondensing

5% to 95%, noncondensing

Nonoperating/Storage temperature

-40°F to 158°F (-40°C to 70°C)

-40°F to 158°F (-40°C to 70°C)

Nonoperating/Storage relative humidity

5% to 95%, noncondensing

5% to 95%, noncondensing

Altitude

up to 16,404 ft (5 km)

up to 16,404 ft (5 km)

Acoustic

Power: 0 dB No fan

Power: 0 dB No fan

#### Electrical characteristics

Frequency

50/60 Hz

50/60 Hz

Voltage

100—240 VAC, rated (depending on power supply chosen)

100—240 VAC, rated (depending on power supply chosen)

Current

0.4 A

0.3/1.8 A

Maximum power rating

21 W

160 W

PoE power

124 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.  
This model provides internal power supply. Please select the correct power cord country option.

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 a External Power Supply (EPS).  
This product provides PoE or PoE+ power across 12 of 24 ports, with a total power budget of 124W. This model is designed with internal power supply. Please select the correct power cord country option.

## HPE 1420 Switch Series (continued)

SPECIFICATIONS (CONTINUED)	HPE 1420-24G-2SFP+ 10G Uplink Switch (JH018A)	HPE 1420-24G-PoE+ (124W) Switch (JH019A)
<b>Safety</b>	CSA 22.2 No. 60950; UL 60950-1; IEC 60950-1; EN 60950-1	CSA 22.2 No. 60950; UL 60950-1; IEC 60950-1; EN 60950-1
<b>Emissions</b>	FCC Rules Part 15, Subpart B Class A	FCC Rules Part 15, Subpart B Class A
<b>Immunity</b>		
Generic	EN 55022 CISPR 22	EN 55022 CISPR 22
EN	EN 55024, CISPR 24	EN 55024, CISPR 24
ESD	IEC 61000-4-2	IEC 61000-4-2
Radiated	IEC 61000-4-3	IEC 61000-4-3
EFT/Burst	IEC 61000-4-4	IEC 61000-4-4
Surge	IEC 61000-4-5	IEC 61000-4-5
Conducted	IEC 61000-4-6	IEC 61000-4-6
Power frequency magnetic field	IEC 61000-4-8	IEC 61000-4-8
Voltage dips and interruptions	IEC 61000-4-11	IEC 61000-4-11
Harmonics	IEC 61000-3-2	IEC 61000-3-2
Flicker	IEC 61000-3-3	IEC 61000-3-3
<b>Notes</b>	Use only supported genuine HPE transceivers with your switch.	
<b>Services</b>	Refer to the Hewlett Packard Enterprise website at <a href="https://hpe.com/networking/services">hpe.com/networking/services</a> for details on the service-level descriptions and product numbers. For details about services, and response times in your area, please contact your local Hewlett Packard Enterprise sales office.	Refer to the Hewlett Packard Enterprise website at <a href="https://hpe.com/networking/services">hpe.com/networking/services</a> for details on the service-level descriptions and product numbers. For details about services, and response times in your area, please contact your local Hewlett Packard Enterprise sales office.

### STANDARDS AND PROTOCOLS

(applies to all products in series)

<b>General protocols</b>	IEEE 802.1p Priority IEEE 802.3ab 1000BASE-T IEEE 802.3ae 10-Gigabit Ethernet IEEE 802.3af Power over Ethernet	IEEE 802.3at Power over Ethernet Plus IEEE 802.3az Energy Efficient Ethernet IEEE 802.3i 10BASE-T Ethernet over twisted pair	IEEE 802.3u 100BASE-TX Fast Ethernet, 100BASE-FX with autonegotiation IEEE 802.3x Flow Control IEEE 802.3z 1000BASE-X Gigabit Ethernet over fiber
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HPE 1420 Switch Series accessories

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)
HPE 1420-24G-2SFP Switch (JH017A)	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)
HPE 1420-24G-2SFP+ 10G Uplink Switch (JH018A)	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) HPE X132 10G SFP+ LC SR Transceiver (J9150A) HPE X130 10G SFP+ LC SR Transceiver (JD092B) HPE X130 10G SFP+ LC LR Transceiver (JD094B) HPE X242 10G SFP+ to SFP+ 1m Direct Attach Copper Cable (J9281B) HPE X242 10G SFP+ to SFP+ 3m Direct Attach Copper Cable (J9283B)

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[hpe.com/networking](http://hpe.com/networking)



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