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# HPE OfficeConnect 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 OfficeConnect 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 five Gigabit switches. All have 10/100/1000 ports for affordable Gigabit connections using copper Cat 5e cabling. There is a model with 16 RJ-45 ports. 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. Lastly, there is a model simply with a 24-port 10/100/1000 layout.

HPE OfficeConnect 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 OfficeConnect 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

- 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

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

## HPE OfficeConnect 1420 Switch Series

Specifications	HPE OfficeConnect 1420-16G Switch (JH016A)	HPE OfficeConnect 1420-24G-2SFP Switch (JH017A)	
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	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 16 autosensing 10/100/1000 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); 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)	
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: O dB No fan	Power: 0 dB No fan	

Specifications (continued)	HPE OfficeConnect 1420-16G Switch (JH016A)	HPE OfficeConnect 1420-24G-2SFP Switch (JH017A)
Electrical characteristics		
Frequency	50/60 Hz	50/60 Hz
Voltage	100–240 VAC, rated	100–240 VAC, rated
Current	0.2 A	0.3 A
Maximum power rating	12 W	18 W
Notes	Maximum power rating is the worst-case theoretical maximum number provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.	Maximum power rating is the worst-case theoretical maximum number provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated.
	This model comes with an internal power supply. Power cord provided based on region option.	This model comes with an internal power supply. Power cord provided based on region option.
Safety	CSA 22.2 No. 60950; UL 60950-1; IEC 60950-1;	CSA 22.2 No. 60950; UL 60950-1; IEC 60950-1;
	EN 60950-1	EN 60950-1
Emissions	FCC Rules Part 15, Subpart B Class A	FCC Rules Part 15, Subpart B Class A
Immunity		
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
Notes		Use only supported genuine HPE transceivers with your switch.
Services	Refer to the Hewlett Packard Enterprise website at	Refer to the Hewlett Packard Enterprise website at
	hpe.com/networking/services for details on the	hpe.com/networking/services for details on the
	service-level descriptions and product numbers. For details	service-level descriptions and product numbers. For detai
	about services, and response times in your area, please	about services, and response times in your area, please
	contact your local Hewlett Packard Enterprise sales office.	contact your local Hewlett Packard Enterprise sales office.

HPE OfficeConnect 1420-24G-2SFP+ 10G Uplink Switch (JH018A)	HPE OfficeConnect 1420-24G-PoE+ (124W) Switch (JH019A)	
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	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 plus 2 SFP+ ports	Supports a maximum of 24 autosensing 10/100/1000 ports	
17.32(w) x 9.37(d) x 1.73(h) in. (44 x 23.8 x 4.4 cm) (1U height) 6 39 lb (29 kg)	17.32(w) x 9.37(d) x 1.73(h) in. (44 x 23.8 x 4.4 cm) (1U height) 7.28 lb (3.3 kg)	
8 MB flash; Packet buffer size: 1.5 MB	1 MB flash; Packet buffer size: 512 KB	
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	
< 8 µs (LIFO 64-byte packets) < 16 µs (LIFO 64-byte packets) Up to 65.5 Mpps (64-byte packets) 88 Gbps 16384 entries	< 8 µs (LIFO 64-byte packets) < 16 µs (LIFO 64-byte packets) < 2 µs (LIFO 64-byte packets) Up to 35.7 Mpps (64-byte packets) 48 Gbps 8192 entries	
32°F to 104°F (0°C to 40°C) 5% to 95%, noncondensing -40°F to 158°F (-40°C to 70°C) 5% to 95%, noncondensing Up to 16,404 ft (5 km) Power: 0 dB No fan	32°F to 104°F (0°C to 40°C) 5% to 95%, noncondensing -40°F to 158°F (-40°C to 70°C) 5% to 95%, noncondensing Up to 16,404 ft (5 km) Power: 0 dB No fan	
50/60 Hz 100–240 VAC, rated 0.4 A 21 W Maximum power rating is the worst-case theoretical maximum number provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all modules populated. This model comes with an internal power supply. Power cord provided based on region option.	50/60 Hz 100–240 VAC, rated 0.3 (without PoE)/1.81A (with full PoE power) 18W (without PoE)/160W (with full PoE power) 124 W PoE+ Maximum power rating is the worst-case theoretical maximum number 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 budget available for Power over Etherent. This product provides PoE or PoE+ power across 12 of 24 ports, with a total power budget of 124W.	
	Uplink Switch (JH018A)      24 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3ab Type 1000BASE-TX); Media Type: Auto-MDIX; Duplex: 10BASE-T7      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      17.32(w) x 9.37(d) x 1.73(h) in. (44 x 23.8 x 4.4 cm) (10 height) 6.39 lb (2.9 kg)      8 MB flash; Packet buffer size: 1.5 MB      Mounts in an EIA standard 19-inch telco rack (hardware included); Desktop mounting      < 8 µs (LIFO 64-byte packets) < 16 µs (LIFO 64-byte packets)	

Specifications (continued)	HPE OfficeConnect 1420-24G-2SFP+ 10G Uplink Switch (JH018A)	HPE OfficeConnect 1420-24G-PoE+ (124W) Switch (JH019A)
Safety	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
Emissions	FCC Rules Part 15, Subpart B Class A	FCC Rules Part 15, Subpart B Class A
Immunity		
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
Notes	Use only supported genuine HPE transceivers with your switch.	
Services	Refer to the Hewlett Packard Enterprise website at	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.	<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 1420 Switch Series (continued)



Specifications (continued)	HPE OfficeConnect 1420 24G Switch (JG708B)
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
	Supports a maximum of 24 autosensing 10/100/1000 ports
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)
Weight	6.61 lb (3 kg)
Memory and processor	1 MB flash; Packet buffer size: 512 KB
Mounting and enclosure	Mounts in an EIA standard 19-inch telco rack (hardware included); Desktop mounting
Performance	
100 Mb Latency	$< 8.0 \ \mu s$ (LIFO 64-byte packets)
1000 Mb Latency	< 16 μs (LIFO 64-byte packets)
Throughput	Up to 35.7 Mpps (64-byte packets)
Routing/Switching capacity	48 Gbps
MAC address table size	8192 entries
Environment	
Operating temperature	32°F to 104°F (0°C to 40°C)
Operating relative humidity	5% to 95% @ 104°F (40°C), noncondensing
Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)
Nonoperating/Storage relative humidity	5% to 90% @ 149°F (65°C), noncondensing
Altitude	Up to 16,404 ft (5 km)
Acoustic	Power: 0 dB No fan

Specifications (continued)	HPE OfficeConnect 1420 24G Switch (JG708B)
Electrical characteristics	
Frequency	50/60 Hz
Maximum heat dissipation	55 BTU/hr (58 kJ/hr)
Voltage	100-240 VAC, rated
Current	0.3 A
Maximum power rating	16 W
Notes	Maximum power rating is the worst-case theoretical maximum number provided for planning the infrastructure with fully loaded Pol (if equipped), 100% traffic, all ports plugged in, and all modules populated.
	This model comes with an internal power supply. Power cord provided based on region option.
Safety	CSA 22.2 No. 60950; UL 60950-1; IEC 60950-1; EN 60950-1
Emissions	FCC Rules Part 15, Subpart B Class A
Immunity	
Generic	EN 55022 CISPR 22
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	IEC 61000-3-2
Flicker	IEC 61000-3-3
Notes	IEEE 802.3az Energy Efficient Ethernet protocol is supported by the HPE OfficeConnect 1420 24G (JG708B), HP 1410-16 (J9662A), and HP 1410-24 (J9663A) Switches.
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.

### STANDARDS AND PROTOCOLS

(applies to all products in series)

#### General protocols

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 auto-negotiation IEEE 802.3x Flow Control IEEE 802.3z 1000BASE-X Gigabit Ethernet over fiber

## HPE OfficeConnect 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 OfficeConnect 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 OfficeConnect 1420-24G-2SFP+ 10G	HPE X121 1G SFP LC SX Transceiver (J4858C)
Uplink Switch (JH018A)	HPE X121 1G SFP LC LX Transceiver (14859C)
	HPE X121 IG SFP RJ45 T Transceiver (J8177C)
	HPE X120 IG 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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