





HP ProCurve 1410 Switch Series

Product overview

The HP ProCurve 1410 Switch Series provides plug-and-play simplicity for high-bandwidth connectivity and consists of three unmanaged Gigabit switches. The HP ProCurve 1410-24G is a 24-port 10/100/1000 switch with 22 10/100/1000 ports and 2 dual-personality ports. The HP ProCurve 1410-16G is a 16-port 10/100/1000 switch. The HP ProCurve 1410-8G is a small-form-factor 8-port 10/100/1000 switch. Ideal for deployment in open spaces, all three switches feature silent operation via a fanless design and are capable of being mounted in various environments (wall, table top, and under table). In addition, the 16 and 24-port switches are rack mountable.

Key features

- Unmanaged Layer 2 Gigabit switch
- 8-, 16-, and 24-port models
- Fanless for silent operation
- Two dual-personality mini-GBIC slots (J9561A)
- Industry-leading Lifetime warranty

Features and benefits

Industry-leading warranty



Connectivity

- Auto-MDIX: automatically adjusts for straight-through or crossover cables on all 10/100 and 10/100/1000 ports
- Jumbo packet support: supports up to 9216-byte frame size to improve performance of large data transfers

Performance

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

Quality of Service (QoS)

• **IEEE 802.1p prioritization:** delivers data to devices based on the priority and type of traffic

Ease of use

- Unmanaged: provides plug-and-play simplicity
- Comprehensive LED display with per-port indicators: provides an at-a-glance view of status, activity, speed, and full-duplex operation
- Flow control: helps ensure reliable communications during full-duplex operation

Flexibility

• **Designed with no fan:** enables quiet operation for deployment in open spaces

Warranty and support

- ProCurve Lifetime Warranty: for as long as you own the product, with next-business-day advance replacement (available in most countries)
- Electronic and telephone support: limited electronic and telephone support is available from HP; refer to the HP website at www.procurve.com/support for details on the support provided and the period during which support is available

[♦] For as long as you own the product, with next-business-day advance replacement (available in most countries). The following hardware products have a five-year hardware warranty for the disk drive and lifetime hardware warranty (for as long as you own the product) for the rest of the module: HP ProCurve ONE Services zl Module, HP ProCurve Threat Management Services zl Module, and HP ProCurve MSM765zl Mobility Controller. The following hardware products and their related series modules have a one-year hardware warranty with extensions available: HP ProCurve Routing Switch 9300m series, HP ProCurve Services, HP ProCurve Network Access Controller 800, and HP ProCurve DCM Controller. The following hardware products have a one-year hardware warranty with extensions available: HP ProCurve MSM7xx Mobility and Access Controllers, HP ProCurve RF Manager IDS/IPS Systems, HP ProCurve MSM Power Supplies, HP ProCurve 1-Port Power Injector, HP ProCurve CNMS Appliances, and HP ProCurve MSM317 Access Device. Standalone software, upgrades, or licenses may have a different warranty duration. For details, refer to the ProCurve Software License, Warranty, and Support booklet at www.procurve.com/warranty.

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Specifications

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	HP ProCurve 1410-8G Switch (J9559A)	HP ProCurve 1410-16G Switch (J9560A)	HP ProCurve 1410-24G Switch (J9561A)
Ports	8 auto-sensing 10/100/1000 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 10Base-TX, 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	16 RJ-45 auto-sensing 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	22 auto-sensing 10/100/1000 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, IEEE 802.3u Type 100Base-TX, IEEE 802.3u Type 100Base-TX; Beta 802.3u Type 100Base-TX: half or full; 1000Base-T: full only 2 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 port (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 10Base-TX; IEEE 802.3u Type 100Base-TX; IEEE 802.3u Type 10Base-TX; IEEE 802.3u Type 10Base-TX
Physical characteristics			
Dimensions	3.8(d) x 6.14(w) x 0.96(h) in. (9.65 x 15.6 x 2.45 cm) (.5U height)	4.41(d) x 8.21(w) x 1.73(h) in. (11.2 x 20.85 x 4.4 cm) (1U height)	6.65(d) x 13.23(w) x 1.73(h) in. (16.9 x 33.6 x 4.4 cm) (1U height)
Weight	.74 lb. (0.34 kg)	1.43 lb. (0.65 kg)	2.98 lb. (1.35 kg)
Memory and processor	4Kb EEPROM capacity; packet buffer size: 192 KB	512 KB flash; packet buffer size: 512 KB	512 KB flash; packet buffer size: 512 KB
Mounting	Wall, desktop, and undertable mounting	Mounts in an ElA-standard 19 in. telco rack (hardware included); wall, desktop, and undertable mounting	Mounts in an EIA-standard 19 in. telco rack (hardware included); wall, desktop, and undertable mounting
Performance			
100 Mb Latency	$< 3.6 \mu s$ (LIFO 64-byte packets)	$< 8.0 \mu s$ (LIFO 64-byte packets)	< 8.0 μs (LIFO 64-byte packets)
1000 Mb Latency	< 1.2 μs (LIFO 64-byte packets)	$< 3.6 \mu s$ (LIFO 64-byte packets)	< 3.6 μs (LIFO 64-byte packets)
Throughput	up to 11.9 million pps (64-byte packets)	up to 23.8 million pps (64-byte packets)	up to 35.7 million pps (64-byte packets)
Switching capacity	16 Gbps	32 Gbps	48 Gbps
MAC address table size	4,000 entries	8,000 entries	8,000 entries
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% @ 104°F (40°C), non-condensing	15% to 95% @ 104°F (40°C), non-condensing	15% to 95% @ 104°F (40°C), non-condensing
Non-operating/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)
Non-operating/Storage relative humidity	15% to 90% @ 149°F (65°C), non-condensing	15% to 90% @ 149°F (65°C), non-condensing	15% to 90% @ 149°F (65°C), non-condensing
Altitude	up to 10,000 ft. (3 km)	up to 10,000 ft. (3 km)	up to 10,000 ft. (3 km)
Acoustic	Power: 0 dB No Fan	Power: 0 dB No Fan	Power: 0 dB No Fan
Electrical characteristics	43 PTH (1 440 O 4 I 1 (1)		75 9711 (1 170 20 11 (1 1
Maximum heat dissipation	41 BTU/hr (43.26 kJ/hr)	44 BTU/hr (46.42 kJ/hr)	75 BTU/hr (79.13 kJ/hr)
Voltage	100-240 VAC	100-240 VAC	100-127 / 200-240 VAC
Current	1.0 A	1.1 A	0.3 / 0.2 A 22 W
Maximum power rating	12 W	13 W	22 vv 50 / 60 Hz
Frequency Notes	50 / 60 Hz	50 / 60 Hz	
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. The exact input voltage and frequency rating are determined by the specific power adapter part number ordered. Please select the correct power adapter 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. The exact input voltage and frequency rating are determined by the specific power adapter part number ordered. Please select the correct power adapter 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, al ports plugged in, and all modules populated.
Safety	CSA 22.2 No. 60950; EN 60950/IEC 60950; UL 60950-1	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	FCC Rules Part 15, Subpart B Class A
Immunity			
Generic	EN 55022 CISPR 22	EN 55022 CISPR 22	EN 55022 CISPR 22
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	

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Specifications (continued)

	HP ProCurve 1410-8G Switch (J9559A)	HP ProCurve 1410-16G Switch (J9560A)	HP ProCurve 1410-24G Switch (J9561A)
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	IEC 61000-3-2	IEC 61000-3-2	IEC 61000-3-2
Flicker	IEC 61000-3-3	IEC 61000-3-3	IEC 61000-3-3
Notes			Use only supported genuine HP ProCurve mini-GBICs with your switch.
Services	3-year, 4-hour onsite, 13x5 coverage for hardware (UF795E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UF796E) Installation with minimum configuration, system-based pricing (U4826E) Installation with HP-provided configuration, system-based pricing (U4830E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UR816E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UR817E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UR818E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UR818E) 8-year, 4-hour onsite, 13x5 coverage for hardware (UR819E) Refer to the HP website at www.procurve.com/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 HP sales office.	3-year, 4-hour onsite, 13x5 coverage for hardware (UF795E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UF796E) Installation with minimum configuration, system-based pricing (U4826E) Installation with HP-provided configuration, system-based pricing (U4830E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UR816E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UR817E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UR818E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UR819E) Refer to the HP website at www.procurve.com/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 HP sales office.	3-year, 4-hour onsite, 13x5 coverage for hardware (UF797E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UF798E) Installation with minimum configuration, system-based pricing (U4826E) Installation with HP-provided configuration, system-based pricing (U4830E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UR820E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UR821E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UR823E) Refer to the HP website at www.procurve.com/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 HP sales office.
Standards and protocols (applies to all products in series)	General protocols IEEE 802.1p Priority	IEEE 802.3x Flow Control	

HP ProCurve 1410 Switch Series accessories

HP ProCurve 1410-24G Switch (J9561A)

HP ProCurve Gigabit-SX-LC Mini-GBIC (J4858C)

HP ProCurve Gigabit-LX-LC Mini-GBIC (J4859C)

HP ProCurve Gigabit-LH-LC Mini-GBIC (J4860C)

HP ProCurve 100-FX SFP-LC Transceiver (J9054B)

HP ProCurve 100-BX-D SFP-LC Transceiver (J9099B)

HP ProCurve 100-BX-U SFP-LC Transceiver (J9100B)

HP ProCurve 1000-BX-D SFP-LC Mini-GBIC (J9142B)

HP ProCurve 1000-BX-U SFP-LC Mini-GBIC (J9143B)

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