





HP ProCurve 1810G Switch Series

Product overview

The HP ProCurve 1810G Switch Series provides reliable, plug-and-play Gigabit network connectivity. As the follow-on to the popular HP ProCurve Switch 1800 Series, the 1810G series provides additional network security capabilities, enhancements to ease of use, improved energy efficiency, and expanded deployment flexibility. The series consists of 8- and 24-port 10/100/1000 Web-managed switches. The HP ProCurve 1810G-24 Switch offers two dual-personality ports for optional fiber uplinks, while the HP ProCurve 1810G-8 Switch can optionally be powered by an upstream Power over Ethernet (PoE) switch. Both switches offer silent operation and multiple mounting options for flexible installation. The 1810G series offers network security protection against denial-of-service attacks, a theft protection slot for Kensington Lock (not included), and legendary HP quality backed by the ProCurve Lifetime Warranty at an affordable price.

Key features

- Web-managed Layer 2 Gigabit switch
- 8- and 24-port models
- Fanless switch for silent operation
- Two dual-personality mini-GBIC slots (J9450A)
- Powered by IEEE 802.3af PoE (J9449A)

Features and benefits

Industry-leading warranty



Connectivity

- Dual-personality ports (1810G-24 switch): two 10/100/1000 ports or mini-GBIC slots for optional fiber connectivity such as Gigabit-SX, -LX, or -LH, or 100-FX
- NEW IEEE 802.3af PoE-powered device option (1810G-8 switch): can obtain power from a standard PoE device on Port 1, making the switch ideal for deployments where a power outlet is not available; such flexibility helps you to extend the network to wherever an Ethernet cable can reach
- Jumbo packet support: supports up to 9216-byte frame size to improve performance of large data transfers

Resiliency and high availability

- IEEE 802.3ad Link Aggregation Control Protocol: provides link-level redundancy with support for up to four trunks on the ProCurve 1810G-8 Switch and eight trunks on the ProCurve 1810G-24 Switch, each with up to four links (ports) per trunk
- NEW Loop protection: Loop Detection and Protection feature prevents network loops and promotes high network availability

Manageability

- Intuitive Web interface: enables simple management via an easy-to-use Web browser interface for switch configuration, monitoring, and administration
- IEEE 802.1AB Link Layer Discovery Protocol (LLDP): automated device discovery protocol for easy mapping by network management applications
- **NEW Dual flash images:** provides independent primary and secondary operating system files for backup while upgrading

- Integration with HP ProCurve Manager: enables discovery and mapping via ProCurve Manager, available as a free download from the Web and provided in box with selected manageable ProCurve devices; provides all the basic tools needed to handle a network effectively, along with a 30-day trial version of HP ProCurve Manager 3.0
- **NEW Energy Savings mode:** automatically places the physical ports in low power mode and LED power down mode to conserve energy

Layer 2 switching

 VLAN support and tagging: support up to 64 port-based VLANs and dynamic configuration of IEEE 802.1Q VLAN tagging, providing security between workgroups

Security

- **NEW Secure Sockets Layer (SSL):** encrypts all HTTP traffic, allowing secure access to the browser-based management GUI in the switch
- NEW Automatic denial-of-service protection: monitors six types of 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

Quality of Service (QoS)

• Traffic prioritization (IEEE 802.1p): allows real-time traffic classification into eight priority levels mapped to eight queues

Monitor and diagnostics

• **Port mirroring:** enables traffic on a port to be simultaneously sent to a network analyzer for monitoring

Ease of use

- **NEW Locator LED:** allows users to set the locator LED on a specific switch to either turn on, blink, or turn off; simplifies troubleshooting by making it easy to locate a particular switch within a rack of similar switches
- Comprehensive LED display with per-port indicators: provides an at-a-glance view of status, activity, speed, and full-duplex operation

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 Suitch 8100fl series, HP ProCurve Network Access Controller 800, and HP ProCurve DCM Controller. The following hardware warranty with extensions available: HP ProCurve Routing Switch 9300m series, HP ProCurve Suitch 8100fl series, HP ProCurve M111 Client Bridge, HP ProCurve MSM3xxR Access Points, 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 MSN317 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 <u>www.procurve.com/warranty</u>.

• **ProCurve/IEEE Auto-MDIX:** automatically adjusts for straight-through or crossover cables on all 10/100/1000 ports

Flexibility

- **Designed with no fan:** enables quiet operation for deployment in open spaces
- **NEW Flexible mounting options:** mounting options include wall, ceiling, tabletop, or undertable configuration for flexible installation process
- NEW IEEE 802.3af PoE-powered device option (1810G-8 switch): can obtain power from a standard PoE device on Port 1, making the switch ideal for deployments where a power outlet is not available; such flexibility helps you to extend the network to wherever an Ethernet cable can reach
- 1U Rack-mountable size (1810G-24 switch): offers a rack-mounting option
- NEW Kensington Lock slot: allows switches to be secured in open-space deployments

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 <u>www.procurve.com/support</u> for details on the support provided and the period during which support is available
- **Software releases:** refer to the HP website at <u>www.procurve.com/support</u> for details on the software releases provided and the period during which software releases are available

Specifications

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	HP ProCurve 1810G-24 Switch (J9450A)	HP ProCurve 1810G-8 Switch (J9449A)		
Ports	22 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	8 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		
	2 dual-personality ports; each port can be used as either an RJ-45 10/100/1000 port or an open mini-GBIC slot (for use with mini-GBIC transceivers)			
Physical characteristics				
Dimensions Weight	6.74(d) x 17.42(w) x 1.73(h) in. (17.12 x 44.25 x 4.39 cm) (1U height) 4.32 lb. (1.96 kg), Fully loaded	4.58(d) x 7.73(w) x 1.73(h) in. (11.63 x 19.63 x 4.39 cm) (1U height) 1.19 lb. (0.54 kg), Fully loaded		
	4.52 lb. (1.70 kg), 1 bily lodded	1.17 lb. (0.34 kg), 1 bily lodded		
Memory and processor	8 MB flash, 16 MB SDRAM; packet buffer size: 512 KB	8 MB flash, 16 MB SDRAM; packet buffer size: 512 KB		
Mounting	Mounts in an EIA-standard 19 in. telco rack (hardware included); wall, desktop, tabletop, and undertable mounting	Wall, ceiling, desktop, and undertable mounting		
Performance				
100 Mb Latency	< 4.7 µs (64-byte packets)	< 3.9 µs (64-byte packets)		
1000 Mb Latency	< 3.0 µs (64-byte packets)	< 2.1 µs (64-byte packets)		
Throughput	up to 35.7 million pps (64-byte packets)	up to 11.9 million pps (64-byte packets)		
Switching capacity	48 Gbps	16 Gbps		
MAC address table size	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)		
Operating relative humidity	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)			
Non-operating/Storage relative humidity	15% to 90% @ 149°F (65°C), non-condensing	-40°F to 158°F (-40°C to 70°C)		
Altitude	up to 10,000 ft. (3 km)	15% to 90% @ 149°F (65°C), non-condensing		
Acoustic	Power: 0 dB no fan	up to 10,000 ft. (3 km) Power: 0 dB no fan		
	rower: 0 db no fan	rower: 0 db no fan		
Electrical characteristics				
Maximum heat dissipation	102 BTU/hr (107.61 kJ/hr)	51 BTU/hr (53.81 kJ/hr)		
Voltage	100-127 / 200-240 VAC	100-240 VAC		
Current	0.7 / 0.4 A	0.5 A		
Maximum power rating	30 W	15 W		
Frequency	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 wit loaded PoE (if equipped), 100% traffic, all ports plugged in, and all mod 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. 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.		
Safety	CSA 22.2 No. 60950; EN 60950/IEC 60950; UL 60950	CSA 22.2 No. 60950; EN 60950/IEC 60950; UL 60950		
Emissions	FCC Rules Part 15, Subpart B Class A; EN 55022; VCCI; ICES-003 (Canada)	FCC Rules Part 15, Subpart B Class A; EN 55022; VCCI; ICES-003 (Canada)		
Immunity				
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 61000-3-2		
Management	HP ProCurve Manager; Web browser			
management	The Frocurve Manager, web browser	HP ProCurve Manager; Web browser		
Notes	Use only supported genuine ProCurve mini-GBICs with your switch	Power: external AC power adapter and IEEE 802.3af-compatible PoE-PD, class		

HP ProCurve 1810G Switch Series

Specifications (continued)

	HP ProCurve 1810G-24 Switch (J9450A)	HP ProCurve 1810G-24 Switch (J9450A) 3-year, 4-hour onsite, 13x5 coverage for hardware (U4683E) 3-year, 4-hour onsite, 24x7 coverage for hardware (U4835E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (U6321E) 3-year, 24x7 SW phone support, software updates (UF792E) Installation with minimum configuration, system-based pricing (U4826E) Installation with HP-provided configuration, system-based pricing (U4830E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UR948E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UR947E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UR947E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UR945E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UR952E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UR952E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UR952E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UR952E) 5-year, 24x7 SW phone support, software updates (UR955E) 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.		HP ProCurve 1810G-8 Switch (J9449A) 3-year, 4-hour onsite, 13x5 coverage for hardware (UE256E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UE257E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UE258E) 3-year, 24x7 SW phone support, software updates (UE260E) 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 (UR847E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UR847E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR848E) 4-year, 4-hour onsite, 13x5 coverage for hardware, 24x7 software phone (UR848E) 4-year, 4-hour onsite, 13x5 coverage for hardware, 24x7 software phone (UR848E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UR850E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UR850E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UR851E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UR852E) 5-year, 24x7 SW phone support, software updates (UR851E) 5-year, 24x7 SW phone support, software updates (UR851E) 5-year, 24x7 SW phone support, software updates (UR853E) 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.	
Services	 3-year, 4-hour onsite, 24x7 coverage for hard 3-year, 4-hour onsite, 24x7 coverage for hard support (U6321E) 3-year, 24x7 SW phone support, software upp Installation with minimum configuration, system Installation with HP-provided configuration, system 4-year, 4-hour onsite, 13x5 coverage for hard 4-year, 4-hour onsite, 24x7 coverage for hard 4-year, 4-hour onsite, 24x7 coverage for hard 4-year, 4-hour onsite, 24x7 coverage for hard (UR950E) 4-year, 24x7 SW phone support, software upp 5-year, 4-hour onsite, 24x7 coverage for hard 5-year, 4-hour onsite, 24x7 coverage for hard 5-year, 4-hour onsite, 24x7 coverage for hard 5-year, 24x7 SW phone support, software upp 8-year, 24x7 SW phone support, software upp 9-year, 24x7 SW phone support, software upp 9-year, 24x7 SW phone support, software upp 9-year, 24x7 SW phone support, software upp 				
Standards and protocols (applies to all products in series)	Denial of service protection CPU DoS Protection	IEEE 802.3ad Link Aggr (LACP)	regation Control Protocol	RFC 2030 Simple Network Time Protocol (SNTP) v4	
	General protocols IEEE 802.1p Priority IEEE 802.1Q VLANs	IEEE 802.3x Flow Contr RFC 1534 DHCP/BOOT		Network management IEEE 802.1AB Link Layer Discovery Protocol (LLDP)	

5

HP ProCurve 1810G Switch Series accessories

Cables HP Optical Ethernet Cables (JxxxxA) Software HP ProCurve Manager 3.10 (-)

HP ProCurve 1810G-24 Switch (J9450A)

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 Gigabit-LH-LC Mini-GBIC (J4860C) HP ProCurve Gigabit-LX-LC Mini-GBIC (J4858C) HP ProCurve Gigabit-LX-LC Mini-GBIC (J4859C)

Technology for better business outcomes

To learn more, visit www.hp.com/go/procurve

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