ProCurve Switch 1800 Series

The ProCurve Switch 1800 series consists of two Gigabit, fanless, Web-Managed switches that are ideal for deployment in open offices that require silent operation. The ProCurve Switch 1800-24G is a 22-port 10/100/1000 switch with 2 dual-personality ports for RJ-45 10/100/1000 or mini-GBIC fiber Gigabit connectivity. The ProCurve Switch 1800-8G is a small form factor, 8-port 10/100/1000 switch. The ProCurve Switch 1800 series enables increased network capabilities and control vs. unmanaged switches, with support for fundamental networking protocols such as trunking and VLANs. Both switches are managed via an intuitive Web interface. The ProCurve Switch 1800 series is ideal for businesses making the transition from unmanaged connectivity to managed networks without added cost or complexity.

ProCurve Switch 1800-8G
(J9029A)

ProCurve Switch 1800-24G
(J9028B)

Features and benefits

Connectivity

• **Jumbo packet support:** supports up to 9,216 byte frame size to improve performance of large data transfers

Resiliency and high availability

• **IEEE 802.3ad Link Aggregation Control Protocol (LACP):** provides link-level redundancy with support for up to 4 trunks on the ProCurve Switch 1800-8G and 12 trunks on the ProCurve Switch 1800-24G, each with up to 8 links (ports) per trunk

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

• **Management password:** provides security so that only authorized access to the Web browser interface is allowed

Quality of Service (QoS)

• **Traffic prioritization:** honors priority of traffic based on 802.1p to deliver data to devices based on the priority and type of traffic

• **Broadcast control:** allows limitation of broadcast traffic rate to cut down on unwanted broadcast traffic on the network

Manageability

• **Intuitive Web interface:** enables simple management via an easy-to-use Web browser interface for switch configuration, monitoring, and administration

• **Integration with ProCurve Manager:** enables discovery and mapping via ProCurve Manager, available as a free download from the Web

• **IEEE 802.1AB Link Layer Discovery Protocol (LLDP):** automated device discovery protocol for easy mapping by network management applications

Monitor and diagnostics

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

Ease of use

• **Comprehensive LED display with per-port indicators:** provides an at-a-glance view of status, activity, speed, and full-duplex operation

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

Flexibility

• **Small form factor:** ideal for desktop use; space-efficient for deployment flexibility (1800-8G only)

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

Industry-leading warranty

• **Lifetime warranty** : for as long as you own the product, with next-business-day advance replacement (available in most countries)

Services

ProCurve Switch 1800-8G
• 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)

ProCurve Switch 1800-24G
• 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)

ProCurve Switch 1800 Series

ProCurve Switch 1800-8G (J9029A)

ProCurve Switch 1800-24G (J9028B)

Specifications

Ports		
	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: IEEE 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 802.3ab Type 1000Base-T); Media Type: IEEE 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 (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-TX; IEEE 802.3ab 1000Base-T Gigabit Ethernet) or an open mini-GBIC slot (for use with mini-GBIC transceivers)
Physical characteristics		
Dimensions	4.58(d) x 7.73(w) x 1.73(h) in. (11.63 x 19.63 x 4.39 cm) (1U height)	6.74(d) x 17.42(w) x 1.73(h) in. (17.12 x 44.25 x 4.39 cm) (1U height)
Weight	1.19 lb. (0.54 kg), Fully loaded	4.32 lb. (1.96 kg), Fully loaded
Memory and processor		
	1 MB flash, 64 KB SDRAM, 1 MB RAM/ROM capacity; packet buffer size: 144 KB	2 MB flash, 64 KB SDRAM, 2 MB RAM/ROM capacity; packet buffer size: 500 KB
Mounting		
	Horizontal surface mounting only	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included); horizontal surface mounting only
Performance		
	Gbps	Gbps
100 Mb Latency	< 3.9 µs (64-byte packets)	< 4.7 µs (64-byte packets)
1000 Mb Latency	< 2.1 µs (64-byte packets)	< 3.0 µs (64-byte packets)
Throughput	up to 11.9 million pps (64-byte packets)	up to 35.7 million pps (64-byte packets)
Switching capacity	16 Gbps	48 Gbps
MAC address table size	8000 entries	8000 entries
Environment		
Operating temperature	32ºF to 104ºF (0ºC to 40ºC)	32ºF to 104ºF (0ºC to 40ºC)
Operating relative humidity	10% to 90% @ 104ºF (40ºC), non-condensing	10% to 90% @ 104ºF (40ºC), non-condensing
Non-operating/Storage temperature	-40ºF to 158ºF (-40ºC to 70ºC)	-40ºF to 158ºF (-40ºC to 70ºC)
Non-operating/Storage relative humidity	10% to 90% @ 149ºF (65ºC), non-condensing	10% to 90% @ 149ºF (65ºC), non-condensing
Altitude	up to 10000 ft. (3 km)	up to 10000 ft. (3 km)
Acoustic	Power: 0 dB no fan	Power: 0 dB no fan
Electrical characteristics		
Maximum heat dissipation	61 BTU/hr (64 kJ/hr)	92 BTU/hr (97 kJ/hr)
Voltage	100-240 VAC	100-127 / 200-240 VAC
Current	0.5 A	0.8 / 0.4 A
Power consumption	18 W	27 W

ProCurve Switch 1800 Series

Frequency	60 Hz	50 / 60 Hz
Notes	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	EN 61000-4-2	EN 61000-4-2
Radiated	EN 61000-4-3	EN 61000-4-3
EFT/Burst	EN 61000-4-4	EN 61000-4-4
Surge	EN 61000-4-5	EN 61000-4-5
Conducted	EN 61000-4-6	EN 61000-4-6
Power frequency magnetic field	EN 61000-4-8	EN 61000-4-8
Voltage dips and interruptions	EN 61000-4-11	EN 61000-4-11
Harmonics	EN 61000-3-2	EN 61000-3-2
Flicker	EN 61000-3-3	EN 61000-3-3
Management		
	ProCurve Manager; Web browser	ProCurve Manager; Web browser
Notes		
	Use only supported genuine ProCurve mini-GBICs with your switch.	Use only supported genuine ProCurve mini-GBICs with your switch.

Standards and Protocols

General Protocols
IEEE 802.1p Priority
IEEE 802.1Q VLANs
IEEE 802.3ad Link Aggregation Control Protocol (LACP)
IEEE 802.3x Flow Control
RFC 1534 DHCP/BOOTP Interoperation

Network Management
IEEE 802.1AB Link Layer Discovery Protocol (LLDP)

Accessories

ProCurve Gigabit-SX-LC Mini-GBIC (J4858C)
A small form factor pluggable (SFP) gigabit SX transceiver that provides a full-duplex gigabit solution up to 550 meters on multimode fiber.

Ports
1 LC 1000Base-SX port (IEEE 802.3z Type 1000Base-SX)
Duplex: full only

Physical characteristics
Dimensions: 2.24(d) x 0.54(w) x 0.486(h) in. (5.69 x 1.37 x 1.23 cm)
Weight: 0.04 lb. (0.02 kg)

Cabling

Type:
• 62.5/125 µm or 50/125 µm (core/cladding) diameter, graded-index, low metal content, multimode fiber optic, complying with ITU-T G.651 and ISO/IEC 793-2 Type A1b or A1a, respectively

Maximum distance:
• 220 m (62.5 µm core diameter, 160 MHz/km bandwidth)• 275 m (62.5 µm core diameter, 200 MHz/km bandwidth)• 500 m (50 µm core diameter, 400 MHz/km bandwidth)• 550 m (50 µm core diameter, 500 MHz/km bandwidth)

ProCurve Gigabit-LX-LC Mini-GBIC (J4859C)
A small form factor pluggable (SFP) gigabit LX transceiver that provides a full-duplex gigabit solution up to 10 km (singlemode) or 550 m (multimode).

Ports
1 LC 1000Base-LX port (IEEE 802.3z Type 1000Base-LX)
Duplex: full only

Physical characteristics
Dimensions: 2.24(d) x 0.54(w) x 0.486(h) in. (5.69 x 1.37 x 1.23 cm)
Weight: 0.04 lb. (0.02 kg)

Cabling

Type:
• Either single mode or multimode
• 62.5/125 µm or 50/125 µm (core/cladding) diameter, graded-index, low metal content, multimode fiber optic, complying with ITU-T G.651 and ISO/IEC 793-2 Type A1b or A1a, respectively
• Low metal content, single-mode fiber-optic, complying with ITU-T G.652 and ISO/IEC 793-2 Type B1

Maximum distance:
• 10 km (single mode) or 550 m (multimode)

Notes
A mode conditioning patch cord may be needed in some multimode fiber installations.

ProCurve Gigabit-LH-LC Mini-GBIC (J4860C)
A small form factor pluggable (SFP) gigabit LH transceiver that provides a full-duplex gigabit solution up to 70 km on singlemode fiber.

Ports
1 LC 1000Base-LH port (no IEEE standard exists for 1550 nm optics)
Duplex: full only

Physical characteristics
Dimensions: 2.17(d) x 0.60(w) x 0.46(h) in. (5.5 x 1.53 x 1.18 cm)
Weight: 0.04 lb. (0.02 kg)

Cabling

Type:
• Low metal content, single-mode fiber-optic, complying with ITU-T G.652 and ISO/IEC 793-2 Type B1

Maximum distance:
• 70 km

ProCurve Manager 2.2 (-)
Windows Server-based network management for ProCurve LAN products

System requirements

For networks having 50 to 250 managed devices, ProCurve recommends the following:
Minimum system hardware
2.0 GHz Intel Pentium 4 or equivalent processor
2 GB RAM memory
10 GB storage
1000 MB NIC
for PCM+ as a standalone application, assuming a dedicated server
Recommended system hardware
3.0 GHz Intel Pentium 4 or equivalent processor
3 GB RAM memory
40 GB storage
1000 MB NIC
for PCM+ assuming a dedicated server, and including ProCurve Identity Driven Manager, Mobility Manager, and Network Immunity Manager on the same server
Recommended software
Microsoft Windows 2000 Server, Advanced Server or Professional with SP4 or better
Microsoft Windows 2003 Server
Windows XP SP2
Windows XP Professional SP2

For networks having 250 to 2,000 managed devices, ProCurve recommends the following:
Minimum system hardware
3.0 GHz Intel Pentium 4 or equivalent processor
3 GB RAM memory
40 GB storage
1000 MB NIC
for PCM+ as a standalone application, assuming a dedicated server
Recommended system hardware
Intel Xeon or equivalent processor
4 GB RAM memory
80 GB storage
1000 MB NIC
for PCM+ assuming a dedicated server, and including ProCurve Identity Driven Manager, Mobility Manager, and Network Immunity Manager on the same server
Recommended software
Microsoft Windows 2000 Server, Advanced Server or Professional with SP4 or better
Microsoft Windows 2003 Server
Windows XP SP2
Windows XP Professional SP2

Browsers
Microsoft Internet Explorer version 5.0 or later

Supported platforms
HP OpenView Network Node Manager version 6.41 or 7.01 or 7.5 (optional)

Additional requirements
NOTE: Network Immunity Manager when loaded on PCM+ 2.2 can sample up to 500 managed ports using sFlow or XRMON.

Notes
Unlimited license means that ProCurve does not impose a limit on the number of devices attached to the network as a condition of the license. Some degradation in performance may be expected the greater the number of devices attached to the network.

Specifications subject to change

ProCurve Networking
HP Innovation

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To learn more, visit www.procurve.com
Information is subject to change without notice