Overview



Models

HP ProCurve Switch 6108 J4902A

Introduction

The ProCurve Switch 6108 is a low-cost, stackable, multi-layer managed 8-port switch with 6 auto-sensing 10/100/1000 ports and 2 dual-personality ports for 10/100/1000 or mini-GBIC connectivity. With Layer 3 basic IP routing, an industry-leading lifetime warranty, and free end-user telephone and e-mail support, the ProCurve 6108 is ideal for access-tier aggregation, with 2 optional Gigabit fiber uplinks to connect at distances up to 70 km.

Features and Benefits

Connectivity

Dual-personality functionality: two 10/100/1000 ports or mini-GBIC slots for optional fiber connectivity such as Gigabit-SX,
-LX, or -LH

Performance

• 16 Gbps backplane: non-blocking architecture for wire-speed throughput

Resiliency and high availability

- IEEE 802.1w Rapid Convergence Spanning Tree Protocol: increases network uptime through faster recovery from failed links
- IEEE 802.3ad Link Aggregation Control Protocol (LACP) and ProCurve trunking: support up to 6 trunks, each with up to 4 links (ports) per trunk

Layer 2 switching

- VLAN support and tagging: supports up to 30 port-based VLANs, GVRP, and IEEE 802.1Q VLAN tagging
- GARP VLAN Registration Protocol: allows automatic learning and dynamic assignment of VLANs

Layer 3 routing

Basic IP routing: enables automatic routing to the connected VLANs and up to 16 static routes--including one default route-in IP networks

Security

- IEEE 802.1X and RADIUS network login: control port-based access for authentication and accountability
- Port security: allows access only to specified MAC addresses, which can be learned or specified by the administrator
- TACACS+: eases switch management security administration by using a password authentication server
- Secure Shell (SSHv2): encrypts all transmitted data for secure, remote command-line interface (CLI) access over IP networks
- Secure Sockets Layer (SSL): encrypts all HTTP traffic, allowing secure access to the browser-based management GUI in the switch



Overview

 Secure access to manage the ProCurve Switch 6108: all access methods--CLI, GUI, or MIB--are securely encrypted through SSHv2, SSL, and/or SNMPv3

Quality of Service (QoS)

• Traffic prioritization (IEEE 802.1p): allows real-time traffic classification into 8 priority levels mapped to 4 queues

Manageability

- RMON: provides advanced monitoring and reporting capabilities for statistics, history, alarms, and events
- Stacking capability: single IP address management for a virtual stack of up to 16 switches, including the ProCurve 2500 series, 2510 series, 2600 series, 2800 series, 2810 series, 2900 series, 3400cl series, 3500yl series, 4200vl series, 6108, 6200vl-24G-mGBIC, and 6400cl series
- ProCurve/IEEE Auto-MDIX: automatically adjusts for straight-through or crossover cables on all 10/100/1000 ports
- Friendly port names: allow assignment of descriptive names to ports

Industry-leading warranty

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

Аc	ce	SS	O	rı	es

ProCurve Gigabit-SX-LC Mini-GBIC	J4858C
ProCurve Gigabit-LX-LC Mini-GBIC	J4859C
ProCurve Gigabit-LH-LC Mini-GBIC	J4860C

Services

3-year, 4-hour onsite, 13x5 coverage for hardware	H5481E
3-year, 4-hour onsite, 24x7 coverage for hardware	U6303E
3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support	U6302E
3-year, 24x7 SW phone support, software updates	UE261E
Installation with minimum configuration, system-based pricing	U4826E
Installation with HP-provided configuration, system-based pricing	U4830E



Technical Specifications

Ports 6 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

1 RS-232C DB-9 console port

2 dual-personality ports; each port can be used as either 2 additional RJ-45 10/100/1000 ports (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-TX; IEEE 802.3ab 1000Base-T Gigabit Ethernet), 2

open mini-GBIC slots (for use with mini-GBIC transceivers), or one of each

Physical characteristics Dimensions 9.3(d) x 17.42(w) x 1.73(h) in. (23.62 x 44.25 x 4.39 cm) (1U height)

Weight 6.96 lb. (3.16 kg)

Memory and processor Processor Motorola PowerPC MPC8245 @ 266 MHz, 16 MB flash

Mounting Mounts in a standard 19 in. rack (hardware included)

Performance Latency <12.5 μ s (LIFO 64-byte packets)

Throughput 11.9 million pps (64-byte packets)

Switching capacity 16 Gbps

Routing table size 8,000 entries

Environment Operating temperature 32° to 131° F (0° C to 55° C)

Operating relative

humidity

15% to 95% @ 104° F (40° C), non-condensing

Non-operating/ -40° to 158° F (-40° to 70° C)

Storage temperature

Non-operating/ 15% to 95% @ 149°F (65°C), non-condensing

Storage relative humidity

Altitude up to 15,000 ft. (4.6 km)

Electrical characteristics Maximum heat dissipation 341 BTU/hr (360 kJ/hr)

Voltage 100-240 VAC

Current 1.5 A
Power consumption 100 W
Frequency 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.

Safety cUL (CSA 950); EN 60950/IEC 60950; NOM-019-SCFI-1994; UL 1950 3rd edition

Emissions FCC Class A; VCCI Class A; EN 55022/CISPR 22 Class A

Immunity EN EN 55024, CISPR 24

ESD IEC 61000-4-2; 4 kV CD, 8 kV AD

Radiated IEC 61000-4-3; 3 V/m

EFT/Burst IEC 61000-4-4; 1.0 kV (power line), 0.5 kV (signal line)

Surge IEC 61000-4-5; 1 kV/2 kV AC

Conducted IEC 61000-4-6; 3 V

Power frequency IEC 61000-4-8; 1 A/m, 50 or 60 Hz

magnetic field

Technical Specifications

Voltage dips and

IEC 61000-4-11; >95% reduction, 0.5 period; 30% reduction, 25 periods

interruptions

Harmonics EN 61000-3-2, IEC 61000-3-2 Flicker EN 61000-3-3, IEC 61000-3-3

Management ProCurve Manager (included); command-line interface; Web browser; configuration menu; out-of-band

management (serial RS-232C)

Standards and protocols Device Management HTML and telnet management

General Protocols IEEE 802.1D MAC Bridges

IEEE 802.1p Priority
IEEE 802.1Q VLANs

IEEE 802.1w Rapid Reconfiguration of Spanning Tree IEEE 802.3ad Link Aggregation Control Protocol (LACP)

IEEE 802.3x Flow Control

RFC 768 UDP

RFC 783 TFTP Protocol (revision 2)

RFC 792 ICMP RFC 793 TCP RFC 826 ARP RFC 854 TELNET RFC 951 BOOTP

RFC 1542 BOOTP Extensions

RFC 2030 Simple Network Time Protocol (SNTP) v4

IP MulticastRFC 2236 IGMPv2MIBsRFC 1213 MIB II

RFC 1493 Bridge MIB RFC 2021 RMONv2 MIB

RFC 2096 IP Forwarding Table MIB

RFC 2613 SMON MIB RFC 2618 RADIUS Client MIB RFC 2620 RADIUS Accounting MIB RFC 2665 Ethernet-Like-MIB RFC 2668 802.3 MAU MIB

RFC 2674 802.1p and IEEE 802.1Q Bridge MIB

RFC 2737 Entity MIB (Version 2) RFC 2863 The Interfaces Group MIB

Network Management RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9

(events)

SNMPv1/v2c/v3

Security IEEE 802.1X Port Based Network Access Control

RFC 1492 TACACS+ Secure Sockets Layer (SSL) SSHv1/SSHv2 Secure Shell

Accessories

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

A small form factor pluggable (SFP) gigabit SX Cabling transceiver that provides a full-duplex gigabit solution up to 550 meters on multimode fiber.

Physical characteristics

1 LC 1000Base-SX port (IEEE 802.3z Type 1000Base-SX)

Duplex: full only

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)

Type:

• $62.5/125 \,\mu\text{m}$ or $50/125 \,\mu\text{m}$ (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 μ m core diameter, 160 MHz*km bandwidth
- 275 m (62.5 μ m core diameter, 200 MHz*km bandwidth
- 500 m (50 μ m core diameter, 400 MHz*km bandwidth)
- 550 m (50 μ m 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

Physical characteristics

Cabling

1 LC 1000Base-LX port (IEEE 802.3z Type 1000Base-LX)

Duplex: full only

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)

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)

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

Notes

Accessories

ProCurve Gigabit-LH-LC Ports

Mini-GBIC (J4860C)

A small form factor pluggable (SFP) gigabit LH Cabling transceiver that provides a full-duplex gigabit solution up to 70 km on singlemode fiber.

Physical characteristics

1 LC 1000Base-LH port (no IEEE standard exists for 1550 nm optics)

Duplex: full only

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)

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

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