HP ProCurve Switch 4100gl series



HP ProCurve Switch 4160gl (J8152A)



HP ProCurve Switch 4140gl (J8151A)





HP ProCurve Switch 4108gl bundle (J4861A)



HP ProCurve Switch 4148gl (J4888A)



HP ProCurve Switch 4108gl (J4865A)



HP ProCurve Switch 4104gl (J4887A)



The HP ProCurve Switch 4100gl series is convergence-ready and easy to use in compact 8-slot and 4-slot modular form factors. Based on HP Fast Path Technology, these switches provide reliable, high-performance, high-density 10 Mbit, 100 Mbit, or Gigabit connectivity for a growing network. The Switch 4100gl series is the low-cost, modular alternative to stackable switches and includes a lifetime warranty.

Features and benefits

- Basic IP routing—enables automatic routing with up to 16 external routes—including one default route in IP networks
- Traffic prioritization (802.1p)—allows real-time traffic classification into 8 priority levels mapped to 3 queues
- iSCSI support—enables the deployment of Ethernet storage area network solutions using the emerging iSCSI standard
- Fast Path Technology—wire-speed switching of intramodule traffic for up to 71.4 million pps throughput
- Fast switch fabric—high-performance switch fabric (up to 36.6 Gbps)
- Hot-swappable modules—permit modules and mini-GBICs to be added or swapped without interrupting the network
- Dual flash images—provide independent primary and secondary OS files for backup while upgrading
- Optional redundant power supply—provides uninterrupted power
- VLAN—supports up to 30 port-based VLANs, GVRP, and 802.1Q VLAN tagging

- Port security—prevents unauthorized access using MAC address lockdown
- TACACS+—eases switch management security administration by using a password authentication server
- Secure Shell (SSHv2)—encrypts all transmitted data for secure CLI remote access over IP networks
- Secure Sockets Layer (SSL)—encrypts all HTTP traffic, allowing secure access to the browser-based management GUI in the switch
- Secure access to manage the 4100gl series—all access methods—CLI, GUI, or MIB—are securely encrypted through SSHv2, SSL, and/or SNMPv3
- HP Auto-MDIX—automatically adjusts for straightthrough or crossover cables on all 10/100 and 100/1000 ports
- Stacking capability—single IP address management for a virtual stack of up to 16 switches, including the 1600m, 2400m, 2424m, 2512, 2524, 2626, 2650, 2824, 2848, 4000m, 6108, 8000m, and 4100gl series
- **Lifetime warranty**—with next-business-day advance replacement (available in most countries)

Accessories

Modules

NEW

- HP ProCurve Switch gl 10/100/1000 Module (J4908A)
- HP ProCurve Switch gl 10/100-TX Module (J4862B)
- HP ProCurve Switch gl 100-FX MTRJ Module (J4892A)
- HP ProCurve Switch gl 100/1000-T Module (J4863A)
- HP ProCurve Switch gl Mini-GBIC Module (J4893A)
- HP ProCurve Switch gl Transceiver Module (J4864A)

Transceivers

- HP ProCurve 100-FX Transceiver (J4853A)
- HP ProCurve 100/1000-T Transceiver (J4834A)
- HP ProCurve Gigabit-LX Transceiver (J4132A)
- HP ProCurve Gigabit-SX Transceiver (J4131B)
- HP ProCurve Gigabit Stacking Kit (J4116A)

Mini-GBICs

- HP ProCurve Gigabit-LH-LC Mini-GBIC (J4860A)
- HP ProCurve Gigabit-LX-LC Mini-GBIC (J4859A)
- HP ProCurve Gigabit-SX-LC Mini-GBIC (J4858A)

RP9

 HP ProCurve Switch gl/xl Redundant Power Supply (J4839A)

Services

HP ProCurve Switch 4108gl and Switch 4108gl Bundle

- 3-year, 4-hour onsite, 13 x 5 coverage, 13 x 5 phone support, for hardware (U7675A/E)
- 3-year, 4-hour onsite, 24 x 7 coverage, 24 x 7 phone support, for hardware (U7676A/E)
- Installation with minimum configuration, system-based pricing (U4827A/E)
- Installation with HP-provided configuration, system-based pricing (U4831A/E)

HP ProCurve Switch 4104gl and Switch 4148gl

- 3-year, 4-hour onsite, 13 x 5 coverage, 13 x 5 phone support, for hardware (U2855A/E)
- 3-year, 4-hour onsite, 24 x 7 coverage, 24 x 7 phone support, for hardware (U2856A/E)
- Installation with minimum configuration, system-based pricing (U4827A/E)
- Installation with HP-provided configuration, system-based pricing (U4831A/E)

Specifications

Standard configurations

8-slot chassis has an integrated switching engine and a power supply. Supports a maximum of 192 10/100 ports or 160 Gigabit ports and 16 mini-GBICs.

Switch 4160gl: 60 RJ-45 10/100/1000 ports

(3 x J4908A);

6 mini-GBIC slots;

5 open module slots

Switch 4108gl bundle:

72 10/100 ports (3 x J4862B); 3 transceiver ports (1 x J4864A);

4 open module slots

Switch 4108gl:

8 open module slots

4-slot chassis has an integrated switching engine and a power supply. Supports a maximum of 96 10/100 ports or 80 Gigabit ports and 8 mini-GBICs.

Switch 4140gl:

40 RJ-45 10/100/1000 ports (2 x J4908A); 4 mini-GBIC slots;

2 open module slots

Switch 4148gl:

48 10/100 ports (2 x J4862B); 2 open module slots

Switch 4104gl:

4 open module slots

Physical characteristics

Dimensions

 Switch 4160gl, 4108gl bundle, and 4108gl:

 $44.2 \times 38.9 \times 22.23$ cm $(17.4 \times 15.3 \times 8.75$ in.) (5U height)

 Switch 4140gl, 4148gl, and 4104gl:

 $44.2 \times 38.9 \times 13.34$ cm $(17.4 \times 15.3 \times 5.25$ in.) (3U height)

Weight

- Switch 4160gl: 13.9 kg (30.6 lb.)

- Switch 4108gl bundle: 10.4 kg (22.9 lb.)

- Switch 4108gl: 9.4 kg (20.7 lb.)

- Switch 4140gl: 10.9 kg (24.1 lb.) - Switch 4148gl:

7.2 kg (15.85 lb.)

– Switch 4104gl:
6.7 kg (14.75 lb.)

Memory and processor

Fabric: Motorola PowerPC @ 200 MHz, 8 MB flash, 32 MB SDRAM

Packet buffer size: 1 MB (8-slot Fabric); 512 KB (4-slot Fabric)

Mounting

Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included); horizontal surface mounting only

Performance

Latency:

100 MB:
 <10.2 μs (FIFO 64-byte packets)

- 1000 MB:

 $<3.5 \mu s$ (FIFO 64-byte packets) Throughput:

- Switch 4160gl, 4108gl bundle, and 4108gl: up to 71.4 million pps

– Switch 4140gl, 4148gl, and 4104gl: up to 35.7 million pps Switch fabric speed:

 Switch 4160gl, 4108gl bundle, and 4108gl: 36.6 Gbps

Switch 4140gl, 4148gl, and 4104gl: 18.3 Gbps
Address table size: 8,000 entries

Environment

Operating

- Temperature: 0° C to 55° C (32° F to 131° F)

Relative humidity: 15% to 95%,@ 40° C (104° F)

non-condensing Non-operating/Storage

- Temperature: -40° C to 70° C (-40° F to 158° F)

Relative humidity: 15% to 95%,
 65° C (149° F)
 non-condensing

Altitude: up to 4.6 km (15,091 ft)

Electrical characteristics

Voltage: 100–127 VAC/ 200–240 VAC Current: 8.2A/3.8A Frequency range: 50/60 Hz

Safety

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

Emissions

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

Immunity

EN 55024/CISPR-24 ESD: IEC 61000-4-2, 4 kV CD, 8 kV AD

Radiated: IEC 61000-4-3, 3V/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, 3V Power frequency magnetic field: IEC 61000-4-8, 1A/m, 50 or 60 Hz

Voltage dips and interruptions: IEC 61000-4-11, >95% reduction, 0.5 period, 30% reduction, 25 periods

Harmonics: EN 61000-3-2/IEC 61000-3-2 Flicker: EN 61000-3-3/IEC

Flicker: EN 61000-3-3/IEC 61000-3-3

Management

HP ProCurve Manager (included); HP ProCurve Manager Plus; command line interface; Web browser; configuration menu; out-of-band management (serial RS-232C)

Standards and protocols

RFC 783 TFTP; RFC 951 BootP; RFC 1542 BootP; RFC 854 Telnet; RFC 768 UDP;

RFC 792 ICMP;

RFC 793 TCP; RFC 826 ARP;

RFC 2030 Simple Network Time Protocol;

IEEE 802.3X Flow Control;

DHCP Relay;

RFC 2236 IGMPv1/v2/v3; IEEE 802.1D Spanning Tree;

IEEE 802.1w Rapid Convergence Spanning Tree;

IEEE 802.3ad Link Aggregation

Control Protocol; Cisco Fast EtherChannel® (FEC);

RFC 1492 TACACS+; RFC 2138 RADIUS;

RFC 2866 RADIUS accounting; SSHv1/SSHv2 Secure Shell;

IEEE 802.1X Network Login; IEEE 802.1Q VLAN tagging;

IEEE 802.1Q GVRP;

IEEE 802.1p Priority; SNMPv1/v2c/v3;

HTML and telnet management; RFC 1493 Bridge MIB; RFC 1213 MIB II;

RFC 2096 IP Forwarding Table MIB:

RFC 2737 Entity MIB;

RFC 2863 Evolution of Interface;

RFC 2665 Ethernet MIB;

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

(events); RFC 2021 RMON probe configuration (RMON v2);

RFC 2668 802.3 MAU MIB; RFC 2613 SMON; RFC 2674 802.1p and 802.1Q

Bridge MIB; RFC 2618 RADIUS Client MIB; RFC 2620 RADIUS Accounting

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