hp procurve switch 4100gl series

The HP Procurve Switch 4100gl series are convergence-ready and easy to use in compact 8-slot and new 4-slot modular form factors. Combined with HP's Fast Path Technology, these switches also provide high-performance, reliable connectivity for a growing network. The Switch 4100al series are the low-cost, modular alternative to stackable switches and include free software upgrades and a lifetime warranty.



hp procurve switch 4108gl bundle (J4861A) with 72 10/100-TX ports and a 3-port transceiver module installed (transceivers ordered separately) and 4 open module slots



hp procurve switch 4108gl (J4865A) with 8 open module slots

accessories

modules:

- HP Procurve Switch GL 10/100-TX module (J4862B)
- HP Procurve Switch GL 100/1000-T module (J4863A)
- HP Procurve Switch GL transceiver module (J4864A)
- HP Procurve Switch GL mini-GBIC module (J4893A)

mini-GBICs and transceivers:

- HP Procurve Gigabit-SX-LC mini-GBIC (J4858A)
- HP Procurve Gigabit-LX-LC mini-GBIC (J4859A)
- HP Procurve Gigabit-LH-LC mini-GBIC* (J4860A)
- HP Procurve Gigabit-SX transceiver (J4131B)
- HP Procurve Gigabit-LX transceiver (J4132A) HP Procurve 100/1000-T transceiver (J4834A)
- HP Procurve 100-FX transceiver (J4853A)
- HP Procurve Gigabit stacking kit (J4116A)

RPS:

• HP Procurve Switch redundant power supply (J4839A)

features and benefits

- fast path technology: wire-speed switching of intra-module traffic for up to 71.4 Mpps throughput
- fast switch fabric: high-performance switch fabric (up to 36.6 Gbps)
- IP multicast (IGMP): prevents flooding of IP multicast traffic
- Rapid Convergence Spanning Tree Protocol (802.1w): increases network uptime through faster recovery from failed links
- 802.3ad Link Aggregation Control Protocol (LACP) and hp trunking: support up to 6 trunks, each with up to 4 links (ports) per trunk; trunking across modules is supported
- Cisco Fast EtherChannel® (FEC): supports Cisco's proprietary FEC trunking protocol
- · hot-swappable modules: permits modules and mini-GBICs to be added or swapped without interrupting the network
- dual flash images: provides independent primary and secondary OS files for backup while upgrading
- optional redundant power supply: provides uninterrupted power
- 802.1x and RADIUS network login: controls port-based access for authentication and accountability
- 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
- Secure Shell (SSH): encrypts all transmitted data for secure remote access over IP networks
- traffic prioritization (802.1p): allows real-time traffic classification into 8 priority levels mapped
- RMON and switch monitoring (SMON): provides 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 1600m, 2400m, 2424m, 2512, 2524, 4000m, 8000m, and 4100gl series
- * Check www.hp.com/go/hpprocurve for availability of this product or feature.

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specifications

standard configuration

Switch 4108gl bundle: 8-slot chassis with integrated switching engine, power supply, 72 10/100-TX ports (3 x J4862B), 3-port transceiver module (1 x J4864A) Switch 4108gl: 8-slot chassis with integrated switching engine, power supply

8-slot chassis: maximum of 192 10/100-TX ports or 48 Gigabit ports

Switch 4148gl: 4-slot chassis with integrated switching engine, power supply, 48 10/100-TX ports (2 x J4862B) Switch 4104gl: 4-slot chassis with integrated switching

engine, power supply 4-slot chassis: maximum of 96 10/100-TX ports or 24 Gigabit ports

Latency: <10μs (FIFO)

Throughput

- Switch 4108gl and 4108gl bundle: up to 71.4 Mpps
- Switch 4104gl and 4148gl: up to 35.7 Mpps Switch fabric speed
- Switch 4108gl and 4108gl bundle: 36.6 Gbps
- Switch 4104gl and 4148gl: 18.3 Gbps

Address table size: 8,000 entries

memory and processor

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

Module: IDT MIPS32 @ 125 MHz, 512 KB flash, 8 MB SDRAM

Packet buffer size: 1 MB (4108gl Fabric); 512 KB (4104gl Fabric); 512 KB (Gigabit module); 16 MB (10/100 module) physical characteristics

- Switch 4108gl and 4108gl bundle: $17.4 \times 15.3 \times 8.75$ in $(44.2 \times 38.9 \times 22.23 \text{ cm})$ (5U height) – Switch 4104gl and 4148gl: $17.4 \times 15.3 \times 5.25$ in
- (44.2 × 38.9 × 13.34 cm) (3U height)

Weight

- Switch 4108gl bundle: 22.9 lb (10.4 kg)
- Switch 4108gl (chassis with 1 PS, 1 RPS cover, and
- 8 slot covers): 20.7 lb (9.4 kg)

 Switch 4148gl: 15.85 lb (7.2 kg)

 Switch 4104gl (chassis with 1 PS, 1 RPS cover, and 4 slot covers): 14.75 lb (6.7 kg)

environment

- Temperature: 32°F to 131°F (0°C to 55°C)
- Relative humidity: 15% to 95% @ 104°F (40°C), non-condensing
- Non-operating/Storage
- Temperature: −40°F to 158°F (−40°C to 70°C)
- Relative humidity: 15% to 95% @ 149°F (65°C)

Altitude: Up to 15,091 ft (4.6 km) mounting

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

electrical characteristics

The Switch 4100gl series automatically adjusts to any voltage from 100 to 127 VAC and from 200 to 240

VAC and either 50 or 60 Hz. AC voltage: 100–127 VAC/200–240 VAC Maximum current: 8.2 A / 3.8 A Frequency range: 50/60 Hz

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hp procurve switch 4100gl series (continued)

The Switch 4100gl series offers a high-performance switch fabric, high-availability features, and a wide range of network and access security features. With layer 3 VLAN routing, industry-leading lifetime warranty, and free end-user telephone and e-mail support, the Switch 4100gl series is your best choice for implementing a high-performance, low-cost network infrastructure.



hp procurve switch 4148gl (J4888A) with 48 10/100-TX ports installed and 2 open module slots



hp procurve switch 4104gl (J4887A) with 4 open module slots

accessories

modules:

- HP Procurve Switch GL 10/100-TX module (J4862B)
- HP Procurve Switch GL 100/1000-T module (J4863A)
- HP Procurve Switch GL transceiver module (J4864A)
- HP Procurve Switch GL mini-GBIC module (J4893A)

mini-GBICs and transceivers:

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- HP Procurve 100-FX transceiver (J4853A)
- HP Procurve Gigabit stacking kit (J4116A)

RPS:

• HP Procurve Switch redundant power supply (J4839A)

features and benefits (continued)

- hp auto-MDIX: automatically adjusts for straight-through or crossover cables on all 10/100-TX and 100/1000-T ports
- · Group VLAN Registration Protocol (GVRP): allows automatic learning and dynamic assignment of **VLANs**
- Cisco Discovery Protocol (CDP): enables real-time mapping of nodes to switch ports
- · friendly port names: allows assignment of descriptive names to ports
- find, fix, and inform: finds and fixes common network problems automatically, then informs administrator
- iSCSI support: enables the deployment of Ethernet storage area network solutions using the emerging iSCSI standard
- layer 3 software upgradability*: enables VLAN-to-VLAN communications in IP networks
- lifetime warranty: for as long as you own the product, with next-business-day advance replacement (available in most countries)
- * Check www.hp.com/go/hpprocurve for availability of this product or feature.

specifications (continued)

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

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

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/2kV AC Conducted: IEC 61000-4-6, 3V Power frequency magnetic field: IEC 61000-4-8, 1A/m,

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 61000-3-3

standards and protocols

IEEE 802.1Q/p GVRP; IEEE 802.1D Spanning Tree; IEEE 802.1w Rapid Convergence Spanning Tree; IEEE 802.3ad Link Aggregation Control Protocol; Cisco Fast EtherChannel[®] (FEC); RFC 2236 IGMPv2; IEEE 802.3x Flow Control; RFC 783 TFTP; RFC 1542 BootP; RFC 951 BootP; RFC 854 Telnet; RFC 768 UDP; RFC 792 ICMP; RFC 793 TCP; RFC 826 ARP

HP Toptools for Hubs & Switches included; Command line interface; Web browser; Configuration menu; Ir band management (serial RS-232); SNMPv1/v2c; 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; HTML and telnet management; RFC 2030 Simple Network Time Protocol; RFC 2674-802.1p and 802.1Q Bridge MIB; RFC 2618 RADIUS Client MIB; RADIUS Accounting MIB