

HP ProCurve Switch 2800 series



HP ProCurve Switch 2848 (J4904A)



HP ProCurve Switch 2824 (J4903A)



The HP ProCurve Switch 2800 series consists of two switches: the 24-port HP ProCurve Switch 2824 with 20 10/100/1000 ports, and the 48-port HP ProCurve Switch 2848 with 44 10/100/1000 ports. In addition, each switch has 4 dual-personality ports for 10/100/1000 or mini-GBIC connectivity. Ideal for medium to large networks, the Switch 2824 and Switch 2848 cost-effectively offer the maximum in bandwidth performance with 10 times the speed of 100 Mbit switches. Migrating to Gigabit switches will allow you to take full advantage of your existing high-performance, Gigabit-enabled PCs, laptops, and servers—and see noticeably improved application response and file transfer times. By implementing the Switch 2824 or Switch 2848, you will seamlessly protect your existing network investment while preparing for future growth.

HP Procurve Switch 2800 series

Features and benefits

- **48 Gbps backplane with up to 35.7 mpps (Switch 2824) and 96 Gbps backplane with up to 71.4 mpps (Switch 2848):** ten times the bandwidth for low-latency throughput
- **Dual-personality functionality:** four 10/100/1000 ports or mini-GBIC slots for optional fiber connectivity such as Gigabit-SX, -LX, or -LH
- **Basic IP routing:** enables automatic routing with up to 16 external routes—including one default route—in IP networks
- **IP multicast (data-driven IGMP):** automatically prevents flooding of IP multicast traffic
- **Optional redundant power supply:** provides uninterrupted power in case of a power supply failure
- **RMON and extended RMON:** provides advanced monitoring and reporting capabilities for statistics, history, alarms, and events
- **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
- **VLAN:** supports up to 60 port-based VLANs, GVRP, and 802.1Q VLAN tagging
- **Traffic prioritization (802.1p):** allows real-time traffic classification into 8 priority levels
- **Per-port broadcast throttling:** selectively configure broadcast control on heavy traffic port uplinks
- **Stacking capability:** single IP address management for a virtual stack of up to 16 switches, including the 2500 series, 2600 series, 2800 series, 4000m, 6108, 8000m, and 4100gl series
- **HP Auto-MDIX:** automatically adjusts for straight-through or crossover cables on all 10/100/1000 ports
- **Source port filters:** allows only specified ports to communicate with each other
- **Lifetime warranty:** with next-business-day advance replacement (available in most countries)

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Accessories

- HP ProCurve Gigabit-LH-LC mini-GBIC (J4860A)
- HP ProCurve Gigabit-LX-LC mini-GBIC (J4859A)
- HP ProCurve Gigabit-SX-LC mini-GBIC (J4858A)
- NEW** • HP ProCurve 600 Redundant and External Power Supply (J8168A)

Services

- Check www.hp.com/go/procurveservices for part numbers and service-level descriptions

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Specifications

Ports

20 (for Switch 2824) or
44 (for Switch 2848) RJ-45
10/100/1000 ports (IEEE 802.3
Type 10Base-T, IEEE 802.3u
Type 100Base-T, IEEE 802.3ab
1000Base-T Gigabit Ethernet)
1 RS-232C DB-9 console port
4 dual-personality ports—each
port can be used as either an
RJ-45 10/100/1000 port (IEEE
802.3 Type 10Base-T; 802.3u
Type 100Base-TX; 802.3ab
1000Base-T Gigabit Ethernet) or
an open mini-GBIC slot (for use
with mini-GBIC transceivers)

Physical characteristics

Switch 2824
– Dimensions:
17.32 x 14.4 x 1.7 in.
(44 x 36.7 x 4.4 cm)
– Weight:
10.2 lb. (4.62 kg)
Switch 2848
– Dimensions:
17.32 x 16.9 x 1.7 in.
(44 x 43 x 4.4 cm)
– Weight:
10.75 lb. (4.88 kg)

Memory and processor

Flash capacity: 16 MB

Mounting

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

Performance

Switch 2824

Latency
– 100MB: <11.5 μ s
(FIFO 64-byte packets)
– 1000MB: <5.4 μ s
(FIFO 64-byte packets)
Throughput: 35.7 mpps
Switching capacity: 48 Gbps

Switch 2848

Latency
– 100MB: <11.8 μ s
(FIFO 64-byte packets)
– 1000MB: <4.4 μ s
(FIFO 64-byte packets)
Throughput: 71.4 mpps
Switching capacity: 96 Gbps
Address table size: 16,000 entries

Environment

Operating
– 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 90%
@ 149° F (65° C),
non-condensing
Altitude: up to 15,091 ft. (4.6 km)
Acoustic: DIN 45635T.19
per ISO 7779 <53dB
@ <80° F (25° C)

Electrical characteristics

Max BTUs: 341
Voltage: 100–127 VAC/
200–240 VAC
Current: 0.6A/0.3A
Power: 100W
Frequency: 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
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;
SSHv2 Secure Shell;
IEEE 802.1X Network Login;

Bridge MIB;
IEEE 802.1Q VLANs
IEEE 802.1Q VLAN tagging;
IEEE 802.1Q GVRP;
IEEE 802.1p Priority;
SNMPv1/v2c/v3;
Cisco Discovery Protocol (CDP);
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), 3 (alarm),
and 9 (events);
Extended RMON;
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
MIB

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