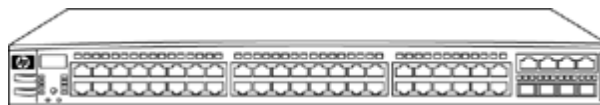
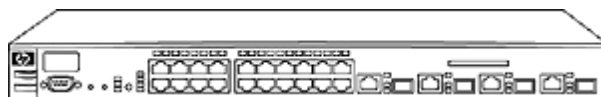


Overview



ProCurve Switch 2848



ProCurve Switch 2824

Models

ProCurve Switch 2848

J4904A

ProCurve Switch 2824

J4903A

Introduction

The ProCurve Switch 2800 series consists of two switches: the 24-port ProCurve Switch 2824 with 20 10/100/1000 ports, and the 48-port ProCurve Switch 2848 with 44 10/100/1000 ports. In addition, each switch has 4 dual-personality ports for RJ-45 10/100/1000 or mini-GBIC fiber 1000 connectivity. Ideal for medium to large networks, the ProCurve Switch 2824 and ProCurve Switch 2848 cost-effectively offer the maximum bandwidth performance with up to 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 ProCurve Switch 2824 or ProCurve Switch 2848, you will seamlessly protect your existing network investment while preparing for future growth.

Features and Benefits

- **48 Gbps backplane with up to 34.7 million pps (ProCurve 2824) and 96 Gbps backplane with up to 69.8 million pps (ProCurve 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 to the connected VLANs and up to 16 static routes-including one default route-in IP networks
- **IP multicast (data-driven IGMPv3):** automatically prevents flooding of IP multicast traffic
- **802.3ad Link Aggregation Protocol (LACP) and ProCurve trunking:** support up to 24 trunks, each with up to 8 links (ports) per trunk
- **Optional redundant power supply:** provides uninterrupted power (provided by ProCurve 600 RPS/EPS)
- **RMON, XRMON, sFlow, and SMON:** provide 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 support and tagging:** support complete 802.1Q (4,096 VLAN IDs) and 256 VLANs simultaneously
- **Traffic prioritization (802.1p):** allows real-time traffic classification into 8 priority levels mapped to 4 queues
- **Stacking capability:** single IP address management for a virtual stack of up to 16 switches, including the ProCurve 2500 series, 2600 series, 2800 series, 3400cl series, 6108, 6400cl series, and 4100gl series
- **IEEE Auto-MDIX:** automatically adjusts for straight-through or crossover cables on all 10/100/1000 ports
- **Source port filters:** allow only specified ports to communicate with each other

Overview

- **Troubleshooting:** ingress/egress port monitoring enables network problem-solving
- **iSCSI support:** enables the deployment of Ethernet storage area network solutions using the iSCSI standard
- **Lifetime warranty:** for as long as you own the product, with next-business-day advance replacement (available in most countries)
- **Cisco Fast EtherChannel® (FEC):** supports Cisco's proprietary FEC trunking protocol
- **Secure FTP:** allows secure file transfer to/from the switch (protects against unwanted file downloads or unauthorized copying of switch configuration file)
- **802.1v Protocol VLANs:** isolate select non-IPv4 protocols automatically into their own VLANs
- **Group VLAN Registration Protocol (GVRP):** allows automatic learning and dynamic assignment of VLANs
- **802.1w Rapid Convergence Spanning Tree Protocol:** increases network uptime through faster recovery from failed links
- **802.1s Multiple Spanning Tree:** provides high link availability in multiple VLAN environments by allowing multiple spanning trees
- **Cisco Discovery Protocol (CDP):** enables real-time mapping of nodes to switch ports
- **Per-port broadcast throttling:** selectively configure broadcast control on heavy traffic port uplinks
- **Friendly port names:** allows assignment of descriptive names to ports
- **Dual flash images:** provide independent primary and secondary OS files for backup while upgrading
- **Web-based authentication:** similar to 802.1X, provides a browser-based environment to authenticate clients that do not support the 802.1X supplicant
- **MAC address lockout:** prevents configured particular MAC addresses from connecting to the network
- **Layer 4 prioritization:** enables prioritization based on TCP/UDP ports
- **Class of Service (CoS):** sets 802.1p priority tag based on IP address, IP Type of Service (ToS), L3 protocol, TCP/UDP port number, source port, and DiffServ
- **Jumbo frames:** allow high-performance remote backup and disaster recovery services

Accessories

ProCurve Gigabit-SX-LC Mini-GBIC (J4858B) (See the ProCurve Mini-GBICs QuickSpec for details.)	J4858B
ProCurve Gigabit-LX-LC Mini-GBIC (J4859B) (See the ProCurve Mini-GBICs QuickSpec for details.)	J4859B
ProCurve Gigabit-LH-LC Mini-GBIC (J4860B) (See the ProCurve Mini-GBICs QuickSpec for details.)	J4860B
ProCurve 600 Redundant External Power Supply (J8169A) (See the ProCurve Redundant and External Power Supply QuickSpec for details.)	J8168A

Services

ProCurve Switch 2848	3-year, 4-hour onsite, 13x5 coverage for hardware	H4496A/E
	3-year, 4-hour onsite, 24x7 coverage for hardware	H2893A/E
	3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support	U6319A/E
	Installation with minimum configuration, system-based pricing	U4826A/E
	Installation with HP-provided configuration, system-based pricing	U4830A/E
ProCurve Switch 2824	3-year, 4-hour onsite, 13x5 coverage for hardware	U2855A/E
	3-year, 4-hour onsite, 24x7 coverage for hardware	U2856A/E
	3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support	U6304A/E
	Installation with minimum configuration, system-based pricing	U4826A/E
	Installation with HP-provided configuration, system-based pricing	U4830A/E

Check <http://www.hp.com/go/procurveservices> for part numbers and service-level descriptions. For details about services and response times in your area, please contact your local HP sales office.

Technical Specifications

ProCurve Switch 2848 (J4904A)	Ports	44 10/100/1000 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, 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 or an open mini-GBIC slot (for use with mini-GBIC transceivers)
	Physical characteristics	Dimensions: 17.32 x 16.9 x 1.75 in. (43.99 x 42.93 x 4.45 cm) (1U height) Weight (fully loaded): 10.75 lb. (4.84 kg)
	Memory and processor	Processor type and speed: Motorola PowerPC MPC8245 @ 266 MHz Flash capacity: 8 MB SDRAM: 64 MB
	Mounting	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included); horizontal surface mounting only
	Performance	Latency <5.4 μ s (FIFO 64-byte packets) Throughput Up to 69.3 million pps (64-byte packets) Switching capacity 96 Gbps Routing table size 16,000 entries
	Environment	Operating temperature 32° to 131°F (0° to 55°C) Operating relative humidity 15% to 95% @ 104°F (40°C), non-condensing Non-operating/Storage temperature -40° to 158°F (-40° to 70°C) Non-operating/Storage relative humidity 15% to 95% @ 149°F (65°C), non-condensing Altitude Up to 15,091 ft. (4.6 km) Acoustic DIN 45635T.19 per ISO 7779 <53 dB @ <80°F (25°C)
	Electrical characteristics	Maximum BTUs 341 BTU/hr Voltage 100–127 VAC/200–240 VAC Current 0.6 A/0.3 A Power consumption 100 W Frequency 50/60 Hz
	Safety	cUL (CSA 950); EN 60950/IEC 60950; 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

Technical Specifications

Management		ProCurve Manager (included); 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 3376 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; Secure Sockets Layer (SSL); IEEE 802.1X Network Login; 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), 2 (history), 3 (alarm), and 9 (events); XRMON; RFC 2021 RMON probe configuration (RMON v2); RFC 2668 802.3 MAU MIB; RFC 2613 SMON; RFC 2674 802.1p and IEEE 802.1Q Bridge MIB; RFC 2618 RADIUS Client MIB; RFC 2620 RADIUS Accounting MIB
ProCurve Switch 2824 (J4903A)	Ports	20 10/100/1000 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, 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 or an open mini-GBIC slot (for use with mini-GBIC transceivers)
	Physical characteristics	Dimensions: 17.32 x 14.4 x 1.75 in. (43.99 x 36.58 x 4.45 cm) (1U height) Weight (fully loaded): 10.2 lb. (4.59 kg)
	Memory and processor	Processor type and speed: Motorola PowerPC MPC8245 @ 266 MHz Flash capacity: 8 MB SDRAM: 64 MB
	Mounting	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included); horizontal surface mounting only
	Performance	Latency <5.4 μ s (64-byte packets) Throughput Up to 34.65 million pps (64-byte packets) Switching capacity 48 Gbps Routing table size 16,000 entries
	Environment	Operating temperature 32° to 131°F (0° to 55°C) Operating relative humidity 15% to 95% @ 104°F (40°C), non-condensing Non-operating/Storage temperature -40° to 158°F (-40° to 70°C) Non-operating/Storage relative humidity 15% to 95% @ 149°F (65°C), non-condensing Altitude Up to 15,091 ft. (4.6 km) Acoustic DIN 45635T.19 per ISO 7779 <53 dB @ <80°F (25°C)

Technical Specifications

Electrical characteristics	Maximum BTUs	341 BTU/hr
	Voltage	100–127 VAC/200–240 VAC
	Current	0.6 A/0.3 A
	Power consumption	100 W
	Frequency	50/60 Hz
Safety	cUL (CSA 950); EN 60950/IEC 60950; 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	ProCurve Manager (included); 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 3376 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; Secure Sockets Layer (SSL); IEEE 802.1X Network Login; 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), 2 (history), 3 (alarm), and 9 (events); XRMON; RFC 2021 RMON probe configuration (RMON v2); RFC 2668 802.3 MAU MIB; RFC 2613 SMON; RFC 2674 802.1p and IEEE 802.1Q Bridge MIB; RFC 2618 RADIUS Client MIB; RFC 2620 RADIUS Accounting MIB	

Technical Specifications

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<http://www.hp.com/go/procurve>.

5982-4071EN, 05/2005