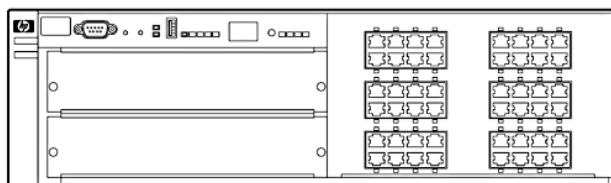
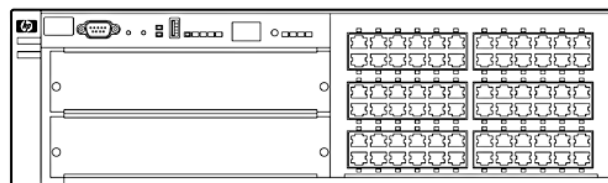


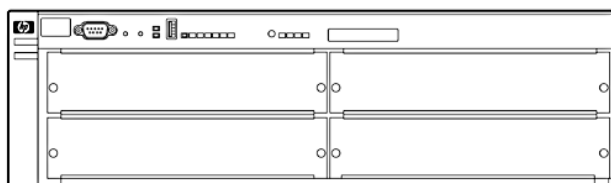
Overview



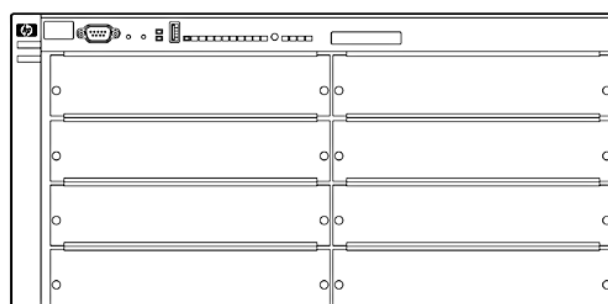
ProCurve Switch 4202vl-48G



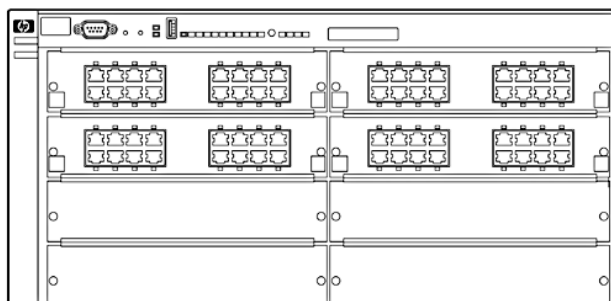
ProCurve Switch 4202vl-72



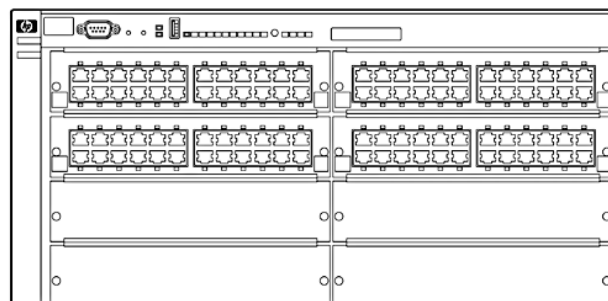
ProCurve Switch 4204vl



ProCurve Switch 4208vl



ProCurve Switch 4208vl-64G



ProCurve Switch 4208vl-96

Models

ProCurve Switch 4202vl-48G
ProCurve Switch 4202vl-72
ProCurve Switch 4204vl
ProCurve Switch 4208vl
ProCurve Switch 4208vl-64G
ProCurve Switch 4208vl-96

J8771A
J8772A
J8770A
J8773A
J8774A
J8775A

Introduction

The ProCurve Switch 4200vl series consists of modular chassis that provide a flexible, cost-effective LAN solution as an alternative to stackables. These switches offer a proven chassis form factor with high quality and reliability in 10/100 and 10/100/1000 scalable solutions that integrate easily into any network.

Overview

Features and Benefits

Performance

- **Non-blocking architecture:** up to 76.8 Gbps non-blocking crossbar switching fabric provides wire-speed intra- and inter-module switching with up to 48 million pps throughput, built on ProCurve custom-designed ASIC technology

Resiliency and high availability

- **IEEE 802.3ad Link Aggregation Control Protocol (LACP) and ProCurve trunking:** support up to 36 trunks, each with up to 8 links (ports) per trunk; trunking across modules is supported
- **Spanning Tree Protocol (IEEE 802.1D):** provides redundant links while preventing network loops
- **IEEE 802.1s Multiple Spanning Tree:** provides high link availability in multiple VLAN environments by allowing multiple spanning trees; encompasses 802.1D Spanning Tree Protocol and 802.1w Rapid Spanning Tree Protocol
- **Hot-swappable modules:** permit modules and mini-GBICs to be added or swapped without interrupting the network
- **Optional redundant power supply:** provides uninterrupted power; allows hot-swapping of one of the two supplies when installed

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

Layer 2 switching

- **VLAN support and tagging:** support complete IEEE 802.1Q (4,096 VLAN IDs) and 256 VLANs simultaneously
- **GARP VLAN Registration Protocol:** allows automatic learning and dynamic assignment of VLANs

Security

- **Port security:** allows access only to specified MAC addresses, which can be learned or specified by the administrator
- **MAC address lockout:** prevents configured particular MAC addresses from connecting to the network
- **Multiple user authentication methods:**
 - **IEEE 802.1X:** industry-standard way of user authentication using an IEEE 802.1X supplicant on the client in conjunction with a RADIUS server
 - **Web-based authentication:** similar to IEEE 802.1X, provides a browser-based environment to authenticate clients that do not support the IEEE 802.1X supplicant
 - **MAC-based authentication:** client is authenticated with the RADIUS server based on the MAC address of the client
- **Secure FTP:** allows secure file transfer to/from the switch; protects against unwanted file downloads or unauthorized copying of switch configuration file
- **TACACS+:** eases switch management security administration by using a password authentication server
- **Source-port filtering:** allows only specified ports to communicate with each other
- **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
- **Switch management logon security:** can require either RADIUS or TACACS+ authentication for secure switch CLI logon
- **Custom banner:** displays security policy when users log in to the switch

Quality of Service (QoS)

- **Traffic prioritization (IEEE 802.1p):** allows real-time traffic classification into 8 priority levels mapped to 4 queues
- **Class of Service (CoS):** sets IEEE 802.1p priority tag based on IP address, IP Type of Service (ToS), L3 protocol, TCP/UDP port number, source port, and DiffServ
- **Layer 4 prioritization:** enables prioritization based on TCP/UDP port numbers

Manageability



Overview

- **sFlow** (RFC 3176): provides wire-speed traffic accounting and monitoring
- **RMON and XRMON**: provide advanced monitoring and reporting capabilities for statistics, history, alarms, and events
- **Friendly port names**: allow assignment of descriptive names to ports
- **ProCurve/IEEE Auto-MDIX**: automatically adjusts for straight-through or crossover cables on all 10/100/1000 ports
- **Dual flash images**: provide independent primary and secondary OS files for backup while upgrading

Convergence

- **IP multicast** (data-driven IGMPv3): automatically prevents flooding of IP multicast traffic
- **LLDP-MED** (Media Endpoint Discovery): a standard extension of LLDP that stores values for parameters such as QoS and VLAN to automatically configure network devices such as IP phones
- **iSCSI support**: enables the deployment of Ethernet storage area network solutions using the iSCSI standard
- **Software updates**: free downloads from the Web
- **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
- **Find-Fix-and-Inform**: finds and fixes common network problems automatically, then informs administrator
- **Troubleshooting**: ingress/egress port monitoring enables network problem-solving
- **Multiple configuration files**: allow a config file to be stored to flash image

Industry-leading warranty

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

Services

ProCurve Switch 4202vl-48G

3-year, 4-hour onsite, 13x5 coverage for hardware	UE247E
3-year, 4-hour onsite, 24x7 coverage for hardware	UE248E
3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support	UE249E
Installation with minimum configuration, system-based pricing	U4827E
Installation with HP-provided configuration, system-based pricing	U4831E

ProCurve Switch 4202vl-72

3-year, 4-hour onsite, 13x5 coverage for hardware	UE247E
3-year, 4-hour onsite, 24x7 coverage for hardware	UE248E
3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support	UE249E
Installation with minimum configuration, system-based pricing	U4827E
Installation with HP-provided configuration, system-based pricing	U4831E

ProCurve Switch 4204vl

3-year, 4-hour onsite, 13x5 coverage for hardware	UE241E
3-year, 4-hour onsite, 24x7 coverage for hardware	UE242E
3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support	UE243E
Installation with minimum configuration, system-based pricing	U4827E
Installation with HP-provided configuration, system-based pricing	U4831E

ProCurve Switch 4208vl

3-year, 4-hour onsite, 13x5 coverage for hardware	UE244E
3-year, 4-hour onsite, 24x7 coverage for hardware	UE245E
3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support	UE246E
Installation with minimum configuration, system-based pricing	U4827E
Installation with HP-provided configuration, system-based pricing	U4831E

ProCurve Switch 4208vl-64G



Overview

3-year, 4-hour onsite, 13x5 coverage for hardware	UE244E
3-year, 4-hour onsite, 24x7 coverage for hardware	UE245E
3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support	UE246E
Installation with minimum configuration, system-based pricing	U4827E
Installation with HP-provided configuration, system-based pricing	U4831E
ProCurve Switch 4208vl-96	
3-year, 4-hour onsite, 13x5 coverage for hardware	UE244E
3-year, 4-hour onsite, 24x7 coverage for hardware	UE245E
3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support	UE246E
Installation with minimum configuration, system-based pricing	U4827E
Installation with HP-provided configuration, system-based pricing	U4831E

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 4202vl-48G (J8771A)	What's included	1 ProCurve Switch gl/xl/vl Redundant Power Supply (J4839A)
	Ports	2 open module slots 48 10/100/1000 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, IEEE 802.3ab 1000Base-T) 1 RS-232C DB-9 console port
	Maximum ports	Supports a maximum of 48 10/100 ports, 80 10/100/1000 ports, or 8 mini-GBICs
	Power supplies	Includes 1 x J4839A 1 open power-supply slot
	Physical characteristics	Dimensions (D x W x H) 15.3 x 17.4 x 5.25 in. (38.86 x 44.2 x 13.34 cm) (3U height) Weight (fully loaded) 23.81 lb. (10.8 kg)
	Memory and processor	Fabric module Motorola PowerPC MPC8245 @ 330 MHz, 24 MB flash, 64 MB SDRAM Packet buffer size 36 MB
	Mounting	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included); horizontal surface mounting only
	Performance	Latency <6 μ s (FIFO) Throughput Up to 30 million pps Switch fabric speed 48 Gbps
	Environment	Operating temperature 32°F to 104°F (0°C to 40°C) Operating 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) Non-operating/Storage relative humidity 15% to 95%, non-condensing Altitude Up to 15,000 ft. (4.6 km) Acoustic DIN 45635 T.19 per ISO 7779 64.2 dB
	Electrical characteristics	Maximum BTUs 2152 BTU/hr Voltage 100–127 VAC/200–240 VAC Current 8.2 A/3.8 A Power consumption 630 W Frequency 50/60 Hz
	Safety	CSA 22.2 No. 950; UL 60950; EN60950
	Emissions	FCC Class A; VCCI Class A; EN55022/CISPR-22 Class A; CISPR22 Class A; EN55024; IEC/EN61000-3-2; IEC/EN61000-3-3

Technical Specifications

Immunity	EN	EN55024, CISPR 24
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
		Harmonics
	Flicker	EN61000-3-3, IEC61000-3-3
Management	ProCurve Manager Plus; ProCurve Manager (included); command-line interface; Web browser; configuration menu; out-of-band management (DB-9 serial port console); IEEE 802.3 Ethernet MIB; Repeater MIB; Ethernet Interface MIB	
Standards and protocols	RFC 783 TFTP; RFC 1542 BootP; RFC 768 UDP; RFC 792 ICMP; RFC 793 TCP; RFC 826 ARP; RFC 2030 SNMP; RFC 2030 Simple Network Time Protocol; IEEE 802.3x Flow Control; DHCP Relay; RFC 3046 DHCP relay Agent Information Option 82; RFC 3376 IGMPv1/v2/v3; IEEE 802.1D Spanning Tree; IEEE 802.1w Rapid Convergence Spanning Tree; IEEE 802.1s Multiple Spanning Trees; IEEE 802.3ad Link Aggregation Control Protocol; IEEE 802.1AB Link Layer Discovery Protocol; RFC 2474 DiffServ Precedence; RFC 2597 DiffServ Expedited Forwarding (EF); RFC 2598 DiffServ Assured Forwarding (AF); RFC 2138 RADIUS; SSHv2 Secure Shell; Secure Sockets Layer (SSL); IEEE 802.1X Network Login; IEEE 802.1Q VLAN tagging; IEEE 802.1Q GVRP; IEEE 802.1p Priority; SNMPv1/v2c/v3; RFC 1493 Bridge MIB; RFC 1213 MIB II; RFC 2737 Entity MIB; RFC 2665 Ethernet MIB; RFC 2668 IEEE 802.3 MAU MIB; RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events); RFC 3164 Syslog; XRMON; RFC 2613 SMON; RFC 2618 RADIUS Client MIB; RFC 791 IP; RFC 1757 RMON Groups 1,2,3,9; RFC 3176 sFlow	
Notes	When using mini-GBICs with this product, mini-GBICs with revision "B" (product number ends with the letter "B"; e.g., J4858B, J4859B) or later are required.	

ProCurve Switch 4202vl-72 (J8772A)	What's included	1 ProCurve Switch gl/xl/vl Redundant Power Supply (J4839A)
	Ports	2 open module slots 72 10/100 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX) 1 RS-232C DB-9 console port
	Maximum ports	Supports a maximum of 120 10/100 ports, 32 Gigabit ports, or 8 mini-GBICs
	Power supplies	Includes 1 x J4839A 1 open power-supply slot
	Physical characteristics	Dimensions (D x W x H) 15.3 x 17.4 x 5.25 in. (38.86 x 44.2 x 13.34 cm) (3U height) Weight (fully loaded) 23.81 lb. (10.8 kg)

Technical Specifications

Memory and processor	Fabric module	Motorola PowerPC MPC8245 @ 330 MHz, 24 MB flash, 64 MB SDRAM
	Packet buffer size	36 MB
Mounting	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included); horizontal surface mounting only	
Performance	Latency	<6 μ s (FIFO)
	Throughput	Up to 22.4 million pps
	Switch fabric speed	33.6 Gbps
Environment	Operating temperature	32°F to 104°F (0°C to 40°C)
	Operating 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)
	Non-operating/Storage relative humidity	15% to 95%, non-condensing
Electrical characteristics	Maximum BTUs	2152 BTU/hr
	Voltage	100-127 VAC/200-240 VAC
	Current	8.2 A/3.8 A
	Power consumption	630 W
	Frequency	50/60 Hz
Safety	CSA 22.2 No. 950; UL 60950; EN60950	
Emissions	FCC Class A; VCCI Class A; EN55022/CISPR-22 Class A; CISPR22 Class A; EN55024; IEC/EN61000-3-2; IEC/EN61000-3-3	
Immunity	EN	EN55024, CISPR 24
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN61000-3-2, IEC61000-3-2
	Flicker	EN61000-3-3, IEC61000-3-3
Management	ProCurve Manager Plus; ProCurve Manager (included); command-line interface; Web browser; configuration menu; out-of-band management (DB-9 serial port console); IEEE 802.3 Ethernet MIB; Repeater MIB; Ethernet Interface MIB	

Technical Specifications

Standards and protocols	RFC 783 TFTP; RFC 1542 BootP; RFC 768 UDP; RFC 792 ICMP; RFC 793 TCP; RFC 826 ARP; RFC 2030 SNTP; RFC 2030 Simple Network Time Protocol; IEEE 802.3x Flow Control; DHCP Relay; RFC 3046 DHCP relay Agent Information Option 82; RFC 3376 IGMPv1/v2/v3; IEEE 802.1D Spanning Tree; IEEE 802.1w Rapid Convergence Spanning Tree; IEEE 802.1s Multiple Spanning Trees; IEEE 802.3ad Link Aggregation Control Protocol; IEEE 802.1AB Link Layer Discovery Protocol; RFC 2474 DiffServ Precedence; RFC 2597 DiffServ Expedited Forwarding (EF); RFC 2598 DiffServ Assured Forwarding (AF); RFC 2138 RADIUS; SSHv2 Secure Shell; Secure Sockets Layer (SSL); IEEE 802.1X Network Login; IEEE 802.1Q VLAN tagging; IEEE 802.1Q GVRP; IEEE 802.1p Priority; SNMPv1/v2c/v3; RFC 1493 Bridge MIB; RFC 1213 MIB II; RFC 2737 Entity MIB; RFC 2665 Ethernet MIB; RFC 2668 IEEE 802.3 MAU MIB; RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events); RFC 3164 Syslog; XRMON; RFC 2613 SMON; RFC 2618 RADIUS Client MIB; RFC 791 IP; RFC 1757 RMON Groups 1,2,3,9; RFC 3176 sFlow
Notes	When using mini-GBICs with this product, mini-GBICs with revision "B" (product number ends with the letter "B"; e.g., J4858B, J4859B) or later are required.

ProCurve Switch 4204vl (J8770A)	What's included	1 ProCurve Switch gl/xl/vl Redundant Power Supply (J4839A)
	Ports	4 open module slots 1 RS-232C DB-9 console port
	Maximum ports	Supports a maximum of 96 10/100 ports, 64 10/100/1000 ports, or 16 mini-GBICs
	Power supplies	Includes 1 x J4839A 1 open power-supply slot
	Physical characteristics	Dimensions (D x W x H) 15.3 x 17.4 x 5.25 in. (38.86 x 44.2 x 13.34 cm) (3U height) Weight (fully loaded) 20.75 lb. (9.41 kg)
	Memory and processor	Fabric module Motorola PowerPC MPC8245 @ 330 MHz, 24 MB flash, 64 MB SDRAM Packet buffer size 36 MB
	Mounting	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included); horizontal surface mounting only
	Performance	Latency <6 μ s (FIFO) Throughput Up to 24 million pps Switch fabric speed 38.4 Gbps
	Environment	Operating temperature 32°F to 104°F (0°C to 40°C) Operating 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) Non-operating/Storage relative humidity 15% to 95%, non-condensing Altitude Up to 15,000 ft. (4.6 km) Acoustic DIN 45635 T.19 per ISO 7779 64.2 dB

Technical Specifications

Electrical characteristics	Maximum BTUs	2152 BTU/hr
	Voltage	100–127 VAC/200–240 VAC
	Current	8.2 A/3.8 A
	Power consumption	630 W
	Frequency	50/60 Hz
Safety	CSA 22.2 No. 950; UL 60950; EN60950	
Emissions	FCC Class A; VCCI Class A; EN55022/CISPR-22 Class A; CISPR22 Class A; EN55024; IEC/EN61000-3-2; IEC/EN61000-3-3	
Immunity	EN	EN55024, CISPR 24
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN61000-3-2, IEC61000-3-2
	Flicker	EN61000-3-3, IEC61000-3-3
Management	ProCurve Manager Plus; ProCurve Manager (included); command-line interface; Web browser; configuration menu; out-of-band management (DB-9 serial port console); IEEE 802.3 Ethernet MIB; Repeater MIB; Ethernet Interface MIB	
Standards and protocols	RFC 783 TFTP; RFC 1542 BootP; RFC 768 UDP; RFC 792 ICMP; RFC 793 TCP; RFC 826 ARP; RFC 2030 SNTP; RFC 2030 Simple Network Time Protocol; IEEE 802.3x Flow Control; DHCP Relay; RFC 3046 DHCP relay Agent Information Option 82; RFC 3376 IGMPv1/v2/v3; IEEE 802.1D Spanning Tree; IEEE 802.1w Rapid Convergence Spanning Tree; IEEE 802.1s Multiple Spanning Trees; IEEE 802.3ad Link Aggregation Control Protocol; IEEE 802.1AB Link Layer Discovery Protocol; RFC 2474 DiffServ Precedence; RFC 2597 DiffServ Expedited Forwarding (EF); RFC 2598 DiffServ Assured Forwarding (AF); RFC 2138 RADIUS; SSHv2 Secure Shell; Secure Sockets Layer (SSL); IEEE 802.1X Network Login; IEEE 802.1Q VLAN tagging; IEEE 802.1Q GVRP; IEEE 802.1p Priority; SNMPv1/v2c/v3; RFC 1493 Bridge MIB; RFC 1213 MIB II; RFC 2737 Entity MIB; RFC 2665 Ethernet MIB; RFC 2668 IEEE 802.3 MAU MIB; RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events); RFC 3164 Syslog; XRMON; RFC 2613 SMON; RFC 2618 RADIUS Client MIB; RFC 791 IP; RFC 1757 RMON Groups 1,2,3,9; RFC 3176 sFlow	
Notes	When using mini-GBICs with this product, mini-GBICs with revision "B" (product number ends with the letter "B"; e.g., J4858B, J4859B) or later are required.	

ProCurve Switch 4208vl	What's included	1 ProCurve Switch gl/xl/vl Redundant Power Supply (J4839A)
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Technical Specifications

(J8773A)

Ports	8 open module slots 1 RS-232C DB-9 console port
	Maximum ports Supports a maximum of 192 10/100 ports, 128 10/100/1000 ports, or 32 mini-GBICs
Power supplies	Includes 1 x J4839A 1 open power-supply slot
Physical characteristics	Dimensions (D x W x H) 15.3 x 17.4 x 8.75 in. (38.86 x 44.2 x 22.23 cm) (5U height)
	Weight (fully loaded) 26.85 lb. (12.18 kg)
Memory and processor	Fabric module Motorola PowerPC MPC8245 @ 330 MHz, 24 MB flash, 64 MB SDRAM
	Packet buffer size 36 MB
Mounting	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included); horizontal surface mounting only
Performance	Latency <6 μ s (FIFO)
	Throughput Up to 48 million pps
	Switch fabric speed 76.8 Gbps
Environment	Operating temperature 32°F to 104°F (0°C to 40°C)
	Operating 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)
	Non-operating/Storage relative humidity 15% to 95%, non-condensing
	Altitude Up to 15,000 ft. (4.6 km)
	Acoustic DIN 45635 T.19 per ISO 7779 64.2 dB
Electrical characteristics	Maximum BTUs 2152 BTU/hr
	Voltage 100–127 VAC/200–240 VAC
	Current 8.2 A/3.8 A
	Power consumption 630 W
	Frequency 50/60 Hz
Safety	CSA 22.2 No. 950; UL 60950; EN60950
Emissions	FCC Class A; VCCI Class A; EN55022/CISPR-22 Class A; CISPR22 Class A; EN55024; IEC/EN61000-3-2; IEC/EN61000-3-3
Immunity	EN EN55024, CISPR 24
	ESD IEC 61000-4-2
	Radiated IEC 61000-4-3
	EFT/Burst IEC 61000-4-4
	Surge IEC 61000-4-5
	Conducted IEC 61000-4-6
	Power frequency magnetic field IEC 61000-4-8
	Voltage dips and interruptions IEC 61000-4-11
	Harmonics EN61000-3-2, IEC61000-3-2
	Flicker EN61000-3-3, IEC61000-3-3

Technical Specifications

Management	ProCurve Manager Plus; ProCurve Manager (included); command-line interface; Web browser; configuration menu; out-of-band management (DB-9 serial port console); IEEE 802.3 Ethernet MIB; Repeater MIB; Ethernet Interface MIB
Standards and protocols	RFC 783 TFTP; RFC 1542 BootP; RFC 768 UDP; RFC 792 ICMP; RFC 793 TCP; RFC 826 ARP; RFC 2030 SNTP; RFC 2030 Simple Network Time Protocol; IEEE 802.3x Flow Control; DHCP Relay; RFC 3046 DHCP relay Agent Information Option 82; RFC 3376 IGMPv1/v2/v3; IEEE 802.1D Spanning Tree; IEEE 802.1w Rapid Convergence Spanning Tree; IEEE 802.1s Multiple Spanning Trees; IEEE 802.3ad Link Aggregation Control Protocol; IEEE 802.1AB Link Layer Discovery Protocol; RFC 2474 DiffServ Precedence; RFC 2597 DiffServ Expedited Forwarding (EF); RFC 2598 DiffServ Assured Forwarding (AF); RFC 2138 RADIUS; SSHv2 Secure Shell; Secure Sockets Layer (SSL); IEEE 802.1X Network Login; IEEE 802.1Q VLAN tagging; IEEE 802.1Q GVRP; IEEE 802.1p Priority; SNMPv1/v2c/v3; RFC 1493 Bridge MIB; RFC 1213 MIB II; RFC 2737 Entity MIB; RFC 2665 Ethernet MIB; RFC 2668 IEEE 802.3 MAU MIB; RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events); RFC 3164 Syslog; XRMON; RFC 2613 SMON; RFC 2618 RADIUS Client MIB; RFC 791 IP; RFC 1757 RMON Groups 1,2,3,9; RFC 3176 sFlow
Notes	When using mini-GBICs with this product, mini-GBICs with revision "B" (product number ends with the letter "B"; e.g., J4858B, J4859B) or later are required.

ProCurve Switch 4208vl-64G (J8774A)	What's included	4 ProCurve Switch vl 16-Port Gig-T Modules (J8764A) 1 ProCurve Switch gl/xl/vl Redundant Power Supply (J4839A)
	Ports	4 open module slots 64 10/100/1000 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, IEEE 802.3ab 1000Base-T) 1 RS-232C DB-9 console port
	Maximum ports	Supports a maximum of 96 10/100 ports, 128 10/100/1000 ports, or 16 mini-GBICs
	Power supplies	Includes 1 x J4839A 1 open power-supply slot
Physical characteristics	Dimensions (D x W x H)	15.3 x 17.4 x 8.75 in. (38.86 x 44.2 x 22.23 cm) (5U height)
	Weight (fully loaded)	32.3 lb. (14.65 kg)
Memory and processor	Fabric module	Motorola PowerPC MPC8245 @ 330 MHz, 24 MB flash, 64 MB SDRAM
	Packet buffer size	36 MB
Mounting		Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included); horizontal surface mounting only
Performance	Latency	<6 μ s (FIFO)
	Throughput	Up to 48 million pps
	Switch fabric speed	76.8 Gbps

Technical Specifications

Environment	Operating temperature	32°F to 104°F (0°C to 40°C)
	Operating 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)
	Non-operating/Storage relative humidity	15% to 95%, non-condensing
Electrical characteristics	Maximum BTUs	2152 BTU/hr
	Voltage	100–127 VAC/200–240 VAC
	Current	8.2 A/3.8 A
	Power consumption	630 W
	Frequency	50/60 Hz
Safety	CSA 22.2 No. 950; UL 60950; EN60950	
Emissions	FCC Class A; VCCI Class A; EN55022/CISPR-22 Class A; CISPR22 Class A; EN55024; IEC/EN61000-3-2; IEC/EN61000-3-3	
Immunity	EN	EN55024, CISPR 24
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN61000-3-2, IEC61000-3-2
	Flicker	EN61000-3-3, IEC61000-3-3
Management	ProCurve Manager Plus; ProCurve Manager (included); command-line interface; Web browser; configuration menu; out-of-band management (DB-9 serial port console); IEEE 802.3 Ethernet MIB; Repeater MIB; Ethernet Interface MIB	
Standards and protocols	RFC 783 TFTP; RFC 1542 BootP; RFC 768 UDP; RFC 792 ICMP; RFC 793 TCP; RFC 826 ARP; RFC 2030 SNTP; RFC 2030 Simple Network Time Protocol; IEEE 802.3x Flow Control; DHCP Relay; RFC 3046 DHCP relay Agent Information Option 82; RFC 3376 IGMPv1/v2/v3; IEEE 802.1D Spanning Tree; IEEE 802.1w Rapid Convergence Spanning Tree; IEEE 802.1s Multiple Spanning Trees; IEEE 802.3ad Link Aggregation Control Protocol; IEEE 802.1AB Link Layer Discovery Protocol; RFC 2474 DiffServ Precedence; RFC 2597 DiffServ Expedited Forwarding (EF); RFC 2598 DiffServ Assured Forwarding (AF); RFC 2138 RADIUS; SSHv2 Secure Shell; Secure Sockets Layer (SSL); IEEE 802.1X Network Login; IEEE 802.1Q VLAN tagging; IEEE 802.1Q GVRP; IEEE 802.1p Priority; SNMPv1/v2c/v3; RFC 1493 Bridge MIB; RFC 1213 MIB II; RFC 2737 Entity MIB; RFC 2665 Ethernet MIB; RFC 2668 802.3 MAU MIB; RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events); RFC 3164 Syslog; XRMON; RFC 2613 SMON; RFC 2618 RADIUS Client MIB; RFC 791 IP; RFC 1757 RMON Groups 1,2,3,9; RFC 3176 sFlow	

Technical Specifications

Notes	When using mini-GBICs with this product, mini-GBICs with revision "B" (product number ends with the letter "B"; e.g., J4858B, J4859B) or later are required.	
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ProCurve Switch 4208vl-96 (J8775A)	What's included	4 ProCurve Switch vl 24-Port 10/100-TX Modules (J8765A) 1 ProCurve Switch gl/xl/vl Redundant Power Supply (J4839A)
	Ports	4 open module slots 96 10/100 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX) 1 RS-232C DB-9 console port
	Maximum ports	Supports a maximum of 192 10/100 ports, 64 10/100/1000 ports, or 16 mini-GBICs
	Power supplies	Includes 1 x J4839A 1 open power-supply slot
	Physical characteristics	Dimensions (D x W x H) 15.3 x 17.4 x 8.75 in. (38.86 x 44.2 x 22.23 cm) (5U height) Weight (fully loaded) 32.3 lb. (14.65 kg)
	Memory and processor	Fabric module Motorola PowerPC MPC8245 @ 330 MHz, 24 MB flash, 64 MB SDRAM Packet buffer size 36 MB
	Mounting	Mounts in an EIA-standard 19 in. telco rack or equipment cabinet (hardware included); horizontal surface mounting only
	Performance	Latency <6 μ s (FIFO) Throughput Up to 48 million pps Switch fabric speed 76.8 Gbps
	Environment	Operating temperature 32°F to 104°F (0°C to 40°C) Operating 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) Non-operating/Storage relative humidity 15% to 95%, non-condensing Altitude Up to 15,000 ft. (4.6 km) Acoustic DIN 45635 T.19 per ISO 7779 64.2 dB
	Electrical characteristics	Maximum BTUs 2152 BTU/hr Voltage 100-127 VAC/200-240 VAC Current 8.2 A/3.8 A Power consumption 630 W Frequency 50/60 Hz
	Safety	CSA 22.2 No. 950; UL 60950; EN60950
	Emissions	FCC Class A; VCCI Class A; EN55022/CISPR-22 Class A; CISPR22 Class A; EN55024; IEC/EN61000-3-2; IEC/EN61000-3-3

Technical Specifications

Immunity	EN	EN55024, CISPR 24
	ESD	IEC 61000-4-2
	Radiated	IEC 61000-4-3
	EFT/Burst	IEC 61000-4-4
	Surge	IEC 61000-4-5
	Conducted	IEC 61000-4-6
	Power frequency magnetic field	IEC 61000-4-8
	Voltage dips and interruptions	IEC 61000-4-11
	Harmonics	EN61000-3-2, IEC61000-3-2
	Flicker	EN61000-3-3, IEC61000-3-3
Management	ProCurve Manager Plus; ProCurve Manager (included); command-line interface; Web browser; configuration menu; out-of-band management (DB-9 serial port console); IEEE 802.3 Ethernet MIB; Repeater MIB; Ethernet Interface MIB	
Standards and protocols	RFC 783 TFTP; RFC 1542 BootP; RFC 768 UDP; RFC 792 ICMP; RFC 793 TCP; RFC 826 ARP; RFC 2030 SNMP; RFC 2030 Simple Network Time Protocol; IEEE 802.3x Flow Control; DHCP Relay; RFC 3046 DHCP relay Agent Information Option 82; RFC 3376 IGMPv1/v2/v3; IEEE 802.1D Spanning Tree; IEEE 802.1w Rapid Convergence Spanning Tree; IEEE 802.1s Multiple Spanning Trees; IEEE 802.3ad Link Aggregation Control Protocol; IEEE 802.1AB Link Layer Discovery Protocol; RFC 2474 DiffServ Precedence; RFC 2597 DiffServ Expedited Forwarding (EF); RFC 2598 DiffServ Assured Forwarding (AF); RFC 2138 RADIUS; SSHv2 Secure Shell; Secure Sockets Layer (SSL); IEEE 802.1X Network Login; IEEE 802.1Q VLAN tagging; IEEE 802.1Q GVRP; IEEE 802.1p Priority; SNMPv1/v2c/v3; RFC 1493 Bridge MIB; RFC 1213 MIB II; RFC 2737 Entity MIB; RFC 2665 Ethernet MIB; RFC 2668 IEEE 802.3 MAU MIB; RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events); RFC 3164 Syslog; XRMON; RFC 2613 SMON; RFC 2618 RADIUS Client MIB; RFC 791 IP; RFC 1757 RMON Groups 1,2,3,9; RFC 3176 sFlow	
Notes	When using mini-GBICs with this product, mini-GBICs with revision "B" (product number ends with the letter "B"; e.g., J4858B, J4859B) or later are required.	

Modules and RPS

ProCurve Switch vl 12-Port 100FX MTRJ Module (J8763A) With 12 100-FX fiber MTRJ ports	Ports	12 100Base-FX ports (IEEE 802.3u Type 100Base-FX) Duplex: half or full Connectors: MTRJ
	Physical characteristics	Dimensions (D x W x H): 8.97 x 8.0 x 1.75 in. (22.78 x 20.32 x 4.45 cm) Weight: 1.79 lb. (0.81 kg)
	Cabling	Type: <ul style="list-style-type: none"> 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
	Maximum distance	2 km (full duplex) or 412 m (half duplex)
ProCurve Switch vl 16-Port Gig-T Module (J8764A) With 16 RJ-45 10/100/1000-T ports	Ports	16 auto-sensing 10/100/1000 ports (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-TX; IEEE 802.3ab Type 1000Base-T) ProCurve/IEEE Auto-MDIX: yes Duplex: half or full Connectors: RJ-45
	Physical characteristics	Dimensions (D x W x H): 8.97 x 8.0 x 1.75 in. (22.78 x 20.32 x 4.45 cm) Weight: 1.54 lb. (0.7 kg)
	Cabling	Type: <ul style="list-style-type: none"> 1000Base-T: Category 5 (5E or better recommended), 100 differential 4-pair unshielded twisted pair (UTP) or shielded twisted pair (STP) balanced, complying with IEEE 802.3ab 1000Base-T
	Notes	Requires revision "B" or later mini-GBICs (product number ends in "B").
ProCurve Switch vl 4-Port Mini-GBIC Module (J8776A) With 4 mini-GBIC XCVR slots for the Switch 4200vl series chassis	Ports	Duplex: full Connectors: LC
	Physical characteristics	Dimensions (D x W x H): 8.97 x 8.0 x 1.75 in. (22.78 x 20.32 x 4.45 cm) Weight: 1.43 lb. (0.65 kg)
	Mini-GBICs supported (ordered separately)	<ul style="list-style-type: none"> J4858B ProCurve Gigabit-SX-LC Mini-GBIC J4859B ProCurve Gigabit-LX-LC Mini-GBIC J4860B ProCurve Gigabit-LH-LC Mini-GBIC J8177B ProCurve Gigabit 1000Base-T Mini-GBIC
	Notes	Requires revision "B" or later mini-GBICs (product number ends in "B").

Modules and RPS

ProCurve Switch vl 24-Port 10/100-TX Module (J8765A)

With 24 RJ-45 10/100 ports for the Switch 4200vl series chassis

Ports	24 auto-sensing 10/100 ports (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-TX) ProCurve Auto-MDIX: yes IEEE Auto-MDI: yes Duplex: half or full Connectors: RJ-45
Physical characteristics	Dimensions (D x W x H): 8.97 x 8.0 x 1.75 in. (22.78 x 20.32 x 4.45 cm) Weight: 1.43 lb. (0.65 kg)
Cabling	Type: <ul style="list-style-type: none"> 100Base-TX: Category 5 (or better), 100 differential unshielded twisted pair (UTP) or shielded twisted pair (STP), complying with IEEE 802.3u 100Base-TX <p>Maximum distance: 100 m</p>

Additional Accessories	ProCurve Switch gl/xl/vl Redundant Power Supply	J4839A
	ProCurve Gigabit 1000Base-T Mini-GBIC	J8177B
	ProCurve Gigabit-LH-LC Mini-GBIC	J4860B
	ProCurve Gigabit-LX-LC Mini-GBIC	J4859B
	ProCurve Gigabit-SX-LC Mini-GBIC	J4858B
	ProCurve Manager 2.1	
	ProCurve Manager Plus 2.1 100 device limited version	J8778A
	ProCurve Manager Plus 2.1 upgrade to unlimited license	J8779A
	ProCurve Manager Plus 2.1 100 device Upgrade	J8991A
	ProCurve Manager Plus 2.1 unlimited license	J9009A
	ProCurve Identity Driven Manager 2.0 base product 500 user license	J9012A
	ProCurve Identity Driven Manager 2.0 base product upgrade from 1.0	J9013A
	ProCurve Identity Driven Manager 2.0 Add 2000 users license	J9014A

Services for accessories are covered under the product in which they are installed.
See the ProCurve Mini-GBICs QuickSpec for details at http://h18000.www1.hp.com/products/quickspecs/11988_div/11988_div.HTML

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