HP 4200G Switch Series

Overview

Models

HP 4200-12G Switch JE015A

Key features

- Entry-level switching, enterprise-class features
- Affordable price
- Out-of-the-box plug-and-play simplicity
- Access control lists for improved security
- Energy efficient; quiet, fan-free design

Product overview

HP 4200G Switch Series are entry-level Gigabit Ethernet LAN switches with enterprise-class quality of service (QoS), security, and management features, delivering high value for network administrators looking for an economical edge device. Dual-personality ports allow flexibility, including the ability to add 10 Gigabit Ethernet capability. Setting them apart from lower-end devices, the series switches support an industry-standard command-line interface, Web-based administration, and SNMP management.

Features and benefits

Quality of Service (QoS)

- Traffic prioritization (IEEE 802.1p): allows real-time traffic classification into eight priority levels mapped to eight queues
- Rate limiting: sets per-port ingress enforced maximums and per-port, per-queue guaranteed minimums
- 802.1p/Q VLAN tagging: delivers data to devices based on the priority and type of traffic; supports IEEE 802.1Q

Management

- Remote configuration and management: is available through a secure Web browser or a command-line interface (CLI)
- Management VLAN: segments traffic to and from management interfaces, including CLI/telnet, a Web browser interface, and SNMP
- RADIUS accounting support: separates RADIUS accounting server support per SSID; provides detailed session, usage, and billing information for each client activity
- SNMPv1, v2c, and v3: facilitate centralized discovery, monitoring, and secure management of networking devices
- 3Com-heritage Comware V3 Operating System: CLI and Web user interface in common with HP E4XXX and E55XX series switches
- Port mirroring: enables traffic on a port to be simultaneously sent to a network analyzer for monitoring
- Network Time Protocol (NTP): synchronizes timekeeping among distributed time servers and clients; keeps consistent
 timekeeping among all clock-dependent devices within the network so that the devices can provide diverse applications based
 on the consistent time
- Enterprise network management: is supported by the Web-based, enterprise-class HP Intelligent Management Center (IMC)
 network management platform and Wireless Service Management (WSM), which effectively integrate traditionally disparate
 management tools into one easy-to-use interface

Connectivity

- Auto-MDIX: automatically adjusts for straight-through or crossover cables on all 10/100 and 10/100/1000 ports
- Dual-personality functionality: includes four 10/100/1000 ports or SFP slots for optional fiber connectivity such as Gigabit-



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Overview

SX, -LX, and -LH, or 100-FX

- Jumbo packet support: supports up to 9216-byte frame size to improve the performance of large data transfers
- Optional 10 Gigabit Ethernet ports: add 10 Gigabit Ethernet connections for uplinks or high-bandwidth server connections;
 flexibly support XENPAK or XFP-style 10 Gigabit transceivers

Manageability

- RMON (remote monitoring): provides advanced monitoring and reporting capabilities for statistics, history, alarms, and events
- Full-featured console: provides complete control of the switch with a familiar command-line interface (CLI)
- Web interface: allows configuration of the switch from any Web browser on the network
- Software updates: free downloads from the Web
- Virtual stacking capability: single IP address management for a virtual stack of up to 255 Comware-based 3Com legacy devices, including HP 4XXX and 55XX series switches

Layer 2 switching

- VLAN support and tagging: support up to 64 port-based VLANs and dynamic configuration of IEEE 802.1Q VLAN tagging, providing security between workgroups
- GARP VLAN Registration Protocol: allows automatic learning and dynamic assignment of VLANs
- IP multicast snooping and data-driven IGMP: automatically prevents flooding of IP multicast traffic
- VLANs: support up to 4096 port or IEEE 802.1Q-based VLANs

Layer 3 routing

• Static IPv4 routing: provides simple, manually configured IPv4 routing

Security

- Access control lists (ACLs): provide IP Layer 3 filtering based on source/destination IP address/subnet and source/destination TCP/UDP port number
- RADIUS/TACACS+: eases switch management security administration by using a password authentication server
- IEEE 802.1X and RADIUS network logins: control port-based access for authentication and accountability
- Secure File Transfer Protocol: allows secure file transfer to and from the switch; protects against unwanted file downloads or unauthorized copying of switch configuration file

Convergence

 Automated voice VLAN assignment: recognizes IP phones and automatically assigns voice traffic to a dedicated VLAN for IP phones

Warranty and support

- Lifetime warranty: for as long as you own the product with advance replacement and next-business-day delivery (available in most countries)†
- Electronic and telephone support: limited electronic and telephone support is available from HP; refer to: www.hp.com/networking/warranty for details on the support provided and the period during which support is available
- Software releases: refer to: www.hp.com/networking/warranty for details on the software releases provided and the period during which software releases are available for your product(s)

†Hardware warranty replacement for as long as you own the product, with next business day advance replacement (available in most countries) with a five-year hardware warranty replacement for the disk drive included with HP AllianceONE Services zl Module, HP Threat Management Services zl Module, HP PCM+ Agent with AllianceONE Services zl Module, and HP MSM765 zl Mobility Controller. For details, refer to the HP Software License, Warranty, and Support booklet at: www.hp.com/networking/warranty.



HP 4200G Switch Series

Technical Specifications

HP 4200-12G Switch (JE015A)

Ports 8 RJ-45 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX,

IEEE 802.3ab Type 1000BASE-T); Media Type: Auto-MDIX; Duplex: 10BASE-T/100BASE-TX: half or full;

1000BASE-T: full only

4 SFP dual-personality 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-

TX, IEEE 802.3ab Type 1000BASE-T) 1 open 10-GbE XENPAK transceiver slot

1 RJ-45 serial console port

Supports a maximum of 1 10-GbE ports, with optional module

Physical characteristics **Dimensions** 11.81(d) x 17.4(w) x 1.73(h) in. (30.0 x 44.2 x 4.4 cm) (1U height)

> Weight 8.38 lb. (3.8 kg)

Processor BCM5836 @ 200 MHz, 16 MB flash, 64 MB RAM; packet buffer size: .75 Memory and processor

Mounting Mounts in an EIA standard 19-in. telco rack or equipment cabinet (hardware included)

Performance Routing table size 32 entries

> MAC address table size 8192 entries

59 Reliability MTBF (years)

Environment 32°F to 104°F (0°C to 40°C) Operating temperature

Operating relative

10% to 95%, noncondensing humidity

Nonoperating/Storage temperature

14°F to 158°F (-10°C to 70°C)

Nonoperating/Storage

relative humidity

10% to 95%, noncondensing

Electrical characteristics Maximum heat dissipation 101 BTU/hr (106.56 kJ/hr)

> Voltage 100-240 VAC

Current 1.5 A Maximum power rating 30 W 50/60 Hz Frequency

Notes Maximum power rating and maximum heat dissipation are the worst-case

> theoretical maximum numbers provided for planning the infrastructure with fully loaded PoE (if equipped), 100% traffic, all ports plugged in, and all

modules populated.

UL 60950-1:2003; CSA 22.2 60950-1:2003; IEC 60950-1:2001; EN 60950-1:2001 Safety

Emissions VCCI Class A; CISPR 22 Class A; EN 55022/A2; IEC/EN 61000-3-2; IEC/EN 61000-3-3; EN 55022

1998 Class A; ICES-003 Class A; Korean EMI Class A

EN55024: 1998+A1:2001+A2:2003 **Immunity** Generic

Management IMC - Intelligent Management Center; command-line interface; Web browser; Telnet; RMON1; FTP

Refer to the HP website at: www.hp.com/networking/services for details on the service-level descriptions Services

and product numbers. For details about services and response times in your area, please contact your

local HP sales office.



HP 4200G Switch Series

Technical Specifications

Standards and protocols

(applies to all products in series)

General protocols

IEEE 802.1D MAC Bridges

IEEE 802.1p Priority
IEEE 802.1Q VLANs

IEEE 802.1s (MSTP)
IEEE 802.1w Rapid Reconfiguration of Spanning

Tree

IEEE 802.1X PAE

IEEE 802.3 Type 10BASE-T IEEE 802.3ab 1000BASE-T

IEEE 802.3ad Link Aggregation (LAG)

IEEE 802.3ae 10-Gigabit Ethernet

IEEE 802.3i 10BASE-T IEEE 802.3u 100BASE-X IEEE 802.3x Flow Control IEEE 802.3z 1000BASE-X

RFC 768 UDP

RFC 783 TFTP Protocol (revision 2)

RFC 791 IP RFC 792 ICMP RFC 793 TCP RFC 826 ARP RFC 854 TELNET RFC 951 BOOTP RFC 1305 NTPv3

RFC 1350 TFTP Protocol (revision 2)

RFC 1519 CIDR RFC 1812 IPv4 Routing RFC 2131 DHCP

RFC 2236 IGMP Snooping RFC 2284 EAP over LAN

RFC 2616 Hypertext Transfer Protocol -- HTTP/1.1

RFC 2865 Remote Authentication Dial In User Service (RADIUS)

IPv6

RFC 2463 ICMPv6

MIBs

RFC 1212 Concise MIB Definitions

RFC 1213 MIB II

RFC 1215 A Convention for Defining Traps for use

with the SNMP

RFC 1493 Bridge MIB

RFC 1757 Remote Network Monitoring MIB

RFC 2096 IP Forwarding Table MIB

RFC 2233 Interface MIB

RFC 2571 SNMP Framework MIB RFC 2572 SNMP-MPD MIB RFC 2573 SNMP-Notification MIB RFC 2573 SNMP-Target MIB

RFC 2574 SNMP USM MIB

RFC 2618 RADIUS Authentication Client MIB RFC 2620 RADIUS Accounting Client MIB

RFC 2620 RADIUS Accounting MIB RFC 2665 Ethernet-Like-MIB

RFC 2668 802.3 MAU MIB

RFC 2674 802.1p and IEEE 802.1Q Bridge MIB

RFC 2737 Entity MIB (Version 2)

RFC 2819 RMON MIB

RFC 2863 The Interfaces Group MIB

RFC 2925 Ping MIB

RFC 3414 SNMP-User based-SM MIB RFC 3415 SNMP-View based-ACM MIB

RFC 3418 MIB for SNMPv3 RFC 3621 Power Ethernet MIB

Network management

RFC 1157 SNMPv1

RFC 2819 Four groups of RMON: 1 (statistics), 2

(history), 3 (alarm) and 9 (events) RFC 2819 Remote Network Monitoring Management Information Base

QoS/CoS

RFC 2474 DS Field in the IPv4 and IPv6 Headers RFC 2597 DiffServ Assured Forwarding (AF)

RFC 2598 DiffServ Expedited Forwarding (EF)



HP 4200G Switch Series

Accessories

accessories

Transceivers	
HP X125 1G SFP LC LH70 Transceiver	JD063B
HP X120 1G SFP LC SX Transceiver	JD118B
HP X124 1G SFP LC SX Transceiver	JD493A
HP X130 10G XENPAK SC SR Transceiver	JD106B
HP X130 10G XENPAK SC LX4 Transceiver	JD499A
HHP X130 10G XENPAK CX4 Transceiver	JD502A



HP 4200G Switch Series

Accessory Product Details

NOTE: Details are not available for all accessories. The following specifications were available at the time of publication.

HP X125 TG SFP LC P	orts?	I LC	TOOOBASE	:-LH port	(no l	EEE standard exists tor	1550 n	m optics)
11170 T								

LH70 Transceiver Connectivity

(JD063B)

A small form-factor pluggable (SFP) Gigabit LH70 transceiver that provides a full-duplex Gigabit solution up to 70km on a single-mode fiber.

transceiver that provides a

solution up to 550m on a

full-duplex Gigabit

Multimode fiber.

onnectivity Connector type LC

Wavelength 1550 nm

Dimensions 2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x

1.17 cm)

Full configuration weight 0.04 lb. (0.02 kg)

Electrical characteristics Power consumption 0.8 W

typical

Power consumption 1.0 W

maximum

Cabling Cable type:

Single-mode fiber optic, complying with ITU-T G.652;

Maximum distance:

• 70km

Fiber type Single Mode

Services Refer to the HP website at www.hp.com/networking/services for details on

the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales

office.

HP X120 1G SFP LC SX Ports 1 LC 1000BASE-SX port

Physical characteristics

Transceiver (JD118B) Connectivity Connector type LC

A small form-factor Wavelength 850 n

pluggable (SFP) Gigabit SX Physical characteristics Dimensions 2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x

1.17 cm)

Full configuration weight 0.04 lb. (0.02 kg)

Electrical characteristics Power consumption 0.8 W

typical

Power consumption 1.0 W

maximum

Cabling Maximum distance:

• FDDI Grade distance = 220m

OM1 = 275mOM2 = 500m

• OM3 = Not Specified by standard

Cable length up to 550m Fiber type Multi Mode

Services Refer to the HP website at www.hp.com/networking/services for details on

the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales

office.



HP 4200G Switch Series

Accessory Product Details

HP X124 1G SFP LC SX Transceiver (JD493A) JD493A HP X124 1G SFP LC SX Transceiver that provides a full duplex Gigabit solution up to 550m on Multi Mode fiber.	Ports	1 LC 1000BASE-SX port					
	Connectivity	Connector type	LC				
		Wavelength	850 nm				
	Physical characteristics	Dimensions	2.17(d) x 0.6(w) x 0.46(h) in. (5.51 x 1.52 x 1.17 cm)				
		Full configuration weight	0.04 lb. (0.02 kg)				
	Electrical characteristics	Power consumption typical	0.8 W				
		Power consumption maximum	1.0 W				
	Cabling	Maximum distance: • 220m-550m					
		Fiber type	Multi Mode				
	Services	Refer to the HP website at www.hp.com/networking/services for details on the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales office.					
HP X130 10G XENPAK SC LX4 Transceiver (JD499A)	Ports	1 SC 10-GbE port; Duple	x: full only				
	Connectivity	Connector type	SC				
		Wavelength	1310 nm				
HP X130 SC LX4 XENPAK Transceiver provides full duplex 10 Gigabit solution for up to 300m on Multimode fiber.	Physical characteristics	Dimensions	4.76(d) x 1.42(w) x 0.69(h) in. (12.1 x 3.6 x 1.74 cm)				
	Electrical characteristics	Power consumption maximum	9.0 W				
		Maximum distance: • 300M Using Multimode cable					

Fiber type

office.

Services

Multi Mode

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HP 4200G Switch Series

Accessory Product Details

HP X130 10G XENPAK Ports 1 CX4 10-GbE port (IEEE 802.3ak Type 10GBASE-CX4); Duplex: full only

CX4 Transceiver (JD502A) Connectivity Connector type CX4

Physical characteristics Dimensions $4.76(d) \times 1.42(w) \times 0.69(h)$ in. $(12.1 \times 3.6 \times 1.42(w) \times 0.69(h))$ in.

1.74 cm)

Environment Operating temperature 32°F to 158°F (0°C to 70°C)

Electrical characteristics Power consumption 1.6 W

typical

Cabling Maximum distance:

• 15m CX4 Cable

Cable length 15m

Services Refer to the HP website at: www.hp.com/networking/services for details on

the service-level descriptions and product numbers. For details about services and response times in your area, please contact your local HP sales

office.

To learn more, visit: www.hp.com/networking

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