

Overview

Models

HP E4200-12G 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 E4200G 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-SX, -LX, -LH, or 100-FX



Overview

- **Jumbo packet support:** supports up to 9216-byte frame size to improve 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 E4XXX and E55XX 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 (GVRP):** 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 (FTP):** 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 E-MSM765 zl Mobility Controller. For details, refer to the HP Software License, Warranty, and Support booklet at: www.hp.com/networking/warranty.



Technical Specifications

HP E4200-12G 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)
Memory and processor	Processor	BCM5836 @ 200 MHz, 16 MB flash, 64 MB RAM; packet buffer size: .75 MB
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	8,192 entries
Reliability	MTBF (years)	59
Environment	Operating temperature	32°F to 104°F (0°C to 40°C)
	Operating relative humidity	10% to 95%, noncondensing
	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
	Frequency	50 / 60 Hz
	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.
Safety	UL 60950-1:2003; CSA 22.2 60950-1:2003; IEC 60950-1:2001; EN 60950-1:2001	
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	
Immunity	Generic	EN55024: 1998+A1:2001+A2:2003
Management	IMC - Intelligent Management Center; command-line interface; Web browser; Telnet; RMON1; FTP	
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.	



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)
RFC 2866 RADIUS Accounting

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)



Accessories

HP E4200G Switch Series Transceivers

accessories	HP X125 1G SFP LC LH70 Transceiver	JD063B
	HP X125 1G SFP LC SX Transceiver	JD118B
	HP X124 1G SFP LC SX Transceiver	JD493A
	HP X135 SC SR XENPAK Transceiver	JD106B
	HP X130 SC LX4 XENPAK Transceiver	JD499A
	HP X130 CX4 XENPAK Transceiver	JD502A

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

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