QuickSpecs

Overview

Models

HP E4210-8 Switch	JE022A
HP E4210-16 Switch	JE025A
HP E4210-24 Switch	JF427A
HP E4210-48 Switch	JE027A
HP E4210-8-PoE Switch	JE029A
HP E4210-16-PoE Switch	JE031A
HP E4210-24-PoE Switch	JE033A

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 (non-PoE)

Product overview

HP E4210 Switch Series are entry-level 10/100 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. Available Power over Ethernet (PoE) models are ideal for Voice over IP and wireless networking installations, while non-PoE models are also available for simple port expansion. Dual-personality ports allow flexibility, setting them apart from lower-end devices. The series supports an industry-standard command-line interface, Web-based administration, and SNMP management. Switches can be clustered in any combination up to 255 units for simplified administration. In addition to rack-mount models, HP E4210 switches are available in small form factor units for enterprise branch and small workgroup deployments, in both PoE and non-PoE versions, with the same manageability as the larger rack-mount models.

Features and benefits

Quality of Service (QoS)

- **Traffic prioritization** (IEEE 802.1p): allows real-time traffic classification mapped to four hardware queues per port

Management

- **Secure Web GUI**: provides a secure, easy-to-use graphical interface for configuring the module via HTTPS
- **Command-line interface** (CLI): provides a secure, easy-to-use command-line interface for configuring the module via SSH or a switch console; provides direct real-time session visibility
- **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

Connectivity

- **Gigabit uplinks**: dual-personality ports for either 10/100/1000 or mini-GBIC SFP connectivity for increased connectivity flexibility

Overview

- **Auto-MDIX**: automatically adjusts for straight-through or crossover cables on all 10/100 and 10/100/1000 ports

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
- **Multiple configuration files**: allow multiple configuration files to be stored to flash image
- **Software updates**: free downloads from the Web
- **IEEE 802.1AB Link Layer Discovery Protocol** (LLDP): automated device discovery protocol provides easy mapping using network management applications
- **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

- **GARP VLAN Registration Protocol** (GVRP): allows automatic learning and dynamic assignment of VLANs
- **VLAN support and tagging**: support IEEE 802.1Q, with 4094 simultaneous VLAN IDs

Security

- **Access control lists** (ACLs): provide IP Layer 3 filtering based on source/destination IP address/subnet and source/destination TCP/UDP port number (may not apply to all models; see specifications for more details)
- **RADIUS/TACACS+**: eases switch management security administration by using a password authentication server
- **Secure Shell** (SSHv2): encrypts all transmitted data for secure, remote command-line interface (CLI) access over IP networks
- **Secure Web management with HTTPS and SSL**: encrypts all HTTP traffic, allowing secure access to the browser-based management GUI in the switch (may not apply to all models; see specifications for more details)
- **IEEE 802.1X and RADIUS network logins**: control port-based access for authentication and accountability
- **Port security**: allows access only to specified MAC addresses, which can be learned or specified by the administrator
- **Switch management logon security**: can require either RADIUS or TACACS+ authentication for secure switch CLI logon
- **Secure management access**: securely encrypts all access methods (CLI, GUI, or MIB) through SSHv2, SSL, and/or SNMPv3
- **Custom banner**: displays security policy when users log in to the switch
- **Management password**: provides security so that only authorized access to the Web browser interface is allowed
- **Automatic VLAN assignment**: automatically assigns users to the appropriate VLAN based on their identity and location and the time of day

Convergence

- **LLDP-MED** (Media Endpoint Discovery): is a standard extension of LLDP that stores values for parameters such as QoS and VLAN to automatically configure network devices such as IP phones
- **Automated voice VLAN assignment**: recognizes IP phones and automatically assigns voice traffic to dedicated VLAN for IP phones (may not apply to all models; see specifications for more details)

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

Overview

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 E4210-8 Switch (JE022A)

Ports	8 RJ-45 auto-sensing 10/100 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX); Media Type: Auto-MDIX; Duplex: half or full	
	1 dual-personality 10/100/1000 port (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, IEEE 802.3ab Type 1000Base-T)	
	1 RJ-45 serial console port	
Physical characteristics	Dimensions	6.3(d) x 9.1(w) x 1.7(h) in. (16 x 23.11 x 4.32 cm) (1U height)
	Weight	2.3 lb. (1.04 kg)
Memory and processor	Processor	Broadcom 4704 @ 200 MHz, 8 MB flash, 64 MB SDRAM; packet buffer size: 256 KB
Mounting	Shipped for desktop operation. Optional angle mounting set is available for mounting in an EIA standard 19-in. telco rack or equipment cabinet (hardware not included)	
Performance	Throughput	up to 2.7 million pps
	Routing/Switching capacity	3.6 Gbps
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	10% to 95%, non-condensing
	Non-operating/Storage temperature	14°F to 158°F (-10°C to 70°C)
	Non-operating/Storage relative humidity	10% to 95%, non-condensing
Electrical characteristics	Voltage	100-240 VAC
	Frequency	50 / 60 Hz
Safety	CSA 22.2 No. 60950; UL 60950-1; IEC 60950-1; EN 60950-1	
Emissions	VCCI Class A; EN 55022 Class A; EN 55024; ICES-003 Class A	
Management	IMC - Intelligent Management Center; command-line interface; Web browser; out-of-band management (serial RS-232C); SNMP Manager; Telnet; IEEE 802.3 Ethernet MIB	
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 802.1ag Service Layer OAM IEEE 802.1D MAC Bridges IEEE 802.1p Priority IEEE 802.1Q (GVRP) IEEE 802.1Q VLANs IEEE 802.1s (MSTP) IEEE 802.1v VLAN classification by Protocol and Port IEEE 802.1w Rapid Reconfiguration of Spanning Tree IEEE 802.1X PAE IEEE 802.3ad Link Aggregation (LAG) IEEE 802.3i 10Base-T IEEE 802.3u 100BASE-X IEEE 802.3x Flow Control IEEE 802.3z 1000BASE-X RFC 768 UDP RFC 792 ICMP RFC 793 TCP RFC 826 ARP RFC 854 TELNET RFC 951 BOOTP RFC 1350 TFTP Protocol (revision 2) RFC 1542 Clarifications and Extensions for the Bootstrap Protocol RFC 3576 Ext to RADIUS (CoA only) RFC 4675 RADIUS VLAN & Priority	**RFC 2572 SNMP-MPD MIB** RFC 2573 SNMP-Notification MIB RFC 2574 SNMP USM MIB RFC 2618 RADIUS Client MIB RFC 2620 RADIUS Accounting MIB RFC 2665 Ethernet-Like-MIB RFC 2674 802.1p and IEEE 802.1Q Bridge MIB RFC 2688 MAU-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 3826 AES for SNMP's USM MIB RFC 4133 Entity MIB (Version 3)

General protocols
IEEE 802.1ag Service Layer OAM
IEEE 802.1D MAC Bridges
IEEE 802.1p Priority
IEEE 802.1Q (GVRP)
IEEE 802.1Q VLANs
IEEE 802.1s (MSTP)
IEEE 802.1v VLAN classification by Protocol and Port
IEEE 802.1w Rapid Reconfiguration of Spanning Tree
IEEE 802.1X PAE
IEEE 802.3ad Link Aggregation (LAG)
IEEE 802.3i 10Base-T
IEEE 802.3u 100BASE-X
IEEE 802.3x Flow Control
IEEE 802.3z 1000BASE-X
RFC 768 UDP
RFC 792 ICMP
RFC 793 TCP
RFC 826 ARP
RFC 854 TELNET
RFC 951 BOOTP
RFC 1350 TFTP Protocol (revision 2)
RFC 1542 Clarifications and Extensions for the Bootstrap Protocol
RFC 3576 Ext to RADIUS (CoA only)
RFC 4675 RADIUS VLAN & Priority

MIBs
IEEE 8021-PAE-MIB
IEEE 8023-LAG-MIB
RFC 1213 MIB II
RFC 1493 Bridge MIB
RFC 1757 Remote Network Monitoring MIB
RFC 1907 SNMPv2 MIB
RFC 2013 SNMPv2 MIB for UDP
RFC 2096 IP Forwarding Table MIB
RFC 2233 Interfaces MIB
RFC 2273 SNMP-NOTIFICATION-MIB
RFC 2571 SNMP Framework MIB

RFC 2572 SNMP-MPD MIB
RFC 2573 SNMP-Notification MIB
RFC 2574 SNMP USM MIB
RFC 2618 RADIUS Client MIB
RFC 2620 RADIUS Accounting MIB
RFC 2665 Ethernet-Like-MIB
RFC 2674 802.1p and IEEE 802.1Q Bridge MIB
RFC 2688 MAU-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 3826 AES for SNMP's USM MIB
RFC 4133 Entity MIB (Version 3)

Network management
IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
IEEE 802.1D (STP)
RFC 1215 SNMP Generic traps
RFC 2571 SNMP Management Frameworks
RFC 2572 SNMPv3 Message Processing
RFC 2573 SNMPv3 Applications
RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events)
RFC 3414 SNMPv3 User-based Security Model (USM)
ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED)
SNMPv1/v2c/v3

Security
IEEE 802.1X Port Based Network Access Control
RFC 1492 TACACS+
RFC 2865 RADIUS Authentication
RFC 2866 RADIUS Accounting
Secure Sockets Layer (SSL)
SSHv2 Secure Shell

QuickSpecs

Technical Specifications

HP E4210-16 Switch (JE025A)

Ports	16 RJ-45 auto-sensing 10/100 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX); Media Type: Auto-MDIX; Duplex: half or full	
	2 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 RJ-45 serial console port	
Physical characteristics	Dimensions	6.3(d) x 14.2(w) x 1.7(h) in. (16 x 36.07 x 4.32 cm) (1U height)
	Weight	3.4 lb. (1.54 kg)
Memory and processor	Processor	Broadcom 4704 @ 200 MHz, 8 MB flash, 64 MB SDRAM; packet buffer size: 256 KB
Mounting	Shipped for desktop operation. Optional angle mounting set is available for mounting in an EIA standard 19-in. telco rack or equipment cabinet (hardware not included)	
Performance	Throughput	up to 5.4 million pps
	Routing/Switching capacity	7.2 Gbps
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	10% to 95%, non-condensing
	Non-operating/Storage temperature	14°F to 158°F (-10°C to 70°C)
	Non-operating/Storage relative humidity	10% to 95%, non-condensing
Electrical characteristics	Voltage	100-240 VAC
	Frequency	50 / 60 Hz
Safety	CSA 22.2 No. 60950; UL 60950-1; IEC 60950-1; EN 60950-1	
Emissions	VCCI Class A; EN 55022 Class A; EN 55024; ICES-003 Class A	
Management	IMC - Intelligent Management Center; command-line interface; Web browser; out-of-band management (serial RS-232C); SNMP Manager; Telnet; IEEE 802.3 Ethernet MIB	
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 802.1ag Service Layer OAM
IEEE 802.1D MAC Bridges
IEEE 802.1p Priority
IEEE 802.1Q (GVRP)
IEEE 802.1Q VLANs
IEEE 802.1s (MSTP)
IEEE 802.1v VLAN classification by Protocol and Port
IEEE 802.1w Rapid Reconfiguration of Spanning Tree
IEEE 802.1X PAE
IEEE 802.3ad Link Aggregation (LAG)
IEEE 802.3i 10Base-T
IEEE 802.3u 100BASE-X
IEEE 802.3x Flow Control
IEEE 802.3z 1000BASE-X
RFC 768 UDP
RFC 792 ICMP
RFC 793 TCP
RFC 826 ARP
RFC 854 TELNET
RFC 951 BOOTP
RFC 1350 TFTP Protocol (revision 2)
RFC 1542 Clarifications and Extensions for the Bootstrap Protocol
RFC 3576 Ext to RADIUS (CoA only)
RFC 4675 RADIUS VLAN & Priority

MIBs
IEEE 8021-PAE-MIB
IEEE 8023-LAG-MIB
RFC 1213 MIB II
RFC 1493 Bridge MIB
RFC 1757 Remote Network Monitoring MIB
RFC 1907 SNMPv2 MIB
RFC 2013 SNMPv2 MIB for UDP
RFC 2096 IP Forwarding Table MIB
RFC 2233 Interfaces MIB
RFC 2273 SNMP-NOTIFICATION-MIB
RFC 2571 SNMP Framework MIB

RFC 2572 SNMP-MPD MIB
RFC 2573 SNMP-Notification MIB
RFC 2574 SNMP USM MIB
RFC 2618 RADIUS Client MIB
RFC 2620 RADIUS Accounting MIB
RFC 2665 Ethernet-Like-MIB
RFC 2674 802.1p and IEEE 802.1Q Bridge MIB
RFC 2688 MAU-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 3826 AES for SNMP's USM MIB
RFC 4133 Entity MIB (Version 3)

Network management
IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
IEEE 802.1D (STP)
RFC 1215 SNMP Generic traps
RFC 2571 SNMP Management Frameworks
RFC 2572 SNMPv3 Message Processing
RFC 2573 SNMPv3 Applications
RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events)
RFC 3414 SNMPv3 User-based Security Model (USM)
ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED)
SNMPv1/v2c/v3

Security
IEEE 802.1X Port Based Network Access Control
RFC 1492 TACACS+
RFC 2865 RADIUS Authentication
RFC 2866 RADIUS Accounting
Secure Sockets Layer (SSL)
SSHv2 Secure Shell

Technical Specifications

HP E4210-24 Switch (JF427A)

Ports	24 RJ-45 auto-sensing 10/100 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX); Media Type: Auto-MDIX; Duplex: half or full	
	2 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 RJ-45 serial console port	
Physical characteristics	Dimensions	6.3(d) x 17.3(w) x 1.7(h) in. (16 x 43.94 x 4.32 cm) (1U height)
	Weight	4.7 lb. (2.13 kg)
Memory and processor	Processor	Broadcom 4704 @ 200 MHz, 8 MB flash, 64 MB SDRAM; packet buffer size: 256 KB
Mounting	Mounts in an EIA standard 19-in. telco rack or equipment cabinet (hardware included)	
Performance	Throughput	up to 6.6 million pps
	Routing/Switching capacity	8.8 Gbps
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	10% to 95%, non-condensing
	Non-operating/Storage temperature	14°F to 158°F (-10°C to 70°C)
	Non-operating/Storage relative humidity	10% to 95%, non-condensing
Electrical characteristics	Voltage	100-240 VAC
	Frequency	50 / 60 Hz
Safety	CSA 22.2 No. 60950; UL 60950-1; IEC 60950-1; EN 60950-1	
Emissions	VCCI Class A; EN 55022 Class A; EN 55024; ICES-003 Class A	
Management	IMC - Intelligent Management Center; command-line interface; Web browser; out-of-band management (serial RS-232C); SNMP Manager; Telnet; IEEE 802.3 Ethernet MIB	
Services	3-year, 4-hour onsite, 13x5 coverage for hardware (UV834E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UV837E) 3-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone support (UV840E) 3-year, 24x7 SW phone support, software updates (UV843E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UV835E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UV838E) 4-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV841E) 4-year, 24x7 SW phone support, software updates (UV844E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UV836E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UV839E) 5-year, 4-hour onsite, 24x7 coverage for hardware, 24x7 software phone (UV842E) 5-year, 24x7 SW phone support, software updates(UV845E) 3 Yr 6 hr Call-to-Repair Onsite (UW434E) 4 Yr 6 hr Call-to-Repair Onsite (UW435E) 5 Yr 6 hr Call-to-Repair Onsite (UW436E) 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 802.1ag Service Layer OAM
IEEE 802.1D MAC Bridges
IEEE 802.1p Priority
IEEE 802.1Q (GVRP)
IEEE 802.1Q VLANs
IEEE 802.1s (MSTP)
IEEE 802.1v VLAN classification by Protocol and Port
IEEE 802.1w Rapid Reconfiguration of Spanning Tree
IEEE 802.1X PAE
IEEE 802.3ad Link Aggregation (LAG)
IEEE 802.3i 10Base-T
IEEE 802.3u 100BASE-X
IEEE 802.3x Flow Control
IEEE 802.3z 1000BASE-X
RFC 768 UDP
RFC 792 ICMP
RFC 793 TCP
RFC 826 ARP
RFC 854 TELNET
RFC 951 BOOTP
RFC 1350 TFTP Protocol (revision 2)
RFC 1542 Clarifications and Extensions for the Bootstrap Protocol
RFC 3576 Ext to RADIUS (CoA only)
RFC 4675 RADIUS VLAN & Priority

MIBs
IEEE 8021-PAE-MIB
IEEE 8023-LAG-MIB
RFC 1213 MIB II
RFC 1493 Bridge MIB
RFC 1757 Remote Network Monitoring MIB
RFC 1907 SNMPv2 MIB
RFC 2013 SNMPv2 MIB for UDP
RFC 2096 IP Forwarding Table MIB
RFC 2233 Interfaces MIB
RFC 2273 SNMP-NOTIFICATION-MIB
RFC 2571 SNMP Framework MIB

RFC 2572 SNMP-MPD MIB
RFC 2573 SNMP-Notification MIB
RFC 2574 SNMP USM MIB
RFC 2618 RADIUS Client MIB
RFC 2620 RADIUS Accounting MIB
RFC 2665 Ethernet-Like-MIB
RFC 2674 802.1p and IEEE 802.1Q Bridge MIB
RFC 2688 MAU-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 3826 AES for SNMP's USM MIB
RFC 4133 Entity MIB (Version 3)

Network management
IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
IEEE 802.1D (STP)
RFC 1215 SNMP Generic traps
RFC 2571 SNMP Management Frameworks
RFC 2572 SNMPv3 Message Processing
RFC 2573 SNMPv3 Applications
RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events)
RFC 3414 SNMPv3 User-based Security Model (USM)
ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED)
SNMPv1/v2c/v3

Security
IEEE 802.1X Port Based Network Access Control
RFC 1492 TACACS+
RFC 2865 RADIUS Authentication
RFC 2866 RADIUS Accounting
Secure Sockets Layer (SSL)
SSHv2 Secure Shell

Technical Specifications

HP E4210-48 Switch (JE027A)

Ports		48 RJ-45 auto-sensing 10/100 ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX); Media Type: Auto-MDIX; Duplex: half or full
		2 RJ-45 auto-sensing 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
		2 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 RJ-45 serial console port
Physical characteristics	Dimensions	9.1(d) x 17.3(w) x 1.7(h) in. (23.11 x 43.94 x 4.32 cm) (1U height)
	Weight	6.8 lb. (3.08 kg)
Memory and processor	Processor	Broadcom 4704 @ 200 MHz, 8 MB flash, 64 MB SDRAM; packet buffer size: 256 KB
Mounting		Mounts in an EIA standard 19-in. telco rack or equipment cabinet (hardware included)
Performance	Throughput	up to 13.1 million pps
	Routing/Switching capacity	17.6 Gbps
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	10% to 95%, non-condensing
	Non-operating/Storage temperature	14°F to 158°F (-10°C to 70°C)
	Non-operating/Storage relative humidity	10% to 95%, non-condensing
Electrical characteristics	Voltage	100-240 VAC
	Frequency	50 / 60 Hz
Safety		CSA 22.2 No. 60950; UL 60950-1; IEC 60950-1; EN 60950-1
Emissions		VCCI Class A; EN 55022 Class A; EN 55024; ICES-003 Class A
Management		IMC - Intelligent Management Center; command-line interface; Web browser; out-of-band management (serial RS-232C); SNMP Manager; Telnet; IEEE 802.3 Ethernet MIB
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 802.1ag Service Layer OAM
IEEE 802.1D MAC Bridges
IEEE 802.1p Priority
IEEE 802.1Q (GVRP)
IEEE 802.1Q VLANs
IEEE 802.1s (MSTP)
IEEE 802.1v VLAN classification by Protocol and Port
IEEE 802.1w Rapid Reconfiguration of Spanning Tree
IEEE 802.1X PAE
IEEE 802.3ad Link Aggregation (LAG)
IEEE 802.3i 10Base-T
IEEE 802.3u 100BASE-X
IEEE 802.3x Flow Control
IEEE 802.3z 1000BASE-X
RFC 768 UDP
RFC 792 ICMP
RFC 793 TCP
RFC 826 ARP
RFC 854 TELNET
RFC 951 BOOTP
RFC 1350 TFTP Protocol (revision 2)
RFC 1542 Clarifications and Extensions for the Bootstrap Protocol
RFC 3576 Ext to RADIUS (CoA only)
RFC 4675 RADIUS VLAN & Priority

MIBs
IEEE 8021-PAE-MIB
IEEE 8023-LAG-MIB
RFC 1213 MIB II
RFC 1493 Bridge MIB
RFC 1757 Remote Network Monitoring MIB
RFC 1907 SNMPv2 MIB
RFC 2013 SNMPv2 MIB for UDP
RFC 2096 IP Forwarding Table MIB
RFC 2233 Interfaces MIB
RFC 2273 SNMP-NOTIFICATION-MIB
RFC 2571 SNMP Framework MIB

RFC 2572 SNMP-MPD MIB
RFC 2573 SNMP-Notification MIB
RFC 2574 SNMP USM MIB
RFC 2618 RADIUS Client MIB
RFC 2620 RADIUS Accounting MIB
RFC 2665 Ethernet-Like-MIB
RFC 2674 802.1p and IEEE 802.1Q Bridge MIB
RFC 2688 MAU-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 3826 AES for SNMP's USM MIB
RFC 4133 Entity MIB (Version 3)

Network management
IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
IEEE 802.1D (STP)
RFC 1215 SNMP Generic traps
RFC 2571 SNMP Management Frameworks
RFC 2572 SNMPv3 Message Processing
RFC 2573 SNMPv3 Applications
RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events)
RFC 3414 SNMPv3 User-based Security Model (USM)
ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED)
SNMPv1/v2c/v3

Security
IEEE 802.1X Port Based Network Access Control
RFC 1492 TACACS+
RFC 2865 RADIUS Authentication
RFC 2866 RADIUS Accounting
Secure Sockets Layer (SSL)
SSHv2 Secure Shell

Technical Specifications

HP E4210-8-PoE Switch (JE029A)

Ports	8 RJ-45 auto-sensing 10/100 PoE ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, IEEE 802.3af PoE); Media Type: Auto-MDIX; Duplex: half or full	
	1 dual-personality 10/100/1000 port (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, IEEE 802.3ab Type 1000Base-T)	
	1 RJ-45 serial console port	
Physical characteristics	Dimensions	9.2(d) x 11.8(w) x 1.7(h) in. (23.37 x 29.97 x 4.32 cm) (1U height)
	Weight	4.9 lb. (2.22 kg)
Memory and processor	Processor	Broadcom 4704 @ 200 MHz, 8 MB flash, 64 MB SDRAM; packet buffer size: 256 KB
Mounting	Shipped for desktop operation. Optional angle mounting set is available for mounting in an EIA standard 19-in. telco rack or equipment cabinet (hardware not included)	
Performance	Throughput	up to 2.7 million pps
	Routing/Switching capacity	3.6 Gbps
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	10% to 95%, non-condensing
	Non-operating/Storage temperature	14°F to 158°F (-10°C to 70°C)
	Non-operating/Storage relative humidity	10% to 95%, non-condensing
Electrical characteristics	Voltage	100-240 VAC
	Frequency	50 / 60 Hz
Safety	CSA 22.2 No. 60950; UL 60950-1; IEC 60950-1; EN 60950-1	
Emissions	VCCI Class A; EN 55022 Class A; EN 55024; ICES-003 Class A	
Management	IMC - Intelligent Management Center; command-line interface; Web browser; out-of-band management (serial RS-232C); SNMP Manager; Telnet; IEEE 802.3 Ethernet MIB	
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 802.1ag Service Layer OAM
IEEE 802.1D MAC Bridges
IEEE 802.1p Priority
IEEE 802.1Q (GVRP)
IEEE 802.1Q VLANs
IEEE 802.1s (MSTP)
IEEE 802.1v VLAN classification by Protocol and Port
IEEE 802.1w Rapid Reconfiguration of Spanning Tree
IEEE 802.1X PAE
IEEE 802.3ad Link Aggregation (LAG)
IEEE 802.3i 10Base-T
IEEE 802.3u 100BASE-X
IEEE 802.3x Flow Control
IEEE 802.3z 1000BASE-X
RFC 768 UDP
RFC 792 ICMP
RFC 793 TCP
RFC 826 ARP
RFC 854 TELNET
RFC 951 BOOTP
RFC 1350 TFTP Protocol (revision 2)
RFC 1542 Clarifications and Extensions for the Bootstrap Protocol
RFC 3576 Ext to RADIUS (CoA only)
RFC 4675 RADIUS VLAN & Priority

MIBs
IEEE 8021-PAE-MIB
IEEE 8023-LAG-MIB
RFC 1213 MIB II
RFC 1493 Bridge MIB
RFC 1757 Remote Network Monitoring MIB
RFC 1907 SNMPv2 MIB
RFC 2013 SNMPv2 MIB for UDP
RFC 2096 IP Forwarding Table MIB
RFC 2233 Interfaces MIB
RFC 2273 SNMP-NOTIFICATION-MIB
RFC 2571 SNMP Framework MIB

RFC 2572 SNMP-MPD MIB
RFC 2573 SNMP-Notification MIB
RFC 2574 SNMP USM MIB
RFC 2618 RADIUS Client MIB
RFC 2620 RADIUS Accounting MIB
RFC 2665 Ethernet-Like-MIB
RFC 2674 802.1p and IEEE 802.1Q Bridge MIB
RFC 2688 MAU-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 3826 AES for SNMP's USM MIB
RFC 4133 Entity MIB (Version 3)

Network management
IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
IEEE 802.1D (STP)
RFC 1215 SNMP Generic traps
RFC 2571 SNMP Management Frameworks
RFC 2572 SNMPv3 Message Processing
RFC 2573 SNMPv3 Applications
RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events)
RFC 3414 SNMPv3 User-based Security Model (USM)
ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED)
SNMPv1/v2c/v3

Security
IEEE 802.1X Port Based Network Access Control
RFC 1492 TACACS+
RFC 2865 RADIUS Authentication
RFC 2866 RADIUS Accounting
Secure Sockets Layer (SSL)
SSHv2 Secure Shell

Technical Specifications

HP E4210-16-PoE Switch (JE031A)

Ports	16 RJ-45 auto-sensing 10/100 PoE ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, IEEE 802.3af PoE); Media Type: Auto-MDIX; Duplex: half or full	
	2 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 RJ-45 serial console port	
Physical characteristics	Dimensions	10.8(d) x 11.8(w) x 1.7(h) in. (27.43 x 29.97 x 4.32 cm) (1U height)
	Weight	6.0 lb. (2.72 kg)
Memory and processor	Processor	Broadcom 4704 @ 200 MHz, 8 MB flash, 64 MB SDRAM; packet buffer size: 256 KB
Mounting	Shipped for desktop operation. Optional angle mounting set is available for mounting in an EIA standard 19-in. telco rack or equipment cabinet (hardware not included)	
Performance	Throughput	up to 5.4 million pps
	Routing/Switching capacity	7.2 Gbps
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	10% to 95%, non-condensing
	Non-operating/Storage temperature	14°F to 158°F (-10°C to 70°C)
	Non-operating/Storage relative humidity	10% to 95%, non-condensing
Electrical characteristics	Voltage	100-240 VAC
	Frequency	50 / 60 Hz
Safety	CSA 22.2 No. 60950; UL 60950-1; IEC 60950-1; EN 60950-1	
Emissions	VCCI Class A; EN 55022 Class A; EN 55024; ICES-003 Class A	
Management	IMC - Intelligent Management Center; command-line interface; Web browser; out-of-band management (serial RS-232C); SNMP Manager; Telnet; IEEE 802.3 Ethernet MIB	
Notes	ACLs are not supported on this model.	
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 802.1ag Service Layer OAM
IEEE 802.1D MAC Bridges
IEEE 802.1p Priority
IEEE 802.1Q (GVRP)
IEEE 802.1Q VLANs
IEEE 802.1s (MSTP)
IEEE 802.1v VLAN classification by Protocol and Port
IEEE 802.1w Rapid Reconfiguration of Spanning Tree
IEEE 802.1X PAE
IEEE 802.3ad Link Aggregation (LAG)
IEEE 802.3i 10Base-T
IEEE 802.3u 100BASE-X
IEEE 802.3x Flow Control
IEEE 802.3z 1000BASE-X
RFC 768 UDP
RFC 792 ICMP
RFC 793 TCP
RFC 826 ARP
RFC 854 TELNET
RFC 951 BOOTP
RFC 1350 TFTP Protocol (revision 2)
RFC 1542 Clarifications and Extensions for the Bootstrap Protocol
RFC 3576 Ext to RADIUS (CoA only)
RFC 4675 RADIUS VLAN & Priority

MIBs
IEEE 8021-PAE-MIB
IEEE 8023-LAG-MIB
RFC 1213 MIB II
RFC 1493 Bridge MIB
RFC 1757 Remote Network Monitoring MIB
RFC 1907 SNMPv2 MIB
RFC 2013 SNMPv2 MIB for UDP
RFC 2096 IP Forwarding Table MIB
RFC 2233 Interfaces MIB
RFC 2273 SNMP-NOTIFICATION-MIB
RFC 2571 SNMP Framework MIB

RFC 2572 SNMP-MPD MIB
RFC 2573 SNMP-Notification MIB
RFC 2574 SNMP USM MIB
RFC 2618 RADIUS Client MIB
RFC 2620 RADIUS Accounting MIB
RFC 2665 Ethernet-Like-MIB
RFC 2674 802.1p and IEEE 802.1Q Bridge MIB
RFC 2688 MAU-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 3826 AES for SNMP's USM MIB
RFC 4133 Entity MIB (Version 3)

Network management
IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
IEEE 802.1D (STP)
RFC 1215 SNMP Generic traps
RFC 2571 SNMP Management Frameworks
RFC 2572 SNMPv3 Message Processing
RFC 2573 SNMPv3 Applications
RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events)
RFC 3414 SNMPv3 User-based Security Model (USM)
ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED)
SNMPv1/v2c/v3

Security
IEEE 802.1X Port Based Network Access Control
RFC 1492 TACACS+
RFC 2865 RADIUS Authentication
RFC 2866 RADIUS Accounting
Secure Sockets Layer (SSL)
SSHv2 Secure Shell

QuickSpecs

HP E4210 Switch Series

Technical Specifications

HP E4210-24-PoE Switch (JE033A)

Ports		24 RJ-45 auto-sensing 10/100 PoE ports (IEEE 802.3 Type 10Base-T, IEEE 802.3u Type 100Base-TX, IEEE 802.3af PoE); Media Type: Auto-MDIX; Duplex: half or full
		2 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 RJ-45 serial console port
Physical characteristics	Dimensions	16.9(d) x 17.3(w) x 1.7(h) in. (42.93 x 43.94 x 4.32 cm) (1U height)
	Weight	13.4 lb. (6.08 kg)
Memory and processor	Processor	Broadcom 4704 @ 200 MHz, 8 MB flash, 64 MB SDRAM; packet buffer size: 256 KB
Mounting		Mounts in an EIA standard 19-in. telco rack or equipment cabinet (hardware included)
Performance	Throughput	up to 6.6 million pps
	Routing/Switching capacity	8.8 Gbps
Environment	Operating temperature	32°F to 113°F (0°C to 45°C)
	Operating relative humidity	10% to 95%, non-condensing
	Non-operating/Storage temperature	14°F to 158°F (-10°C to 70°C)
	Non-operating/Storage relative humidity	10% to 95%, non-condensing
Electrical characteristics	Voltage	100-240 VAC
	Frequency	50 / 60 Hz
Safety		CSA 22.2 No. 60950; UL 60950-1; IEC 60950-1; EN 60950-1
Emissions		VCCI Class A; EN 55022 Class A; EN 55024; ICES-003 Class A
Management		IMC - Intelligent Management Center; command-line interface; Web browser; out-of-band management (serial RS-232C); SNMP Manager; Telnet; IEEE 802.3 Ethernet MIB
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 802.1ag Service Layer OAM
IEEE 802.1D MAC Bridges
IEEE 802.1p Priority
IEEE 802.1Q (GVRP)
IEEE 802.1Q VLANs
IEEE 802.1s (MSTP)
IEEE 802.1v VLAN classification by Protocol and Port
IEEE 802.1w Rapid Reconfiguration of Spanning Tree
IEEE 802.1X PAE
IEEE 802.3ad Link Aggregation (LAG)
IEEE 802.3i 10Base-T
IEEE 802.3u 100BASE-X
IEEE 802.3x Flow Control
IEEE 802.3z 1000BASE-X
RFC 768 UDP
RFC 792 ICMP
RFC 793 TCP
RFC 826 ARP
RFC 854 TELNET
RFC 951 BOOTP
RFC 1350 TFTP Protocol (revision 2)
RFC 1542 Clarifications and Extensions for the Bootstrap Protocol
RFC 3576 Ext to RADIUS (CoA only)
RFC 4675 RADIUS VLAN & Priority

MIBs
IEEE 8021-PAE-MIB
IEEE 8023-LAG-MIB
RFC 1213 MIB II
RFC 1493 Bridge MIB
RFC 1757 Remote Network Monitoring MIB
RFC 1907 SNMPv2 MIB
RFC 2013 SNMPv2 MIB for UDP
RFC 2096 IP Forwarding Table MIB
RFC 2233 Interfaces MIB
RFC 2273 SNMP-NOTIFICATION-MIB
RFC 2571 SNMP Framework MIB

RFC 2572 SNMP-MPD MIB
RFC 2573 SNMP-Notification MIB
RFC 2574 SNMP USM MIB
RFC 2618 RADIUS Client MIB
RFC 2620 RADIUS Accounting MIB
RFC 2665 Ethernet-Like-MIB
RFC 2674 802.1p and IEEE 802.1Q Bridge MIB
RFC 2688 MAU-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 3826 AES for SNMP's USM MIB
RFC 4133 Entity MIB (Version 3)

Network management
IEEE 802.1AB Link Layer Discovery Protocol (LLDP)
IEEE 802.1D (STP)
RFC 1215 SNMP Generic traps
RFC 2571 SNMP Management Frameworks
RFC 2572 SNMPv3 Message Processing
RFC 2573 SNMPv3 Applications
RFC 2819 Four groups of RMON: 1 (statistics), 2 (history), 3 (alarm) and 9 (events)
RFC 3414 SNMPv3 User-based Security Model (USM)
ANSI/TIA-1057 LLDP Media Endpoint Discovery (LLDP-MED)
SNMPv1/v2c/v3

Security
IEEE 802.1X Port Based Network Access Control
RFC 1492 TACACS+
RFC 2865 RADIUS Authentication
RFC 2866 RADIUS Accounting
Secure Sockets Layer (SSL)
SSHv2 Secure Shell

Accessories

HP E4210 Switch Series accessories	Transceivers	
	HP X120 1G SFP LC LX Transceiver	JD119B
	HP X124 1G SFP LC SX Transceiver	JD493A
	HP X125 1G SFP LC LH70 Transceiver	JD063B
	HP X115 100M SFP LC BX 10-U Transceiver	JD100A
	HP X110 100M SFP LC FX Transceiver	JD102B
	HP X115 100M SFP LC BX 10-D Transceiver	JD101A
	Cables	
	NEW HP 0.5 m Multimode OM3 LC/LC Optical Cable	AJ833A
	NEW HP 1 m Multimode OM3 LC/LC Optical Cable	AJ834A
	NEW HP 2 m Multimode OM3 LC/LC Optical Cable	AJ835A
	NEW HP 5 m Multimode OM3 LC/LC Optical Cable	AJ836A
	NEW HP 15 m Multimode OM3 LC/LC Optical Cable	AJ837A
	NEW HP 30 m Multimode OM3 LC/LC Optical Cable	AJ838A
	NEW HP 50 m Multimode OM3 LC/LC Optical Cable	AJ839A
	NEW HP 0.5 m PremierFlex OM3+ LC/LC Optical Cable	BK837A
	Mounting Kit	
	HP A3100/E4210-9 Rack-mount Kit	JD322A
	HP A3100/E4210-16 Rack-mount Kit	JD321A
	HP A3100/E4210-16/-8 PoE Rack-mount Kit	JD323A

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