

Data sheet

Product overview

HP V1410 series switches are unmanaged Gigabit Ethernet and Fast Ethernet switches designed for small businesses looking for entry-level, low-cost networking solutions with a lifetime warranty. The HP V1410 switch series consists of seven models with flexible mounting options that allow customers to choose the best switch to meet their network switching needs. All models have QoS support and IEEE 802.3x flow control features to provide outstanding data efficiency. Simplified plug-and-play operation is enabled by features like Auto-MDIX and auto-speed negotiation. HP has innovated and combined the latest advances in silicon technology to provide some of the most power-efficient switches: 16- and 24-port Fast Ethernet models are the industry's first IEEE 802.3az compliant unmanaged Fast Ethernet switches. The available green features, along with the HP lifetime warranty, make the HP V1410 switch series ideal for customers seeking low-cost and reliable networking solutions.

Key features

- Unmanaged Gigabit and Fast Ethernet switches
- Green features for low power consumption
- Fanless for silent operation
- Quality-of-Service (QoS) support
- Industry-leading lifetime warranty



Features and benefits

Quality of Service (QoS)

- IEEE 802.1p prioritization: delivers data to devices based on the priority and type of traffic
- DiffServ Code Point (DSCP) support: allows real-time traffic prioritization based on Layer 3 TOS/DSCP parameters

Connectivity

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

Performance

- NEW Energy-efficient Ethernet support (J9662A and J9663A only): supports new IEEE 802.3az standard; allows lower power consumption when operated with IEEE-compliant client devices in 100 Mb/s mode only
- Half-/Full-duplex auto-negotiating capability on every port: doubles the throughput of every port
- Jumbo frame support (Gigabit Ethernet models only): allows frames up to 9216 bytes to be switched through the network
- Mini jumbo frame support (J9662A and J9663A only): allows frames up to 2048 bytes to be switched through the network, which supports large data transfers

Ease of use

- Unmanaged: provides plug-and-play simplicity
- Comprehensive LED display with per-port indicators: provides an at-a-glance view of status, activity, speed, and full-duplex operation
- Flow control: helps ensure reliable communications during full-duplex operation
- Auto-speed negotiation: automatically selects individual port speed depending on client capabilities without the need for manual intervention, allowing for simple plug-and-play operation

Flexibility

• **Designed with no fan:** enables quiet operation for deployment in open spaces

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 <u>www.hp.com/networking/warranty</u> for details on the support provided and the period during which support is available

*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.

Specifications

	HP V1410-8G Switch (J9559A)	HP V1410-16G Switch (J9560A)	HP V1410-24G Switch (J9561A)
Ports	8 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASE-T, IEEE 802.3u Type 100BASE-TX, IEEE 802.3ab Type 1000BASE-Tj; Media Type: Auto-MDIX; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only	16 RI-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	22 autosensing 10/100/1000 ports (IEEE 802.3 Type 10BASET, IEEE 802.3u Type 100BASETX, IEEE 802.3ab Type 1000BASET); Media Type: Auto-MDIX; Duplex: 10BASE-T/100BASE-TX: half or full; 1000BASE-T: full only 2 dual-personality ports; each port can be used as either an RI-45 10/100/1000 port (IEEE 802.3 Type 10Base-T; IEEE 802.3u Type 100Base-TX; IEEE 802.3ab 1000Base-T Gigabit Ethernet) or an open mini-GBIC slot (for use with mini-GBIC transceivers)
Physical characteristics			mini-ObiC sioi (for use with mini-ObiC transcervers)
Dimensions	3.8(d) x 6.14(w) x 0.96(h) in. (9.65 x 15.6 x 2.45 cm) (.5U height)	4.41(d) x 8.21(w) x 1.73(h) in. (11.2 x 20.85 x 4.4 cm) (1U height)	6.65(d) x 13.23(w) x 1.73(h) in. (16.9 x 33.6 x 4.4 cm) (1U height)
Weight	.74 lb. (0.34 kg)	1.43 lb. (0.65 kg)	2.98 lb. (1.35 kg)
Memory and processor	4 Kb EEPROM capacity; packet buffer size: 192 KB	512 KB flash; packet buffer size: 512 KB	512 KB flash; packet buffer size: 512 KB
Mounting	Wall, desktop, and under-table mounting	Mounts in an ElA-standard 19 in. telco rack (hardware included); wall, desktop, and under-table mounting	Mounts in an EIA-standard 19 in. telco rack (hardware included); wall, desktop, and under-table mounting
Performance			
100 Mb Latency	< 3.6 µs (LIFO 64-byte packets)	< 8.0 μ s (LIFO 64-byte packets)	< 8.0 µs (LIFO 64-byte packets)
1000 Mb Latency	< 1.2 μ s (LIFO 64-byte packets)	< 3.6 µs (LIFO 64-byte packets)	< 3.6 µs (LIFO 64-byte packets)
Throughput	up to 11.9 million pps (64-byte packets)	up to 23.8 million pps (64-byte packets)	up to 35.7 million pps (64-byte packets)
Switching capacity	16 Gbps	32 Gbps	48 Gbps
MAC address table size	4096 entries	8000 entries	8000 entries
Environment			
Operating temperature	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)
Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing	15% to 95% @ 104°F (40°C), noncondensing	15% to 95% @ 104°F (40°C), noncondensing
Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)
Nonoperating/Storage relative humidity	15% to 90% @ 149°F (65°C), noncondensing	15% to 90% @ 149°F (65°C), noncondensing	15% to 90% @ 149°F (65°C), noncondensing
Altitude	up to 10,000 ft. (3 km)	up to 10,000 ft. (3 km)	up to 10,000 ft. (3 km)
Acoustic	Power: 0 dB No fan	Power: 0 dB No fan	Power: 0 dB No fan
Electrical characteristics			
Maximum heat dissipation	41 BTU/hr (43.26 kJ/hr)	44 BTU/hr (46.42 kJ/hr)	75 BTU/hr (79.13 kJ/hr)
Voltage	100-240 VAC	100-240 VAC	100-127/200-240 VAC
Current	1.0 A	1.1 A	0.3/0.2 A
Maximum power rating	12 W	13 W	22 W
Frequency	50/60 Hz	50/60 Hz	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. The exact input voltage and frequency rating are determined by the specific power adapter part number ordered. Please select the correct power adapter country option.	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. The exact input voltage and frequency rating are determined by the specific power adapter part number ordered. Please select the correct power adapter country option.	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	CSA 22.2 No. 60950; EN 60950/IEC 60950; UL 60950-1	CSA 22.2 No. 60950; UL 60950-1; IEC 60950-1; EN 60950-1	CSA 22.2 No. 60950; UL 60950-1; IEC 60950-1; EN 60950-1
Emissions	FCC Rules Part 15, Subpart B Class A	FCC Rules Part 15, Subpart B Class A	FCC Rules Part 15, Subpart B Class A
Immunity			
Generic	EN 55022 CISPR 22	EN 55022 CISPR 22	EN 55022 CISPR 22
EN	EN 55024, CISPR 24	EN 55024, CISPR 24	EN 55024, CISPR 24
ESD	IEC 61000-4-2	IEC 61000-4-2	IEC 61000-4-2
Radiated	IEC 61000-4-3	IEC 61000-4-3	IEC 61000-4-3
EFT/Burst	IEC 61000-4-4	IEC 61000-4-4	IEC 61000-4-4
Surge	IEC 61000-4-5	IEC 61000-4-5	IEC 61000-4-5
Conducted	IEC 61000-4-6	IEC 61000-4-6	IEC 61000-4-6
Power frequency magnetic field	IEC 61000-4-8	IEC 61000-4-8	IEC 61000-4-8
remaining magnetic hold			
Voltage dips and interruptions	IEC 61000-4-11	IEC 61000-4-11	IEC 61000-4-11
	IEC 61000-4-11 IEC 61000-3-2 IEC 61000-3-3	IEC 61000-4-11 IEC 61000-3-2 IEC 61000-3-3	IEC 61000-4-11 IEC 61000-3-2 IEC 61000-3-3

Specifications (continued)

HP V1410-8G Switch (J9559A)

HP V1410-16G Switch (J9560A)

HP V1410-24G Switch (J9561A)

Notes			Use only supported genuine HP mini-GBICs with your switch.
Services	3-year, 4-hour onsite, 13x5 coverage for hardware (UF795E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UF796E) Installation with minimum configuration, system-based pricing (U4826E) Installation with HP-provided configuration, system-based pricing (U4830E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UR816E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UR817E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UR818E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UR818E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UR818E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UR819E) 3 Yr 6 hr Call-to-Repair Onsite (UW386E) 4 Yr 6 hr Call-to-Repair Onsite (UW387E) 5 Yr 6 hr Call-to-Repair Onsite (UW388E) 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.	3-year, 4-hour onsite, 13x5 coverage for hardware (UF797E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UF798E) Installation with minimum configuration, system-based pricing (U4826E) Installation with HP-provided configuration, system-based pricing (U4830E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UR820E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UR821E) 5-year, 4-hour onsite, 13x5 coverage for hardware (UR822E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UR822E) 5-year, 4-ho	3-year, 4-hour onsite, 13x5 coverage for hardware (UF797E) 3-year, 4-hour onsite, 24x7 coverage for hardware (UF798E) Installation with minimum configuration, system-based pricing (U4826E) Installation with HP-provided configuration, system-based pricing (U4830E) 4-year, 4-hour onsite, 13x5 coverage for hardware (UR820E) 4-year, 4-hour onsite, 24x7 coverage for hardware (UR821E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UR822E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UR822E) 5-year, 4-hour onsite, 24x7 coverage for hardware (UR823E) 3 Yr 6 hr Call-to-Repair Onsite (UW389E) 4 Yr 6 hr Call-to-Repair Onsite (UW391E) 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.
Standards and protocols (applies to all products in series)	General protocols IEEE 802. 1p Priority IEEE 802.3ab 1000BASE-T IEEE 802.3i 10BASE-T IEEE 802.3u 100BASE-X	IEEE 802.3x Flow Control IEEE 802.3z 1000BASE:X	

4

Specifications (continued)

	2		
	HP V1410-8 Switch (J9661A)	HP V1410-16 Switch (J9662A)	
Ports	Supports a maximum of 8 autosensing 10/100 ports	Supports a maximum of 16 autosensing 10/100 ports	
Physical characteristics			
Dimensions	3.74(d) x 6.14(w) x 0.97(h) in. (9.5 x 15.6 x 2.46 cm)	4.21(d) x 8.21(w) x 1.73(h) in. (10.7 x 20.85 x 4.4 cm)	
Weight	0.74 lb. (0.34 kg)	1.43 lb. (0.65 kg)	
Memory and processor			
	96 KB	16 Kb EEPROM; packet buffer size: 2 Mb	
Mounting	Wall, desktop, and under-table mounting	Mounts in an EIA-standard 19 in. telco rack (hardware included); wall, desktop, and under-table mounting	
Performance			
100 Mb Latency	< 3.7 µs (LIFO 64-byte packets)	< 10.6 µs (LIFO 64-byte packets)	
Throughput	up to 1.1 million pps (64-byte packets)	up to 2.3 million pps (64-byte packets)	
Switching capacity	1.6 Gbps	3.2 Gbps	
MAC address table size	1040 entries	8192 entries	
Environment			
Operating temperature	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)	
Operating relative humidity	15% to 95% @ 104°F (40°C), noncondensing	15% to 95% @ 104°F (40°C), noncondensing	
Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)	
Nonoperating/Storage relative humidity	15% to 90% @ 149°F (65°C), noncondensing	15% to 90% @ 149°F (65°C), noncondensing	
Altitude	up to 10,000 ft. (3 km)	up to 10,000 ft. (3 km)	
Acoustic	Power: 0 dB	Power: 0 dB	
Electrical characteristics			
Maximum heat dissipation	13 BTU/hr (13.72 kJ/hr)	13 BTU/hr (13.72 kJ/hr)	
Voltage	100-240 VAC	100-240 VAC	
DC voltage	12 V	12 V	
Current			
	0.3 A	0.3 A	
Maximum power rating	3.6 W	3.6 W	
Frequency	50/60 Hz	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. The exact input voltage and frequency rating are determined by the specific power adapter part number ordered. Please select the correct power adapter country option.	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. The exact input voltage and frequency rating are determined by the specific power adapter part number ordered. Please select the correct power adapter country option.	
Safety	UL 60950-1; CSA 22.2 60950-1; IEC 60950-1:2005; EN 60950-1:2006 + A11:2009	UL 60950-1; CSA C22.2 60950-1; IEC 60950-1:2005; EN 60950-1:2006 + A11:2009	
Emissions	FCC Rules Part 15, Subpart B Class A	FCC Rules Part 15, Subpart B Class A	
Immunity			
Generic	EN 55022 CISPR 22	EN 55022 CISPR 22	
EN	EN 55024, CISPR 24	EN 55024, CISPR 24	
ESD	IEC 61000-4-2	IEC 61000-4-2	
Radiated	IEC 61000-4-3	IEC 61000-4-3	
EFT/Burst	IEC 61000-4-4	IEC 61000-4-4	
Surge	IEC 61000-4-4	IEC 61000-4-5	
-			
Conducted	IEC 61000-4-6	IEC 61000-4-6	
Power frequency magnetic field	IEC 61000-4-8	IEC 61000-4-8	
Voltage dips and interruptions	IEC 61000-4-11	IEC 61000-4-11	
Harmonics	IEC 61000-3-2	IEC 61000-3-2	
Flicker	IEC 61000-3-3	IEC 61000-3-3	
Notes		IEEE 802.3az Energy Efficient Ethernet protocol is supported by the HP V1410-16 (J9662A) and HP V1410-24 (J9663A) Switches only	
Services	Refer to the HP website at <u>www.hp.com/networking/services</u> 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.	Refer to the HP website at <u>www.hp.com/networking/services</u> 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.	
Standards and protocols (applies to all products in series)	General protocolsIEEE 802.3x Flow ControlIEEE 802.1p PriorityIEEE 802.3z 1000BASE.TIEEE 802.3i 10BASE.TIEEE 802.3u 100BASE.X		

Specifications (continued)

		1	
	HP V1410-24 Switch (J9663A)	HP V1410-24-2G Switch (J9664A)	
Ports	Supports a maximum of 24 autosensing 10/100 ports	Supports a maximum of 24 autosensing 10/100 ports plus 2 autosensing 10/100/1000 ports, or a combination	
Physical characteristics			
Dimensions	6.65(d) x 13.23(w) x 1.73(h) in. (16.9 x 33.6 x 4.4 cm)	6.65(d) x 13.23(w) x 1.73(h) in. (16.9 x 33.6 x 4.4 cm)	
Weight	2.98 lb. (1.35 kg)	2.98 lb. (1.35 kg)	
Memory and processor	16 Kb EEPROM; packet buffer size: 2 Mb	2 KB EEPROM; packet buffer size: 2.5 Mb	
Mounting	Mounts in an EIA-standard 19 in. telco rack (hardware included); wall, desktop, and under-table mounting	Mounts in an EIA-standard 19 in. telco rack (hardware included); wall, desktop and under-table mounting	
Performance			
100 Mb Latency	< 11 μ s (LIFO 64-byte packets)	< 5.6 μ s (LIFO 64-byte packets)	
1000 Mb Latency		< 2.2 µs (LIFO 64-byte packets)	
Throughput	up to 3.5 million pps (64-byte packets)	up to 6.5 million pps (64-byte packets)	
Switching capacity	4.8 Gbps	8.8 Gbps	
MAC address table size	8192 entries	8192 entries	
Environment			
Operating temperature	20°E to 10.4°E (0°C to 40°C)	20°E to 10.4°E (0°C to 40°C)	
Operating relative humidity	32°F to 104°F (0°C to 40°C)	32°F to 104°F (0°C to 40°C)	
	15% to 95% @ 104°F (40°C), noncondensing	15% to 95% @ 104°F (40°C), noncondensing	
Nonoperating/Storage temperature	-40°F to 158°F (-40°C to 70°C)	-40°F to 158°F (-40°C to 70°C)	
Nonoperating/Storage relative humidity	15% to 90% @ 149°F (65°C), noncondensing	15% to 90% @ 149°F (65°C), noncondensing	
Altitude	up to 10,000 ft. (3 km)	up to 10,000 ft. (3 km)	
Acoustic	Power: 0 dB	Power: 0 dB	
Electrical characteristics			
Maximum heat dissipation	17 BTU/hr (17.93 kJ/hr)	37 BTU/hr (39.03 kJ/hr)	
Voltage	100-240 VAC	100-240 VAC	
DC voltage	12 V	12 V	
Current	0.4 A	0.9 A	
Maximum power rating	4.8 W	10.8 W	
Frequency	50/60 Hz	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. The exact input voltage and frequency rating are determined by the specific power adapter part number ordered. Please select the correct power adapter country option.	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. The exact input voltage and frequency rating are determined by the specific power adapter part number ordered. Please select the correct power adapter country option	
Safety	UL 60950-1; CSA 22.2 60950-1; IEC 60950-1:2005; EN 60950-1:2006 + A11:2009	UL 60950-1; CSA 22.2 60950-1; IEC 60950-1:2005; EN 60950-1:2006 + A11:2009	
Emissions	FCC Rules Part 15, Subpart B Class A	FCC Rules Part 15, Subpart B Class A	
Immunity			
Generic	EN 55022 CISPR 22	EN 55022 CISPR 22	
EN	EN 55024, CISPR 24	EN 55024, CISPR 24	
ESD	IEC 61000-4-2	IEC 61000-4-2	
Radiated	IEC 61000-4-3	IEC 61000-4-3	
EFT/Burst	IEC 61000-4-4	IEC 61000-4-4	
Surge	IEC 61000-4-5	IEC 61000-4-5	
Conducted	IEC 61000-4-6	IEC 61000-4-6	
Power frequency magnetic field	IEC 61000-4-8	IEC 61000-4-8	
Voltage dips and interruptions	IEC 61000-4-11	IEC 61000-4-11	
Harmonics	IEC 61000-3-2	IEC 61000-3-2	
Flicker	IEC 61000-3-3	IEC 61000-3-3	
Notes	IEEE 802.3az Energy Efficient Ethernet protocol is supported by the HP V1410-16 (J9662A) and HP V1410-24 (J9663A) Switches only		
Services	Refer to the HP website at <u>www.hp.com/networking/services</u> 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.	Refer to the HP website at <u>www.hp.com/networking/services</u> 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.	

Specifications (continued)

HP V1410-24 Switch (J9663A)

Standards and protocols (applies to all products in series) General protocols IEEE 802.1p Priority IEEE 802.3ab 1000BASE-T IEEE 802.3i 10BASE-T IEEE 802.3u 100BASE-X HP V1410-24-2G Switch (J9664A)

IEEE 802.3x Flow Control IEEE 802.3z 1000BASE-X

HP V1410 Switch Series accessories

Cables

HP 0.5 m Multimode OM3 LC/LC Optical Cable (AJ833A) HP 1 m Multimode OM3 LC/LC Optical Cable (AJ834A) HP 2 m Multimode OM3 LC/LC Optical Cable (AJ835A) HP 5 m Multimode OM3 LC/LC Optical Cable (AJ836A) HP 15 m Multimode OM3 LC/LC Optical Cable (AJ837A) HP 30 m Multimode OM3 LC/LC Optical Cable (AJ838A) HP 50 m Multimode OM3 LC/LC Optical Cable (AJ839A) NEW HP 0.5 m PremierFlex OM3+ LC/LC Optical Cable (BK837A)

NEW HP 1 m PremierFlex OM3+ LC/LC Optical Cable (BK838A)

NEW HP 2 m PremierFlex OM3+ LC/LC Optical Cable (BK839A)

NEW HP 5 m PremierFlex OM3+ LC/LC Optical Cable (BK840A)

NEW HP 15 m PremierFlex OM3+ LC/LC Optical Cable (BK841A)

NEW HP 30 m PremierFlex OM3+ LC/LC Optical Cable (BK842A)

NEW HP 50 m PremierFlex OM3+ LC/LC Optical Cable (BK843A)

HP V1410-24G Switch (J9561A)

HP X121 1G SFP LC SX Transceiver (J4858C) HP X121 1G SFP LC LX Transceiver (J4859C) HP X111 100M SFP LC FX Transceiver (J9054C)

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

© Copyright 2010-2011 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

