



## HP Color LaserJet 4650 printer series

Accelerate your business with proven colour performance

## Enhance your communications with colour

With easy-to-use features, intuitive interface and low total cost of ownership, the HP Color LaserJet 4650 printer series lets you print short-run colour documents in-house quickly, efficiently and affordably.



Print only what you need, when you need it and eliminate the expenses associated with outsourcing print runs. Make changes at a moment's notice and eliminate your waste and storage costs.

Now you can add colour to your business communications easily for a true professional appearance.

# Professional colour print quality—in house

## Conventional printing



## With direct PDF Printing



Get your print-outs fast with direct PDF printing

## HP Color LaserJet performance

- **Improve productivity with fast colour laser prints.** Single-pass in-line colour printing enables colour A4-sized document printing at black and white speeds of up to 21 ppm (A4)/22 ppm (letter). Instant-on Technology virtually eliminates warm-up time and gives you a fast first page out within 15 seconds.
- **Handle complex print jobs effortlessly.** High powered 533 MHz processor and 544 MB of embedded RAM makes light work of the most complex print jobs.
- **Print more.** Robust 85,000-page per month duty cycle and high-yield print cartridges means that you get reliable, worry free printing with less user intervention and lower printer downtime.
- **Direct PDF printing.** Bypass PDF reader/converter software with HP's native PDF printing, which enables driverless printing of PDF files. Native PDF printing also allows printing from devices of all types, such as mobile phones, handheld computers, PDAs and notebook computers.

## Professional colour print quality

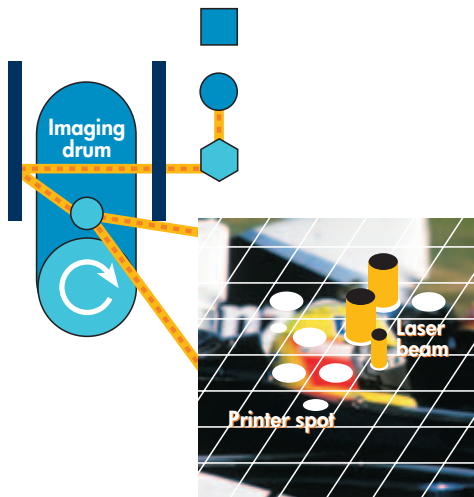
- **Expect exceptional results with advanced print technologies.** HP ImageREt 3600<sup>1</sup> (Resolution Enhancement technology) is optimised for the HP Color LaserJet 4650 printer series, offering superior image enhancements. When used with the new HP toner formulations, it produces smooth colour transitions, crisp text and sharp images. HP ImageREt 3600<sup>1</sup> technology also includes a range of Press options such as SWOP, Euroscale and DIC for conversions from standard RGB (sRGB) to CMYK.
- **Enhance your in-house colour printing capabilities.** The new fuser technology allows you to print on a variety of media, including HP High Gloss LaserJet Paper and HP Premium Colour Paper. Now you can produce full-colour attention-getting marketing collateral, such as brochures, flyers and ads easily.
- **Intelligent imaging features.** Get professional colour results with HP Color REt, which smoothes edges by intelligently changing the size and position of dots that make up the edge of a solid object. With adaptive halftoning you get edge smoothness of text and graphics while maintaining the quality of area fills. In addition, you can expect a wider range of colour hues and tints with the PANTONE<sup>®2</sup> Matching System.

## Designed to easily fit your business

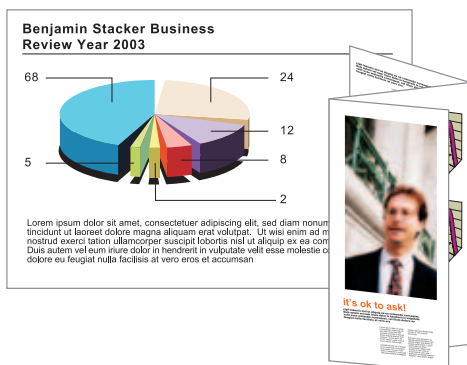
- **Advanced paper handling features.** Reduce user intervention with automated two-sided printing unit (standard for the HP Color LaserJet 4650dn and HP Color LaserJet 4650dtn printers), standard 100-sheet multipurpose tray that can handle custom and thick-media up to 200 g/m<sup>2</sup> bond (53 lb), 500-sheet second tray and an optional 2 x 500-sheet feeder (1,000-sheet pedestal) for a maximum input capacity of up to 1,600-sheet.

<sup>1</sup> The image mode of this print system is optimised for printing on HP High Gloss Laser Paper.

<sup>2</sup> For details on how to use PANTONE<sup>®</sup> Matching System with this printer series, go to: [www.hp.com/support/lj4650](http://www.hp.com/support/lj4650).



Vivid colour and sharp text with HP ImageREt 3600<sup>1</sup>



Create your own professional marketing and business collateral



Change low or empty print cartridges easily



Control panel conveniently lets you check print supplies and status

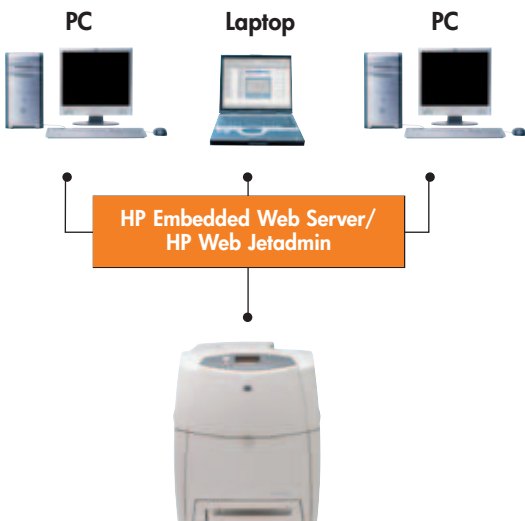


August 5, 2003  
OVERALL PRINTERS  
Hewlett-Packard Company

HP reliability

시작됩니다  
装着

Optional Asian language font support



HP Color LaserJet 4650

Cost effective for workgroup networking

- **Replace print cartridges easily.** Convenient front-door access and HP Smart printing technology<sup>1</sup> makes print cartridge exchange and troubleshooting easy for all users. HP Smart printing technology<sup>3</sup> helps monitor consumables, transmits automated email alerts and also enables you to continue printing a number of pages with the black cartridge when any colour cartridge runs out.
- **Check printer status easily.** The front control panel displays up to four lines of text and animated graphics simultaneously for easy troubleshooting and convenient printer configuration.
- **Convenient job retention features.** Enhance your business productivity with 4 workflow-tailored printing solutions to enable multiple copying and job storage. Proof and Hold and Private Printing features are available with the HP Color LaserJet 4650dtn printer or by adding additional RAM to the other printers in the series. The Quick Copy and Stored Job features are available with an optional HP high-performance 20 GB EIO hard disk.
- **HP reliability.** HP is the only printer vendor to receive an 'A' rating for Printer Service and Reliability for twelve years in a row from PC Magazine's annual Readers' Choice survey, and recently received one of the first 'A+' ratings awarded.

## Enhance your productivity with advanced networking features

- **Easy expandable network capabilities.** Expand your printer's connectivity to match your business growth. These printers are designed to support workgroup of up to 20 users via the HP Jetdirect 620n 10/100Base-T Ethernet networking card. Take advantage of up to three available EIO slots for increased workgroup productivity and an optional 20 GB hard disk. Optional HP Jetdirect 680n EIO internal print server allows for wireless 802.11b networking.
- **Multiple print language support.** Support for HP PCL 6, HP PCL 5c (web download), HP PostScript level 3 emulation provides consistent, professional results.
- **Versatile expansion features.** Install a font card<sup>2</sup> to seamlessly print multi-byte encoded Asian language documents, with fully scalable typefaces for complete PCL and PostScript compatibility. Language fonts supported include Simplified Chinese, Traditional Chinese, Thai, Korean, Japanese and Arabic. Install a flash memory card for forms or third-party solutions via two available flash memory slots.
- **Remote printer management.** HP Toolbox provides one location for users to access all printer information, including documentation, self-help and troubleshooting tips, printer status and help links. HP Embedded Web Server offers similar features for a single networked printer, while HP Web Jetadmin<sup>3</sup> provides network managers a single support tool to install, monitor and troubleshoot a wide range of network-connected devices from an intuitive browser interface.

<sup>1</sup> Using genuine HP supplies ensure availability of all HP printing features.

<sup>2</sup> For more information on Asian font solutions, go to: [www.hp.com/apac/printsolutions](http://www.hp.com/apac/printsolutions).

<sup>3</sup> Not included with printer installation software but can be downloaded from the HP website: [www.hp.com/go/webjetadmin](http://www.hp.com/go/webjetadmin)



## HP worldwide customer service and support: The HP assurance

For greater peace of mind, every HP product comes with award winning HP service and support—HP Customer Care. Our highly experienced and knowledgeable customer service professionals are there to help you—online ([www.hp.com/support](http://www.hp.com/support)), via email or on the phone for fast response—round the clock, round the globe in as many as 18 languages. You will get professional advice on using your HP product, assistance with setup and installation, help with troubleshooting, details on warranty and repair options, fast product replacement, software upgrades and more.

Our wide range of warranty and repair options give you maximum flexibility and convenience—you can return your product directly to HP or your local retailer or a HP repair centre<sup>1</sup>. If you choose to do the repairs yourself, you can trust HP to quickly deliver all the parts that you need.

## HP Pay per use

HP Pay per use provides everything your company needs for a reliable imaging and printing environment. This comprehensive service combines the hardware, services, support, supplies and financing to provide you with flexible payment options of level pay, base plus click and cost per page. The HP Pay per use allows customers to reduce their Total Costs of Ownership (TCO) and increase their print-related workflow productivity.

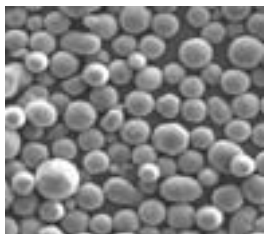
## HP Imaging and Printing services can help you

HP's Imaging and Printing services is committed to helping you get the most value from your imaging and printing environment. Our comprehensive portfolio of services that combines consulting, integration, management and support services to simplify your imaging and printing infrastructure, streamline your business operations and sharpen your customer communications. HP Imaging and Printing services bring the depth of imaging and printing expertise that can transform the way businesses communicate, while uncovering and capturing entirely new levels of productivity, efficiency and cost savings.

<sup>1</sup> Service and support options and availability vary by product, country/region and language.



Best Support Services  
ComputerWorld Reader's  
Choice Award 2003



HP chemically grown toner particles fuses quickly to the paper to produce vivid hues and sharper text with impressive results.

### HP original LaserJet print cartridge. The science behind brilliant printing.

#### High tech, high performance

70% of HP LaserJet printing technology is in the cartridge. Smaller, more uniformly shaped HP colour toner particles deliver richer, sharper colours and more even tones, so your documents always look their best.

#### Unmatched reliability

Painstakingly engineered and tested to work perfectly with HP LaserJet printers, you get reliable, consistent print results and peace of mind with HP original LaserJet print cartridges.

#### Smart management

Access real-time toner usage data stored in the cartridge with HP Smart printing technology and make better purchase decisions.

# HP Color LaserJet 4650 printer series

1. Control panel simultaneously displays up to four lines of text and animated graphics
2. Top cover allows convenient front access to four, all-in-one HP print cartridges
3. Automatic two-sided printing unit offers fast, efficient duplexing
4. 100-sheet multipurpose tray handles heavy custom media up to 53 lb bond (200 g/m<sup>2</sup>)
5. Adjustable 500-sheet input tray 2
6. Optional 2 x 500-sheet paper feeder assembly delivers high-volume printing
7. HP Jetdirect 620n Fast Ethernet internal print server
8. 288 MB total memory and a powerful 533 MHz processor perform complex tasks quickly
9. Foreign interface for third-party paper handling solutions
10. Bidirectional parallel port and USB 1.1 port



Front view

Right side view

HP Color LaserJet 4650dn with optional 2 x 500 sheet tray/pedestal as shown

## HP Color LaserJet 4650 printer series at-a-glance

### HP Color LaserJet 4650

- 100-sheet multipurpose tray
- 500-sheet input tray
- 160 MB RAM
- 533 MHz RISC processor
- Three open EIO slots

### HP Color LaserJet 4650dn




Base model plus:

- HP Jetdirect 620n Fast Ethernet print server in one EIO slot
- Automatic two-sided printing

### HP Color LaserJet 4650dtn

Base model plus:

- HP Jetdirect 620n Fast Ethernet print server in one EIO slot
- 500-sheet input tray for 1,100-sheet capacity
- Additional 128 MB RAM for a total of 288 MB RAM

Technical specifications	HP Color LaserJet 4650 Q3668A	HP Color LaserJet 4650dn Q3670A	HP Color LaserJet 4650dn Q3671A
			
<b>Print speed<sup>1</sup></b>	Up to 21 ppm (A4)/22 ppm (letter), colour and black only		
<b>First page out</b>	Approximately 15 seconds		
<b>Resolution</b>	600 x 600 dpi with HP ImageREt 3600		
<b>Processor</b>	533 MHz RISC		
<b>Memory</b>	<b>4650/4650dn:</b>	160 MB standard; 544 MB maximum; one available DIMM slot	
	<b>4650dn:</b>	288 MB standard; 544 MB maximum; one available DIMM slot	
<b>Flash memory</b>	Two available slots for font cards or third-party solutions <sup>2</sup>		
<b>EIO hard disk</b>	Optional		
<b>Duty cycle</b>	Up to 85,000 pages per month		
<b>Media</b>			
Media handling	<b>4650/4650dn:</b>	100-sheet multipurpose tray, 500-sheet tray 2, foreign interface harness	
	<b>4650dn:</b>	100-sheet multipurpose tray, 500-sheet tray 2, 500-sheet tray 3, foreign interface harness	
Output capacity	250-sheet face-down output bin		
Duplex printing	<b>4650/4650dn:</b>	Manual two-sided printing	
	<b>4650dn:</b>	Automatic two-sided printing	
Sizes	Multipurpose tray: 3 x 5 inches (76.2 x 127 mm) to 8.5 x 14 inches (216 x 356 mm); letter, legal, executive, A4, A5, B5 (JIS), executive (JIS), DPostcard (JIS), 16k, envelopes (No. 10, Monarch, C5, DL, B5); Trays 2, 3, and 4: 7.2 x 8.2 inches (182 x 210 mm) to 8.5 x 14 inches (216 x 356 mm); letter, legal, executive, A4, A5, B5 (JIS)		
Weights	Multipurpose tray: 16 to 53 lb bond (60 to 200 g/m <sup>2</sup> ); Trays 2, 3, and 4: 16 to 28 lb bond (60 to 105 g/m <sup>2</sup> )		
Types	Multipurpose tray: paper (plain, glossy, colored, pre-printed, letterhead, recycled, HP Tough and HP High Gloss Laser), envelopes, transparencies, labels, cardstock; Trays 2, 3 and 4: paper (plain, glossy, recycled), transparencies		
<b>Connectivity</b>			
Interfaces	<b>4650:</b>	Bidirectional IEEE-1284-C parallel port, USB 1.1 port	
	<b>4650dn/4650dn:</b>	Bidirectional IEEE-1284-C parallel port, USB 1.1 port, HP Jetdirect 620n Fast Ethernet internal print server	
EIO slots available	<b>4650:</b>	Three	
	<b>4650dn/4650dn:</b>	Two	
Languages	HP PCL 6, HP PCL 5c (web download), HP postscript level 3 emulation, native PDF printing		
Fonts	80 internal TrueType™ fonts scalable in HP PCL and HP postscript level 3 emulation; additional font solutions available via DIMMs		
Client operating systems	Microsoft® Windows 98, 98 SE, NT 4.0, Me, 2000, XP 32-Bit <sup>3</sup> , Server 2003 32-Bit <sup>3</sup> , Mac OS 9.0 and later, OS X.0 and later; UNIX®; Linux; HP OpenVMS; OS/2		
Network operating systems <sup>4</sup>	Via HP Jetdirect print servers: Microsoft® Windows 98, Me, NT 4.0, 2000, XP, XP 64-Bit, 2003 Server; Apple Mac OS 8.6 and later; Novell NetWare 3.2, 4.2, 5.x, 6; Red Hat Linux 6.x and later; SuSE Linux 6.x and later; HP-UX 10.20, 11.x; Solaris 2.5x, 2.6, 7, 8 (SPARC systems only); IBM AIX 3.2.5 and later (requires software from vendor); MPE-iX		
Network protocols supported <sup>4</sup>	Via HP Jetdirect print servers: TCP/IP, IPX/SPX, AppleTalk, Apple Rendezvous compatible, DLC/LLC, Auto-IP, IP Direct Mode, NDS, Bindery, NCP, NDPS, iPrint, Telnet, SLP, IGMP, BOOTP/DHCP, WINS, SNMP v 1 and v 2c, HTTP; may require software from the NOS vendor or third-party vendor: LPD, FTP Printing, IPP		
<b>Dimension (h x d x w)</b>	<b>4650/4650dn:</b>	22.3 x 20 x 18.9 inches (567 x 508 x 481 mm)	
	<b>4650dn:</b>	27.3 x 20 x 18.9 inches (694 x 508 x 481 mm)	
<b>Weight</b>	<b>4650/4650dn:</b>	81 lb (36.8 kg)	
	<b>4650dn:</b>	97 lb (44 kg)	

<sup>1</sup> Exact speed varies depending on the system configuration, software application, driver and document complexity.

<sup>2</sup> For third-party solutions, go to: [www.hp.com/go/gsc](http://www.hp.com/go/gsc).

<sup>3</sup> Driver support is provided for 64-bit OS, but no installer or toolbox support.

<sup>4</sup> Not all protocol and operating system combinations are supported. For more information, go to: [www.hp.com/support/net\\_printing](http://www.hp.com/support/net_printing)

# HP Color LaserJet 4650 printer series

## Technical specifications

<b>Environmental ranges</b>	<b>Operating temperature:</b> Operating: 50 to 86 °F (10 to 30 °C) Recommended: 62.6 to 77 °F (17 to 25 °C) <b>Relative humidity:</b> Operating: 10 to 80 % relative humidity Recommended: 30 to 70 % relative humidity <b>Altitude:</b> 0 to 8530 ft (0 to 2600 m)
<b>Acoustics</b>	Power: active: 6.5 B(A); standby: 5 B(A) Pressure (bystander): active: 51 dB(A); standby: 34 d(B)A
<b>Power specifications</b>	Input voltage: 110 to 127 V (±10 %), 50/60 Hz (±2 Hz) 220 to 240 V (±10 %), 50/60 Hz (±2 Hz)
<b>Power consumption</b> (Energy-saver sleep mode, Energy Star compliant)	Active: 560 watts Standby: 38 watts (4650hdn: 40 watts) Powersave: 26 watts (4650hdn/4650dtn: 31 watts) Off: 0.3 watts
<b>Product certifications</b>	EMC: CISPR 22: 1997/EN 55022: 1998 Class B; EN 61000-3-2: 1995/A14; EN 61000-3-3: 1995; EN 55024: 1998; FCC Title 47 CFR, Part 15 Class B/ICES-003, Issue 3/GB9254-1998, GB17625.1-1998; EMC Directive 89/336/EEC, the Low Voltage Directive 73/23/EEC, and carries the CE-Marking accordingly Argentina (TUV S Mark-Rs.92/98/Ds.1009/98), Australia (AS/NZ 3260), Canada (cUL-CAN/CSA C22.2 No.60950-00), China (GB4943), Czech Republic (CSN-IEC 60950-IEC 60825-1), Estonia (EEI-EN60950-IEC 60825-1), EU (CE Mark-Low Voltage Directive 73/23/EEC), Germany (TUV-EN60950-IEC 60825-1), Hungary (MEE-IEC 60950-IEC 60825-1), Lithuania (LS-IEC 60950-IEC 60825-1), Mexico (NOM NYCE-NOM 019 SCFI), Poland (B Mark-IEC 60950-IEC60825-1), (Russia (GOST-R50377), Slovakia (IEC 60950-IEC60825-1), Slovenia (SQIEC 60950-EN60825-1), South Africa (IEC 60950-IEC60825-1), USA (UL-LUL 60950; FDA-21 CFR Chapter 1 Subchapter J for lasers); Class 1 Laser/LED Product
<b>Warranty</b>	One-year, next day, on-site warranty

For more information, call your local Hewlett-Packard sales office or your nearest HP authorised dealer:

HP customer information centre (for product information)

Australia	132347
China	+86 21 2898 2255
Hong Kong	+852 800 938 833
India	+9628 123 123 (Del/Mum/Blr) +1600 444 999 (other cities)
Indonesia	+0800 1111 222
Korea	+080 703 0700
Malaysia	+1800 88 4848
New Zealand	+0800 733 547
Philippines	+1800 1331 4488
Singapore	+1800 278 8100
Taiwan	+0800 236 686
Thailand	+662 353 9000
Vietnam	+848 823 6215

For the following countries, please fax your queries to: +65 6 275 6707

• Bangladesh • Brunei • Cambodia • Pakistan • Sri Lanka

HP customer care centre (for post-sales service)

Australia	+61 3 8877 8000
China	+86 10 6868 7980
Hong Kong	+852 800 96 7729
India	+1600 112 267
Indonesia	+62 21 350 3408
Korea	+82 2 3270 0700
Malaysia	+60 3 2695 2566
New Zealand	+64 9 356 6640
Philippines	+63 2 867 3551
Singapore	+65 6 272 5300
Taiwan	+886 2 8722 8000
Thailand	+662 353 9000
Vietnam	+848 823 4530



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## Ordering information

Number	Description
Q3668A	HP Color LaserJet 4650 printer
Q3670A	HP Color LaserJet 4650dn printer
Q3671A	HP Color LaserJet 4650dtn printer
<b>Print servers</b>	
J7934A	HP Jetdirect 620n Fast Ethernet internal print server
J6058A	HP Jetdirect 680n wireless Ethernet internal print server
<b>Paper handling</b>	
Q3673A	500-sheet input tray (tray 3)
Q3674A	2 x 500-sheet paper feeder assembly (trays 3 and 4)
C9667A	Printer cabinet
<b>HP printing supplies</b>	
C9720A	Black print cartridge (9,000 pages at 5 percent coverage)
C9722A	Yellow print cartridge (8,000 pages at 5 percent coverage)
C9723A	Magenta print cartridge (8,000 pages at 5 percent coverage)
C9721A	Cyan print cartridge (8,000 pages at 5 percent coverage)
<b>Media</b>	
Q1298B	HP LaserJet Tough Paper, A4-size, 50 sheets
Q6542A	HP LaserJet Soft Gloss Paper, A4-size, 200 sheets
C2936A	HP LaserJet Colour Transparencies, A4-size, 50 sheets
92296U	HP LaserJet Monochrome Transparencies, A4-size, 50 sheets
Q2397A <sup>1</sup>	HP Premium Choice LaserJet Paper, A4-size, 250 sheets
Q2407A <sup>1</sup>	HP Office Paper, A4-size, 500 sheets
Q2408A <sup>1</sup>	HP Office Paper, letter size, 500 sheets
Q2400A <sup>1</sup>	HP Everyday Paper, A4-size, 500 sheets
Q2398A <sup>1</sup>	HP Everyday Paper, letter size, 500 sheets
Q6550A	HP Laser Photo Paper, A4-size, matt, 100 sheets
Q6547A	HP Laser Photo Paper, A4-size, gloss, 200 sheets
Q6548A	HP Laser Photo Paper, A3-size, gloss, 200 sheets
Q6544A	HP Laser Paper, A4-size, matt, 150 sheets
<b>Memory and storage</b>	
J6073A	20 GB HP high-performance EIO hard disk
Q2630A	128 MB DDR SDRAM
Q2631A	256 MB DDR SDRAM
<b>Cables</b>	
92215N	Appletalk interface cable, 1 metre
92215S	Macintosh printer cable, 2 metre
C2946A	Parallel cable, 3-metre IEEE 1284-B (a to c) cable
C2947A	Parallel cable, 10-metre IEEE 1284-B (a to c) cable
<b>Service and support</b>	
H3113A	HP Care Pack 3 years next day
H3114A	HP Care Pack 4 years next day
H3115A	HP Care Pack 5 years next day
U3795A	HP Care Pack 3 years 4 hours 9 x 5
H3118A	HP Care Pack 3 years 4 hours 13 x 5
H3119A	HP Care Pack 4 years 4 hours 13 x 5
H3129A	HP Care Pack 5 years 4 hours 13 x 5
H3183PA	HP Care Pack 1 year post warranty, next day
U4941PA	HP Care Pack 1 year post warranty, 4 hours 9 x 5
U2034PA	HP Care Pack 1 year post warranty, 4 hours 13 x 5

<sup>1</sup> Available in selected Asia Pacific countries only.

For more information on HP Care Pack, visit:

<http://www.hp.com/apac/hpservices/carepack>

HP Instant Support Professional Edition (ISPE), visit:

<http://www.instantsupport.asiapac.hp.com>

For more information on support, visit: <http://www.hp.com/support>

For more information on HP genuine parts, visit:

<http://www.hp.com/go/hpparts>

For specific warranty details, please check with your local country resellers.

