



WHAT DO YOU HAVE TO SAY?



HP Indigo press ws4500

Productive, cost-effective, versatile printing solution for label and package printing

Approximately 65% of label jobs around the world are produced in print runs of less than 50,000 labels, or under 6,500 feet (See fig 1)

Fact! Label and packaging print jobs are continuing to become shorter!

Fact! Customers are demanding shorter lead times and faster turnaround!

Fact! Conventional printing processes are prohibitively expensive for low volume orders and result in shrinking profit margins!

How do you adapt to these changing market trends, satisfy exacting customer demands and, at the same time, sustain a profitable printing business?

The HP Indigo press ws4500 provides a complete end-to-end solution from prepress to finishing and lowers production costs immediately in several key areas:

- It eliminates the expense of films, plates or chemistry.
- It generates little or no waste.
- It requires far less set-up time than conventional printing.

For runs up to 6,500 feet, the HP Indigo press ws4500 significantly lowers your costs. And it integrates easily within your existing printing environment to complement the capabilities of your current equipment.

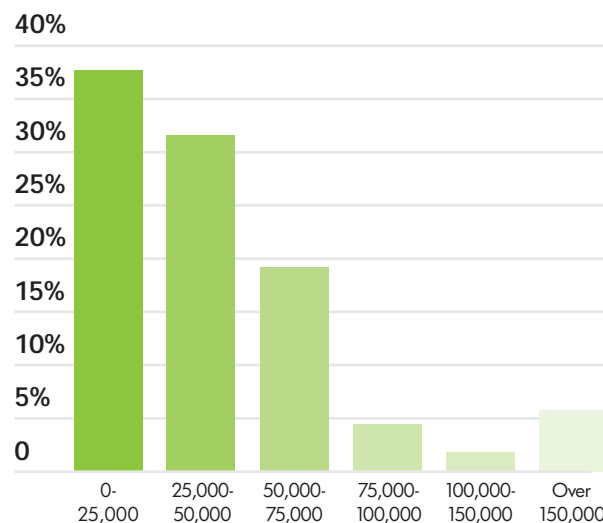
“With the HP Indigo press we are already seeing more revenue opportunities, greater productivity and profitability, and increased customer retention and loyalty.”

Jerry Berke,
President Lion Labels,
MA

Fig 1: Run length types (# of 5 x 10 cm labels)

Source: Labels & Labeling

The increase in small order quantities – and the decrease in long runs – has created new opportunities and higher profit margins for the label converter and printer.



Be labeled ‘premium provider’ with the HP Indigo press ws4500

The HP Indigo press ws4500 solution allows marketers to respond rapidly and cost effectively to shorter product life-cycles and ever-changing retail needs. It allows for highly targeted labeling and packaging — applications that would be expensive or impossible with a traditional press. These include: versioned products, event marketing, private labels, regional and seasonal packaging and test markets.

The flexible production offerings, rapid response times and the liquid ink quality of the HP Indigo press ws4500, complement conventional printing capabilities to expand your service options. This allows you to allocate jobs to your most suitable, cost efficient press while consistently maintaining the offset quality your customers are used to. This way, you can optimize your productivity, ensure repeatable colors and maximize your profitability on every job.

Expand your arsenal of services

The HP Indigo press ws4500 can help you grow your business and transform you into an indispensable, one-stop partner for your customers. It lets you build an arsenal of new services for the production of labels, shrink sleeves and flexible packaging:

- Provide your customers with instant proofs identical to their required jobs.



- Print runs as few as one, or up to 50,000 labels in fast turnaround time, exactly when required and help customers get their jobs to market quickly.
- Supply small, medium and large quantities to your customers to precisely meet their needs and help them manage their supply chain effectively, thereby saving them inventory costs.
- Provide exceptional print quality, to ensure your customers' brands stand out in the marketplace.
- Print spot colors to meet your customers' corporate branding requirements.
- Offer virtually limitless substrate compatibility and cater to a wider range of packaging needs.
- Use variable data printing to provide complete, full-color product personalization, as well as ticketing and game pieces.
- Use numbering and security features to enable product track and trace and help your customers protect their assets.

Benefit from built-in revolutionary technology

Your HP Indigo press ws4500 includes a number of uniquely competitive features:

HP ElectroInk. HP Indigo uses the unique HP ElectroInk liquid ink technology — the only color process in digital printing that equals the quality and color range of offset.

One-Shot Color printing. Enables all color separations to be laid down simultaneously on the final substrate, preventing registration issues and allowing you to print on a broad variety of substrates.

HP IndiChrome Plus. Expands color versatility beyond CMYK by offering you: a broader color gamut that includes CMYK + OVG (orange, violet, green) inks supported by an EskoArtwork digital front end; a closer match to the PANTONE MATCHING SYSTEM Colors; a broader applications range; a higher analog-to-digital transformation rate.

On-press Fast Ink Replacement (OFIR). Simple on-the-fly replacement of special/spot colors eliminates the time needed for swapping colors, making spot color jobs simple to execute.

HP SmartStream Labels and Packaging Solutions, Powered by EskoArtwork. The user-friendly HP Indigo hardware and EskoArtwork software package enables connectivity to conventional solutions through EskoArtwork software. This front end solution 'remembers' color settings for each substrate at the prepress stage, simplifying color management and allowing repeat jobs to produce identical output on whatever press you use.

Fast setup and job changeover

One-Shot Color

Assures perfect registration by accumulating all image separations on the blanket and transferring them to the substrate simultaneously in one shot.

Rewinder

- An easy-to-use touch screen panel, inspection plate and splicing table allow print quality inspection and fast roll replacement.
- Optional rewinder designed especially for flexible packaging applications with tension control and web guide.
- Multi-substrate capabilities down to 12 μ films.

Inspection plate

Splicing table

Work station

- For intuitive operator control over the functioning of the press, with easy-to-use menus and guidance.
- Remote assistance to press operator via support center.

7-station ink cabinet

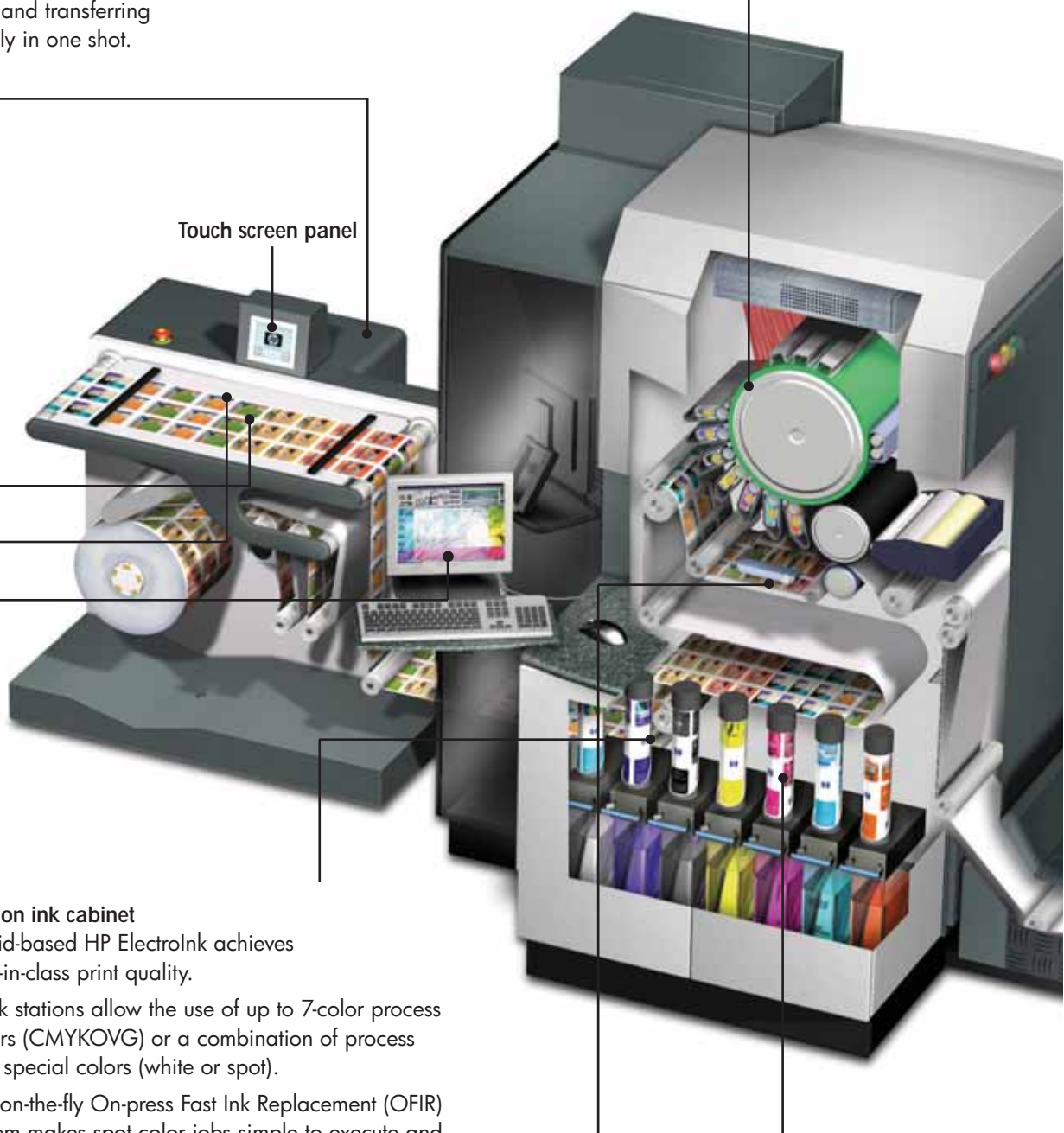
- Liquid-based HP ElectroInk achieves best-in-class print quality.
- 7 ink stations allow the use of up to 7-color process colors (CMYKOVG) or a combination of process and special colors (white or spot).
- The on-the-fly On-press Fast Ink Replacement (OFIR) system makes spot color jobs simple to execute and increases overall press productivity.

In-line densitometer

Assures color consistency, fidelity, dot gain compensation and accurate repeatability across jobs and allows the operator to fine-tune the press during printing.

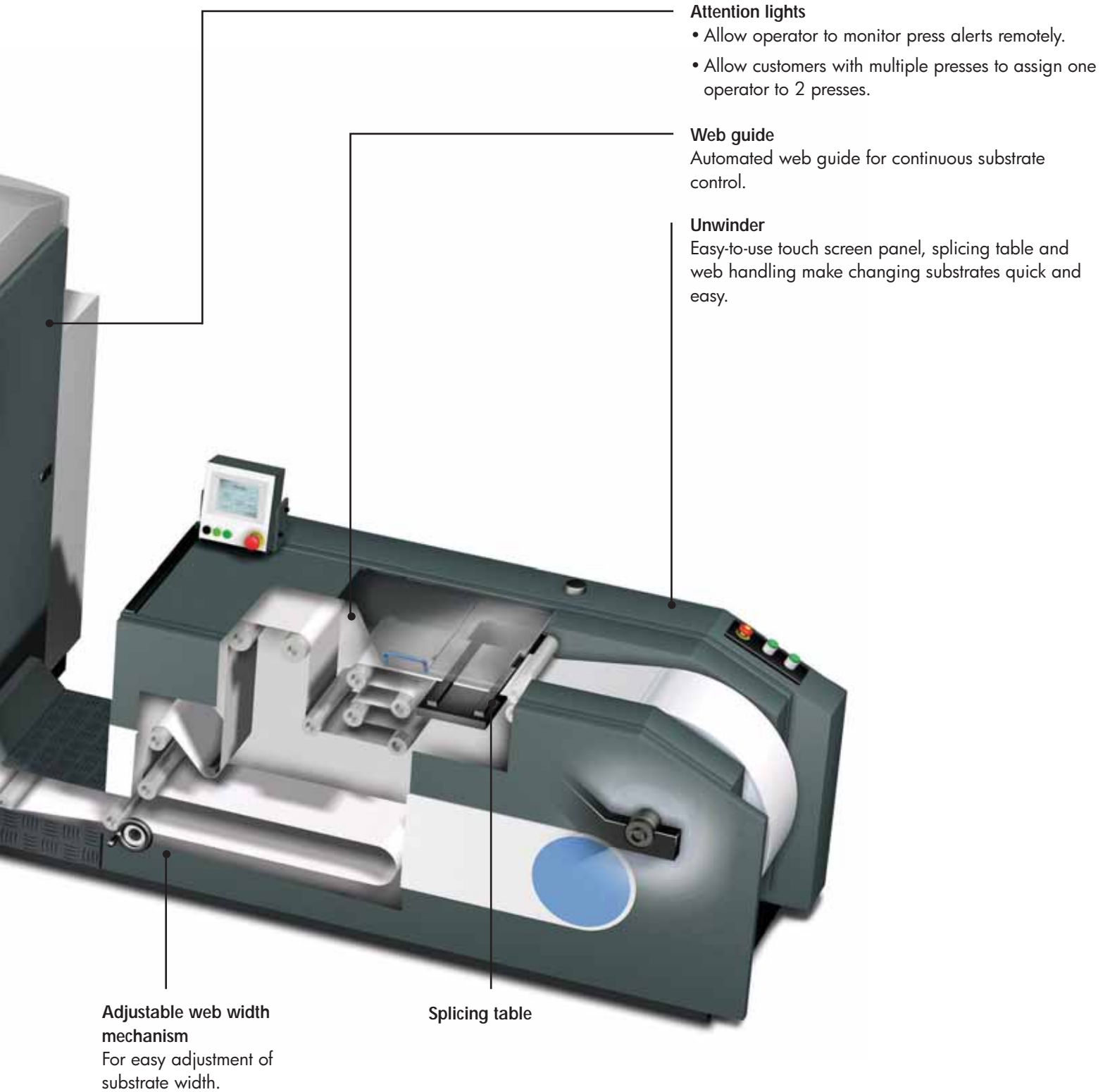
Ink cans

For easy, fast and clean ink replacement.



Digital front end solutions

HP SmartStream Labels and Packaging Print Server, Powered by EskoArtwork digital front end that supports end-to-end workflow.



Maximize results with HP Indigo partners

HP has aligned with industry-leading partners to address the most critical customer needs:

The HP SmartStream Labels and Packaging Print Server, Powered by EskoArtwork. A high-performance RIP, Digital Front-End and workflow controller, the server can reside in your prepress environment or near the press. From its centralized location, it assures highly efficient file processing, best-in-class color control, simple, sophisticated bar-coding, enhanced step and repeat and high quality variable data output. The server enables connectivity to central EskoArtwork workflow solutions, as well as to other workflow components, such as web-to-print and MIS solutions.

With extensive space for storing a tremendous number of jobs, the server scales to adopt system upgrades and increased workflow requirements. The solution also addresses your production needs through ICC color management, and includes prepress tools in the native environment of Adobe® Illustrator™.

AB Graphic (www.abgint.com)

ABG Digicoat: offers an affordable in-house coating solution, and can be used to apply water-based primers or optionally UV curable over varnishes.

ABG Digicon label finishing: the Series 2 Digicon range from AB Graphic International offers an unprecedented variety of options for digital print finishing—available either in-line or off-line and incorporating flexo varnishing and semi-rotary die-cutting along with the options of overlaminating, semi-rotary screen printing, hot foil blocking, and embossing, as well as an inspection system. The modular design allows for any combination of processes to be carried out in a single pass, and its sophisticated control system enables quick changeovers with minimal waste.

ABG Digilam flexible packaging finishing: the ABG Digilam is a laminator designed for flexible packaging applications, such as food-specific substrates. The equipment allows water-based adhesives to be applied via a gravure coating system. It incorporates a 4-stage high power hot air drying system, followed by a heated laminating nip roller and a single spindle rewind with pneumatic lay-on roller. A sophisticated web tension control system enables the easy handling of materials as thin as 12 microns.

Rotoflex Vericut System (www.rotoflex.com). The off-line Vericut system features automatic registration with continuous correction, auto-positioning, auto-learn, servo-driven draw stations, and maximum machine speed in variable and constant repeat modes.

Delta Industrial (www.deltaind.com). The Delta Spectrum Series flexible Mod-Tech rotary converter is optimized to run in-line or off-line with the HP Indigo narrow web presses. All modules are servo controlled to register and reregister from each axis; they unwind and rewind clockwise or counter clockwise. The system includes a steering assembly and die station, and provides the coating, over laminate, flex and engraved die cut, slit or sheet, laser die cutting, hot stamp, cold foil and more.

Michelman (www.michem.com). Environmentally friendly, water-based DigiPrime coatings provide excellent HP Indigo ink adhesion on a variety of substrates.

Media partners:

Fedrigoni/Manter, UPM Raflatac, Avery Dennison, Ineos Films, Mitsubishi and Innovia offer diverse self-adhesive paper and films on rolls and sheets.

“The print quality of the HP Indigo press is excellent, and its 7-color capabilities enable us to print on a wider range of substrates, including clear, textured and colored variants.”

Elisha Tropper,
former President
and Owner
Prestige Label, NC

Technical specifications

Print engine specifications:	Printing speed	52.5 feet per min. in 4-color mode 105 feet per min. in 1 or 2-color mode
	Substrate thickness	12*-350 micron (0.47*-13.8 mils)
	Substrate type	Self-adhesive label stock and films
	Printing technology	HP ElectroInk technology
	Image quality	812 x 812 dpi 812 x 1,624 dpi when printing in high resolution mode Line screens: 144 (sequin) 160, 175, 180, 230 lpi
	Image size	12.13" x 17.72" max.
	Web width	Max. width: 12.99" Min. width: 7.87"
Process colors	Standard 4-color printing	Cyan, Magenta, Yellow, Black
PANTONE® Colors**	HP IndiChrome on-press simulation (6-color printing)	Cyan, Magenta, Yellow, Black, Orange and Violet
	HP IndiChrome on-press simulation (7-color printing)	Cyan, Magenta, Yellow, Black, Orange, Violet and Green
	HP IndiChrome off-press (mixed spot ink)	PANTONE Colors are mixed using the HP IndiChrome Ink Mixing System or ordered via the HP Indigo Ink Mixing Services.
	White ink	Yes
Input system	Input roll max. diameter: 51.18" Core inside diameter: 3" (6" optional) Tension control system Air expanded shaft	Roll load/unload pneumatic device Max. roll weight: 880 lb. Active web guide
Output system	Rewinder: 23.62" max. roll diameter	
Dimensions of press	Length: 81.1" Width: 64.96" Height: 86.61"	
Weight of press	12,100 lb.	
HP SmartStream Labels and Packaging Print Server, Powered by EskoArtwork	Software platform	Microsoft® Windows XP® Professional
	Hardware platform	2.8 GHz Pentium® 4 processor, 36 GB hard drive 512 MB base memory, expandable to 4 GB 15 inch flat screen monitor DVD-RW/CD-RW Image disks - two 36 GB drives which provide 70 GB of image memory
	Network protocols	TCP/IP Profibus with WHS
	Physical network connection	10/100/1000 Base-T
	Supported formats and standards	Postscript Level 3, PDF 1.4, TIFF, JPEG, EPS, PPML 1.0, JLT
Optional equipment/configuration:	HP SmartStream DigitalFront-Ends	HP SmartStream Labels and Packaging Color Kit, powered by EskoArtwork HP SmartStream Labels and Packaging VDP Tools, powered by EskoArtwork HP SmartStream Labels and Packaging Pre/press Tools, powered by EskoArtwork
	Expanded colors capabilities	5th, 6th and 7th color printing; HP Indigo Ink Mixing System
	Reinsertion	Optional

*Substrate testing recommended

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Hewlett-Packard Company
1001 Summit Boulevard
Mailstop 401
Atlanta, GA 30319
USA
Tel: +1 800 289 5986
Fax: +1 404 648 2054

Europe, Middle East and Africa

Hewlett-Packard Indigo B.V.
Renier Nafzigerstraat 100
6221 KL Maastricht
The Netherlands
Tel: +31 43 356 5656
Fax: +31 43 356 5600

Asia Pacific

Hewlett-Packard Company
138 Depot Road
Singapore 109683
Tel: +65 6727 0777
Fax: +65 6276 3160

Latin America

Hewlett-Packard Company
5200 Blue Lagoon Drive
Suite 950
Miami, FL 33126
USA
Tel: +305 267 4220
Fax: +305 265 5550
informahpindigo@hp.com

Israel

Hewlett-Packard Company
Kiryat Weizmann
P.O. Box 150
Rehovot 76101
Israel
Tel: +972 8 938 1818
Fax: +972 8 938 1338



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