

HP Indigo WS4600 Digital Press



High-quality narrow-web solution
for labels production



Diversify and grow your label business with digital printing

The HP Indigo WS4600 Digital Press offers high quality, productivity, and flexibility for the production of any type of pressure-sensitive label. The press delivers the quality demanded by brands, enabling converters to start on a growth path with a more profitable digital solution.

The leader in print quality and colour

HP Indigo's superior liquid ElectroInk technology is the only colour process in digital printing that matches gravure quality. ElectroInk provides the widest digital colour gamut using up to 7 ink stations on press. With high resolution printing and perfect registration, the press can produce eye-catching, distinctive labels.

High productivity

Enhanced Productivity Mode (EPM) increases press throughput by up to 33% for most new colour jobs and by 25% when adding white ink, achieving distinct HP Indigo quality with reduced turnaround time and lower cost per printed linear metre.

- Designed for continuous printing of a wide variety of jobs
- Press speed of 21 linear metres/minute in colour using EPM, increasing the number of addressable jobs
- Up to 30 linear metres/minute in 1- or 2-colour mode

Security printing

HP Indigo ElectroInk Invisible Red opens business applications and allows one-pass printing for anti-counterfeiting, invisible barcodes, and other security elements.

End-to-end workflow

Together with market-leading partners, HP Indigo offers a portfolio of workflow solutions specifically designed for the needs of label converters, including MIS solutions, pre-press tools, and production management.

Environmental benefits

Make business more environmentally responsible by shifting production from conventional processes to digital, on-demand technology. The HP Indigo WS4600 Digital Press also supports many eco-certified substrates as well as environmentally friendly primers, varnishes, and adhesives.

High-quality, cost-effective label press

Wide colour and substrate flexibility

A wide offering of certified substrates and the widest digital colour gamut give a business advantage by enabling production of high-value jobs.

One Shot Colour technology. Achieve accurate, repeatable printing. All colour separations are laid down simultaneously in a single pass on the substrate, creating perfect colour-to-colour registration including on heat-sensitive materials.

Wide media range. Print on substrates from 12 to 350 microns including pressure-sensitive label stock and films.

PANTONE colours on press. Emulate a wide majority of PANTONE colours on press with CMYK or the HP IndiChrome Plus 7-colour system using CMYK plus orange, violet, and green inks.

Accurate spot colours. True spot colours can be mixed off press for outstanding Pantone-approved solids. Covering up to 97% of the PANTONE® colour range, the HP IndiChrome Ink Mixing System (IMS) uses CMYK as well as orange, violet, green, reflex blue, rhodamine red, bright yellow, and transparent.

Maximise production flexibility

The HP Indigo WS4600 Digital Press integrates easily within existing environments, complementing conventional printing platforms and expanding service options.

Any size run. Print the shortest runs that customers require, and economically address runs up to 50,000 labels on-demand with fast turnaround.

Enhance production efficiency. Maximise profitability by allocating suitable jobs to the HP Indigo WS4600 Digital Press.

Digital freedom. With no make-ready required and quick changeovers between jobs, the press can produce dozens of different jobs per day.



To learn more, visit
hp.com/go/graphic-arts
or hp.com/go/hpindigoWS4600

Advanced workflow solutions

Together with hand-picked market-leading partners, HP Indigo has built a well-integrated ecosystem that provides converters with all the tools they need from order to fulfilment.

Powerful print server. HP SmartStream Labels and Packaging Print Server is designed especially for HP Indigo by Esko. It includes best-in-class job management tools to automate and simplify workflow, as well as a powerful Colour Engine. The Colour Engine is a fully integrated solution for complete colour management. It quickly creates profiles that match PANTONE and spot colours, satisfying brand requirements and ensuring accurate colour matching from any technology to an HP Indigo press. The print server is equipped with a dedicated Adobe RIP for consistent, high-quality output.

Multiple VDP solutions. HP SmartStream Labels and Packaging VDP Tools, Powered by Esko, provide automatic printing of unique elements such as barcodes, text, singular numbers, photos, and security features. HP SmartStream Designer is an entry-level VDP offering with unique creative functionalities.

Converting solutions. A full range of solutions is provided by AB Graphics International and other leading vendors.

End-to-end efficiency. Integration of pre-press, production management tools, inspection and more drive superior quality, efficiency, and profitability by lowering human intervention and creating automated flow of jobs.

For more information, please refer to the Labels and Packaging Workflow Solutions Brochure.



Use HP SmartStream products and partner solutions with the HP Indigo WS4600 Digital Press to improve production efficiency and support digital growth. To learn more visit hp.com/go/smartstream



1. Unwinder
2. High-speed laser writing head
3. Scoroton charging units
4. Photo Imaging Plate (PIP)
5. Binary Ink Developers (BIDs)
6. Blanket
7. Impression cylinder
8. Inline densitometer
9. Ink cabinet
10. Work station
11. Rewinder

Technical specifications

Printing speed	Up to 15 m/min in 4-colour mode Up to 21 m/min in Enhanced Productivity Mode Up to 30 m/min in 1- or 2-colour mode	
Image resolution	812 dpi at 8 bit, addressability: 2438 x 2438 dpi HDI (High Definition Imaging)	
Line screens	144 (sequin) 160, 175, 180, 230 lpi	
Image size	308 x 450 mm maximum	
Substrate thickness*	12 to 350 microns	
Substrate type	Pressure-sensitive label stock and films	
Web width	Max. width: 330 mm; Min. width: 200 mm	
Unwinder	Input roll max. diameter: 1000 mm Core inside diameter: Standard: 3 in Optional: 6 in	Tension control system, air expanded shaft Roll load/unload pneumatic device Max. roll weight: 400 kg Active web guide
Rewinder	700 mm max. roll diameter	
Print server	HP SmartStream IN050 Labels and Packaging Print Server and Colour Engine, Powered by Esko	
Press dimensions	Length: 6070 mm; Width: 2020 mm; Height: 2150 mm. Electrical cabinet: Width: 2700 mm; Length: 650 mm; Width: 1440 mm	
Press weight	4550 kg	
HP Indigo ElectrolInks		
Standard 4-colour printing	Cyan, magenta, yellow, and black	
5-colour printing	Cyan, magenta, yellow, black, and white	
HP IndiChrome 6-colour printing	Cyan, magenta, yellow, black, orange, and violet	
HP IndiChrome Plus 7-colour printing	Cyan, magenta, yellow, black, orange, violet, and green	
Special effect inks	Invisible red	
HP IndiChrome off-press spot inks	HP IndiChrome Ink Mixing System (IMS) for spot colour creation using CMYK as well as orange, violet, green, reflex blue, rhodamine red, bright yellow, and transparent	
PANTONE® colours	Supports PANTONE PLUS®, PANTONE MATCHING SYSTEM®, PANTONE Goe™ HP Professional PANTONE Emulation Technology using CMYK; HP IndiChrome and HP IndiChrome Plus on-press HP IndiChrome off-press Ink Mixing System for achieving up to 97% of the PANTONE® colour range	
Options		
Expanded colour capabilities	5, 6, or 7 ink stations; HP IndiChrome Ink Mixing System	
Enhanced Productivity Mode	Enables EPM	
Print server options	HP SmartStream Labels and Packaging VDP Tools, Powered by Esko HP SmartStream Labels and Packaging Prepress Tools, Powered by Esko	
Reinsertion	Simplex and duplex capability	


*Media characteristics vary. If the media you are about to use is not listed in the Media Locator, HP cannot guarantee performance and we recommend that you test it prior to use.



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