

HP Indigo 5900 Digital Press



The gateway to HP Indigo quality



Enter the world of quality, versatility and robustness

The HP Indigo 5900 Digital Press is the entry point to HP Indigo's offset-matching quality and versatility, driven by the latest innovations for smart and productive printing. Broad capabilities, including printing on synthetics and extra thick substrates, enable an extensive range of high-value applications and an unparalleled variety of colours.

Highly productive and capable

The leading choice for medium-volume printers, the press prints at 90 colour pages per minute for more than two million colour pages per month. It can also deliver five million pages per month using its rapid 272 pages per minute monochrome speed. HP SmartStream Production Pro brings substantial RIP power. Multiple drawers enable continuous printing of a diverse job mix, and seamlessly switching between jobs and media types. HP SmartStream Mosaic produces millions of one-of-a-kind products using variable design technology.

The leader in print quality and colour

Enabled by HP Indigo's liquid ElectroInk technology and unique digital offset process, HP Indigo digital prints are of the highest quality. They match or even exceed offset, allowing them to be used interchangeably. ElectroInk has the widest digital colour gamut, in addition to special inks, using up to 7 ink stations on press. A 5th ink station is standard.

Biggest media range including thick substrates

Boasting the widest substrate offering in digital production, the press is compatible with uncoated and coated papers, as well as canvas, synthetics, lenticular, metallised, dark and transparent media, and paperboard. Print on thick substrates up to 550 microns and ultra-thick synthetics up to 600 microns. Use on-press primer to print on an extended range of paperboards.

Reinvent print production

HP PrintOS is a print production operating system with apps that help you get more out of your HP Indigo presses, and simplify and automate your production. Use PrintOS to continuously improve operations. Access the open and secure cloud-based PrintOS platform anytime, anywhere.



Boost your sustainability.

The HP Indigo 5900 Digital Press is manufactured carbon neutral, and offers reduced production waste, a takeback program, and energy efficiency. Certified with the Intertek Green Leaf Mark.

CO₂ neutral

A highly versatile digital printing solution

Uncompromising HP Indigo value and quality

Digital offset colour technology. HP Indigo's liquid electrophotography (LEP) technology, using HP Indigo ElectroInk with minute ink particles, delivers accurate linework, attractive images and smooth vignettes with a very thin ink layer that gives uniform gloss between ink and substrate.

Colour gamut. Use the 5th ink station to take advantage of special inks and spot colours. Emulate PANTONE® colours on press using CMYK or HP IndiChrome's 6- or 7-colour process. True spot colours can be mixed off press or ordered from the HP IndiChrome Ink Mixing Service for outstanding Pantone-approved solids, reaching 97% of the PANTONE® colour range.

Printing mode flexibility. Lower costs and boost productivity by printing high-quality prints in fewer than four colours. Enhanced Productivity Mode using only three colours delivers 33% higher throughput, significantly reducing turnaround time and production costs, as well as 25% less energy consumed per printed page. A pre-flight solution by Enfocus can automatically select suitable jobs. Print in two colours at 136 ppm, and monochrome at a speed of 272 ppm.

Proven success. The HP Indigo 5900 Digital Press is the latest model in the HP Indigo 5000 Digital Press Series with thousands of presses sold and over 100 billion printed impressions. It is a proven platform that delivers consistently high quality, reliability and productivity.

Wide flexibility for high-value specialty applications

Specialty media printing. One Shot technology extends media capabilities to unique substrates including canvas, synthetic, lenticular, and metallised media. All colour separations are accumulated on the blanket and transferred to the substrate in a single pass for perfect registration. Offer plastic cards, photo canvas, metallised cartons, and specialty products.

Ultra thick and thick synthetics. Print on opaque PVC materials up to 600 microns, opening new applications such as mono-core plastic cards and more. Offer an alternative to silk screen printing for manufacturers of industrial products, including panels, labels, and clothing tags. Support for thick paperboard up to 550 microns, including duplex printing, enables an array of folding cartons to help you get into the packaging world, as well as point of purchase applications.

Protecting your investment. Most innovations in the HP Indigo 5900 Digital Press will be available as optional upgrades for the HP Indigo 5600 and the HP Indigo press 5500.



- | | |
|---|---|
| 1. Feeder | 7. Impression cylinder |
| 2. High-speed laser writing head | 8. Perfector |
| 3. Scorotron charging units | 9. Ink cabinet |
| 4. Photo Imaging Plate (PIP) | 10. Proof tray |
| 5. Binary Ink Developers (BIDs) | 11. Stacker |
| 6. Blanket | 12. Imaging Oil Recycling System |



Digital ink priming. Use HP Indigo ElectroInk Primer to extend the variety of paperboards for the 550 micron thick substrate capability.

High-impact inks. Printing with HP Indigo ElectroInk White on transparencies, dark, coloured, and metallic substrates creates a high impact for white-on-black invitations, business cards, covers and cards. HP Indigo ElectroInk Fluorescent Pink offers high-value pages and glow effects under UV light for cards, publishing, specialty products, and more. Transparent ink creates a gloss effect on a matte substrate and can be used for watermark printing.

Production management and workflow

Powerful print server. Now provided for the HP Indigo 5000 Digital Press Series, HP SmartStream Production Pro is a powerful print server designed to meet challenging workloads. It offers a wealth of easily automated prepress tools to optimise production. Use an embedded real-time guide to easily leverage these capabilities.

PrintOS. Print Beat provides visibility to press performance to drive continuous improvement to print operations. PrintOS Site Flow efficiently manages any number of jobs per day, even hundreds or thousands. Automate, simplify and streamline files submission with PrintOS Box. Use PrintOS Composer for heavy VDP processing including sophisticated Mosaic campaigns.

Open standards. HP Indigo's openness makes it possible to tailor a solution according to specific business needs. JDF workflow architecture supports both upstream and downstream JDF connectivity, including inline and near line finishing.



Service Advantage
Our certified service teams are committed to meeting your end-to-end needs for accelerated ramp-up and maximum uptime. Remote engineers around the world provide support in multiple languages. Use the on-press capabilities of Print Care to resolve issues quickly and independently. The Smart Uptime Kit helps you to quickly locate the right part and manage your inventory.

Technical specifications

| | |
|---|--|
| Printing speed | 68 four-colour 8.5 x 11 in pages per minute (two-up); 90 colour 8.5 x 11 in pages per minute in EPM (two-up); 136 two-colour 8.5 x 11 in pages per minute (two-up); 272 full monochrome 8.5 x 11 in pages per minute (two-up) |
| Image resolution | 812 dpi at 8 bit, addressability: 2438 x 2438 dpi HDI (High Definition Imaging) |
| Line screens | 175, 180, 180m, 230 lpi |
| Sheet size | 330 x 482 mm maximum |
| Image size | 317 x 450 mm maximum |
| Paper weight* | Coated: 80 to 350 gsm; Uncoated: 60 to 320 gsm; Thickness: 70 to 400 microns |
| Feeder | Four drawers: Three drawers with 180 mm depth each (1800 sheets of 120 gsm each) One special jobs drawer: 70 mm (700 sheets of 120 gsm) A total of 6100 sheets of 120 gsm. All drawers support the full range of substrates. |
| Stacker | Main stacking tray with 600 mm stack height, supporting offset jogging (6100 sheets of 120 gsm) Proof tray with 60 mm stack height (600 sheets of 120 gsm) |
| Print servers (DFE) | HP SmartStream Production Pro |
| Cloud connectivity | Via HP PrintOS |
| Press dimensions | Length: 3952 mm; Width: 2282 mm; Height: 2074 mm |
| Press weight | 2700 kg |
| HP Indigo ElectroInks | |
| Standard 4-colour printing | Cyan, magenta, yellow, and black |
| 5-colour printing | Via the 5th ink station |
| 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 inks | Invisible red, light cyan, light magenta, white, digital matte, transparent, fluorescent pink, light black |
| 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®, and PANTONE Goe™ HP Professional PANTONE Emulation Technology using CMYK on-press; HP IndiChrome on press; HP IndiChrome Plus on-press HP IndiChrome off press (IMS) for achieving up to 97% of the PANTONE® colour range. |
| Options | |
| Expanded colour capabilities | 6 or 7 on-press ink stations; HP IndiChrome Ink Mixing System |
| White ink kit | Enables use of white ink |
| Thick Substrate Kit 550 | Supports substrates up to 550 microns (paperboards with duplex printing and synthetics with One Shot printing) |
| HP Indigo ElectroInk Primer | On-press priming solution for off-the-shelf paperboard up to 550 microns. |
| Ultra thick substrate kit | Enables printing on opaque PVC materials up to 600 microns |
| One Shot process kit | Enables printing on synthetics using HP Indigo One Shot technology |
| Print servers (DFEs) | HP SmartStream Ultra Print Server; HP SmartStream Labels and Packaging Print Server, Powered by Esko |
| Additional feeder | One additional feeder with three drawers, each with 180 mm of media |
| Additional stacker | One additional stacker with 600 mm of media |

*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.



Sign up for updates
hp.com/go/getupdated



Independently verified for
 environmental credentials



Share with colleagues



Rate this document

© Copyright 2016 HP 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.

PANTONE® and other Pantone, Inc. trademarks are the property of Pantone, Inc.

4AA6-3967EEW, March 2016.

