

HP Designjet Z3100 Photo Printer series

Featuring the HP Designjet Z3100 Photo Printer
and the HP Designjet Z3100ps GP Photo Printer



Breakthrough color

Achieve consistent & accurate color with the first ever embedded spectrophotometer¹ with i1 color technology

- **Automated and simple creation of ICC profiles.** HP's embedded spectrophotometer with i1 color technology makes profiling and printer calibration simple, reliable, and accurate. HP's Advanced Profiling Solution offers advanced color management options, such as CMYK profiling and editing.
- **Broad gamut coverage.** Over 80% PANTONE[®] coverage,² and full compliance with prepress standards: SWOP, ISO, GRACOL, EUROSCALE, TOYO, FOGRA, and 3DAP.
- **Expect consistent color from print to print.** Calibrate the printer and obtain print-to-print and printer-to-printer color repeatability.

No limits

Get exquisite prints that resist fading for over 200 years³ with a 12-ink printing system using HP Vivera pigment inks

- **Fade and water resistant.** Color and b&w prints resist fading for over 200 years³ on a range of HP papers and HP Hahnemühle papers and are water resistant⁴ on a range of HP canvas, photo and proofing papers.
- **Beautiful black-and-white prints with the HP Quad-black ink set.** HP Vivera pigment inks deliver true gray neutrality under different lighting conditions and produce smooth continuous tones and deep rich blacks.
- **Superior gloss uniformity and elimination of bronzing with HP Gloss Enhancer.**⁵ Used on glossy and semi-gloss photo papers to produce images with uniform gloss from highlights to shadows.

- **Direct PostScript and PDF support (Z3100ps GP only).** The Embedded Adobe[®] PS/PDF RIP (Postscript level 3, PDF 1.6, fully Acrobat 7 compatible) and driver give you optimum networkability and PostScript color management.

True print confidence

Print with greater confidence thanks to dependable HP technologies

- **Eliminate trial and error with real-time layout and orientation preview.** HP's printer driver and embedded Web server let you preview the layout, size, and position of your print on your paper to save time, effort, and money.
- **Glide effortlessly through color management and printing** with the HP Color Center tool.
- **Save time with HP Easy Printer Care/HP Printer Utility software.** Monitor the status of printers and supplies and get the latest updates.
- **Expect always-on quality** with automatic servicing routines that are economical and convenient thanks to proactive printhead maintenance.
- **Have your questions answered.** Application settings and color management consultation at your finger tips with the HP Knowledge Center.
- **Remote printer management is fast and easy using any web browser.** You can conveniently manage your printer remotely for the printer status, job accounting, and ink and media usage. The Z3100ps GP expands these capabilities to include job submission, nesting, queuing, and permanent storage of files.

¹ In a drop-on-demand inkjet large format printer of its category.

² HP's preliminary, internal results have shown that the HP Designjet Z Photo Printer series is capable of successfully simulating over 80% of the PANTONE colors. HP Designjet Z2100, Z3100, and Z3100ps GP Photo Printers are pending PANTONE licensing

³ Display permanence rating by Wilhelm Imaging Research, Inc. on a range of HP creative and specialty media. For details: www.hp.com/go/supplies/printpermanence

⁴ Water resistance ratings tested by HP Image Permanence Lab on a range of HP media using Original HP 70 Vivera inks. For details: www.hp.com/go/supplies/printpermanence

⁵ Bronzing is eliminated as an image-quality issue when HP Gloss Enhancer is used. HP Gloss Enhancer is used on photo paper, with the exception of matte-finish papers.

Professional Photographers

"The results are remarkable: something I feel proud and confident about putting out in public in a museum."

Joel Meyerowitz
Joel Meyerowitz Photography

"The black and whites I printed are absolutely perfect. They're neutral in their grays, they have wonderful tonality and very, very heavy blacks (which I love)."

Thomas Hoepker
Magnum Photographer

"By accessing printer calibration directly from the Lightroom Print module, photographers using the HP Designjet Z series printers will be assured they're getting the most accurate results possible."

Kevin Connor
Senior Director
Professional Digital Imaging
Adobe

Digital Fine Artists

"With the simplicity of the color profiling on this printer, HP has taken great strides in making it very simple to get great prints the first time."

Bonny Lhotka
Digital Atelier

"Hahnemühle FineArt is proud to be working with HP in bringing to market a user experience of this caliber. This is a great example of two market leaders capitalizing on synergies to raise the bar of expectation in the digital imaging world."

Norbert Klinko
Director Sales and Marketing
Hahnemühle FineArt



Create exquisite exhibition prints, portfolios, and digital albums

Consistently beautiful, whether it's in color or black and white

- Prints resist fading for over 200 years.³
- Smooth color transitions and highlight and shadow details are preserved.
- Achieve truly neutral grays under different lighting conditions, continuous tones, uniform gloss, rich blacks, and the elimination of bronzing as an image-quality issue.⁵
- Switch between matte and glossy papers without having to swap black cartridges.

A care-free experience

- Printing of accurate and consistent colors is effortless thanks to the HP Color Center and automated media profiling.
- Added to Adobe® Lightroom is a Calibrate Printer button, enabling you to launch the printer's color management tools directly from the application, the result of close collaboration between HP and Adobe.
- Integrate one of a range of commercially available photo RIPs, such as the ImagePrint v.6 RIP from ColorByte. This RIP gives you advanced options, including advanced multiple-image placement, black-and-white split-toning, and PostScript® and PDF printing.

Free to experiment

Get true, consistent, and lasting colors on the substrates of your choice

- Realize your digital fine art in breathtaking color prints that resist fading for over 200 years.³
- You're free to use almost any art substrate you like with the confidence of retaining color fidelity and consistency.
- Colors are precisely controlled thanks to automated media profiling.

Fits seamlessly into your workflow

- HP offers an extensive range of canvases, fine art papers, and photo papers for museum-quality results.
- HP and Hahnemühle have designed beautiful smooth, textured, and watercolor fine art papers.
- Print the desired colors on the first attempt from Adobe Photoshop® thanks to the free HP Photosmart Pro print plug-in for Adobe Photoshop®, which synchronizes application and driver settings.





Produce accurate, consistent, and stable prepress contract proofs

Automated profiling, stable colors, and an extremely broad gamut

- Accurate and consistent colors are assured through automated ICC profile generation.
- Colors stay true and stabilize at less than 1 DE in under 5 minutes.
- The printer covers over 80% of PANTONE® colors² and completely encompasses the SWOP, ISO, GRACOL, EUROSCALE, TOYO, FOGRA, and 3DAP gamuts.
- PANTONE color certification.⁶

Integrated solutions that drastically shorten your workflow

- Automated closed-loop color consistency is achieved with the printer's embedded spectrophotometer, featuring X-Rite leading i1 color technology.
- To achieve an advanced proofing solution, integrate one of a range of commercially available proofing RIPs, such as the Kodak Matchprint Inkjet proofing solution or the Colorproof o4 RIP from GMG. These leading prepress RIPs combine with the printer to form a cost-effective solution that verifies the press-standard color compliance of your proofs.
- Complete end-to-end color workflow management in the box with HP's Advanced Profiling Solution that is standard for the Z3100ps GP.

Key technologies

HP Vivera pigment inks offer outstanding image quality and fade resistance, along with water resistance, on a wide range of HP creative and specialty media. HP's proprietary Electrosteric Encapsulation Technology optimizes the pigment chemistry and ink properties for stability and performance to ensure a broad color gamut, print permanence, excellent gloss uniformity, and reliable, accurate, and consistent printing.

The HP embedded spectrophotometer with i1 Color Technology from X-Rite is mounted on the printer carriage and revolutionizes professional color workflows by automating media profiling, allowing users to automatically generate custom RGB ICC profiles for their media and provides accurate

measurements for printer calibration that delivers print-to-print and printer-to-printer color consistency. Also, with the HP Advanced Profiling Solution (included with the Z3100ps GP), you can edit and modify existing profiles and create CMYK profiles.

HP's 12-ink printing system involves six HP 70 Printheads, each printing two colors of ink with 1,056 nozzles per color. The system includes the HP Gloss Enhancer and HP Vivera pigment inks in seven colors and four blacks. These inks deliver an exceptionally broad color gamut for photographic and graphics art applications, superb neutral tones, and deep blacks on matte, glossy, semi-gloss, and fine art papers.

An extensive media portfolio: HP offers a portfolio of 9 photo papers, 10 digital fine art papers, 3 proofing papers, 9 bond and coated papers, and over 30 other HP media. All have been tested with HP 70 Vivera pigment inks to deliver consistent, museum-quality prints that withstand the demands of handling, display and storage expected of professional prints.

Services

The HP Start-up kit, HP Knowledge centre, and HP Easy Printer Care (Windows®)/Printer Utility (Mac®) are all complimentary services provided by HP to assist you during installation and throughout your printing workflow; visit www.hp.com/go/graphic-arts for full details. For enhanced services purchase from the HP Professional Graphic Services portfolio, which includes:

- **HP Installation Care Pack Services:** Easier to get your printer up and running in minimum time. Stand alone and network options available.
- **The HP Color Expert Service powered by X-Rite Color Services:** Problems getting the right color from your printer? Call one phone-number for immediate, reliable answers to all of your questions on color, color management software and hardware, RIPs, design applications, output devices, drivers and operating systems.
- **HP Care Pack and Post Warranty Services:** Reduce downtime and mitigate the risk of unbudgeted repair costs. 3-5 year warranty extensions available. See back page for ordering information and visit www.hp.com/go/pgs for more details on all options.

Prepress Specialists

"The HP Designjet Z3100 printer is a major step forward for prepress. It has got a built-in spectrophotometer, which calibrates the machine and brings it into a known state, and, because it's built in, it's error free. This printer is like a color management center."

Allan Roche
Pixel CMS Ltd.

"Metamerism is very important for us, and I've seen that this inkjet printer has the lowest metamerism in the marketplace."

Allan Roche
Pixel CMS Ltd.

"By combining the embedded eye-one color spectrophotometer together with the latest printing technologies found in the new HP Designjet Z Photo Printers, new ground-breaking standards in large-format printing have been established, providing the industry with a new benchmark."

Francis Lamy
Executive VP and CIO
X-Rite

⁶ Z3100ps GP model using HP Premium Instant-dry Gloss Photo Paper

HP Designjet Z3100 Photo Printer series

Technical specifications

Print speed	Best 15 min/page on D/A1 ⁷ or up to 17 ft ² /h (color image on glossy paper) 9.8 min/page on D/A1 ⁷ or up to 31 ft ² /h (color image on coated paper)		
Normal	7.9 min/page on D/A1 ⁷ or up to 38 ft ² /h (color image on glossy paper) 4.2 min/page on D/A1 ⁷ or up to 72 ft ² /h (color image on coated paper)		
Draft	5.8 min/page on D/A1 ⁷ or up to 52 ft ² /h (color image on glossy paper) 2.0 min/page on D/A1 ⁷ or up to 150 ft ² /h (color image on coated paper)		
Resolution	Best (Color and B&W) 2400 x 1200 optimized dpi Normal (Color and B&W) 600 x 600 dpi Draft (Color and B&W) 600 x 600 dpi		
Memory	HP Designjet Z3100 Photo Printer: 128 MB standard memory, 40 GB hard disk HP Designjet Z3100ps GP Photo Printer: 256 MB Standard memory, 40 GB hard disk		
Media Handling	Sheet feed, roll feed, automatic cutter (cuts all media except canvas)		
Types	Photographic paper (satin, gloss, semi-gloss, matte), proofing paper (high-gloss, semi-gloss, matte), fine art printing material (canvas, smooth, textured, watercolor), self-adhesive and vinyl (polypropylene, vinyl), sign and banner (display film, banner, scrim, polypropylene, Tyvek [®] , outdoor paper), bond and coated (bond, coated, heavyweight coated, super heavyweight coated)		
Maximum weight	500 g/m ²		
Size	24-inch model: All standard sizes larger than Letter/A4 up to 24 in./610 mm 44-inch model: All standard sizes larger than Letter/A4 up to 44 in./1117 mm		
Max. external roll diameter	5.3 in./136 mm		
Maximum roll length	300 ft/91 m		
Printing	Roll: 0.2 x 0.2 x 0.2 x 0.2 in./5 x 5 x 5 mm (full bleed available on glossy roll media) Sheet: 0.2 x 0.67 x 0.2 x 0.2 in./5 x 17 x 5 x 5 mm		
Margins (top x bottom x right x left)			
Technology	HP Viverna pigment inks, HP Quad-black ink set, HP Embedded Spectrophotometer		
Ink cartridge colors	light cyan, light magenta, light gray, photo black, gray, gloss enhancer, magenta, yellow, matte black, red, green, blue		
Ink types	HP Viverna pigment inks and HP Gloss Enhancer		
Ink drop	4 pl (light cyan, light magenta, light gray, photo black, gray, gloss enhancer), 6 pl (magenta, yellow, matte black, red, green, blue)		
Ink cartridge size	130 ml ink cartridges (69 ml introductory cartridges included in 24-inch printer box, not available as replacement cartridges); 130 ml ink cartridge twin packs also available		
Nozzles	2 colors/printhead, 1056 nozzles/color		
Maximum print length	300 ft/91 m (OS and application dependent)		
Line accuracy	± 0.2 % ⁸		
Light fastness	Over 200 years ⁹ fade resistance		
Water resistance	Water-resistant* on a range of HP creative and specialty media		
Connectivity	Standard: One 10/100BT Ethernet (10/100/1000 for ps model), one USB 2.0 high-speed certified port, one EIO Jetdirect accessory slot Optional: HP Jetdirect EIO print servers		
Print languages (standard)	HP Designjet Z3100 Photo Printer: HP PCL3/GUI HP Designjet Z3100ps GP Photo Printer: Adobe PostScript Level 3, Adobe PDF 1.6, HP-GL/2, HP-RTL, TIFF, JPEG, CALS G4		
Print languages (optional)	HP Designjet Z3100 Photo Printer: PS via optional software RIP, HP-GL2/RTL optional software solution		
Image quality	Color accuracy Median <1.6 dE2000, 95% of colors <2.8 dE2000 ⁹ Short term color stability <1 dE2000 in less than 5 minutes ¹⁰ Long term print-to-print repeatability Average <0.5 dE2000, 95% of colors <1.4 dE2000 ¹⁰ Maximum optical density 4 L* / 2.5 D ¹¹		
Environmental ranges	Operating temperature 41 to 104°F/5 to 40°C Recommended operating temperature 59 to 95°F/15 to 35°C Storage temperature -13 to 131°F/-25 to 55°C Recommended operating temperature 20 to 80% RH Recommended storage humidity 0 to 95% RH		
Acoustic	Sound pressure: Active 44 dB(A) Standby 29 dB(A) Sound power: Active 6.5 B(A) Standby 4.4 B(A)		
Power consumption	Active 200 watts Powersave 27 watts Maximum 200 watts Standby 43 watts Power requirements Input voltage auto-ranging 100–240 VAC (+/- 10%), 50/60Hz (+/- 3Hz), 2 Amp max		
Certification	Safety IEC 60950-1 compliant, EU LVD and EN 60950-1 compliant, certified by CSA for Canada and United States, Argentina IRAM, Singapore PSB, Russia GOST, China CCIB, Taiwan BSMI Electromagnetic Compliance for Class B products: EU (EMC Directive), United States (FCC rules), Canada (DoC), Australia (ACA), New Zealand (MoC), China (CCC), Japan (VCCI), Korea (MIC), and Taiwan (BSMI) Press standard 100% coverage of SWOP, ISO and GRACOL, and 3DAP ENERGY STAR [®] compliant Yes, ENERGY STAR [®] qualified models; see: http://www.hp.com/go/energystar		
Warranty	1 year warranty with on-site, next business-day service		
Warranty extensions	UF044PE HP 1-Year Post Warranty Next-Business-Day Onsite Service HC132PE HP 1-Year Technical Phone Support		
HP Care Pack Services	UF035E HP 3-Year Next Business Day Onsite Service UF036E HP 4-Year Next Business Day Onsite Service UF037E HP 5-Year Next Business Day Onsite Service H4518E HP Installation with network configuration		
Color Services	UF050E HP Color Expert Service (5 cases within 1 year) UF315E HP Color Expert Service (1 case within 1 year)		

More information on products, technologies and services available at www.hp.com/go/graphicarts

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Recommended system requirements

Macintosh	Mac OS X v10.2., 10.3, 10.4 and later; PowerPC G4, G5 or Intel [®] Core Processor; 1 GB RAM; 2 GB available on hard disk
Windows	Microsoft Windows XP or 2000; Intel Pentium [®] 4; 3GHz, 1 GB RAM, 2 GB available on hard disk

Dimensions (w x d x h)

Printer with stand	24-inch model: 49.7 x 26 x 41.2 in./1262 x 661 x 1047 mm 44-inch model: 69.7 x 26 x 41.2 in./1770 x 661 x 1047 mm
Shipping Dimensions	24-inch model: 57.8 x 30.7 x 29.1 in./1470 x 780 x 740 mm 44-inch model: 77.3 x 30.7 x 30.7 in./1965 x 780 x 780 mm

Weight

Printer with stand	24-inch model: 143 lb/65 kg 44-inch model: 189 lb/86 kg
Shipping weight	24-inch model: 225 lb/102 kg 44-inch model: 271 lb/123 kg

What's in the box

24-inch models: Spindle; printheads (6 x 2 colors); ink cartridges (12 x 69 ml);¹² high-gloss photo media sample roll (24 in. x 15 ft); 24-inch stand; 24-inch rear tray; 3-inch spindle adapter kit, quick reference guide, set-up poster, USB cable, power cord, HP Start-Up Kit including printer software and training, HP Advanced Profiling Solution (Z3100ps GP model only)

44-inch models: Spindle, printheads (6 x 2 colors), ink cartridges (12 x 130 ml)¹², high gloss photo media sample roll (36 in. x 15 ft), 44-inch stand, 44-inch rear tray, 3-inch spindle adapter kit, quick reference guide, set-up poster, USB cable, power cord, HP Start-Up Kit including printer software and training, HP Advanced Profiling Solution (Z3100ps GP model only)

Ordering information

Product

Q5669A	HP Designjet Z3100 24-in Photo Printer
Q6659A	HP Designjet Z3100 44-in Photo Printer
Q5670A	HP Designjet Z3100ps GP 24-in Photo Printer
Q6660A	HP Designjet Z3100ps GP 44-in Photo Printer

Accessories

Q6643D	EFI Designer Edition 5.1 RIP for HP XL International
Q6692B	HP GL/2 Upgrade Kit for the HP Designjet Z2100/A3100 Photo series
Q6695A	HP Advanced Profiling Solution International
Q6698A	HP Designjet ZX100 44-inch Spindle for printing on technical media
Q6699A	HP Designjet ZX100 44-inch Spindle for graphics (spare, for easy media switching)
Q6700A	HP Designjet ZX100 24-inch Spindle for graphics (spare, for easy media switching)

Printing supplies

Printheads

C9405A	HP 70 Light Magenta and Light Cyan Printhead
C9406A	HP 70 Magenta and Yellow Printhead
C9407A	HP 70 Photo Black and Light Gray Printhead
C9408A	HP 70 Blue and Green Printhead
C9409A	HP 70 Matte Black and Red Printhead
C9410A	HP 70 Gloss Enhancer and Gray Printhead

130 ml ink cartridges

C9448A	HP 70 Matte Black 130-ml Ink Cartridge
C9449A	HP 70 Photo Black 130-ml Ink Cartridge
C9450A	HP 70 Gray 130-ml Ink Cartridge
C9451A	HP 70 Light Gray 130-ml Ink Cartridge
C9453A	HP 70 Magenta 130-ml Ink Cartridge
C9454A	HP 70 Yellow 130-ml Ink Cartridge
C9455A	HP 70 Light Magenta 130-ml Ink Cartridge
C9456A	HP 70 Red 130-ml Ink Cartridge
C9457A	HP 70 Green 130-ml Ink Cartridge
C9458A	HP 70 Blue 130-ml Ink Cartridge
C9459A	HP 70 Gloss Enhancer 130-ml Ink Cartridge
C9390A	HP 70 Light Cyan 130-ml Ink Cartridge

Ink cartridge twin packs

CB339A	HP 70 Matte Black 130-ml Ink Cartridge Twin Pack
CB340A	HP 70 Photo Black 130-ml Ink Cartridge Twin Pack
CB341A	HP 70 Gray 130-ml Ink Cartridge Twin Pack
CB342A	HP 70 Light Gray 130-ml Ink Cartridge Twin Pack
CB344A	HP 70 Magenta 130-ml Ink Cartridge Twin Pack
CB345A	HP 70 Yellow 130 ml Ink Cartridge Twin Pack
CB346A	HP 70 Light Magenta 130-ml Ink Cartridge Twin Pack
CB347A	HP 70 Red 130-ml Ink Cartridge Twin Pack
CB348A	HP 70 Green 130-ml Ink Cartridge Twin Pack
CB349A	HP 70 Blue 130-ml Ink Cartridge Twin Pack
CB350A	HP 70 Gloss Enhancer 130-ml Ink Cartridge Twin Pack
CB351A	HP 70 Light Cyan 130-ml Ink Cartridge Twin Pack

Media supplies

Q6626A	HP Super Heavyweight Plus Matte Paper 24 in x 100 ft/610 mm x 30.5 m
Q7973A	HP Matte Litho-realistic Paper 36 in x 100 ft/914 mm x 30.5 m
Q7991A	HP Premium Instant-dry Gloss Photo Paper 24 in x 75 ft/610 mm x 22.9 m
Q7992A	HP Premium Instant-dry Satin Photo Paper 24 in x 75 ft/610 mm x 22.9 m
Q8704A	HP Artist Matte Canvas 24 in x 20 ft/610 mm x 6.1 m
Q8708A	HP Collector Satin Canvas 24 in x 20 ft/610 mm x 6.1 m
Q8712A	HP Universal Matte Canvas 24 in x 20ft/610 x 6.1 m
Q8759A	HP Professional Satin Photo Paper 24 in x 50 ft/610 mm x 15.2 m
Q8840A	HP Professional Satin Photo paper 44 in x 50 ft/1118 mm x 15.2 m
Q8663A	HP Professional High-gloss Contract Proofing Paper 24 in x 100 ft/610 mm x 30.5 m
Q7971A	HP Professional Semi-gloss Contract Proofing Paper 24 in x 100 ft/610 mm x 30.5 m
Q8736A	HP Hahnemühle Textured Fine Art Paper 265 g/m ² 24 in x 35 ft/610 mm x 10.7 m
Q8732A	HP Hahnemühle Smooth Fine Art Paper 265 g/m ² 24 in x 35 ft/610 mm x 10.7 m
Q1984A	HP Hahnemühle Watercolor Paper 36 in x 38 ft/914 mm x 11.5 m
Q8741A	HP Aquarella Art Paper 24 in x 35 ft/610 mm x 10.67 m
Q1724A	HP Canvas Paper 180 g/m ² 36 in x 35 ft/914 mm x 10.7 m

More HP media sizes and weights available at www.hp.com/go/designjet/supplies

⁷ Printed image size: 22 x 27.5 in/55.9 x 69.9 cm

⁸ +/- 0.2% of the specified vector length or +/- 0.1 mm (whichever is greater) at 23°C (73°F), 50-60 percent relative humidity, on E/A0 printing material in Best or Normal mode with HP Matte Film roll feed.

⁹ ICC absolute colorimetric accuracy on HP Proofing Matte paper.

¹⁰ With HP Premium Instant Dry Photo Satin media, right after calibration.

¹¹ With HP Premium Instant Dry Photo Gloss media.

¹² Replacement ink cartridges available are HP 70 130 ml Ink Cartridges and HP 70 130 ml Ink Cartridge Twin Packs.

For more information, visit www.hp.com/go/pageyield

