



## The New HP Designjet Z2100 and Z3100 Photo Printer Series



# HP Designjet Z2100 Photo Printer Series

## 8-ink printing system with HP Three-Black Ink set



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www.asiergomez.com

"The machine creates the ICC profiles for you and does the calibration for you, which are massive issues for artists. This enables the media and inks to work together, regardless of the paper used."  
Patrick Morgan,  
Farm Creative

"By combining the embedded i1 colour spectrophotometer, together with the latest printing technologies found in the new HP Designjet Z Photo Printer series, new, ground-breaking standards in large-format printing have been established, providing the industry with a new benchmark."  
Francis Lamy, Executive VP and CTO X-Rite

"The driver options are wonderful. They'll save huge amounts of paper. In the past we often got either double colour management or none at all."  
Bruce Fraser, author of Real World Photoshop and Real World Colour Management

[www.hp.com/go/graphicarts](http://www.hp.com/go/graphicarts)

### Graphic designer

- Express your creativity and sell your ideas with high-impact concepts and packaging proofs.
- Print the right colours from Photoshop® thanks to the free HP ProPrint Plug-in, co-designed by HP and Adobe®.
- Integrate the optional EFI Designjet Edition RIP 5.1 for HP to enable CMYK workflow support, PostScript® & PDF printing, and accurate spot colour management.

### Commercial photography

- Create beautiful, large-format colour and black-and-white exhibition prints, portfolios, and magazine proofs.
- Added to Adobe® Lightroom is a Calibrate Printer button, enabling you to launch the printer's colour management tools directly from the application.
- For advanced options integrate one of a range of commercially available photo RIPs, such as the ImagePrint v.6 RIP from ColourByte. This RIP provides advanced multiple-image placement, black-and-white split-toning, and PostScript® & PDF printing.

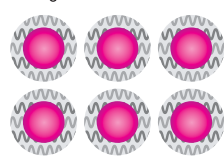
### Pre-press, proofing

- The embedded spectrophotometer ensures accurate and consistent colours through fast, automated ICC profile generation.
- HP Vivera pigment inks yield colours that stay true and stabilize at less than 1 ΔE in under 5 minutes.
- This 8-ink printer completely covers the SWOP, ISO, GRACOL, EUROSCALE, TOYO, and FOGRA gamuts and leverages most of commercially available proofing RIPs, such as the Colourproof o4 RIP from GMG.



©Neil Snape Photography

#### HP Pigment Ink Particles



- Base pigment
- Resin encapsulated negative charges



## Key Technologies

HP Vivera pigment inks offer outstanding image quality, fade and water resistance on a wide variety of photo and fine art media. HP's proprietary Electrostatic Encapsulation Technology optimizes the pigment ink properties for stability and performance to ensure a broad colour gamut, print permanence, excellent gloss uniformity, and accurate and consistent printing.

**The HP embedded spectrophotometer**  
Powered by i1 Colour Technology from X-Rite™ which is mounted on the printer carriage and revolutionizes colour workflows by allowing users to automatically generate custom RGB ICC profiles for their preferred media. It also provides accurate measurements for printer calibration that delivers print-to-print and printer-to-printer colour consistency.

**HP's 8-ink printing system**  
is made up of HP Vivera pigment inks including a Three-Black ink set that allows you to print with photo and matte black ink without swapping cartridges. Ensuring exceptional colour, accuracy and consistency. A valuable tool for graphic designers and prepress professionals who need repeatable results.

**HP's 12-ink printing system**  
Involves user replaceable printheads, each printing with 1,056 nozzles per colour, the HP Gloss Enhancer and HP Vivera pigment inks in seven colours, including direct RGB and four blacks. These inks deliver an exceptionally broad colour gamut for photographic and fine art prints, truly neutral tones, and dense blacks on any media.

# HP Designjet Z3100 Photo Printer Series

## 12-ink printing system with HP Gloss Enhancer and Four-Black Ink Set



### Professional photographers

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

- Prints resist fading for over 200 years<sup>1</sup>.
- Smooth colour transitions and highlight and shadow details are preserved.
- Achieve truly neutral greys under different lighting conditions, continuous tones, uniform gloss, rich blacks, and the elimination of bronzing<sup>2</sup>.
- Switch between matte and glossy papers without having to swap black cartridges.

### Digital fine artists

Get true, consistent, and lasting colours on media of your choice

- Realise your digital fine art in breathtaking colour or black-and-white prints that resist fading for over 200 years<sup>1</sup>.
- You're free to use almost any art substrate you like while retaining colour fidelity and consistency.
- Colours are precisely controlled thanks to automated media profiling.

### Pre-press specialist

Automated profiling, stable colours, and a broad colour gamut

- Accurate and consistent colours are assured through automated ICC profile generation.
- Colours stay true and stabilise at less than 1ΔE in under 5 minutes.
- The printer covers over 80% of PANTONE® colours<sup>3</sup> and completely encompasses the SWOP, ISO, EUROSCALE, FOGRA, and 3DAP press standards.



©Photo by Milton H. Greene, 2006  
Joshua Greene. www.archiveimages.com

"The HP Designjet Z3100 printer is a major step forward for prepress. It has 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 colour management center."  
Allan Roche, Pixel CMS Ltd

"Hahnemühle FineArt is proud to be working with HP in bringing to market a user experience of this calibre. This is a great example of two market leaders capitalising on synergies to raise the bar of expectation in the digital imaging world."  
Norbert Klinke, Director Sales and Marketing, Hahnemühle FineArt

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



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## Accessories

### 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 Vivera pigment inks to deliver consistent, museum-quality prints that last.

### The HP-GL/2 Upgrade Kit

Improve line quality and network throughput with the HP-GL/2 Upgrade Kit. Store and reprint files from the printer queue and print legacy HP-GL/2 files.

### The HP Advanced Profiling Solution

powered by X-Rite™ technology, offers a powerful automated colour management system that works seamlessly with the HP embedded spectrophotometer. It enables screen-to-print colour workflow, you can edit and modify profiles, create CMYK profiles or even build profiles for various lighting conditions. The i1 screen calibrator is also included in the box.

### The Efi Designer Edition 5.1XL for HP

A powerful, yet cost effective digital proofing system. Together, Efi and HP enable designers, photographers and other creative professionals to easily generate proof-quality prints with sharp detail, colour accuracy and smooth tonal transitions.

# Technical specifications.

<b>Print technology</b>	HP Scalable Printing Technology	
<b>Printhead nozzles</b>	HP Designjet Z2100: 8448 (1056 nozzles per colour) HP Designjet Z3100: 12672 (1056 nozzles per colour)	
<b>Print quality</b>	Up to 2400 x 1200 optimised dpi from 1200 x 1200 input dpi with maximum detail selected	
<b>Number of inks</b>	HP Designjet Z2100 - 8 (Cyan, Light Cyan, Magenta, Light Magenta, Yellow, Light Gray, Photo Black, Matte Black) HP Designjet Z3100-12 (Light Cyan, Magenta, Light Magenta, Yellow, Red, Green, Blue, Light Grey, Grey, Photo Black, Matte Black, Gloss Enhancer)	
<b>Ink types</b>	HP Vivera pigmented inks	
<b>Ink drop</b>	HP Designjet Z2100 - size 4 pl (l, lm, lg, pK), 6 pl (C, M, Y, mK) HP Designjet Z3100 - size 4 pl (l, lm, lg, pK, E, G), 6 pl (M, Y, mK, R, GN, B)	
<b>Lightfastness</b>	Over 200 years (media dependent). Based on internal HP light-fade testing on HP Super Heavyweight Plus Matte Paper, HP Hahnemühle Smooth Fine Art Paper, HP Hahnemühle Watercolour Paper, HP Artist Matte Canvas. Display permanence rating by Wilhelm Imaging Research, Inc. on a range of HP creative and specialty media. For details refer to <a href="http://www.hp.com/go/supplies/printpermanence">http://www.hp.com/go/supplies/printpermanence</a> .	
<b>Print speed</b>	Economic quality: A1 colour image: 2.0 min/page (coated), 5.8 min/page (glossy). Productivity quality: A1 colour image: 4.2min/page (coated), 7.9 min/page (glossy). Photo quality: A1 colour image: 9.8 min/page (coated), 15.0 min/page (glossy)	
<b>Line</b>	Line accuracy: +/- 0.2%. Minimum width: 0.0508 mm	
<b>Print languages</b>	HP PCL3 GUI. Optional: HP-GI2/RTL via Q6692A HP-GI/2 Upgrade Kit for the HP Designjet Z2100/Z3100 Photo Printer series	
<b>Memory</b>	Standard: 128 MB for 24" printer models; 256 MB for 44" printer models	
<b>Print margins (mm)</b>	<b>Roll</b>	<b>Sheet</b>
	top: 5 mm or borderless	5 mm
	bottom: 5 mm or borderless	14 mm
	left: 5 mm or borderless	5 mm
	right: 5 mm or borderless	5 mm
<b>Media types</b>	Paper [plain, coated, heavyweight coated, super heavyweight coated, natural tracing, bond, translucent bond, photo (satin, gloss, semi-gloss), satin matte, proofing (contract, matte), colourficient backlit UV, matte adhesive backed, fine arts (smooth, textured), glossy, matte litho-realistic, billboard paper blue back], vellum, film (clear, matte, polyester, durable display), transparencies, labels, banner (gloss, Tyvek), opaque scrim, durable flag fabric, paper-backed fabric polyester, paper-backed fabric silk satin, polypropylene matte, canvas (matte, satin, paper)	
<b>Media sizes</b>	Standard: All standard sizes larger than A4	
<b>Maximum media length</b>	Roll: 91.4 m.	Sheet: 1676.4 mm
<b>Maximum media width</b>	DJ Z2100/Z3100 24": 610 mm; DJ Z2100/Z3100 GP 24": 610 mm; DJ Z2100/Z3100 44": 1117 mm	
<b>Maximum print length</b>	91 m (OS and application dependent)	
<b>Media thickness</b>	Up to 0.8 mm	
<b>Roll</b>	Maximum diameter: 136 mm	
<b>Media handling</b>	Sheefeed (manual single-sheet feed through rear path), roll feed, automatic cutter (cuts all media except canvas)	
<b>Interface &amp; connectivity</b>	Standard: 1 10/100 BT Ethernet RJ-45 port, 1 Hi-Speed USB (compatible with USB 2.0 specifications) port, 1 EIO Jetdirect accessory slot. Optional: HP Jetdirect EIO print servers	
<b>Control panel</b>	240 x 160 pixel greyscale graphical display, 4 direct access buttons, 7 navigation buttons and 2 bicolour lights (Ready, Processing, Attention, Error)	
<b>Drivers included</b>	HP PCL 3 GUI driver, HP Colour Center, HP Easy Printer Care Software	
<b>Software</b>	Printer drivers (HP PCL 3 GUI, HP-GI2/RTL via Q6692A HP-GI/2 Upgrade Kit for the HP Designjet Z2100/Z3100 Photo Printer series), HP Colour Center, HP Easy Printer Care Software	
<b>Operating systems compatibility</b>	Windows® 2000, XP Home, XP Professional, XP Professional x64 Edition, Server 2003, Novell NetWare 5.x, 6.x, Mac OS 10.2 and higher, Citrix MetaFrame, Windows® Terminal Services. Latest driver upgrade information available on <a href="http://www.hp.designjet.com">http://www.hp.designjet.com</a>	
<b>Network operating systems compatibility</b>	Windows® 2000, XP Home, XP Professional, XP Professional x64 Edition, Server 2003, Novell NetWare 5.x, 6.x, Mac OS 10.2 and higher, Citrix MetaFrame, Windows® Terminal Services	
<b>Recommended system requirements</b>	Windows® 2000: Pentium® III processor, 256 MB RAM, 2 GB available hard disk space, 733 MHz; Windows® XP Professional: Pentium® IV processor, 512 MB RAM, 2 GB available hard disk space, 1 GHz. Mac G3 dual processor, 512 MBRAM, 1 GB available hard disk space	
<b>Power Requirements</b>	Input voltage: autoranging 100 to 240 VAC (+/- 10%), 50/60Hz (+/- 3 Hz), 2 amp maximum. Supply: Built-in universal power supply. Consumption 200 watts maximum	
<b>Warranty</b>	Standard Warranty: One year next business day onsite support. 1 year Warranty Extension (next business day onsite support or same business day onsite support with 4 hours response), 3 year HP Care Pack (two options: next day onsite support, same business day onsite support with 4 hours response), basic installation, setup and network.	

<sup>1</sup> Display permanence rating by Wilhelm Imaging Research, Inc. on a range of HP creative and specialty media. For details: <http://www.hp.com/go/supplies/printpermanence>

<sup>2</sup> 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.

<sup>3</sup> 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 colours. HP Designjet Z2100 and Z3100 Photo Printers are pending PANTONE licensing.

## Ordering Information

### HP Designjet Z2100

**Q6675A** HP Designjet Z2100 24 inch Photo Printer.

**Q6675B** HP Designjet Z2100 GP 24" Photo Printer as Q6675A plus HP Advanced Profiling Solution

**Q6677A** HP Designjet Z2100 44" Photo Printer as Q6675A plus 44-inch capabilities

### HP Designjet Z3100

**Q5669A** HP Designjet Z3100 24 inch Photo Printer.

**Q5669B** HP Designjet Z3100 GP 24" Photo Printer as Q5669A plus HP Advanced Profiling Solution

**Q6659A** HP Designjet Z3100 44" Photo Printer as Q5669A plus 44-inch capabilities

For a complete list of supplies, accessories and services, please refer to [www.hp.com/go/designjet](http://www.hp.com/go/designjet)

<http://www.hp.com/uk>

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

<http://www.hp.com/go/graphic-arts>



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