

# HP Designjet Z2100 Photo Printer series

For professionals who need to deliver stunning and compelling output that lasts, the HP Designjet Z2100 Photo Printer series delivers superior quality, durability and consistency. Count on HP for printing that's easy, reliable and predictable.



## Impressive prints that last

Get vivid, long-lasting quality with HP Vivera pigment inks.

- **Output spectacular high-quality color photos, renderings and presentations.** HP 70 Vivera pigment inks with an 8-ink printing system achieve consistently outstanding image quality. The precisely placed 4 and 6 pl ink drops, along with resolution of 2400 dpi, highlight even the most intricate details.
- **Water-resistant prints resist fading.** Your photos, posters, presentations and maps will be water-resistant<sup>1</sup> and will resist fading for over 200 years<sup>2</sup> on a range of basic and specialty media.
- **The Three-black ink set (matte black, photo black and light gray).** Ensure true neutral tones and rich, deep blacks. You can even print on matte or glossy paper without having to waste time and ink exchanging cartridges.

## Breakthrough color

Achieve consistent and accurate color.

- **Expect superior and consistent color from print to print.** The first-ever embedded spectrophotometer with i1 color technology enables the printer to automatically generate custom ICC profiles for your preferred paper and calibrates the printer to deliver print-to-print and printer-to-printer repeatability.
- **Present projects on media that supports your vision.** Achieve consistent colors on a wide range of papers. Choose from over 30 new HP papers and other readily available media.

• **Fast color stability covers a broad gamut.** Output stable proofs in less than 5 minutes and with over 80% PANTONE® coverage<sup>3</sup>, including full compliance with prepress standards.

• **Glide effortlessly through color management and printing** with the HP Color Center tool.

## True print confidence

Print with greater confidence, thanks to dependable HP technologies.

- **Achieve flawless output every time.** To ensure dependable and consistent image quality every time, the drop-ejection performance of every nozzle is periodically and automatically tested with an Optical Drop Detector.
- **Eliminate trial and error with real-time layout and orientation preview.** Take the guesswork out of margins. Save time and materials.
- **Spend less time waiting.** The new and powerful internal processor uses 128 MB of standard memory and a 40 GB hard disk so that productivity is high, even for very complex prints. And thanks to HP Vivera pigment inks, the output dries instantly and can be used as soon as it has been printed.
- **Benefit from HP Services.** A number of complimentary services are provided to assist you during installation and throughout your printing workflow. For enhanced assistance, purchase from the extensive portfolio of service options available.

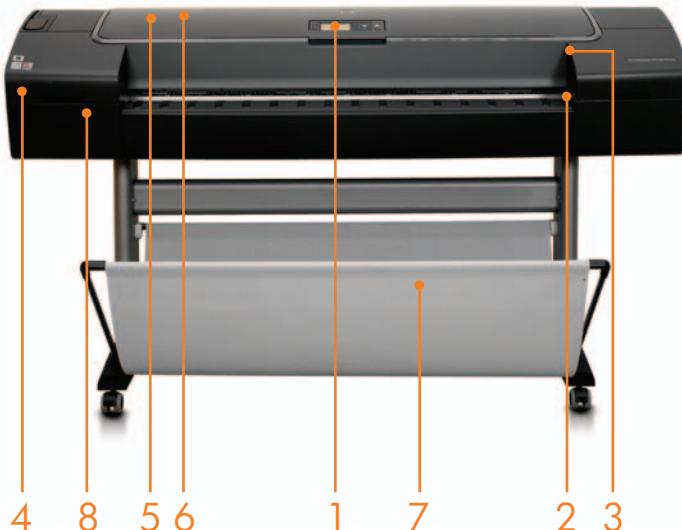
<sup>1</sup> Water resistance ratings tested by HP Image Permanence Lab on a range of HP media with Original HP 70 Vivera pigment inks. For details: [www.hp.com/go/supplies/printpermanence](http://www.hp.com/go/supplies/printpermanence)

<sup>2</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>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 colors. HP Designjet Z2100 and Z3100 Photo Printers are pending PANTONE-licensing

# HP Designjet Z2100 Photo Printer series

1. LCD front panel and direct access keys for ink supply maintenance and print message alerts
2. Front bypass slot accommodates media up to 24 in./610 mm wide (24-inch printer) or up to 44 in./1117 mm (44-inch printer)
3. Mounted on the carriage, the embedded spectrophotometer brings accurate profiling and precision color calibration
4. Rear USB 2.0 High Speed and 10/100 BT Ethernet connection for TCP/IP. Free slot for additional network connectivity with 1 EIO HP Jetdirect card
5. Rear bypass slot handles heavy and rigid media of weights up to 500 g/m<sup>2</sup> and thickness up to 0.8 mm
6. Roll feed (located at the back of the printer) feeds rolls up to 24 in./610 mm wide (for 24-inch printer) or up to 44 in./1117 mm (for 44-inch printer) and 300 ft/91 m long
7. Media bin
8. HP Vivera pigment ink set with 4 pl and 6 pl drop size for prints that resist fading for over 200 years



## Optional accessories



**HP-GL/2 Upgrade Kit.** For CAD customers that need improved line quality and network availability with the HP-GL/2 software key. The printer, rather than the computer, processes files for improved operating efficiency. 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 color management system that works in combination with the spectrophotometer embedded in the printer. This automated solution enables you to perform: monitor profiling and calibration, ambient light and monitor-profile validation, RGB and CMYK profiling with optimized inkjet separations for HP Media in addition to the most common separations (Inkjet 260 and 400) and rigorous fine-tuning of printer color profiles. A very intuitive profile-editing wizard lets you match colors to various viewing conditions that use non-standard illuminants.

**Additional 24- and 44-inch spindles** make life easier for professional photographers and graphic designers, spare spindles mean that they can have different media types ready to load. Also available, for design professionals such as architects, engineers and GIS specialists, is an additional 44-inch spindle for easy switching between technical media rolls. This technical media spindle is recommended for use with Plain, Bright White Bond, Coated, Natural Tracing and Translucent Bond papers and Vellum.

**The Efi Designer Edition 5.1 XL for HP** is the recommended RIP and proofing application for your HP Designjet printer. Integrating this enables CMYK workflow support, PostScript® & PDF printing and accurate spot color management for designers, photographers and other creative professionals. A powerful, yet cost-effective digital proofing system that allows full control over digital proofing needs to speed up workflows, saving both time and money.



## Services

A number of standard services come in the printer box to enable you to print with confidence right from the start:

- **HP Start-up Kit:** Enables you to easily install the printer on your own. Includes: drivers for both Mac® and Windows®, multimedia training in how to operate the printer and PDF user manuals for easier consultation.
- **Online HP Knowledge Center:** Fit your printer into your workflow. Benefit from multimedia training sessions, step-by-step guides, access to relevant forums and blogs, contact details for HP support and information on the latest drivers and firmware.
- **HP Easy Printer Care (Windows) or Printer Utility (Mac):** This feature tells you how your printer is doing by sending you alerts on everything from job accounting to color control.

See [www.hp.com/go/graphic-arts](http://www.hp.com/go/graphic-arts) for full details on all services.

For enhanced services, purchase from the HP Professional Graphic Services portfolio, which includes:

- **HP Installation Care Pack Services:** Makes it easy to get your printer up and running in minimum time. Stand alone and network options available.
- **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](http://www.hp.com/go/pgs) for more details on all options.

HP Vivera Pigment Inks



HP Media



HP Printhead



HP Embedded Spectrophotometer



## Key technologies

**HP Vivera pigment inks** offer outstanding image quality and fade resistance on a wide variety of photo and fine art media, along with water resistance on a range of HP creative and specialty media. HP's proprietary Electrostatic 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. It allows users to automatically generate custom RGB ICC profiles for their preferred media and provides accurate measurements for printer calibration that delivers print-to-print and printer-to-printer color consistency. Also, with the optional HP Advanced Profiling Solution, you can edit and modify existing profiles and create CMYK profiles.

**HP's 8-ink printing system** is made up of the exclusive HP Vivera pigment ink formulation technology with HP 70 Printheads, each printing two colors of ink with 1,056 nozzles per color and the HP Three-black ink set. Ensures exceptional color accuracy and consistency: a valuable tool for graphic designers and prepress professionals who need repeatable results. The HP Designjet Z series are also the first large-format printers to employ HP Scalable Printing Technology, providing superior reliability and optimized ink consumption.

**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.

## High-quality creative prints, prepress proofs and technical images

### Proofing

- Have proofs approved in record time: colors stabilize in less than 5 minutes.
- Print consistent and accurate colors across a wide range of media, thanks to automated printer calibration and ICC profiling.

- Produce high-quality black-and-white proofs: The 8 HP Vivera pigment inks include three blacks that give excellent gray neutrality.

### Display graphics

- Print full-color, long-lasting posters, banners and displays on a wide range of media.
- Create persuasive marketing collateral, point-of-sales material and tradeshow displays with photo-quality images and consistent, accurate colors.

### Design

- Make an impact by presenting concepts in large format and with accurate colors right from the start of your project. The printer covers over 80% of PANTONE colors.
- Get consistent colors, print after print and from one printer to another, thanks to automated printer calibration.

### Technical presentations

- Produce impressive renderings and presentation panels with superior quality, consistency and durability.
- Three-black ink allows for greater realism in renderings with metal or stone.
- Images are smudge-resistant to minimize damage from repeated handling.

### Commercial photography

- Create neutral black and white prints. No need to waste ink when changing between matte and glossy papers: all three blacks are always on board.
- Produce consistent and accurate color photo proofs, thanks to the printer's built-in calibration technology and broad color gamut.
- Print on almost any media—the printer creates media profiles for you and you can use thick stock of up to 500 g/m<sup>2</sup>.

### Mapping

- Maps and satellite images show more detail and gradations thanks to small drop size and precise placement.
- Output resists fading and is water-resistant, so maps can be used in the field.
- Colors are consistent, so subtle differences can be seen and studied over time.

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## Technical specifications

<b>Print Speed</b>	
Best	15 min./page on D/A1 or up to 17 ft <sup>2</sup> /h (color image on glossy paper) 9.8 min./page on D/A1 or up to 31 ft <sup>2</sup> /h (color image on coated paper)
Normal	7.9 min./page on D/A1 or up to 38 ft <sup>2</sup> /h (color image on glossy paper) 4.2 min./page on D/A1 or up to 72 ft <sup>2</sup> /h (color image on coated paper)
Draft	5.8 min./page on D/A1 or up to 52 ft <sup>2</sup> /h (color image on glossy paper) 2.0 min./page on D/A1 or up to 150 ft <sup>2</sup> /h (color image on coated paper)
<b>Resolution</b>	
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
<b>Memory</b>	<b>HP Designjet Z2100 24-inch Photo Printer:</b> 128 MB Standard memory, 40 GB hard disk <b>HP Designjet Z2100 44-inch Photo Printer:</b> 128 MB Standard memory, 40 GB hard Disk
<b>Media Handling</b>	
Types	Sheet feed, roll feed, automatic cutter (cuts all media except canvas) 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 <sup>2</sup>
Size	<b>HP Designjet Z2100 24-inch Photo Printer</b> All standard sizes larger than Letter/A4 up to 24 in./610 mm wide <b>HP Designjet Z2100 44-inch Photo Printer</b> All standard sizes larger than Letter/A4 up to 44 in./1117 mm wide
Maximum external roll diameter	5.3 in./136 mm
Maximum roll length	300 ft/91 m
<b>Printing</b>	
Margins (top x bottom x right x left)	<b>Roll:</b> 0.2 x 0.2 x 0.2 x 0.2 in./5 x 5 x 5 x 5 mm (full bleed available on glossy roll media) <b>Sheet:</b> 0.2 x 0.67 x 0.2 x 0.2 in./5 x 17 x 5 x 5 mm
Technology	HP Vivera pigment inks, HP Three-black ink set, HP Embedded Spectrophotometer
Ink cartridge colors	Light cyan, light magenta, light gray, photo black, cyan, magenta, yellow, matte black
Ink types	HP Vivera pigment inks
Ink drop	4 pl (light cyan, light magenta, light gray, photo black), 6 pl (cyan, magenta, yellow, matte black)
Ink cartridge size	130 ml ink cartridges; 130 ml ink cartridge twin packs also available
Nozzles	2 colors per printhead, 1056 nozzles per color
Maximum print length	300 ft/91 m (OS and application dependent)
Line accuracy	+/- 0.2 % <sup>4</sup>
Light fastness	Over 200 years fade resistance
Water resistance	Water-resistant on a range of HP creative and specialty media
Connectivity	<b>Standard:</b> One 10/100 BT Ethernet, One USB 2.0 high-speed certified port, One EIO Jetdirect accessory slot <b>Optional:</b> HP Jetdirect EIO print servers
Print languages	<b>Standard:</b> HP PCL3GUI <b>Optional:</b> PS via optional software RIP, HP-GL2/RTL optional software solution
<b>Image quality</b>	
Color accuracy	Median <1.6 dE2000, 95% of colors <2.8 dE2000 <sup>5</sup>
Short term color stability	<1 dE2000 in less than 5 minutes <sup>6</sup>
Long term print-to-print repeatability	Average <0.5 dE2000, 95% of colors <1.4 dE20004
Maximum optical density	L* / 2.4 D <sup>7</sup>
<b>Environmental ranges</b>	
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 humidity	20 to 80% RH
Recommended storage humidity	0 to 95% RH
<b>Acoustic</b>	
Sound pressure	<b>Active</b> 44 dB(A) <b>Standby</b> 29 dB(A)
Sound power	<b>Active</b> 6.5 B(A) <b>Standby</b> 4.4 B(A)
<b>Power consumption</b>	
Active	200 watts
Maximum	200 watts
Powersave	27 watts
Standby	43 watts
Power requirements	Input voltage auto-ranging 100 to 240 VAC (+/- 10%), 50/60Hz (+/- 3 Hz), 2 Amp max
<b>Certification</b>	
Safety	IEC 60950-1 compliant, EU LVD and EN 60950-1 compliant, certified by CSA for Canada and US, Argentina IRAM, Singapore PSB, Russia GOST, China CCIB, Taiwan BSMI
Electromagnetic	Compliance for Class B products: EU (EMC Directive), USA (FCC rules), Canada (DoC), Australia (ACA), New Zealand (MoC), China (CCC), Japan (VCCI), Korea (MIC) and Taiwan (BSMI)
Energy Star® Compliant	Yes, ENERGY STAR® qualified models; see: <a href="http://www.hp.com/go/energystar">http://www.hp.com/go/energystar</a>
Press standard	100% coverage of SWOP, ISO and GRACOL, and 3DAP
<b>Warranty</b>	1 year warranty with on-site, next business day service
<b>Warranty extensions</b>	UFO28PE HP 1-Year Post Warranty Next Business Day Onsite Service HCT122PE HP Technical Phone Support
<b>HP Care Pack Services</b>	UFO17E HP 3-Year Next Business Day Onsite Service UFO18E HP 4-Year Next Business Day Onsite Service UFO19E HP 5-Year Next Business Day Onsite Service H7604E HP Installation Service H4518E HP Installation with Network Configuration
<b>Color Services</b>	UF050E HP Color Expert Service 1-Year/5 cases UF315E HP Color Expert Service 1-Year/1 case

<sup>4</sup> +/- 0.2% of the specified vector length or +/- 0.1 mm (whichever is greater) at 23°C (73°F), 50-60% relative humidity, on E/A0 printing material in Best or Normal mode with HP Matte Film roll feed

<sup>5</sup> ICC absolute colorimetric accuracy on HP Proofing Matte paper

<sup>6</sup> With HP Premium Instant-dry Photo Satin media, right after calibration

<sup>7</sup> With HP Premium Instant-dry Photo Gloss media

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## Recommended system requirements

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

## Dimensions (w x d x h)

Printer with stand	<b>HP Designjet Z2100 24-inch Photo Printer</b> 49.7 x 26 x 41.2 in./1262 x 661 x 1047 mm <b>HP Designjet Z2100 44-inch Photo Printer</b> 69.7 x 26 x 41.2 in./1770 x 661 x 1047 mm
Shipping dimensions	<b>HP Designjet Z2100 24-inch Photo Printer</b> 57.8 x 30.7 x 29.1 in./1470 x 780 x 740 mm <b>HP Designjet Z2100 44-inch Photo Printer</b> 77.3 x 30.7 x 30.7 in./1965 x 780 x 780 mm

## Weight

Printer with stand	<b>HP Designjet Z2100 24-inch Photo Printer</b> 143 lb/65 kg <b>HP Designjet Z2100 44-inch Photo Printer</b> 189 lb/86 kg
Shipping weight	<b>HP Designjet Z2100 24-inch Photo Printer</b> 225 lb/102 kg <b>HP Designjet Z2100 44-inch Photo Printer</b> 271 lb/123 kg

## What's in the box

**HP Designjet Z2100 24-inch Photo Printer:** spindle, printheads (4 x 2 colors), introductory ink cartridges, media high gloss photo sample roll (24 in. x 15 ft), stand (24 in.), rear tray (24 in.), adaptor 3-inch KIT for spindle (2), quick reference guide, set-up poster, USB cable, power cord, HP Start-up kit including printer software and training

**HP Designjet Z2100 44-inch Photo Printer:** spindle, technical spindle, printheads (4 x 2 colors), introductory ink cartridges, media high gloss photo sample roll (36 in. x 15 ft), stand (44 in.), rear tray (44 in.), 3-inch KIT for spindle (2), quick reference guide, set-up poster, USB cable, power cord, HP Start-up kit including printer software and training

## Ordering information

### Product

Q6675A HP Designjet Z2100 24-inch Photo Printer

Q6677A HP Designjet Z2100 44-inch Photo Printer

### Accessories

Q6643D EFI Designer 5.1 for HP XL International

Q8692B HP GL/2 Upgrade Kit for the HP Designjet Z2100/Z3100 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

C9404A HP 70 Matte Black & Cyan Printhead

C9405A HP 70 Light Magenta & Light Cyan Printhead

C9406A HP 70 Magenta & Yellow Printhead

C9407A HP 70 Photo Black & Light Gray Printhead

#### 130 ml ink cartridges

C9448A HP 70 Matte Black 130 ml Ink Cartridge

C9449A HP 70 Photo Black 130 ml Ink Cartridge

C9451A HP 70 Light Gray 130 ml Ink Cartridge

C9452A HP 70 Cyan 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

C9390A HP 70 Light Cyan 130 ml Ink Cartridge

#### Ink cartridge twin packs

CB339A HP 70 Matt Black 130 ml Ink Cartridge Twin Pack

CB340A HP 70 Photo Black 130 ml Ink Cartridge Twin Pack

CB342A HP 70 Light Gray 130 ml Ink Cartridge Twin Pack

CB343A HP 70 Cyan 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

CB351A HP 70 Light Cyan 130 ml Ink Cartridge Twin Pack

#### Media supplies

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

Q6626A HP Super Heavyweight Plus Matte Paper 24 in. x 100 ft/610 mm x 30.5 m

C6029C HP Heavyweight Coated Paper 24 in. x 100 ft/610 mm x 30.5 m

C6775A HP Colorfast Adhesive Vinyl 36 in. x 40 ft/914 mm x 12.2 m

Q1898A HP Opaque Scrim 36 in. x 50 ft/914 mm x 15 m

C6787A HP Barriers with Tyvek® 36 in. x 50 ft/914 mm x 15 m

Q7973A HP Matte Litho-realistic Paper 36 in. x 100 ft/914 mm x 30.5 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

Q1968A HP Proofing Matte 24 in. x 100 ft/610 mm x 30.5 m

Q8732A HP Hahnemühle Smooth Fine Art Paper 265 g/m<sup>2</sup> 24 in. x 35 ft/610 mm x 10.7 m

Q8736A HP Hahnemühle Textured Fine Art Paper 265 g/m<sup>2</sup> 24 in. x 35 ft/610 mm x 10.7 m

Q1984A HP Hahnemühle Watercolor Paper 36 in. x 38 ft/914 mm x 11.58 m

Q8741A HP Aquarella Art Paper 24 in. x 35 ft/610 mm x 10.7 m

More HP media sizes and weights available at [www.hp.com/go/designjet/supplies](http://www.hp.com/go/designjet/supplies)

More information on products, technologies and services available at [www.hp.com/go/graphic-arts](http://www.hp.com/go/graphic-arts)

