HP Designjet Z3100ps GP Photo Printer series

Deliver exquisite color and true black-and-white results with breakthrough color quality, accuracy, and consistency. Count on HP for printing that's easy, reliable and predictable—for posters, banners, maps, presentations, photos and fine art reproductions.

hp

Breakthrough color performance

Achieve accurate, predictable, and consistent color.

- **Produce superior and consistent color from print to print**. The first embedded spectrophotometer with i1 color technology[1] enables precise printer calibration to deliver print-to-print consistency. You can even generate custom ICC profiles for your preferred paper automatically.

- **Print on the media that's right for your project.** Achieve consistent colors on a wide range of papers. Increase your options—choose from over 30 new HP papers and other readily available media.

- **Get fast color stability plus a broad gamut.** Colors are stable in as little as five minutes. Print the colors you need with over 80 percent PANTONE® coverage,[2] HP Professional PANTONE emulation, and full compliance with all major prepress standards.

- **Glide effortlessly through color management and printing.** The HP Color Center tool gives you a single source to control and manage your color workflow.

No-limits printing

Produce vivid, long-lasting prints using HP Vivera pigment inks.

- **Create spectacular high-quality color photos, posters, maps and renderings.** Consistently achieve outstanding image quality using a 12-ink printing system with HP 70 Vivera pigment inks. The precisely placed 4- and 6-pl ink drops, along with 2400 dpi resolution, highlight even the most intricate details.

- **Avoid fading with water-resistant prints.** Prints are water-resistant and resist fading for over 200 years[3] on a range of basic and specialty media.

- **Produce beautiful black-and-white prints with the HP Quad-black ink set.** Get true gray neutrality under different lighting conditions, plus smooth, continuous tones, and rich, deep blacks on matte and glossy media.

- **Eliminate bronzing and achieve superior gloss uniformity with HP Gloss Enhancer.**[4] Use on glossy and semi-gloss photo papers to produce images with uniform gloss from highlights to shadows.

True print confidence

Print with greater confidence, thanks to dependable HP technologies.

- **Achieve flawless output every time.** HP's Optical Drop Detector monitors the drop ejection performance and compensates for failed or clogged nozzles to ensure dependable and consistent image quality every time.

- **Simplify and empower your workflow with HP's Embedded Web Server and Adobe® PostScript 3 RIP.** Directly submit TIFF, JPEG, and PDF files to the printer without ever opening a driver or application. Quickly and easily manage your print jobs, monitor supplies, and track printer status from your workstation. The onboard RIP, based on true Adobe PostScript, offers driver-like simplicity and seamlessly integrates with Adobe applications.

- **Eliminate trial and error with real-time layout and orientation preview.** HP's printer drivers and embedded web server let you preview the layout, size and position on your paper saving time, effort and money.

[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 and Z3100 Photo Printers are pending PANTONE licensing.
[3] Display permanence rating for interior displays/away from direct sunlight by HP Image Permanence Lab and by Wilhelm Imaging Research, Inc., on a range of HP media. Water resistance and interior in-window display ratings by HP Image Permanence Lab on a range of HP media. For details, visit www.hp.com/go/supplies/printpermanence.
[4] 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.

HP Designjet Z3100ps GP Photo Printer series

1. Roll feed accommodates media rolls up to 300 ft

2. HP Vivera ink supplies up to 130 ml

3. Six long-life printheads featuring HP Scalable Printing Technology

4. Easy-to-reach, intuitive LCD front panel and direct-access keys for ink supply maintenance and print message alerts

5. Mounted on the carriage, the embedded spectrophotometer brings accurate profiling and precision color calibration

6. Front bypass slot accommodates media up to 24 in./610 mm wide (24-in. printer) or up to 44 in./1117 mm (44-in. printer)

7. Rear bypass slot handles heavy and rigid media of weights up to 500 g/m^2 and thickness up to 0.8 mm

8. 40 GB hard disk for large files and file queuing

9. Media stand and bin collect drawings as they print

10. USB and Ethernet connections ensure easy workgroup integration

11. EIO slot accommodates an array of HP JetDirect options

Printer series at a glance

HP Designjet Z3100ps GP Photo Printer
- Choice of 24- and 44-inch models
- Drivers for Windows® and Macintosh®
- 256 MB RAM and 40 GB hard disk
- Embedded Adobe PostScript 3 RIP
- Direct file submission of HP RTL, HP-GL/2, CALS, TIFF, JPEG, PostScript, and PDF files
- Advanced Profiling Solution, including colorimeter for monitor calibration

Options
- Additional spindles for easy media swapping
- EFI Designer Edition XL for HP
- Installation service
- Warranty extensions or upgrades
- HP JetDirect network solutions

Key technologies

The HP embedded spectrophotometer with i1 Color Technology from GretagMacbeth™ is mounted on the printer carriage and revolutionizes professional color workflows by automating media profiling. The spectrophotometer allows users to automatically generate custom ICC profiles for their preferred media and provides accurate measurements for printer calibration that deliver print-to-print and printer-to-printer color consistency.
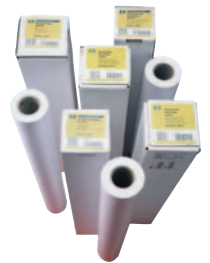
HP DreamColor Technologies are a system of color sciences that make it easy for you to produce accurate, predictable, and consistent color across different printers, presses, and media. It's designed to provide customers with accurate, predictable, and easy color. Initially refined to meet the demanding standards for color accuracy at DreamWorks Animation SKG™, HP DreamColor Technologies offer capabilities such as closed loop color calibration for color consistency, Professional PANTONE emulation and offset color emulation.

HP's Embedded Web Server enables remote printer management and monitoring. Use your web browser to easily control queue management and nesting, job submission and storage, and job accounting.

HP Advanced Profiling, powered by GretagMacbeth technology, offers a color management solution along with the spectrophotometer embedded in the printer. Easily monitor color profiling, calibration, ambient light, and monitor-profile validation, as well as rigorously fine-tune printer color profiles. You also can control RGB and CMYK profiling and optimize inkjet separations for HP media in addition to the most common inkjet separations (Inkjet 260 and 400). A very intuitive profile-editing wizard lets you match colors to various viewing conditions that use nonstandard illuminants.

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

HP's extensive media portfolio includes a portfolio of nine photo papers, 10 digital fine art papers, three proofing papers, nine 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 handling, display and storage that professional prints demand.

Services

A number of standard services come in the printer box to help you print with confidence right from the start. See www.hp.com/go/graphic-arts for more details.

HP Start-Up Kit: Easily install the printer on your own. The HP Start-Up Kit includes drivers for 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, and contact details for HP support and information on the latest drivers and firmware.

HP Easy Printer Care (Windows) or Printer Utility (Macintosh): This feature tells you how your printer is doing by sending you alerts on everything from job accounting to color control.

Purchase enhanced services from the HP Professional Graphic Services portfolio:

HP Installation Care Pack Services: Easily get your printer up and running in minimum time. Standalone and network options are 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 about color, color management software and hardware, RIPs, design applications, output devices, drivers, and operating systems.

HP Care Pack Services and post-warranty services: Reduce downtime and minimize the risk of unbudgeted repair costs. Three- to five-year warranty extensions available.

See the back page for ordering information and visit www.hp.com/go/pgs for more details on all service options.

HP Designjet Z3100ps GP Photo Printer series

Technical specifications

Print speed

Best	15 min/page on D/A1 or up to 17 ft²/h (color image on glossy paper) 9.8 min/page on D/A1 or up to 31 ft²/h (color image on coated paper)
Normal	7.9 min/page on D/A1 or up to 38 ft²/h (color image on glossy paper) 4.2 min/page on D/A1 or up to 72 ft²/h (color image on coated paper)
Draft	5.8 min/page on D/A1 or up to 52 ft²/h (color image on glossy paper) 2.0 min/page on D/A1 or up to 150 ft²/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	24- and 44-inch models: 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), backlit, bond and coated (bond, coated, heavyweight coated, super heavyweight coated)
Maximum weight	500 g/m²
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

Margins (top x bottom x right x left)	Roll: 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) Sheet: 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 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 Vivera 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 %[5]
Light fastness	Over 200 years[3] fade resistance
Water resistance	Water-resistant on a range of HP creative and specialty media
Connectivity	Standard: One 10/100BT Ethernet, one USB 2.0 high-speed certified port, one EIO Jetdirect accessory slot Optional: HP Jetdirect EIO print servers
Print languages	Standard: Adobe PostScript 3, Adobe PDF 1.6, HP-GL/2, HP-RTL, TIFF, JPEG, CALS G4

Image quality

Color accuracy	Median <1.6 dE2000, 95% of colors <2.8 dE2000[6]
Short term color stability	<1 dE2000 in less than 5 minutes[7]
Long term print-to-print repeatability	Average <0.5 dE2000, 95% of colors <1.4 dE2000[7]
Maximum optical density	4 L* / 2.5 D[8]

Power consumption

Active	200 watts
Maximum	200 watts
Powersave	27 watts
Standby	43 watts
Power requirements	Input voltage auto-ranging 100–240 VAC (+/- 10%), 50/60Hz (+/- 3Hz), 2 Amp max

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)

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
ENERY 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

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

Post Warranty

	UF046PE HP 1-Year Post-Warranty Next Business Day Onsite Service
	HC132PE HP 1-Year Technical Phone Support

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/graphic-arts

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

HP Designjet Z3100ps GP 24-inch Photo Printer: Spindle; printheads (6 x 2 colors); ink cartridges (12 x 69 ml)[9]; high-gloss photo media sample roll (24 in. x 15 ft); 24-inch stand; 24-inch rear tray; 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 Z3100ps GP 44-inch Photo Printer: Spindle, printheads (6 x 2 colors), ink cartridges (12 x 130 ml)[9], high gloss photo media sample roll (36 in. x 15 ft), 44-inch stand, 44-inch rear tray, 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

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

[5] +/- 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.
[6] ICC absolute colorimetric accuracy on HP Proofing Matte paper.
[7] With HP Premium Instant Dry Photo Satin media, right after calibration.
[8] With HP Premium Instant Dry Photo Gloss media.
[9] 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