



HP Designjet Z3100 Photo Printer series



BREAKTHROUGH COLOR: Achieve consistent & accurate color with the first ever embedded spectrophotometer¹

- **Automated and simple creation of ICC profiles.** HP's embedded spectrophotometer and an automated workflow bring simplicity and reliability to accurate profiling and precise printer calibration. HP's Advanced Profiling Solution offers additional options for profiling and calibrating your printing system.
- **Broad gamut coverage.** Over 80% PANTONE[®] coverage², 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 years on a range of HP papers and HP Hahnemühle papers and are water resistant on 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 Enhancer⁴.** Used on glossy and semigloss photo papers to produce images with uniform gloss from highlights to shadows.

TRUE PRINT CONFIDENCE: Print with greater confidence thanks to dependable HP technologies

- **Eliminate trial and error with real-time layout and orientation preview.** Take the guess-work out of margins. Save time and materials.
- **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 & 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.

¹ With i1 color technology.

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 by Wilhelm Imaging Research, Inc. on a range of HP creative and specialty media. For details: <http://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.

DESIGNED FOR CREATIVE PROFESSIONALS

PROFESSIONAL PHOTOGRAPHERS

Create exquisite exhibition prints, portfolios, and digital albums

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

Joel Meyerowitz, Joel Meyerowitz Photography

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.⁽⁴⁾
- 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® & PDF printing.

«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



Free to experiment

«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 Klinke, Director Sales and Marketing, Hahnemühle FineArt

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 the workflows of digital artists

- 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.

«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

Produce accurate, consistent, and stable prepress contract proofs

«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.

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 ΔE in under 5 minutes.
- The printer covers over 80% of PANTONE® colors⁽²⁾ and completely encompasses the SWOP, ISO, GRACOL, EUROSACLE, TOYO, FOGRA, and 3DAP gamuts.

Integrated solutions that drastically shorten your workflow

- Automated closed-loop color consistency is achieved with the printer's embedded spectrophotometer, featuring GretagMacbeth's leading i1 color technology.
- Integrate one of a range of commercially available proofing RIPs, such as the Colorproof o4 RIP from GMG, for a customized proofing solution. This leading prepress RIP combines with the printer to form a cost-effective solution that verifies the press-standard color compliance of your proofs.
- Or add the optional EFI Designer Edition 5.1 RIP for HP (XL version), developed for graphic designers and providing CMYK workflow support, PostScript and PDF printing, and accurate spot color management.

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

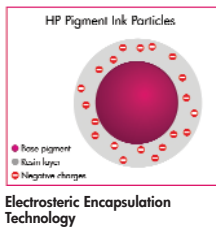
Allan Roche, Pixel CMS Ltd.



«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 CTO, X-Rite

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 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 GretagMacbeth 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 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/graphicarts 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.

HP Designjet Z3100 Photo Printer series



Technical specifications

| | |
|--|---|
| Print speed | |
| Best | 15 min/page on D/A1 or up to 17 ft ² /h (color image on glossy paper) 9.8 min/page on D/A1 or up to 31 ft ² /h (color image on coated paper) |
| Normal | 7.9 min/page on D/A1 or up to 38 ft ² /h (color image on glossy paper) 4.2 min/page on D/A1 or up to 72 ft ² /h (color image on coated paper) |
| Draft | 5.8 min/page on D/A1 or up to 52 ft ² /h (color image on glossy paper) 2.0 min/page on D/A1 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 24" Photo Printer: 128 MB Standard memory, 40 GB hard disk HP Designjet Z3100 44" Photo Printer: 128 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/m ² |
| Size | HP Designjet Z3100 24" Photo Printer: All standard sizes larger than Letter/A4 up to 24 in/610 mm wide HP Designjet Z3100 44" Photo Printer: 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 |
| 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 1.7 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" printer box, not available as replacement 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 % ⁵ |
| Lightfastness | Over 200 years ⁶ fade resistance |
| Water resistance | Water-resistant on a range of HP creative and specialty media |
| Connectivity | Standard: One 10/100 BT Ethernet, One USB 2.0 high-speed certified port, One EIO Jetdirect accessory slot Optional: HP Jetdirect EIO print servers |
| Print Languages | Standard: HP PCL3GUI Optional: 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 ⁴ |
| 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 |

(5) +/- 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

(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

| | |
|-----------------------------------|--|
| 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 humidity | 20 to 80% RH |
| Recommended storage humidity | 0 to 95% RH |
| Acoustic | |
| Sound pressure, active | 44 dB(A) |
| Sound pressure, standby | 29 dB(A) |
| Sound power, active | 6.5 B(A) |
| Sound power, standby | 4.4 B(A) |
| Power consumption | |
| 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 |
| Certification | |
| 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 CCCB, 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 |
| Press standard | 100% coverage of SWOP, ISO, GRACOL and 3DAP |
| Warranty | 1 year warranty with on-site, next business-day service |
| Warranty extensions | UF044PE HP 1 yr Post Warranty Next-Business-Day Onsite Service HC132PE HP 1yr Technical Phone Support |
| HP Care Pack Services | UF035E HP 3 yr Next-Business-Day Onsite Service UF036E HP 4 yr Next-Business-Day Onsite Service UF037E HP 5 yr Next-Business-Day Onsite Service H7604E HP Installation Service H4518E HP Installation with network configuration |
| Color Services | UF050E 1yr/5 cases HP Color Expert Service UF315E 1yr/1 case HP Color Expert Service |

| | |
|--|--|
| 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, 1 GB RAM, 2 GB available hard disk |
| Dimensions (w x d x h) | |
| Printer with stand | HP Designjet Z3100 24" Photo Printer: 49.7 x 28.8 x 41.2 in 1262 x 732 x 1047 mm HP Designjet Z3100 44" Photo Printer: 69.7 x 28.8 x 41.2 in 1770 x 732 x 1047 mm |
| Shipping dimensions | HP Designjet Z3100 24" Photo Printer: 57.8 x 30.7 x 29.1 in 1470 x 780 x 740 mm HP Designjet Z3100 44" Photo Printer: 77.2 x 30.5 x 23.6 in 1960 x 775 x 600 mm |
| Weight | |
| Printer with stand | HP Designjet Z3100 24" Photo Printer: 143 lb/65 kg HP Designjet Z3100 44" Photo Printer: 189 lb/86 kg |
| Shipping | HP Designjet Z3100 24" Photo Printer: 225 lb/102 kg HP Designjet Z3100 44" Photo Printer: 271 lb/123 kg |

What's in the box

HP Designjet Z3100 24" Photo Printer: spindle, printheads (6 x 2 colors), ink cartridges (12 x 69 ml)⁹, media high gloss photo sample roll (24 in x 15 ft), stand (24"), rear tray (24"), adaptor 3" 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 Z3100 44" Photo Printer: spindle, technical spindle, printheads (6 x 2 colors), ink cartridges (12 x 130 ml), media high gloss photo sample roll (36" x 15 ft), stand (44"), rear tray (44"), 3" 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 | Q5669A HP Designjet Z3100 24" Photo Printer |
| Q6659A | HP Designjet Z3100 44" 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/Z3100 Photo series |
| Q6695A | HP Advanced Profiling Solution International |
| Q6698A | HP Designjet Z3100 44 inch Spindle for printing on technical media |
| Q6699A | HP Designjet Z3100 44 inch Spindle for graphics (spare, for easy media switching) |
| Q6700A | HP Designjet Z3100 24 inch Spindle for graphics (spare, for easy media switching) |
| Printing supplies | |
| Printheads | C9405A HP 70 Light Magenta & Light Cyan Printhead |
| C9406A | HP 70 Magenta & Yellow Printhead |
| C9407A | HP 70 Photo Black & Light Gray Printhead |
| C9408A | HP 70 Blue & Green Printhead |
| C9409A | HP 70 Matte Black & Red Printhead |
| C9410A | HP 70 Gloss Enhancer & Gray Printhead |
| 130 ml ink cartridges | Q9448A HP 70 Matte Black 130 ml Ink Cartridge |
| Q9449A | HP 70 Photo Black 130 ml Ink Cartridge |
| Q9450A | HP 70 Gray 130 ml Ink Cartridge |
| Q9451A | HP 70 Light Gray 130 ml Ink Cartridge |
| Q9453A | HP 70 Magenta 130 ml Ink Cartridge |
| Q9454A | HP 70 Yellow 130 ml Ink Cartridge |
| Q9455A | HP 70 Light Magenta 130 ml Ink Cartridge |
| Q9456A | HP 70 Red 130 ml Ink Cartridge |
| Q9457A | HP 70 Green 130 ml Ink Cartridge |
| Q9458A | HP 70 Blue 130 ml Ink Cartridge |
| Q9459A | HP 70 Gloss Enhancer 130 ml Ink Cartridge |
| Q9390A | 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 |
| Q8700A | 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 24in x 20ft/610 x 6.1 m |
| Q8759A | HP Professional Satin Photo Paper 24 in x 50 ft/610 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 |

Media supplies

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