

# *DIGITAL* Output<sup>®</sup>

OCTOBER 2007

VOL. XIII, NO. 10 • \$6.95 USA

[www.digitaloutput.net](http://www.digitaloutput.net)

## Sublimation Printing

Wide and Dyed

- > Flatbed POP
- > On Demand Label Printing
- > Backlit Signage

DEDICATED TO > CAPTURE > CREATION > OUTPUT > FINISHING



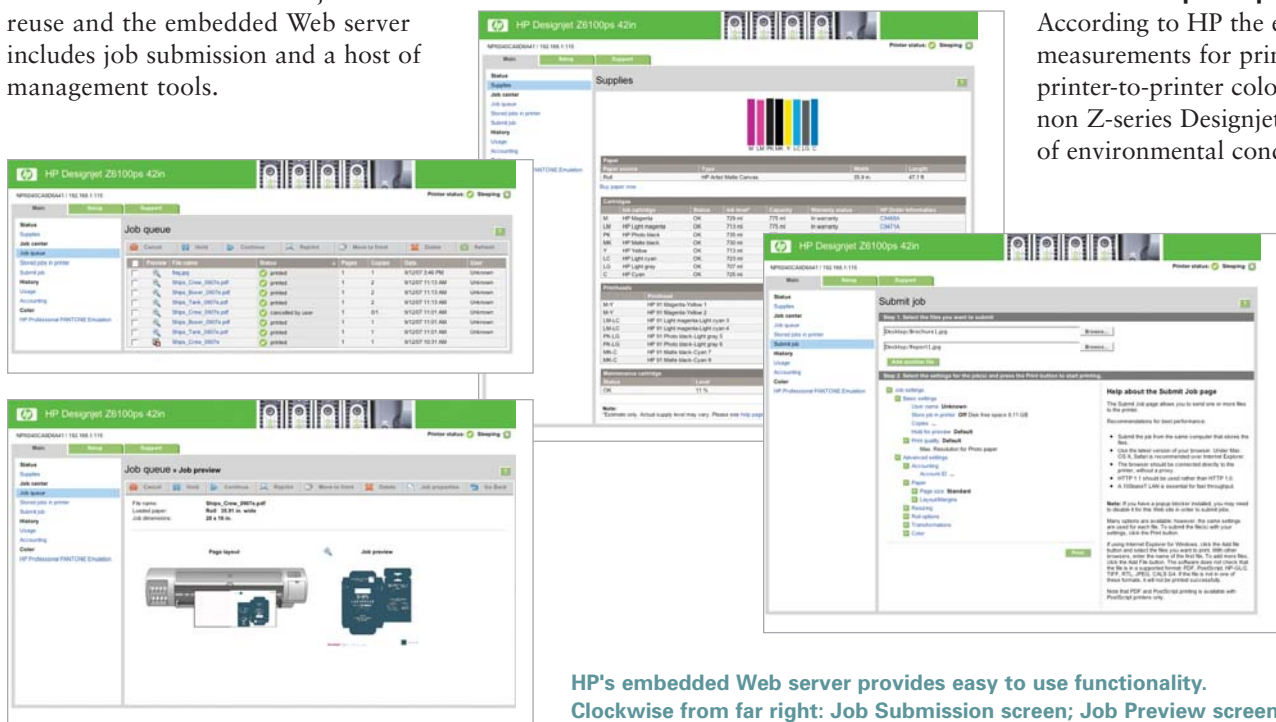
# HP Designjet Z6100

High performance inks, color management technology, speed, and an optional embedded RIP help the Designjet series evolve.

Hewlett-Packard (HP), a technology innovator, has earned leadership positions in key segments of large format printing. HP solutions provide high quality and dependable printers for print service providers and technical markets like GIS, architectural, engineering, and construction. In May the company announced additions to its mid-range aqueous inkjet solution with the launch of the HP Designjet Z6100. The Designjet series, wide format printers with vivid, durable color and ease-of-use, established HP as a solid player in professional markets. Targeted as a replacement to its successful Designjet 5000 and 5500 large format printers, the Z6100 performs at almost twice the speed of its predecessor in best quality and more than four times the speed in fast quality.

The eight-ink Designjet Z6100 thermal inkjet printers are available in 42- and 60-inch widths, and come with or without an embedded Adobe Postscript RIP. With print speeds up to 1,134 square feet per hour (sf/h), the Z6100 is ideal for those with both high-end quality and high-speed output needs. The printer has a home in fast-paced digital print and quick print shops, sign shops, agencies, photo studios, technical and construction sites, and in-house marketing offices.

The Designjet Z6100 includes an embedded spectrophotometer and color management tools that allow users to insure color accuracy. HP's new DreamColor Technologies are built into the devices to assure a consistent color every time, from display through printing. Innovative staggered printheads in HP's Double Swath technology offers 2,112 print head nozzles, small ink drop sizes, and the debut of HP's Optical Media Advance Sensor. The onboard 40GB hard drive allows users to store jobs for reuse and the embedded Web server includes job submission and a host of management tools.



HP's embedded Web server provides easy to use functionality. Clockwise from far right: Job Submission screen; Job Preview screen; Job Queue enabling preview and print functionality; Supplies screen providing consumables status on paper, inks, printheads, and the maintenance cartridge.



HP Designjet Z6100 60-inch and 42-inch models.

The printers use HP's advanced Vivera pigment 775ml ink cartridges—cyan, light cyan, magenta, light magenta, yellow, light gray, matte black, and photo black. HP says these inks resist fading in or near a window for more than one year unlaminated, more than three years laminated, and 200-plus years away from direct sunlight.

The Z6100 handles media up to 114 lb weight, in roll widths of 24 to 42 inches, and lengths of up to 575 feet depending on media type—from bond and coated paper, to vellum, film, photographic paper, backlit, self-adhesive, scrim, fabric, and canvas. HP offers a number of premium substrate options, including bright white heavyweight bond and coated paper, and an Instant-dry gloss paper.

## Embedded Spectrophotometer

According to HP the embedded Spectrophotometer provides accurate measurements for printer calibration that deliver print-to-print and printer-to-printer color consistency with less than half the color error of non Z-series Designjets. Color accuracy is available over a wide range of environmental conditions. The embedded spectrophotometer also allows users of HP Designjet Z6100-series printers to automatically generate custom CMYK ICC profiles for their preferred media.

The printer, color imaging pipeline, and a professional-quality spectrophotometer are integrated with the Color Center Utility for HP Designjet Z6100-series printers. This offers an in-line workflow with significant advantages over third-party profiling solutions with off-line workflows. Giving the calibration and profiling process direct access to the writing system allows precise control of ink levels and color separations for each color patch in the test chart. The automated measurement process eliminates handling the test chart, provides repeatable dry-times, and allows fast measurements with precise electro-mechanical positioning of the spectrophotometer over the color patch.

Optionally, the user can choose to have the printer eject the test chart for off-line drying. The test chart will be automatically aligned with the spectrophotometer when it is reloaded into the printer, and the automated profiling process can resume.

Profiling charts may be printed in 24-, 36-, and 42-inch formats depending on the width of the media roll. The format is automatically selected to minimize media use. A complete printer calibration and profiling process including user inputs, printing, drying, scanning, and processing takes about 30 minutes.

Simplified color management and color consistency are necessities for most digital print providers.

**Hands On**

Working with a 42-inch Z6100PS unit, we found the HP setup and installation documentation top rate. In less than three hours the unit went from crate to full operation. Out of the box the Z6100 includes an automatic cutter, spindle, printheads, eight 775ml ink cartridges, a maintenance cartridge and kit, a 25-foot sample roll of HP Heavy-weight Coated Paper, the stand and basket, a



HP Vivera inks on the Z6100.

three-inch spindle adapter kit, reference guide, setup poster and startup DVD, power cord, and Designjet software.

Media installation is effortless with a front access load spindle which fed automatically using the prompt system generated on the unit's 3½-inch LCD menu screen. We printed a range of prints from high quality photographs to POP posters on HP durable flag film, HP Instant dry gloss photo paper, HP professional matte canvas, and HP Hahnemühle fine art paper. To test both software and the

embedded RIP, we alternated our prints with Onyx Poster Shop 7.0 and using the embedded Web server for job submission.

Print quality in best mode is exceptional with a print resolution of 2400x1200 optimized dpi. Photographic prints on the HP media are stunningly accurate. Media changes and profile changes using the embedded Web server and onboard menu system are intuitive and easy to implement.

**Wide Format Simplified**

The HP Designjet Z6100 Printer series raises the bar as a high performance easy to use professional wide format solution. The Z6100 delivers on HP's promise to enable customers to do more with a broad portfolio of intuitive, scalable solutions. The Z6100 Printer series with HP Vivera pigment inks offer an excellent solution for indoor and short-term outdoor large format printing applications like photos and fine art prints, drawings, maps, and renders, delivering vivid and high-impact prints at maximum print speeds.

**fast facts**

**Products/Estimated Retail Prices:**

HP Designjet Z6100 42-inch .....	\$9,995
HP Designjet Z6100ps 42-inch .....	\$12,495
HP Designjet Z6100 60-inch .....	\$15,995
HP Designjet Z6100ps 60-inch .....	\$18,500

**Consumables/Accessories:**

Vivera pigment ink HP 91 cartridges (eight)	
Cyan, Light Cyan, Magenta, Light Magenta, Yellow,	
Light Gray, Matte Black, Photo Black.....	
Roll Feed Spindles—42-inch .....	\$100
60-inch .....	\$150
Take-Up Reel—42-inch .....	\$1,500

**Company:** Hewlett-Packard

**Web site:** www.hp.com

Prices as of 9/6/07



**FREE SUBSCRIPTIONS**

available online at  
[www.digitaloutput.net](http://www.digitaloutput.net).



Posted with permission from Digital Output and Rockport Custom Publishing. May not be reproduced or distributed without the written permission from the publisher. All rights reserved ©2007