



## HP Designjet 90 Printer series



Focus on your creativity with this professional, A2+/C+-size photo printer: the HP Designjet 90. HP Professional Color Technologies deliver consistent color output while HP Vivera Inks and select HP papers provide exceptional fade resistance.<sup>1</sup>

## Experience professional color

- Rich color depth and minimal dot visibility. Proprietary dye-based HP Vivera Inks in HP six-ink color printing work to deliver a wide range of colors, deeper blacks, continuous tones, and gloss uniformity. A four-picoliter ink-drop size maintains fine detail reproduction, especially in dark areas, and smooth tonal transitions.
- Maximum color consistency. See reliable, consistent color from print to print. HP invests in HP Professional Color Technologies making your color experience simple and straightforward. Plus, enjoy more robust color and job management capabilities.
- **Revolutionary HP Vivera inks.** HP Vivera inks are carefully engineered to work flawlessly with all parts of the printing system so you achieve rich, vibrant colors and extraordinary photo image quality, time after time. Graphic designers and professional photographers can rest assured that the images they create will maintain their impact.

## Live out your creativity

 Optional EFI software RIP. Add the optional EFI software RIP to expand your printing options and enhance color accuracy. The EFI software RIP provides Adobe® PostScript® 3<sup>™</sup> support and optional Automatic PANTONE® calibration. Added to that, you get enhanced job management capabilities for greater control. Spend just a little more to get a lot more from this professional, versatile printer.<sup>(4</sup>

- Print high-quality images quickly. Print high-quality images on A3+/B+ -size media at four minutes per page in Normal print mode. Use Draft mode for proof printing to deliver A3+/B+ -size prints quickly. No matter which mode you choose, you'll appreciate the quality that comes from HP technology.
- Experience full color workflow support. Your design software choices expand when you use the HP Designjet 90 Printer series, which enables color solutions for every color workflow. The print preview ensures correct layout and you can add optional EFI software if you need color management in a CMYK workflow.

## Valuable time and cost savings

- Save time and increase productivity. Cost-effective, individually replaceable HP ink cartridges and printheads maximize efficiency and provide reliable operation that minimizes user intervention and improves productivity.
  3-ink multipacks provide additional savings and convenience for high-volume printing.
- Wide range of media weights and types. Choose the media type that best conveys your concepts with durable HP media. The HP Designjet 90 Printer series can handle stock in weights up to 300 g/m<sup>2</sup> (80 lb), as well as thick or rigid media (up to 15 mil). Choose from a variety of HP media finishes. Furthermore, you also benefit from the added convenience of four different HP 457 mm (18 in) media rolls.<sup>12</sup>

## HP Designjet 90 Printer series

- LCD printer status indicator for ink supply maintenance and print message alerts
- 2. Media tray holds up to 70 sheets of standard-size media (up to A2+/C+-size)
- Front bypass slot accommodates cut sheet media up to 457 mm (18 in)
- 4. Small footprint allows placement of printer on tabletop or in common work area
- 5. USB and parallel connection ensure easy system integration. Optional network connectivity with compatible HP Jetdirect network cards
- Rear bypass slot handles heavy and rigid media of weights up to 300 g/m<sup>2</sup> (80 lb)
- 7. Roll feed (optional with HP Designjet 90 Printer) feeds rolls up to 457 mm (18 in) wide and 45.7 m (150 ft) long

Internal color sensor for color consistency

Fade-resistant inks with 4 pl drop size for fade-resistant<sup>1</sup>, photoquality images

Modular ink system with six independently replaceable ink cartridges allows you to replace only the ink colors you need





HP Designjet 90 Printer front view



HP Designjet 90r Printer top view

## Series at a glance

## HP Designjet 90 Printer

- Input tray for 70 sheets up to 457  $\times$  609 mm (18  $\times$  24 in)
- Optimized Macintosh and Windows® drivers with RGB ICC profiles
- Optional network connectivity

## HP Designjet 90r Printer

All the features of the HP Designjet 90 Printer plus:

• Roll feed for printing up to 457 mm (18 in) wide

## **Optional accessories**

- HP Designjet 90 Roll Feed accessory\*
- HP Designjet 90 Spindle accessory\*
- EFI Designer Edition 5.1 for HP M International
- EFI Designer Edition 5.1 for HP M Japan
- EFI Designer Edition 5.1 for HP XL International
- EFI Designer Edition 5.1 for HP XL Japan
- compatible HP Jetdirect network cards
- \* Standard with the HP Designjet 90r

## HP Color Profiling Offsite Service

The HP Color Profiling Offsite Service helps eliminate wasted time, media and ink caused by inadequate results, while improving the efficiency and effectiveness of advanced color workflow. This is done by providing an ICC profile specialized design for your printer and media. There are 2 packages available:

- UC217E: for creation of 1 profile
- UC218E: for creation at a reduced price

# A great tool for professional photographers

## Exceptional fade-resistant photo quality

HP Vivera inks, together with HP Premium Plus photo papers for exceptionally fade-resistant images that last approximately 82 years<sup>1</sup>.

## Fine details and faithful reproduction

Excellent highlight and shadow detail, smooth transitions and persuasive skin tones, with 4pl ink drop size. HP color layering technologies provide dense blacks, reliable color consistency and gloss uniformity.

## Excellent gloss level and gloss uniformity

Dye-based HP Vivera inks provide rich color depth, minimal dot visibility, and uniform gloss-all important attributes of image quality.

## An asset for graphic designers

## No need to outsource or tile and assemble

Save time and money by publishing professional color prints in-house.

### Media versatility up to C+/A2+ size

4 independent paper paths and a roll-feed<sup>12</sup> expand your printing capabilities, from postcards to full sized banners.

### **Professional color proofs**

HP Color Technologies such as Professional PANTONE Emulation and CMYK+ will provide the edge to win more clients. Automatic printhead alignment and Closed Loop Color calibration deliver consistent reliable colors every time. Postscript support through EFI Designer Edition 5.1 RIP<sup>13</sup>.





# Improving the workflow of proofing professionals

## Fast color stability

Obtain accurate and stable proofs quickly with new dye-based HP Vivera ink and HP Proofing media (most media are stable 10 minutes after printing).

#### Color consistency

Consistency is guaranteed by way of the patented Closed Loop Color calibration, which eliminates guess work.

#### Press simulation

Press simulation is a CMYK to CMYK transformation that changes the lightness, hue, and saturation of the CMYK files sent to the inkjet printer to match the output of a production device, giving pre-press professionals an easy-to-use and low-cost tool for producing accurate proofs. Postscript support through EFI Designer Edition 5.1 RIP<sup>(3)</sup>.

#### Flexible printing sizes

Switching easily between sheet and roll-fed media<sup>12</sup> up to 457 mm (18 in) wide, you can reliably print postcard-size images, full-color pages, or banner-style pieces.





HP Vivera Inks, specifically developed for use with HP inkjet printing systems, encompass a number of key elements that contribute to the inks' exceptional performance:

- Superior ingredients and unique ink formulations
- Exceptional ink purity
- Low-colorant inks designed from the ground up

## HP Designjet 90 Printer series

## Technical specifications

Print speed	and the second secon
A3/B	Color image (ISO N5), Normal mode on glossy paper: 4 min/page
A2/C	Color image (ISO N5), Normal mode on glossy paper: 6.3 min/page
Printing	
Print resolution	Up to 2400 x 1200 dpi
Margins	Sheet: 5 x 12 x 5 x 5 mm (0.2 x 0.47 x 0.2 x 0.2 in); roll: 5 x 5 x 5 x 5 mm (0.2 x 0.2 x 0.2 x 0.2 in)
Technology	HP Thermal Inkjet
Technology resolution	HP Color Layering technology, PhotoREt IV
Ink types	Dye-based HP Vivera inks
Ink colors	, Cyan, magenta, yellow, black, light cyan, light magenta
Ink drop	4 pl
Print heads	6 (1 each cyan, magenta, yellow, black, light cyan, light magenta)
Minimum line width	0.04 mm (0.002 in)
Media	
Handling	70-sheet input tray, 50-sheet output tray, front single-sheet paper feed, rear path for manual single-sheet feed, rear roll feed with automatic cutter
Турез	Bond and coated paper (coated, heavyweight coated, plain), photo (gloss, satin, matte), proofing (high-gloss contract, semi-gloss contract, matte)
Weight	<b>Tray 1:</b> 65 to 150 g/m <sup>2</sup> (17 to 40 lb); <b>manual single-sheet feed:</b> 65 to 150 g/m <sup>2</sup> (17 to 40 lb); <b>rear path:</b> up to 300 g/m <sup>2</sup> (80 lb); <b>roll feed:</b> 65 to 150 g/m <sup>2</sup> (17 to 40 lb)
Size	<b>Tray 1:</b> 76 x 142 to 457 x 610 mm (3 x 5.6 to 18 x 24 in); <b>manual single-sheet feed:</b> 110 x 205 to 457 x 610 mm (4.3 x 8.1 to 18 x 24 in); <b>rear path:</b> 110 x 205 to 457 x 610 mm (4.3 x 8.1 to 18 x 24 in); <b>real feed:</b> up to 457 mm (18 in)
Thickness	Tray 1: up to 8 mil; envelopes: up to 15 mil; front path: up to 8 mil; rear path: up to 15 mil; roll feed: up to 8 mil
Standard sizes	A2, A3, A4, B3, B4 (letter, legal, tabloid, C, envelopes, banners)
Connectivity	
Interfaces (standard)	USB 1.1 (USB 2.0 compliant), Centronics parallel IEEE-1284 (ECP compliant), 1 EIO slot
Interfaces (optional)	HP Jetdirect 620n, 630n, 635n, 690n, 175x, en 1700, en 3700, ew 2400 Print Servers
Print languages	PCL 3 GUI RGB 24-bit Contone; optional: Adobe PostScript 3 via software RIP
Drivers (included)	PCL 3 GUI Windows driver; Microsoft® Windows drivers (Vista®, XP, 2000); Raster driver for Mac OS (9.x, 10.2, 10.3, 10.4)
Supported operating systems	
	Windows Vista, XP Home, XP Professional, Server 2003, 2000; Mac OS 9.x, OS X 10.2, 10.3
Dimensions (w x d x h)	
Printer	<b>90:</b> 890 x 400 x 220 mm (35 x 15.7 x 8.7 in), <b>90r:</b> 890 x 520 x 220 mm (35 x 20.5 x 8.7 in)
Maximum	890 x 980 x 220 mm (35 x 38.6 x 8.7 in)
Shipping	1034 x 544 x 498 mm (43 x 22 x 20 in)
Weight	
Printer	<b>90:</b> 18.5 kg (40.8 lb), <b>90r:</b> 19.5 kg (43 lb)
Shipping	90: 31 kg (68 lb), 90r: 33 kg (73 lb)
What's in the box	
HP Designjet 90 Printer	HP Designjet 90 Printer, printheads (x6), ink cartridges (x6), input/output tray, input tray cover, HP media samples, documentation and drivers CD, quick reference guide, setup poster, USB cable (AP, EMEA, LAR), power cord
HP Designjet 90r Printer	HP Designjet 90r Printer, roll feed, spindle, printheads (x6), ink cartridges (x6), input/output tray, input tray cover, HP media samples, documentation and drivers CD, quick reference guide, setup poster, USB cable (AP, EMEA, LAR), power cord

Operating temperature	5 to 40° C (41 to 104° F)
Recommended operating temperature	15 to 35° C (59 to 91° F)
Storage temperature	-25 to 55° C (-13 to 131° F)
Operating humidity	20 to 80% RH
Recommended humidity	25 to 75% RH
Storage humidity	0 to 95% RH
Acoustic	
Sound pressure, active	50 dB(A)
Sound pressure, standby	37 dB(A)
Sound power, active	6.2 B(A)
Sound power, standby	5.4 B(A)
Power consumption	
Maximum	65 watts
Standby	17 watts
Power requirements	Input voltage 100 to 240 V ac (+/- 10%) auto ranging, 50/60 Hz (+/- 3Hz), 2 A maximum
Certification	
Safety	IEC 950-compliant, EU LVD and EN60950 compliant, CSA certified for US and Canada, Mexico NOM-1-
	NYCE, Argentina IRAM, China CCC, Singapore PSB, Russia VNIIS, Korea KTL
Electromagnetic	Compliance for Class B products, Class A when connected to LANs: EU (EMC Directive), USA (FCC rules),
·	Canada (DoC), Australia (ACA), New Zealand (MoC), China (CCC), Japan (VCCI); Class A: Korea (MIC
	Taiwan (BSMI)
ENERGY STAR® qualified models see:	http://www.hp.com/go/energystar
Warranty	
-	One-year warranty

Digital Color Digital Color

# For more information, visit our website at **www.hp.com/go/designjet90**

Ordering information

Ordering information		
Product		
Q6656A	HP Designjet 90 Printer	
Q6656B	HP Designjet 90r Printer	
Accessories		
Q6662A	HP Designjet 90 Roll Feed Accessory (standard on 90r)	
Q6661A	HP Designjet 90 Spindle Accessory (standard on 90r)	
Q6641D	EFI Designer Edition 5.1 RIP for HP (M) Intl	
Q6642D	EFI Designer Edition 5.1 RIP for HP (M) Japan	
Q6643D	EFI Designer Edition 5.1 RIP for HP (XL) Intl	
Q6644D	EFI Designer Edition 5.1 RIP for HP (XL) Japan	
J7934G	HP Jetdirect 620n Fast Ethernet Print Server	
Ink supplies		
C9420A	HP 85 Cyan Printhead	
C9421A	HP 85 Magenta Printhead	
C9422A	HP 85 Yellow Printhead	
C9423A	HP 85 Light Cyan Printhead	
C9424A	HP 85 Light Magenta Printhead	
C5019A	HP 84 Black Printhead	
C9425A	HP 85 Cyan Ink Cartridge (28 ml)	
C9426A C9427A	HP 85 Magenta Ink Cartridge (28 ml)	
C9427A C9428A	HP 85 Yellow Ink Cartridge (69 ml) HP 85 Light Cyan Ink Cartridge (69 ml)	
C9428A C9429A	HP 85 Light Magenta Ink Cartridge (69 ml)	
C5016A	HP 84 Black Ink Cartridge (69 ml)	
Media		
Q5488A	HP Premium Plus Gloss Photo Paper 610 mm x 15.2 m/24 in x 50 ft	
Q5486A	HP Premium Plus Gloss Photo Paper, B+, 25 sheets	
Q5487A	HP Premium Plus Gloss Photo Paper, C+, 20 sheets	
Q7920A	HP Premium Plus Satin Photo Paper 458 mm x 15.2 m/18 in x 50 ft	
Q5492A	HP Matte Photo Paper, B+, 50 sheets	
Q1967A	HP Matte Proofing Paper, B+, 100 sheets	
Care packs		
UC743A/E	Installation - 1 Unit	
UC744A/E	Network installation - 1 Unit	
U3423A/E	Next-day Exchange, 3 years (only available in EMEA, NA, LAR, Australasia)	
U3477A/E	Next-day Onsite Hardware support, 3 years (only available in AP)	
	Next-day Exchange, 1 year (only available in EMEA, NA, LAR, Australasia)	
U4662PA/PE	Next-day Onsite Hardware support, 1 year (only available in AP)	
More HP media sizes and weights available at		
www.hp.com/go/designjet/supplies		

#### Footnotes

VIVera

- 1) Wilhelm Imaging Research, Inc. concluded that prints made with HP No. 85 ink cartridges and HP Premium Plus Photo and Proofing paper may be displayed indoors under glass for 82 years before noticeable fading and staining occur (see http://www.wilhelm-research.com for details). Display permanence ratings are based on accelerated light stability tests conducted at 35 klux with glass-filtered, cool white fluorescent illumination with the sample plane air temperature maintained at 24° C and 60 percent relative humidity. Data was extrapolated to display conditions of 450 lux for 12 hours per day using the Wilhelm Imaging Research, Inc. Visually-weighted endpoint criteria set v 3.0 and represent the years of display for easily noticeable fading, changes in color balance, and/or staining to occur.
- 2) Roll-feed device is standard on the Designjet 90r model, optional (not included, sold separately) on the Designjet 90 model.
- 3) The EFI software RIP is optional (not included, sold separately). Some color technologies are also optional, as they require the EFI software RIP.
- 4) HP has worked with the leading RIP vendors to ensure easy integration of the HP Designjet 90 into your workflow



© Copyright 2004, 2008 HewlettPackard Development Company, LP. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warran statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein. Microsoft, Windows, and Windows Vista are U.S. registered trademarks of Microsoft Corporation. ENERGY STAR and the ENERGY STAR mark are registered U.S. marks. Adobe PostScript 3 is a trademark of Adobe Systems Incomparted RANTONE: it is encounted in Patterne. Incomparison of the second s

5983-1027ENE, August 2008

(energy )