HP PHOTOSMART PRO B8850 PHOTO PRINTER—REVIEWER/EVALUATOR’S GUIDE

Professional-quality prints from your home
Whether you’re taking photos to display on your wall, give as gifts or enter in photography contests, your best work deserves the best possible print quality. Introducing the HP Photosmart Pro B8850 Photo Printer—an easy-to-use photo printer that gives you the confidence and control to produce up to 13 x 19-inch/A3+ professional-quality prints on your own. By combining the latest in digital printing technology, unparalleled ease of use and eight individual pigment-based inks, the HP Photosmart Pro B8850 has all the tools a hobbyist or advanced amateur photographer needs to produce long-lasting, exceptional prints on photo papers and fine art media alike in a variety of sizes.

How to use this guide
This guide provides information to help you evaluate printer features and functionality. For information on setting up the printer, use the HP Photosmart Pro B8850 series Quick Start Guide. For more details on printer features, troubleshooting and how to access the electronic HP Photosmart help, refer to the HP Photosmart Pro B8850 series User Guide. If you have questions or want further technical detail on printer features or HP inkjet printing technologies, please use the contact information on page 14 to reach an HP representative, and be sure to keep this guide for future reference.
1. Low-ink indicators estimate ink levels and alert you when it's time to change a cartridge
2. Easy-to-use buttons include print/cancel, resume and toolbox
3. Power button
4. Single-sheet paper feed for printing of thick media up to 0.7 mm
5. Top door for easy access to printheads
6. Front door for easy access to ink cartridges
7. Eight individual pigment-based inks for professional-quality prints
8. 200-sheet input tray handles a variety of media up to 13 x 19-inches/A3+
9. Rear access door
10. Rear door releases
11. Power cord connection
12. Hi-Speed USB 2.0 port
The HP Photosmart Pro B8850 is packed with features that make it easy to take creative control by producing your own professional-quality photos right at home.

**HP’s 8-ink printing system**
The HP Photosmart Pro B8850 employs the same eight pigment inks used in the HP Photosmart Pro B9180—a printer used by some of the world’s most well-known photographers. This system employs four HP 70 printheads, each printing two colors of ink with 1,056 nozzles per color—8,448 nozzles in all. HP Vivera pigment inks are featured in five colors (Cyan, Magenta, Yellow, Light Magenta, Light Cyan) and three blacks (Photo Black, Light Gray and Matte Black). These inks deliver exceptional print quality—including a broad color gamut, smooth tones, neutral grays and deep blacks on matte, glossy, semi-gloss and fine art papers.

**Electrostatic Drop Detection**
Electrostatic Drop Detection is a unique printhead management system that self-monitors each of the 8,448 print nozzles and minimizes ink waste by cleaning only the individual print nozzles that require it. This efficient system keeps the printer in top working condition without the guesswork of manual maintenance. The results are consistent and economical professional-quality pigment prints every time.

Here’s how it works: If the condition of a printhead is compromised, the system is signaled to substitute ink from a neighboring nozzle. If the system cannot adequately compensate for the printhead condition, the printer will alert the user to start a cleaning cycle. The system then identifies and cleans only the affected nozzle, saving you precious ink.

HP printheads are designed to last the life of the printer with normal use.

**HP Vivera pigment inks**
Experience the best in longevity, durability, flexibility and color. When you use HP Vivera pigment inks, you can be confident your prized works will last for 200+ years on HP Advanced Photo Paper. Photos printed with these inks are exceptionally water-, smudge- and humidity-resistant. And HP Vivera pigment inks are optimized for a variety of fine art and photo papers and finishes—including matte and high gloss.

**Color calibration**
During printer setup, the Pro B8850 automatically calibrates the print settings to ensure color consistency, print after print. The basic color calibration of the Pro B8850 samples color density and adjusts ink levels to assure color consistency.

**Replacement HP inkjet cartridges**
- C9412A, HP 38 Matte Black Pigment Ink Cartridge with HP Vivera Ink, yields 3,000 photos
- C9413A, HP 38 Photo Black Pigment Ink Cartridge with HP Vivera Ink, yields 1,400 photos
- C9414A, HP 38 Grey Pigment Ink Cartridge with HP Vivera Ink, yields 320 photos
- C9415A, HP 38 Cyan Pigment Ink Cartridge with HP Vivera Ink, yields 4,500 photos
- C9418A, HP 38 Light Cyan Pigment Ink Cartridge with HP Vivera Ink, yields 4,400 photos
- C9419A, HP 38 Light Magenta Pigment Ink Cartridge with HP Vivera Ink, yields 550 photos
- C9417A, HP 38 Yellow Pigment Ink Cartridge with HP Vivera Ink, yields 840 photos

**Replacement HP printheads**
- C9404A, HP 70 Matte Black and Cyan Printhead
- C9405A, HP 70 Light Magenta and Light Cyan Printhead
- C9406A, HP 70 Magenta and Yellow Printhead
- C9407A, HP 70 Photo Black and Grey Printhead

**HP DreamColor Technologies**
All these advanced, easy-to-use printing technologies make the HP Photosmart Pro B8850 an HP DreamColor product—a designation that ensures you’ll get consistent color with every print.
With the Pro B8850, HP has designed a printer that appeals to the hobbyist or advanced amateur photographer. As a part of this fast-growing segment of the market, you’re likely to be passionate about your art and in search of easy-to-use tools to get the best possible results. In the past, you may have found it difficult to find a high-quality photo printer that offered a combination like this one—unparalleled print quality, legendary ease of use (including basic color management automation) and surprising affordability. The HP Photosmart Pro B8850 delivers the balance you’ve been seeking.

**Putting exceptional print quality in your hands**

With the HP Photosmart Pro B8850, you get the same outstanding print quality for your photos that you would expect to receive from a third-party photo lab—without the wait. Eight, individual HP Vivera pigment ink cartridges make it possible to produce pro-quality prints from home. Light Cyan, Light Magenta, CMY, Photo Black, Matte Black and Light Gray inks combine to create a wide color gamut with smooth gradations. The result? Photos produced with the Pro B8850 match your vision—landscapes are breathtakingly true-to-life and photographs of subjects are lifelike with realistic skin tones.

Shadowy night shots and dramatic black-and-white photos are also in reach with the HP Photosmart Pro B8850. The Pro B8850 includes individual Photo Black, Matte Black and Light Gray inks, providing true, deep black and excellent gray neutrality for outstanding black-and-white print quality. And while HP Photo Black ink is optimized for printing on glossy photo papers, the Matte Black ink is designed for printing on fine art papers with a matte finish. Both Matte and Photo Black cartridges reside in the printer at all times, allowing you to print on matte or glossy papers without swapping black inks.

This unparalleled quality gives you the confidence to display your photos on a wall, submit them to contests or offer them as a gift worthy of appreciation for generations. Using HP Advanced Photo Paper in combination with HP Vivera pigment inks assures your photos will stay brilliant for 200+ years. Prized prints will highly resist water, smudging and humidity when printed on HP Advanced Photo Paper, so you can display your work with confidence.

**Ideal for businesses**

While the Pro B8850 is designed for hobbyist and advanced amateur photographers, its appeal to businesses is undeniable. Graphic designers, professional service firms and small business owners will find the Pro B8850’s media versatility, full bleed capability and brilliant image quality invaluable for customized in-house marketing, personalized presentations and more.
A side-by-side comparison

HP provides a full line of photo printers that produce print sizes up to 13 x 19-inches/A3+. It’s easy to find a photo printer that’s right for you.

<table>
<thead>
<tr>
<th>Features</th>
<th>HP Photosmart Pro B8350</th>
<th>HP Photosmart Pro B8850</th>
<th>HP Photosmart Pro B9180</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Features</strong></td>
<td>Ideal for the creative consumer</td>
<td>Ideal for the advanced amateur photographer</td>
<td>Ideal for professional photographers</td>
</tr>
<tr>
<td><strong>Price</strong></td>
<td>$349/€349</td>
<td>$599/€549</td>
<td>$699/€699</td>
</tr>
<tr>
<td><strong>Ink type</strong></td>
<td>6 dye-based HP Vivera inks</td>
<td>8 pigment-based HP Vivera inks</td>
<td>8 pigment-based HP Vivera inks</td>
</tr>
<tr>
<td><strong>Cartridge type</strong></td>
<td>Two cartridges with three inks each</td>
<td>Eight individual high-capacity cartridges</td>
<td>Eight individual high-capacity cartridges</td>
</tr>
<tr>
<td><strong>Print size</strong></td>
<td>Up to 13 x 19-inch (A3+), borderless</td>
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<td>Up to 13 x 19-inch (A3+), borderless</td>
</tr>
<tr>
<td><strong>Image attributes</strong></td>
<td>• Water-resistant, fast-drying photos¹ • Fade resistant under glass for 100+ yrs.¹ • Laser-quality black and color</td>
<td>• Neutral grays and deep blacks • Water-resistant, fast-drying photos¹ • Fade resistant under glass for 200+ yrs.¹ • Laser-quality black and color</td>
<td>• Neutral grays and deep blacks • Water-resistant, fast-drying photos¹ • Fade resistant under glass for 200+ yrs.¹ • Laser-quality black and color</td>
</tr>
<tr>
<td><strong>Print-system sensors</strong></td>
<td>N/A</td>
<td>• Electrostatic Drop Detection • Basic closed-loop color calibration (automatic calibration during initial installation and via software)</td>
<td>• Electrostatic Drop Detection • Full-featured closed-loop color calibration (automatic calibration activated via a front-panel button)</td>
</tr>
<tr>
<td><strong>Media type</strong></td>
<td>• Photo papers • Plain paper</td>
<td>• Digital fine art papers • Canvas • Photo papers • Plain papers</td>
<td>• Card stock • Digital fine art papers • Canvas • Photo papers • Plain papers</td>
</tr>
<tr>
<td><strong>Paper paths</strong></td>
<td>• Single-sheet front feed • Rear straight-through paper path up to 0.3 mm thickness</td>
<td>• Single-sheet front feed • Straight-through paper path up to 0.7 mm thickness</td>
<td>• Single-sheet front feed • Straight-through paper path up to 1.5 mm thickness</td>
</tr>
<tr>
<td><strong>Front panel</strong></td>
<td>• Low-ink warning lights • Buttons: cancel, sheet feed</td>
<td>• Low-ink warning lights • Buttons: print/cancel, resume and toolbox</td>
<td>• Ink-level indicators • Text LCD for status information, print job control and calibration</td>
</tr>
<tr>
<td><strong>Speed</strong></td>
<td>• 4 x 6-inch (10 x 15 cm) photos in as fast as 26 seconds² • 13 x 19-inch (A3+) photos in less than 1.5 minutes³</td>
<td>• 4 x 6-inch (10 x 15 cm) photos in as fast as 10 seconds² • 13 x 19-inch (A3+) photos in as fast as 90 seconds³</td>
<td>• 4 x 6-inch (10 x 15 cm) photos in as fast as 10 seconds² • 13 x 19-inch (A3+) photos in as fast as 90 seconds³</td>
</tr>
<tr>
<td><strong>Adobe Photoshop CS3 integration</strong></td>
<td>N/A</td>
<td>Full support of print job controls including synchronization of color management</td>
<td>Full support of print job controls including synchronization of color management</td>
</tr>
<tr>
<td><strong>Adobe Photoshop CS2 integration</strong></td>
<td>N/A</td>
<td>HP Photosmart Pro Print plug-in included for control of print job settings on one screen</td>
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</tr>
<tr>
<td><strong>Color management</strong></td>
<td>N/A</td>
<td>HP color management tools fully support Adobe RGB, sRGB and ICC profiles</td>
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</tr>
<tr>
<td><strong>Interface</strong></td>
<td>USB 2.0 Hi-Speed</td>
<td>USB 2.0 Hi-Speed</td>
<td>USB 2.0 Hi-Speed and built-in Ethernet</td>
</tr>
<tr>
<td><strong>Options and accessories</strong></td>
<td>Automatic two-sided printing with optional duplexer</td>
<td>N/A</td>
<td>HP raster image processor</td>
</tr>
</tbody>
</table>
Anyone who loves photography values the opportunity to print a photo as soon as they can. The HP Photosmart Pro B8850 provides instant results, with easy-to-use technologies giving you more control over your creative process.

Intuitive setup
The Pro B8850 is designed for ease of setup and use. It features an interactive, animated setup wizard for easy installation. The wizard leads you step by step through your setup, integrating the printer with your existing workflow without guesswork and less need for technical support.

Animated setup wizard

To launch the HP Solution Center, go to the HP Printer Utility screen (Macintosh) or the HP Solution Center screen (Windows). The HP Solution Center also provides a link to HP Professional Photography online, a web-based resource with printing guides, troubleshooting, advanced search options, color tips and tutorials.

Adobe compatibility
With the HP Photosmart Pro B8850, there’s no need to change your preferred workflow. The printer integrates seamlessly with Adobe Photoshop® CS3 and CS2, allowing you to print directly from the application. Access to Photoshop is available in fewer steps with easy-to-find Photoshop controls and a larger print preview window. Print control is even easier to achieve, thanks to automatic synchronization of the color management setting in Adobe Photoshop CS3.

HP Solution Center
Advanced artistic control is delivered by the HP Solution Center through a collection of simplified color management tools that support Adobe RGB, sRGB and International Color Consortium (ICC) profiles. ICC profiles for compatible HP papers are automatically installed when the printer is set up. Easy, one-button access helps you add and manage profiles for custom papers and install existing ICC profiles for non-HP photo and fine art medias.
Creative control

One of the primary advantages of printing photos on your own is the ability to control the entire development of each image. With the HP Photosmart Pro B8850, you can print in a range of sizes, on a variety of media types—from glossy photo paper to matte to canvas. You can supervise print quality at the proofing and final stages rather than waiting for a delivery from a photo lab. And you can have fun experimenting with a range of media to create a custom look based on your artistic vision.

The Pro B8850 will print on a range of media and sizes from 3.5 x 5-inches to 13 x 19-inches (9 x 13 cm to A3+) with or without borders. It handles a variety of plain paper, photo and digital fine art media, including canvas, for prints with a look and feel that match your vision. The single-sheet front feed with straight-through paper path enables easy printing on a variety of media weights and thicknesses up to 0.7mm. And the Pro B8850 doesn’t just print photos. It produces sharp, clear laser-quality text for professional documents and do-it-yourself promotional materials.

**Instant results**
With HP Photosmart Pro B8850, you get instant results you just can’t get with a photo lab. Printing your photos at home gives you control over when and where you print, so that photos you take at a wedding reception or sports event can be printed and shared the very next day. With the advanced technology of the HP Photosmart Pro B8850, you can produce your prints at breathtaking speeds. Print a 13 x 19-inch/A3+ photo in as fast as 90 seconds and a 4 x 6-inch/10 x 15 cm photo in as fast as 10 seconds (draft mode).

**Control your costs**
The HP Photosmart Pro B8850 has many economical features that make printing on your own affordable. HP’s printing platform and specially formulated inks are designed for efficiency. The unique Electrostatic Drop Detection ensures you won’t lose precious ink during cleaning. And with the high-capacity inks featured on the Pro B8850, you’ll replace cartridges less often, saving time and money.

**Benefits of self printing vs. outsourcing**

- **Creative control**
- **Immediate results**
- **Outstanding, pro-like image quality, durability and fade-resistance**
- **New opportunities to exercise your creativity**
- **Surprisingly competitive pricing**

If you’re debating between self printing and outsourcing your work to a print house, the Pro B8850 makes it simple.

- Creative control to supervise print quality at every development stage: Develop a custom look based on your preference and maintain photo reprint consistency, rather than relinquishing control to a print house
- Immediate results: Produce a print soon after you’ve captured it
- Outstanding, pro-like image quality, durability and fade-resistance
- New opportunities to exercise your creativity
- Surprisingly competitive pricing
• **HP Hahnemühle Smooth Fine Art Paper**
This high-quality, acid-free paper is ideal for photo and digital fine art reproductions. Constructed of 100 percent cotton rag, the paper is coated on one side and has a smooth finish for rich color and increased contrast.

• **HP Hahnemühle Watercolor Paper**
This soft-textured watercolor paper delivers exceptional image quality. Naturally white material contains 50 percent cotton rag content for strength and durability.

• **HP Aquarella Art Paper**
This textured paper features a naturally white matte finish for rich, full-color prints on affordable, mould-made paper.

• **HP Artist Matte Canvas**
This cotton-polyester blend, stretchable canvas is ideal for framing. It features a special ink-receptive coating that protects the surface from cracking and is water-resistant when using HP Vivera pigment inks.

• **HP Professional Satin Photo Paper**
This paper is ideal for printing your finest photographic achievements. A professional satin surface delivers impressive image quality, archival-quality fade resistance and exceptional durability.

• **HP Advanced Photo Paper**
This 250 g/m² photo paper is exceptionally fade-resistant and resistant to smudges and smearing. Photos printed on Advanced Photo Paper resist fading for 200+ years. Available in glossy and satin-matte finish and various sizes from 4 x 6-inches (10 x 15 cm) to 13 x 19-inches (A3+).
Evaluating the printer

This guide is designed to help you evaluate the Pro B8850. Follow these prompts to see why the Pro B8850 is the best choice for hobbyist or advanced amateur photographers.

Evaluation step #1
Follow the setup wizard through each step for an easy installation. The setup wizard is designed to give you an easy-to-follow, step-by-step experience, minimizing the hassle of reading a complicated manual or making numerous calls to tech support. Compare the experience of setting up the Pro B8850 with other printers in its class.

Evaluation step #2
Photographers at every level of experience are looking to produce prints with brilliant, long-lasting colors. The Pro B8850 uses eight individual pigment inks to achieve a wide range of vibrant, realistic colors that last for 200+ years. Consider the color range and image durability of prints created with the Pro B8850 in comparison with other printers in its class.

Evaluation step #3
Black-and-white photo neutrality is critical for advanced amateur photographers. Print a black-and-white photo on HP Hahnemühle Smooth Fine Art Paper, using the Pro B8850. If you have a competing printer, print the same photo on a comparable recommended media. Compare the neutrality of the image. Notice that the competition’s black may have a blue or green tint compared with HP’s deep blacks and truly neutral grays, thanks to HP’s Matte Black and Light Gray print cartridges. Note that there’s no need to swap print cartridges to use the Matte Black—a feature that saves you both time and money.

Evaluation step #4
Reliable pigment ink printing has been an unmet need for the advanced amateur looking for an affordable B-size photo printer. The Pro B8850 virtually eliminates white streaks on prints, using Electrostatic Drop Detection, a self-monitoring system that maintains the printheads’ quality for professional-quality prints every time. Another factor that adds to the Pro B8850’s reliable performance is its basic color calibration. During printer setup, the Pro B8850 automatically calibrates the print settings to ensure color consistency, print after print. Print out several prints of the same image. Note the reliable print quality and color from print to print.

Evaluation step #5
Adobe Photoshop CS2 or CS3 is a must for a large number of advanced amateur photographers. The Pro B8850 makes printing with Photoshop even easier by automatically synchronizing color management selections between Adobe Photoshop and the print driver. Compare the experience of printing to the Pro B8850 from Photoshop as compared with similar competitive printers.
Key specifications

**Print technology**

HP Thermal Inkjet

<table>
<thead>
<tr>
<th>Print speeds¹</th>
<th>Type</th>
<th>Fast draft</th>
<th>Normal</th>
<th>Best</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black-and-white US letter (A4)</td>
<td>Up to 27 ppm</td>
<td>N/A</td>
<td>N/A</td>
<td></td>
</tr>
<tr>
<td>Color full page US letter (A4)</td>
<td>Up to 25 ppm</td>
<td>As fast as 110 sec</td>
<td>As fast as 155 sec</td>
<td></td>
</tr>
<tr>
<td>Color 4 x 6-inch (10 x 15 cm) photo</td>
<td>As fast as 10 sec</td>
<td>As fast as 50 sec</td>
<td>As fast as 70 sec</td>
<td></td>
</tr>
<tr>
<td>Color 13 x 19-inch (A3+) photo</td>
<td>As fast as 90 sec</td>
<td>As fast as 260 sec</td>
<td>As fast as 390 sec</td>
<td></td>
</tr>
</tbody>
</table>

**Resolution**

Black: Up to 4800 x 1200 optimized dpi and 1200 x 1200 input dpi when printing in gray only in Maximum DPI mode. Color: Up to 4800 x 1200 optimized dpi when printing from a computer and 1200 dpi input.

**Supplies yields**

For information on cartridge page and photo yields, visit http://www.hp.com/go/pageyield.

**Memory**

64 MB RAM

**Media handling²**

Supports up to 60 pages of photo paper.

**Standard media sizes**

Letter, legal, tabloid, executive, 3.5 x 5-inch, 4 x 6-inch, 5 x 7-inch, 8 x 10-inch, 11 x 14-inch, 11 x 17-inch, 13 x 19-inch envelopes (9 x 13 cm, 10 x 15 cm, 13 x 18 cm, A4, A3, A3+)

**Custom media sizes**

Main tray: 3 x 5-to 13 x 19-inch (9 x 13 cm to A3+)
Specially tray (single sheet only): 3 x 5 to 13 x 19-inch (9 x 13 cm to A3+)

**Media weights**

Main tray: 80 to 180 g/m²; Specialty tray: 80 to 380g/m² up to 0.7 mm thick.

**Media types**

Paper (photo, digital fine art papers, coated, inkjet, plain), canvas, labels, cards (index, greeting)

**Network operating systems**

Windows XP Home, XP Professional, XP Media Center Edition, Mac OS 10.3.9 or higher.

**Client operating systems**

Windows XP Home, XP Professional, XP Media Center Edition, Mac OS 10.3.9 or higher.

**Dimensions**

26.5 x 16.9 x 9.5 in (67.31 x 42.93 x 24.13 cm)

**Power specifications**

Input voltage: 100 to 240 VAC (+/- 10%), 50/60 Hz (+/- 5 Hz), 1 amp
Power consumption: 35 watts (maximum), 7.8 watts (ready), 0.42 watts (off)

**Product certifications**

ENERGY STAR® compliant

**Warranty**

One-year limited hardware warranty backed by HP Customer Care, service and support; one-year technical phone support; plus a toll-free number (North America only)

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1. Display permanence rating by Wilhelm Imaging Research, Inc. or HP Image Permanence lab using select HP Vivera pigment inks. For details, visit www.hp.com/go/printpermanence.
2. Exceptionally water-resistant with HP Advanced Photo Paper; water-resistant with other HP-recommended papers. For details, see www.hp.com/go/printpermanence.
3. After first page; see www/hp.com/go/inkjetprinter for details.
4. Dependent upon type, print mode and approximate figures. Exact speed will vary depending on the system configuration, software program and document complexity.
5. Yield varies considerably based on content of printed pages and other factors. Included ink may be used for printer setup. For more details, see www.hp.com/go/learnaboutsupplies.