

# Gain momentum with HP Latex Printing Technologies



The HP Latex guide



Create new opportunities for your business with HP Latex Printing Technologies. Print service providers around the world are leaving other ink technologies behind, and using the advantages of HP Latex technologies to gain new capabilities, new flexibility, and new ways to meet—and exceed—customers' expectations.



## The advantages of HP Latex Printing Technologies

HP Latex Inks combine the best characteristics of solvent inks, UV-curable inks, and water-based inks. You obtain high quality, outdoor durability, plus versatility across common media types used in sign and display applications. Produce odorless prints—and move to healthier printing<sup>1</sup>—with water-based HP Latex Inks.

- Exceed your clients' expectations with high quality and durable, scratch-resistant<sup>2</sup> outdoor signage
- Meet demanding turnarounds with prints that come out dry and ready for finishing and delivery
- Ramp your production with printing systems that are easy to use and maintain, whether your operators have a little, or a lot, of signage experience
- Explore the many ways you can expand your business with access to a versatile range of new applications
- Create a safer workplace with HP Latex Ink printing—water-based inks meet a range of stringent human health criteria<sup>1</sup>

### Produce high-quality, durable images

- Produce sharp image quality with 6 colors and printheads with 1200 nozzles per inch
- A smooth, flexible ink layer conforms to complex surfaces
- Outdoor prints last up to three 3 years unlaminate, up to 5 years laminate<sup>3</sup>
- User-replaceable HP Thermal Inkjet printheads maintain image quality over the life of the printer

### Speed up—even eliminate—production steps

- Eliminate waiting time—prints are completely cured and dry inside the printer, ready for immediate finishing and delivery
- Durable, scratch-resistant prints<sup>2</sup> help you move quickly and confidently through production and delivery
- Consider unlaminate use with scratch resistance comparable to hard-solvent inks on SAV and PVC banner<sup>2</sup>
- Reduce maintenance with HP Thermal Inkjet printheads and water-based inks:
  - no daily manual cleaning required
  - turn off printers overnight, weekends, or longer

### HP Latex printing is healthier printing<sup>1</sup>

- UL ECOLOGO<sup>®</sup> Certified HP Latex Inks meet a range of stringent human health criteria<sup>4</sup>
- GREENGUARD GOLD Certified HP Latex Inks are certified to standards for low chemical emissions into indoor air<sup>5</sup>
- HP Latex Inks are non-flammable, non-combustible<sup>6</sup> and nickel free<sup>7</sup>
- No special ventilation is required<sup>8</sup> and HP Latex Inks have no hazard warning labels or HAPs<sup>9</sup>
- HP Latex 300 series printers are ENERGY STAR qualified, have no special power requirements, and are EPEAT registered<sup>10</sup>
- Reach new indoor display environments like hospitality, healthcare—odorless prints go where solvent and UV can't



PRODUCT CERTIFIED FOR:  
REDUCED ENVIRONMENTAL  
IMPACT. VIEW SPECIFIC  
ATTRIBUTES EVALUATED:  
UL.COM/EL  
UL 2801



PRODUCT CERTIFIED  
FOR LOW CHEMICAL  
EMISSIONS:  
UL.COM/IGG  
UL 2818



## Print a wide range of applications



### Point of purchase posters

Reduce costs without compromising quality:

- Great results on all types of paper, including low-cost uncoated papers and traditional offset papers



### Light boxes

Deliver high-value backlit applications:

- Produce high-resolution prints up to 1200 dpi
- Vibrant, saturated colors



### Outdoor and event banners

Produce images worthy of building the best brands:

- High-quality results with scratch resistance comparable to hard-solvent inks on SAV and PVC banner<sup>2</sup>
- Outdoor display permanence up to 3 years un laminated, up to 5 years laminated<sup>3</sup>



### Vehicle wraps and graphics

Achieve fast turnarounds, even on urgent jobs:

- Laminate right after printing—no need to wait for prints to dry
- Flexible ink layer conforms to complex surfaces



### Wallcoverings and canvas

Discover new market opportunities:

- Odorless prints meet high environmental and health standards—ideal for hotels, restaurants, schools
- The free HP WallArt Solution includes access to a vast library of high-quality images, designs, and artwork from Fotolia, visit [hpwallart.com](http://hpwallart.com)<sup>11</sup>



### Temporary textiles<sup>12</sup>

Complement your business with new applications:

- Print on a wide variety of textiles, including uncoated and natural textiles
- An easy-to-use solution compared to dye-sublimation techniques

## Be unstoppable—the new HP Latex 300 Printer series can take your business to the next level



Finish one job and move on to the next with the efficiency and versatility of third-generation HP Latex Printing Technologies. Designed to fit even small work environments, there's no compromise for delivering outstanding graphics for either indoors or outdoors. With scratch resistance comparable to hard-solvent inks on SAV and PVC banners,<sup>2</sup> the new HP Latex 300 Printer series breaks the boundaries of sign and display printing. Whatever the demands, your business growth can be unstoppable.

### **Production-ready printers designed for easy operation**

The HP Latex 300 Printer series is designed to help you come right up to production speeds and save time:

- Front media loading lets you move the printer right up against the wall, frees up workspace, and puts your operator in a better position to multitask
- Easy access to how-to videos, from QR codes available in the front panel
- Fast warm-up and immediate ripping
- Automatic, reliable, low-maintenance HP Latex printing helps reduce time monitoring the printer

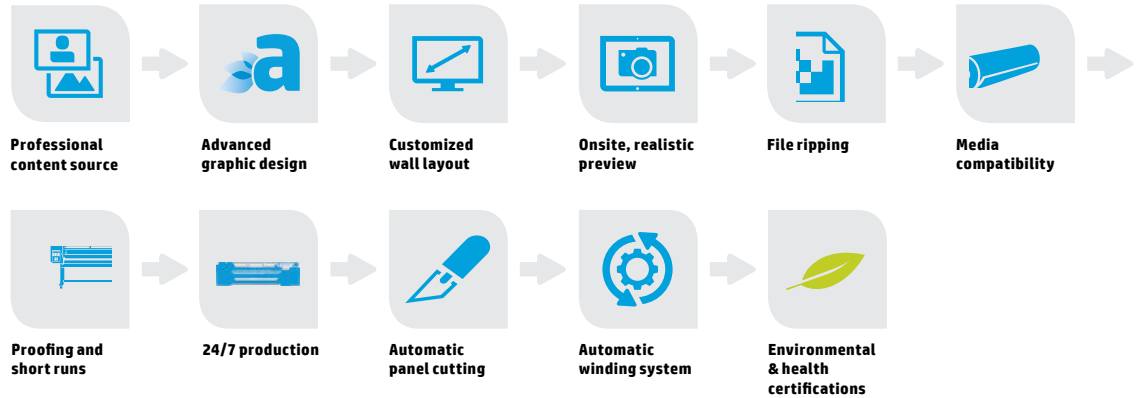
### **Save hours of time with a new approach to color management**

If you think of color management in terms of seemingly endless trial and error, our new solution for substrate profiling will have you thinking differently. The HP Latex 300 Printer series features a simplified color management experience with touchscreen access, directly from the front panel.

- A full set of generic and specific HP substrate profiles are pre-installed in the printer
- Search, download, and install custom substrate profiles from the online substrate profile library
- Conveniently fine-tune everyday substrate profiles—with HP Quick Substrate Profiling featured in the HP Latex 310 and 330 Printers, you can easily edit, clone, and remove a profile
- With HP Custom Substrate Profiling featured in the HP Latex 360 Printer, get all the features of HP Quick Substrate Profiling plus create custom substrate profiles with the i1 embedded spectrophotometer<sup>13</sup>

## Build your application capability on complete solutions from HP and our market-leading partners

Whether you're looking for an efficient, low-volume solution or production-volume capability, the HP solution is a complete offering, with our market-leading partners bringing key components optimized for HP Latex printing.



### File ripping—easy and efficient

Our RIP certification program defines a comprehensive set of compatibility criteria aligned to the highest performance standards and the unique capabilities of HP Latex Printing Technologies. Only third-party companies that have demonstrated conformance with these criteria are awarded HP Latex certified status.

The following independent RIP manufacturers currently participate in our certification program:

ONYX, Caldera, SAI, AVA, ColorGATE, Ergosoft, GMG, Shiraz, Wasatch

Look for the list of certified RIPs compatible with your HP Latex printer at [hp.com/go/latex](http://hp.com/go/latex). ONYX and Caldera provide RIPs for mid-volume HP Latex Printers, with all partners supporting low-volume HP Latex printers. The intuitive SAI FlexiPrint HP Edition RIP is included in the box with the HP Latex 310 and 330 Printers.



### Print and cut—the dual-device HP Latex printing solution



Deliver same day with confidence with a dual-device solution based on the HP Latex 300 Printer series and cutting devices from our market-leading partners. With separate devices, cutting no longer slows down your printing throughput and you can ramp up to production print speeds and avoid wait time. And with HP Latex printing, jobs come off the printer completely dry—with scratch-resistant prints, you can consider unlaminated use<sup>2</sup>—so you can move directly into finishing to keep your workflow moving.



HP has selected the world's leading cutting partners, Summa and Graphtec, to offer a validated print-and-cut workflow solution, driving print-and-cut applications to a new level of quality with a more efficient and versatile solution.



### Start bringing in new revenue—the HP digital printing solution for wall decoration

HP, working together with industry-leading partners and vendors, offers a wide range of modular solution components to help you build your wall decoration capability.



- Easy access to professional content directly from the HP WallArt Solution from a market-leading partner, **Fotolia**<sup>11</sup>
- Enhance job creation, improve color management, and increase efficiency with design tools from a market-leading partner, **AVA**



- Boost your wall decoration opportunity with the easy-to-use, cloud-based **HP WallArt Solution** that simplifies the entire process from image selection and wall layout to print and installation—using the HP WallArt tablet app,<sup>14</sup> your customers can design onsite, using pictures of the actual wall



- Help reduce bottlenecks and create workflow efficiencies with automatic, accurate panel cutting—deliver wallcovering rolls while reducing labor costs and increasing efficiencies with the automatic winding system from a market leader, **Fotoba International**
- Deliver your wallcoverings with confidence—prints produced with HP Latex Inks meet many international wallcovering industry standards for performance factors from washability to colorfastness to flame spread
- For large-format canvas applications, HP WallArt provides automatic file preparation including folding and cutting marks as well as automatic generation of multi-panel prints

## Find the ideal fit—media offering for HP Latex Inks



To help you expand your offering, it's now easier than ever to find the breadth of compatible substrates needed for any print job—from optimized HP media engineered with ColorPRO Technology to certified substrates from a wide range of media suppliers—for the entire portfolio of HP Latex printers.



Look for HP Media to get optimum performance out of your HP Latex printer.

### HP media solutions

HP offers an extensive range of printing materials designed together with HP Latex Inks to deliver high-quality, durable output. HP's broad portfolio of large format printing materials, from photo paper to banners to backlit materials, are designed to enable the right print the first time and every time. Designed together with HP Latex Inks and printers for optimal image quality, consistency, and reliability.

For more detailed product and ordering information, see [globalBMG.com/hp](http://globalBMG.com/hp).



For color excellence in digital printing, look for products with the ColorPRO Technology logo.

### Media with ColorPRO Technology

The ColorPRO Technology trademark represents a quality standard for color excellence in digital printing. All materials that carry the ColorPRO Technology logo are designed together with HP Latex Inks and HP Latex printers and demonstrate visibly enhanced print quality, delivering professional quality and striking results.

For more information about the ColorPRO Technology Program, please see [colorprotechnology.com](http://colorprotechnology.com).

Certified for HP Latex Inks

Look for the "Certified for HP Latex Inks" icon to choose among a wide range of third-party certified substrates.

### Media Certified for HP Latex Inks<sup>15</sup>

With the help of the Media Certification Program, you can easily find media certified as compatible with HP Latex Inks from a wide range of recognized media suppliers worldwide. Explore all the new application possibilities with new profit potential for your business using certified media—and reduce the ramp-up time associated with testing media yourself.

**Find a comprehensive list of all latex compatible media along with finished color profiles and printing settings at [hp.com/go/mediasolutionslocator](http://hp.com/go/mediasolutionslocator)**



**Providing reassurance—media performance warranties**

To provide reassurance for you and your customers, HP<sup>16</sup> and other media manufacturers including 3M<sup>17</sup> and Avery Dennison<sup>18</sup> offer warranties for certain graphics printed with HP Latex Ink printers. To maintain eligibility, it is important to comply with the terms of each companies' warranties.

**For vehicle wrap applications, HP is the only company that offers and warrants the entire printing system<sup>16</sup>**

The quality and performance of your vehicle wraps—along with your reputation and the profit potential of your business—rely upon the integrity and the performance of your printing solution. The HP large format printing solution—printer, HP ink supplies, and HP printing material—is custom engineered and tested to provide consistent, quality results and trouble-free performance with every print. The HP vehicle wrap solution includes a cast vinyl as well as an overlamine and is covered by the HP Product and Performance Warranty. This warranty covers image performance, durability, and easy removal up to five years. For more information, see the HP Product and Performance Warranty for HP Air Release Adhesive Gloss Cast Vinyl at [globalBMG.com/hp/mediawarranties](http://globalBMG.com/hp/mediawarranties).

**3M™ MCS™ Warranty—a comprehensive warranty**

Gain peace of mind with the 3M™ MCS™ Warranty for finished graphics using a system of matched components designed and tested for optimal compatibility and performance. The 3M™ MCS™ Warranty provides you with comprehensive protection for graphics that demand your very best. You're covered with credit or replacement of all 3M materials used in the graphic. For details, see [3Mgraphics.com](http://3Mgraphics.com) and choose your country for more specific warranty information.<sup>17</sup>



## Help me choose my HP Latex printer





All HP Latex printers provide the same benefits of high image quality, versatility across a wide range of applications and media types, plus healthier printing with HP Latex Inks.<sup>1</sup>

Selecting the right one for your business is primarily based on your Average Monthly Print Volume (AMPV). Consider your AMPV today, as well as how you foresee volumes growing over the next few years.




Also take into account the maximum width of prints you want to produce, as well as the specific media handling capabilities of each printing system.

HP's third-generation HP Latex printers feature new HP 831 and HP 881 Latex Inks—with all the benefits of HP Latex Inks, plus scratch resistance comparable to hard-solvent inks on self-adhesive vinyl and PVC banner.<sup>2</sup>

### HP Latex printers—third generation

	Low-volume HP Latex printers			Mid-volume HP Latex printers
				
	<b>HP Latex 310 Printer</b>	<b>HP Latex 330 Printer</b>	<b>HP Latex 360 Printer</b>	<b>HP Latex 3000 Printer</b>
<b>Description</b>	A perfect fit for small spaces, this affordable printer frees up workspace and your operator.	Gain versatility and enjoy convenient printing of indoor and outdoor jobs with this affordable printer.	Produce high quality for indoors and out at production speeds ideal for handling urgent jobs.	Achieve industrial productivity and operational efficiency.
<b>Media handling</b>	<ul style="list-style-type: none"> <li>• Roll-to-free fall</li> <li>• Take-up reel—optional accessory</li> </ul>	<ul style="list-style-type: none"> <li>• Roll-to-free fall</li> <li>• Take-up reel</li> </ul>	<ul style="list-style-type: none"> <li>• Roll-to-free fall</li> <li>• Take-up reel</li> <li>• Double-sided printing<sup>19</sup></li> <li>• Ink collector</li> </ul>	<ul style="list-style-type: none"> <li>• Roll-to-roll</li> <li>• Roll-to-free fall</li> <li>• Dual roll</li> <li>• Double-sided printing<sup>19</sup></li> <li>• Ink collector—optional accessory</li> </ul>
<b>HP Latex Inks</b>	HP 831 Latex Inks 775-ml cartridges	HP 831 Latex Inks 775-ml cartridges	HP 831 Latex Inks 775-ml cartridges	HP 881 Latex Inks 5-liter cartridges
<b>Maximum media width</b>	137.1 cm (54 in)	162.5 cm (64 in)	162.5 cm (64 in)	320 cm (126 in)
<b>Maximum media loading</b>	25 kg (55 lb)	42 kg (92.6 lb)	42 kg (92.6 lb)	160 kg (350 lb)
<b>Speed—maximum</b>	48 m <sup>2</sup> /hr (517 ft <sup>2</sup> /hr)	50 m <sup>2</sup> /hr (538 ft <sup>2</sup> /hr)	91 m <sup>2</sup> /hr (980 ft <sup>2</sup> /hr)	180 m <sup>2</sup> /hr (1950 ft <sup>2</sup> /hr)
<b>Speed—indoor high quality</b>	10 m <sup>2</sup> /hr (108 ft <sup>2</sup> /hr)	10 m <sup>2</sup> /hr (108 ft <sup>2</sup> /hr)	14 m <sup>2</sup> /hr (151 ft <sup>2</sup> /hr)	77 m <sup>2</sup> /hr (830 ft <sup>2</sup> /hr)
<b>Average Monthly Print Volume (AMPV)</b>	500 m <sup>2</sup> /month 5,000 ft <sup>2</sup> /month	500 m <sup>2</sup> /month 5,000 ft <sup>2</sup> /month	800 m <sup>2</sup> /month 8,000 ft <sup>2</sup> /month	5000 m <sup>2</sup> /month 50,000 ft <sup>2</sup> /month

### HP Latex printers—second generation

	Low-volume HP Latex printers	Mid-volume HP Latex printers	
			
	<b>HP Latex 280 Printer</b>	<b>HP Latex 820 Printer</b>	<b>HP Latex 850 Printer</b>
<b>Description</b>	Easy, productive printing; ideal width for wide banners and textiles. <sup>20</sup>	Fully-featured mid-volume roll-to-roll printer.	Fully-featured mid-volume roll-to-roll printer offering multiple workflow features.
<b>Media handling</b>	<ul style="list-style-type: none"> <li>• Roll-to-free fall</li> <li>• Take-up reel</li> <li>• Double-sided printing<sup>19</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Roll-to-roll</li> <li>• Double-sided printing<sup>19</sup></li> </ul>	<ul style="list-style-type: none"> <li>• Roll-to-roll</li> <li>• Roll-to-free fall</li> <li>• Dual roll</li> <li>• Double-sided printing<sup>19</sup></li> <li>• Ink collector</li> </ul>
<b>HP Latex Inks</b>	HP 792 Latex Inks 775-ml cartridges	HP LX610 Latex Inks 3-liter cartridges	HP LX610 Latex Inks 3-liter cartridges
<b>Maximum media width</b>	264 cm (104 in)	320 cm (126 in)	320 cm (126 in)
<b>Maximum media loading</b>	100 kg (220 lb)	130 kg (286 lb)	130 kg (286 lb)
<b>Speed—indoor high quality</b>	14.7 m <sup>2</sup> /hr (158 ft <sup>2</sup> /hr)	45 m <sup>2</sup> /hr (484 ft <sup>2</sup> /hr)	45 m <sup>2</sup> /hr (484 ft <sup>2</sup> /hr)
<b>Average Monthly Print Volume (AMPV)</b>	650 m <sup>2</sup> /month 6,500 ft <sup>2</sup> /month	3000 m <sup>2</sup> /month 30,000 ft <sup>2</sup> /month	3000 m <sup>2</sup> /month 30,000 ft <sup>2</sup> /month

- <sup>1</sup> Based on a comparison of HP Latex Ink technology to competitors with leading market share as of December, 2013 and analysis of published MSDS/SDSs and/or internal evaluation. Performance of specific attributes may vary by competitor and ink technology/formulation.
- <sup>2</sup> Scratch-resistance comparison based on testing HP 831 and 881 Latex Inks and representative hard-solvent inks. Estimates by HP Image Permanence Lab on a range of media.
- <sup>3</sup> HP image permanence estimates by HP Image Permanence Lab. Outdoor display permanence tested according to SAE J2527 on a range of media, including HP media; in a vertical display orientation in simulated nominal outdoor display conditions for select high and low climates, including exposure to direct sunlight and water; performance may vary as environmental conditions change. Laminated display permanence using HP Clear Gloss Cast Overlaminates, GBC clear gloss 1.7 mil hot laminate, or Neschen Solvoprint Performance Clear 80 laminate. Results may vary based on specific media performance.
- <sup>4</sup> UL ECOLOGO® Certified to UL 2801 demonstrates that an ink meets a range of stringent criteria related to human health and environmental considerations (see [ul.com/EL](http://ul.com/EL)).
- <sup>5</sup> GREENGUARD GOLD Certification to UL 2818 demonstrates that products are certified to GREENGUARD standards for low chemical emissions into indoor air during product usage. For more information, visit [ul.com/gg](http://ul.com/gg) or [greenguard.org](http://greenguard.org).
- <sup>6</sup> Water-based HP Latex Inks are not classified as flammable or combustible liquids under the USDOT or international transportation regulations. Testing per the Pensky-Martins Closed Cup method demonstrated flash point greater than 110° C.
- <sup>7</sup> Nickel free as demonstrated according to testing conducted for HP Latex Inks to achieve UL ECOLOGO® Certification. UL ECOLOGO® Certified to UL 2801 demonstrates that an ink meets a range of stringent criteria related to human health and environmental considerations (see [ul.com/EL](http://ul.com/EL)).
- <sup>8</sup> Special ventilation equipment (air filtration) is not required to meet U.S. OSHA requirements. Special ventilation equipment installation is at the discretion of the customer—see the Site Preparation Guide for details. Customers should consult state and local requirements and regulations.
- <sup>9</sup> HP Latex Inks were tested for Hazardous Air Pollutants, as defined in the Clean Air Act, per U.S. Environmental Protection Agency Method 311 (testing conducted in 2013) and none were detected.
- <sup>10</sup> EPEAT registered where applicable/supported. See [epeat.net](http://epeat.net) for registration status by country.
- <sup>11</sup> Requires an HP WallArt account, Internet connection, and connected Internet-capable device. Images from Fotolia are included with HP WallArt. A limited number of images are available free of charge. Additional images are available for customer purchase. For more information, see [hpwallart.com](http://hpwallart.com).
- <sup>12</sup> Performance may vary depending on media—for more information, see [hp.com/go/mediasolutionslocator](http://hp.com/go/mediasolutionslocator) or consult your media supplier for compatibility details. For best results, use textiles that do not stretch. Performance varies by printer. HP Latex 360 and 850 Printers include an ink collector for printing on porous textiles. The HP Latex 3000 Printer requires the optional ink collector for porous textiles. For all other HP Latex printers, print on media that does not let the ink trespass onto the printer.
- <sup>13</sup> ICC profiling with the spectrophotometer does not support textiles and banners.
- <sup>14</sup> Tablet app compatible with iPad and Android devices.
- <sup>15</sup> HP's "Media Certification Program" ("Program") supplies information to media manufacturers, suppliers, and customers to assist in evaluating media compatibility with printers and inks from HP's Graphics Solutions Business. Media is supplied by independent third-party manufacturers. Inclusion in the Program and "Certified for" media shall not be construed as an endorsement by HP for any of the media or manufacturers. HP makes no representation or warranty of any kind for any media in the Program including but not limited to media availability, media quality, media performance, or manufacturer changes that may impact any media characteristics. The information contained herein is subject to change without notice. HP makes no representation as to the Program information's completeness or accuracy. The only warranties for HP products and services are set forth in the express warranty 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. This information is provided as a courtesy, free of charge, "AS-IS" by HP. HP makes no express or implied warranty of any kind regarding this information. HP shall not be liable for any direct, indirect, special, incidental or consequential damages, whether based on contract, tort or any other legal theory in connection with or arising out of the furnishing or use of this information.
- <sup>16</sup> Some warranty limitations apply. See the HP Product and Performance Warranty for HP Air Release Adhesive Gloss Cast Vinyl at [globalBMG.com/hp/mediawarranties](http://globalBMG.com/hp/mediawarranties). The HP printer is subject to the HP hardware warranty.
- <sup>17</sup> Applicable to HP Latex printers using HP 792 and HP 881 Latex Inks. Some warranty limitations apply for 3M, please see [hp.com/go/vehiclegraphics](http://hp.com/go/vehiclegraphics).
- <sup>18</sup> Applicable to HP Latex printers using HP 792 and HP 881 Latex Inks. Some warranty limitations apply for Avery Dennison, please see [hp.com/go/vehiclegraphics](http://hp.com/go/vehiclegraphics).
- <sup>19</sup> For best results use media options intended for double-sided printing.
- <sup>20</sup> For best results, print on media that does not let the ink trespass onto the printer. Performance may vary depending on media. Please consult your media supplier for compatibility details.



**Learn more at**  
[hp.com/go/latex](http://hp.com/go/latex)

---

© Copyright 2014 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty 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.

4AA5-1130ENW, April 2014

