

# HP PageWide Managed Color MFP P77940dns



HP Managed MFPs and printers are optimized for managed environments. Offering increased monthly page volumes and fewer interventions, this portfolio of products can help reduce printing and copying costs. See your HP Authorized Reseller for details.



**makepeace**  
An Archimede Solutions Group Company

575 University Avenue  
Suite D  
Norwood, MA 02062

617.782.3800  
sales@makepeace.com  
www.makepeace.com

**Dynamic security enabled printer. Only intended to be used with cartridges using an HP original chip. Cartridges using a non-HP chip may not work, and those that work today may not work in the future.**  
<http://www.hp.com/go/learnaboutsupplies>

**Print Speed:**Letter: Up to 40 ppm black; Up to 40 ppm color; First Page Out: As fast as 7.80 sec black; As fast as 8.02 sec color

**Scan Resolution:**Hardware: Up to 600 ppi; Optical: Up to 600 ppi

**Standard Connectivity:**2 Hi-Speed USB 2.0 Host; 1 Hi-Speed USB 2.0 Device; 1 Gigabit Ethernet 10/100/1000T network; 1 Hardware Integration Pocket

**Paper Handling:**550-sheet Universal Input Tray; 100-sheet multi-purpose tray; 500-sheet face-down output bin

**Duty Cycle:**Monthly, letter: Up to 150,000 pages

#### Affordable color printing for every office

- Depend on lasting value. Get the results you expect for a game-changing low color cost per page.
- Print even faster—and save even more per page—by setting this printer to General Office mode.<sup>3</sup>
- Help keep energy costs down with the most efficient MFP in its class.<sup>2</sup>

#### Minimal interruptions. Maximum uptime.

- Minimize interruptions with an HP PageWide MFP designed for less maintenance than laser competitors.<sup>4</sup>
- Print speeds up to 50% faster than competitors—as fast as 60 ppm in color and black-and-white.<sup>6</sup>
- Print Microsoft® Word and PowerPoint® files with a USB port that quickly recognizes, formats, and prints.<sup>6</sup>

#### The world's most secure printing<sup>1</sup>

- Each printer in your fleet checks its operating code and repairs itself from attacks.
- Your printer's outgoing network connections are inspected to stop suspicious requests and thwart malware.
- Memory activity is monitored to continually detect and stop attacks.
- Firmware is automatically checked during startup to determine if it's authentic code—digitally signed by HP.

#### Designed with the environment in mind

- With HP Sure Start, each printer regularly checks its operating code and repairs itself from attempted hacks.
- This MFP meets rigorous standards for ISO class 5 clean rooms—perfect for sensitive environments.
- Help reduce your impact. Count on easy cartridge recycling at no charge through HP Planet Partners.<sup>7</sup>
- Keep noise to a minimum with an MFP designed to be quiet. Place it near people without disrupting work.



<sup>1</sup> Based on HP review of 2018 published security features of competitive in-class printers. Only HP offers a combination of security features that can monitor to detect and automatically stop an attack then self-validate software integrity in a reboot. For a list of printers, visit <http://hp.com/go/PrintersThatProtect>. For more information: <http://hp.com/go/printersecurityclaims>. <sup>2</sup> Energy claim based on TEC data reported on <http://energystar.gov> as of February 2018. Data normalized to determine energy efficiency of in-class color laser printers and MFPs with print speeds between 20-80 ppm as of February 2018. Subject to device settings. Actual results may vary. <sup>3</sup> Comparison based on printing in Professional mode. <sup>4</sup> Fewer service parts claim based on HP analysis of leading in-class A3 color laser printers and MFPs as of February 2018; calculations use publicly available and/or published manufacturer rated yields for long-life consumables and assume 600,000 pages printed (using a 60% black/40% color ratio). Learn more at <http://hp.com/go/pagewideclaims>. <sup>5</sup> Comparison of HP PageWide A3 devices with the majority of in-class color ink/laser MFPs (\$3,000-\$10,299 and €2,820-€10,199), and color ink/laser single function printers (\$1,500-\$4,299 and €1,410-€4,099) as of April 2018 excluding other HP PageWide products; competitive set based on market share data as reported by IDC as of Q4 2017, MSRP data provided by gap intelligence and/or Buyers Lab. HP PageWide speeds based on General Office mode and exclude first page. Learn more at <http://hp.com/go/printerspeeds>. <sup>6</sup> Feature works with Microsoft® Word and PowerPoint® 2003 and later. Only Latin language fonts are supported. <sup>7</sup> Program availability varies. For more information, visit <http://hp.com/recycle>.

# HP PageWide Managed Color MFP P77940dns Specifications Table

<b>Functions / Multitasking Supported</b>	Print, copy, scan, fax (optional) / Yes
<b>Print Speed</b>	<b>Letter:</b> Up to 40 ppm black; Up to 40 ppm color <sup>5</sup> <b>First Page Out:</b> As fast as 8 sec black; As fast as 8.3 sec color <sup>6</sup>
<b>Duplex Print Speed</b>	<b>Letter:</b> Up to 28 ppm
<b>Print Resolution</b>	<b>Black (best):</b> Up to 1200 x 1200 optimized dpi from 600 x 600 input dpi (on Unspecified, Plain, HP Premium Presentation Matte, and HP Brochure Matte). <b>Color (best):</b> Up to 2400 x 1200 optimized dpi from 600 x 600 input dpi (on HP Advanced Photo Papers)
<b>Print Technology</b>	HP PageWide Technology with pigmented inks
<b>Print Resolution Technologies</b>	HP PageWide Technology up to 1200 x 1200 optimized dpi from 600 x 600 input dpi
<b>Print Cartridges Number</b>	4 (1 each black, cyan, magenta, yellow)
<b>Standard Print languages</b>	HP PCLXL (PCL6), PCL5, native PDF, HP Postscript Level 3 emulation, PIL, JPEG, PCLM
<b>Printer Smart Features</b>	HP Trusted Platform Module; HP JetAdvantage Security Manager; HP Web Jetadmin; HP ePrint, Apple AirPrint™, HP Auto-On/Auto-Off technology, HP Color Access Control, HP EasyColor, Front-facing USB printing, store print jobs, print preview, automatic two-sided printing, print multiple pages per sheet (2, 4, 6, 9, 16), collation, booklet printing, cover pages, tray selection, scaling, Portrait/Landscape orientation, High Quality Grayscale and Black Ink Only, General Office/Professional/Presentation dpi print modes, Optional: wireless
<b>Printer Management</b>	HP JetAdvantage Security Manager; HP SNMP Proxy Agent; HP Web Jetadmin Software; Printer Administrator Resource Kit for HP Universal Print Driver
<b>Scan Type / Technology</b>	Flatbed, ADF / Contact Image Sensor (CIS)
<b>Scan Resolution</b>	<b>Hardware:</b> Up to 600 ppi; <b>Optical:</b> Up to 600 ppi
<b>Scan File Format</b>	Scan File Types supported by included software: Bitmap (bmp), JPEG (jpg), PDF (.pdf), PNG (.png), TIFF (.tif)
<b>Scan Input Modes</b>	Front panel applications; Copy; Scan to E-mail with LDAP e-mail address lookup, Scan to Network Folder, Scan to USB, Scan to Sharepoint. Client applications: EWS, HP Scan App.
<b>Scan Size</b>	<b>ADF:</b> 11 x 17 in; With "long scan size" selected, 8.5 x 34 in Maximum; 4 x 6 in Minimum; <b>Flatbed:</b> 11 x 17 in
<b>Scan Speed</b>	Up to 60 ipm (mono and color), LEF* <b>Duplex:</b> Up to 120 ipm (mono and color), LEF*
<b>Scanner Advanced Features</b>	Optimize text/picture; Image adjustments; Job build; Output quality setting; Selectable scan resolution 75 to 600 dpi; Auto detect color; Edge Erase; Job notification; Blank page suppression; HP Quick Sets; Scan and save to destinations: network folder, FTP, Sharepoint, USB flash drive, e-mail; see software section for more details.
<b>Bit depth / Grayscale levels</b>	24-bit / 256
<b>Digital Sending Standard Features</b>	Scan-to-E-mail with LDAP email address lookup; Scan-to-Network Folder; Scan-to-USB; Scan-to-Sharepoint, Scan to FTP; Send to LAN Fax; Send to Internet Fax; Color Access Control; Native authorization and authentication; Quick Sets; two-sided copying; scalability; image adjustments (darkness, contrast, background cleanup, sharpness); N-up, N or Z-ordering; content orientation; collation; booklet; ID Scan; job build; edge-to-edge; job storage
<b>Copy Speed</b>	Up to 40 cpm <sup>3</sup>
<b>Copy Resolution</b>	<b>Black (text and graphics):</b> Up to 600 x 600 dpi; Up to 600 x 600 dpi; <b>Color (text and graphics):</b> Up to 600 x 600 dpi
<b>Maximum Number Of Copies</b>	Up to 9999 copies
<b>Copier Resize</b>	25 to 400%
<b>Copier Settings</b>	Two-sided copying, scalability, image adjustments (darkness, contrast, background cleanup, sharpness), N-up, N or Z-ordering, content orientation, collation, booklet, ID Scan, job build, edge-to-edge, job storage
<b>FaxSpeed</b>	<b>Up to:</b> 33.6 kbps; <b>Letter:</b> 5 Sec per page
<b>FaxResolution</b>	<b>Black (best):</b> Up to 300 x 300 dpi (400 x 400 dpi for received faxes only); <b>Color (best):</b> Up to 300 x 300 dpi (400 x 400 dpi for received faxes only); <b>Black (standard):</b> 204 x 98 dpi; <b>Color (standard):</b> Up to 300 x 300 dpi (400 x 400 dpi for received faxes only)
<b>FaxSmart 5 software Features</b>	Stored faxes; Fax archiving; Fax forwarding; Scale to fit; Fax address book; LAN/Internet fax; Fax number confirmation; Holiday fax schedule
<b>FaxFeatures</b>	<b>Fax Memory:</b> Up to 500 pages (black and white); <b>Auto Fax Reduction Supported:</b> Yes; <b>Auto-Redialing Yes;</b> <b>Fax Delayed Sending:</b> No; <b>Distinctive Ring Detection Supported:</b> No; <b>Fax Forwarding Supported:</b> Yes; <b>Fax Phone TAD Interface Supported:</b> No; <b>Fax Polling Supported:</b> Yes (poll to receive only); <b>Fax Telephone Mode Supported:</b> No; <b>Junk Barrier Supported:</b> Yes; <b>Maximum Speed Dialing Numbers:</b> Up to 1000 numbers (each with 210 destinations); <b>PC Interface Supported:</b> Yes; HP Software support provided; <b>Remote Retrieval Capability Supported:</b> No; <b>Telephone Handset Supported:</b> No
<b>Standard Connectivity</b>	2 Hi-Speed USB 2.0 Host; 1 Hi-Speed USB 2.0 Device; 1 Gigabit Ethernet 100/100/1000T network; 1 Hardware Integration Pocket
<b>Network Capabilities</b>	Via HP Jetdirect Ethernet embedded print server (standard) supports: 10Base-T, 100Base-Tx, 1000Base-T; 802.3az (EEE) support on Fast Ethernet and Gigabit Ethernet; IPsec (standard)
<b>Wireless Capability</b>	Optional, enabled with purchase of a hardware accessory
<b>Mobile Printing Capability</b>	HP ePrint, Apple AirPrint™, Google Cloud Print
<b>Memory</b>	<b>Standard:</b> 2816 MB – System Total Standard; 1280 MB on Formatter; 1024 MB on the SCB; 512 MB on the ECB. <b>Maximum:</b> 1584 MB – System Total Standard; 2048 MB on Formatter (with 1024 MB DIMM); 1024 MB on the SCB; 512 MB on the ECB
<b>Processor Speed</b>	1.2GHz / <b>Hard disk:</b> None. Printer uses eMMC solid state drive (SSD)
<b>Duty Cycle</b>	<b>Monthly letter:</b> Up to 150,000 pages <sup>7</sup>
<b>Recommended Monthly Page Volume</b>	2500 to 30,000 <sup>8</sup>
<b>Media Types Supported</b>	Plain paper; HP EcoFICIENT, HP Premium Presentation Matte 120g, HP Brochure Matte 180g, HP Brochure Glossy, HP Advanced Photo Papers, Light 60-74g, Intermediate 85-95g, Mid-Weight 96-110g, Heavy 111-130g, Extra Heavy 131-175g, Cardstock 176-220g, Labels, Letterhead, Envelope, Heavy Envelope, Preprinted, Prepunched, Colored, Bond, Recycled, Rough
<b>Media Weight Supported</b>	Tray 1: 16-58lb, 80lb Photo Paper Only; Trays 2-5: 16-58lb; HCl Trays 3 & 4: 16-58lb;
<b>Media Sizes Supported</b>	12 x 18; 11 x 17; RA3; A3; 8K; 273 x 394 mm, 270 x 390 mm, 260 x 368 mm; B4 (JIS); Legal; Oficio 216 x 340 mm; Oficio 8.5 x 13; C4; SR44; RA4 - R; Arch A-R; A4/3; A4 - R; Letter - R; 16K; 197 x 273 mm - R; 195 x 270 mm - R; executive - R; A5 - R; 16K; 184 x 260 mm - R; B5 (JIS) - R; Arch A; Statement; Letter; RA4; A4; 5 x 8; Double Japan Postcard Rotated; 16K; 197 x 273 mm, 195 x 270 mm, 184 x 260 mm; Executive; B5 (JIS); B6 (JIS); 5 x 7; 4 x 6; 10 x 15 cm; A5; Double Japan Postcard Rotated - R; A6; Japanese Postcard; Custom-sized media; Envelopes; Envelope B5; Envelope #10; Japanese Envelope Chou #3; Japanese Envelope - Flap Open; Envelope C5; Envelope #9; Envelope DL; Envelope Monarch; Envelope C6; Cards; 5 x 8 Index card; Double Japan Postcard Rotated; 4 x 6 Index card; Double Japan Postcard Rotated - R; A6 Index card; Japanese Postcard; Custom-sized media; Photo Media; 5 x 7 Photo Media; 4x6 Photo media; 10 x 15 cm; Japanese Postcard Hagaki Photo Cards

<b>Paper Handling</b>	550-sheet Universal Input Tray; 100-sheet multi-purpose tray; 500-sheet face-down output bin; <b>Duplex Options:</b> Automatic (standard); Manual (driver support provided); <b>Auto Document Feeder Capacity:</b> 100; <b>Envelope Feeder:</b> No; <b>Standard Paper Trays:</b> 2; <b>Input Capacities:</b> Up to 550 sheets Tandem Tray; Up to 100 sheets - MP Tray; <b>Output Capacities:</b> Up to 500 sheets; Up to 50 envelopes; None
<b>What's in the box</b>	<b>YZ264A</b> HP PW Managed Color MFP P77940dns; HP Setup Ink Cartridges (yield after setup ~8,000 pages CMY and ~10,000 K); Installation guide, Support Filter; Documentation on CD-ROM; Power cord
<b>Replacement Cartridges</b>	HP 990AC Black Contract PageWide Crtg (20,000) X4D18AC; HP 990AC Cyan Contract PageWide Crtg (20,000) X4D09AC; HP 990AC Magenta Contract PageWide Crtg (16,000) X4D12AC; HP 990AC Yellow Contract PageWide Crtg (16,000) X4D15ACX4D17AC
<b>Product Dimensions</b>	<b>W x D x H:</b> 23.8 x 25.7 in x 30.4 in; <b>Maximum:</b> 50.0 x 40.4 x 41.5 in
<b>Product Weight</b>	181.5 lb <sup>1</sup>
<b>Warranty Features</b>	90 day parts only warranty.
<b>Energy Efficiency Compliance</b>	ENERGY STAR® qualified; EPEAT® Gold
<b>Control Panel</b>	8.0-in (20.3 cm) Color Graphics Display (CGD) with IR touchscreen; rotating (adjustable angle) display; illuminated Home button (for quick return to the Home menu); USB High-speed 2.0 port; Hardware Integration Pocket
<b>Display Description</b>	8.0-in (20.3 cm) Color Graphics Display (CGD) with IR touchscreen
<b>Software Included</b>	HP Device Experience (DXP), HP PCL 6 Print Driver, HP Software Installer/Uninstaller, Mac OS Welcome Screen (Directs users to 123.HP.com or OS App Source for printer software), Online user manuals
<b>Fonts and Typefaces</b>	105 internal TrueType fonts scalable in HP PCL, 92 internal scalable fonts in HP Postscript level 3 emulation (Euro symbol built-in); 1 internal Unicode Font (Andale Mono Type/Type); 2 internal Windows Vista 8 Fonts (Calibri, Cambria); additional font solutions available via third-party flash memory cards; HP LaserJet Fonts and IPDS Emulation available at http://www.hp.com/go/laserjetfonts
<b>Compatible Operating Systems</b>	Android, Linux Boss (5.0), Linux Debian (7.0, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 8.0, 8.1, 8.2, 8.3, 8.4, 8.5, 8.6), Linux Fedora (22, 23, 24), Linux Mint (17, 17.1, 17.2, 17.3, 18), Linux Red Hat Enterprise (6.0, 7.0), Linux SUSE (13.2, 42.1), Linux Ubuntu (12.04, 14.04, 15.10, 16.04, 16.10), OS macOS 10.12 Sierra, OS X 10.10 Yosemite, OS X 10.11 El Capitan, UNIX, Windows 10 all 32- & 64-bit editions (excluding RT OS for Tablets), Windows 7 all 32- & 64-bit editions, Windows 8/8.1 all 32- & 64-bit editions (excluding RT OS for Tablets), Windows Vista all 32-bit editions (Home Basic, Premium, Professional, etc.), Windows XP SP3 32-bit editions (XP Home, XP Pro, etc.)
<b>Compatible Network Operating Systems</b>	Citrix MetaFrame Presentation Server 3.0, Citrix MetaFrame XP Presentation Server (Feature Release 1, 2, and 3), Citrix on Windows Server 2003/2003R2, Citrix on Windows Server 2008/2008R2/2008 R2 SP1, Citrix on Windows Server 2012/2012R2, Citrix Presentation Server 4.0/4.5, Citrix XenApp 5.0 (Plus Feature Pack 2 & 3) for Windows Server 2008 Terminal Services 32- and 64-bit, Citrix XenApp 6.0/6.5 [for Windows Server 2008 R2 Terminal Services, 32- and 64-bit], Citrix XenApp 6.0/6.5/7.5 [for Windows Server 2008 R2 SP1 Terminal Services, 32- and 64-bit], Citrix XenApp 7.5 [for Windows Server 2012 and 2012 R2 Terminal Services, 64-bit], Citrix XenDesktop 5.6 [for Windows Server 2008 R2 Terminal Services, 32- and 64-bit], Citrix XenDesktop 5.6/7.0/7.5 [for Windows Server 2008 R2 SP1 Terminal Services, 32- and 64-bit], Citrix XenDesktop 7.0/7.5 [for Windows Server 2012 and 2012 R2 Terminal Services, 64-bit], Novell NetWare 6.5/SP8 Novell Clients www.novell.com/print, Novell iPrint Appliance v1.0, Novell Open Enterprise Server 11/SP1, Novell Open Enterprise Server 2 for Linux, Novell Servers www.novell.com/print, Windows Server 2003/2003 R2 32-/64-bit (SP1/SP2) Standard/Enterprise (Cluster & Terminal Services), Windows Server 2003/2003 R2 32-bit (SP1/SP2) Standard/Enterprise (Cluster & Terminal Services), Windows Server 2008 32-/64-bit (SP2) Standard/Enterprise (Cluster & Terminal Services), Windows Server 2008 R2 64-bit (SP1) Standard/Enterprise (Cluster & Terminal Services), Windows Server 2008/2008 R2 32-/64-bit (SP1/SP2) Standard/Enterprise/Datacenter (Cluster & Terminal Services), Windows Server 2012/2012 R2 64-bit Standard/Foundation/Essentials/Datacenter (Cluster & Terminal Services), Windows Server 2016/ 64-bit Standard/Essential/Datacenter (Cluster & Terminal Services)
<b>Minimum System Requirements</b>	<b>PC:</b> Windows® 10, 8.1, 8, 7: 1 GHz 32-bit or 64-bit processor, 2 GB available hard disk space, CD-ROM/DVD drive, Internet connection, USB port, Microsoft® Internet Explorer, Windows Vista®: 800 MHz processor (32-bit only), 2 GB available hard disk space, CD-ROM/DVD drive or Internet connection, USB port, Microsoft® Internet Explorer 8, Windows® XP SP3 or higher (32-bit only); any Intel® Pentium® II, Celeron® or 233 MHz compatible processor, 850 MB available hard disk space, CD-ROM/DVD drive or Internet connection, USB port, Microsoft® Internet Explorer 8; <b>MAC:</b> Apple® OS X v10.12 Sierra, OS X v10.11 El Capitan, OS X v10.10 Yosemite; minimum 1.2 GB available HD space; Internet required; USB port
<b>Power</b>	<b>Power Supply Type:</b> Internal (Built-in) power supply. <b>Power Requirements:</b> Input voltage: 100 to 240 VAC, 50/60 Hz. <b>Power Consumption:</b> 452 watts (max. print/copy), 107 watts (print/copy), 31 watts (ready), 1.4 watts (sleep), 0.2 watts (auto-off), 0.2 watts (off) <sup>2</sup> . <b>Typical electricity consumption (TEC) number:</b> ES: 1.533 kWh/Week; BA: 1.548 kWh/Week <sup>12</sup> . <b>Best Technical Electricity Consumption (TEC):</b> 1.533 kWh/Week <sup>13</sup>
<b>Acoustics</b>	<b>Acoustic Power Emissions:</b> 7 B(A) (Print color simplex A4 at 41 ppm)
<b>Operating Environment</b>	<b>Operating Temperature Range:</b> 59 to 86°F; <b>Recommended Operating Temperature:</b> 63 to 77°F; <b>Storage Temperature Range:</b> Before initial setup (Non-Purged): -40 to 140°F; After initial setup (Purged): 32 to 140°F. If stored below the lowest specified operating temperature, unit must slowly warm up to an approved operating temperature (HP recommends waiting 24 hours at approved operating temperature prior to using the printer). <b>Non-Operating Humidity Range:</b> 10 to 80% RH; <b>Operating Humidity Range:</b> 10 to 80% RH; <b>Recommended Humidity Operating Range:</b> 30 to 70% RH
<b>Security Management</b>	Kerberos authentication, LDAP authentication, 2000 user PIN codes, Network IPsec/Firewall with Certificate, Pre-Shared Key, and Kerberos authentication, Supports WIA-10 IPsec configuration Plug-in, 802.1X authentication (EAP-PEAP, EAP-TLS), SNMPv3, HTTPS, Certificates, Access Control List, HP Trusted Platform Module (TPM) comes standard; Data: Storage Encryption, Encrypted PDF & Email (uses FIPS 140 validated cryptographic libraries from Microsoft), Secure Erase, SSL/TLS (HTTPS), Encrypted Credentials; Device: Security lock slot, USB port disablement, HP Security Management: Compatible with HP JetAdvantage Security Manager, Device: Security Syslog Messages processed and accessible in ArcSight and Splunk; SMEs; For more security settings for HP JetAdvantage Security Manager go to http://h10032.www1.hp.com/ctg/Manual/c03602120
<b>Accessories</b>	HP PageWide Managed 550-sheet Paper Tray (P1V16A), HP PageWide Managed 550-sheet Paper Tray and Cabinet (P1V17A), HP PageWide Managed 3x550-sheet Paper Tray and Stand (P1V18A), HP PageWide Managed 4000 sheet High-capacity Paper Tray and Stand (P1V19A), HP Internal USB Ports (B5L28A), HP Foreign Interface Harness (B5L31A), HP 1 GB x32 144-pin (800 MHz) DDR3 SODIMM (E5K48A), HP Jetdirect 2900nw Print Server (U8031A), HP Jetdirect 3000NFC/Wireless Accessory (U8030A), HP LaserJet MFP Analog Fax Accessory 500 (CC487A), HP Staple Cartridge Refill (U8J96A)
<b>HP Service and Support Options</b>	U9VX9E - HP 3 year Next Business Day Onsite; U9VY0E - HP 4 year Next Business Day Onsite; U9VY1E - HP 5 year Next Business Day Onsite

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

<sup>1</sup> With ink installed, no media in trays <sup>2</sup> Power requirements are based on the country/region where the printer is sold. Do not convert operating voltages. This will damage the printer and void the product warranty. Power Consumption and Energy Star TEC values typically based on measurement of 115V device. <sup>3</sup> Speed specifications have been updated to reflect current industry testing methods. <sup>4</sup> Based on standard ITU-T test image #1 at standard resolution. More complicated pages or higher resolution will take longer and use more energy. <sup>5</sup> ISO speeds measured using ISO/IEC 24734. Excludes first page or first set of ISO test pages. For details see [hp.com/go/printerclaims](http://hp.com/go/printerclaims) <sup>6</sup> No heating or fusing warm up time required <sup>7</sup> Duty cycle is defined as the maximum number of pages per month of imaged output. This value provides a comparison of product robustness in relation to other HP LaserJet or HP Color LaserJet devices, and enables appropriate deployment of printers and MFPs to satisfy the demands of connected individuals or groups. <sup>8</sup> HP recommends that the number of printed pages per month be within the stated range for optimum device performance, based on factors including supplies replacement intervals and device life over an extended warranty period. <sup>9</sup> HP SureSupply alerts you when you should replace a print cartridge and helps you purchase locally or via the Internet. For more information, visit [hp.com/learn/suresupply](http://hp.com/learn/suresupply). Only available with original HP supplies; Internet access required. <sup>10</sup> All HP media listed as compatible with the printer in the HP PageWide Printing Supplies Compatibility Guide, regardless of weight, may be used <sup>12</sup> Based on the BA TEC method with the following possible exceptions: 1 minute or less sleep delay setting, Wi-Fi disabled. <sup>13</sup> Normalized TEC (kwhr hours per page) BA: 0.388 Wh/page, ES: 0.383 Wh/page

