



# HP Color LaserJet Managed MFP E78223dn, E78228dn

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.



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. Learn more at: <http://www.hp.com/go/learnaboutsupplies>



HP Web Jetadmin



Easy access USB



2-sided printing



Quality laser printing

#### Big color. Small cost.

- Print premium, professional-quality documents with vivid color images and graphics for a low cost.
- Get consistent, professional quality and performance you count on with Original HP toner cartridges and drums.

#### Minimal interruptions. Maximum uptime.

- Avoid interruptions with an HP LaserJet Managed MFP designed to be streamlined for maximum productivity.
- Tailor this MFP to the needs of your business with a wide range of paper-handling accessories.
- Scan files directly to Microsoft® Office and SharePoint, plus email, USB, and network folders.<sup>2</sup>
- Grab pages and go, without waiting. This HP LaserJet wakes up quickly and prints fast—up to 28 ppm.<sup>3</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.

## Product walkaround

### HP Color LaserJet Managed MFP E78228dn shown

1. Hardware Integration Pocket (for connecting accessory and third-party devices)<sup>1</sup>
2. Flatbed scanner supports media sizes up to A3
3. Easy-access USB port<sup>2</sup>
4. 500-sheet output bin
5. Front door, access to toner cartridges and imaging drums
6. Automatic two-sided printing
7. 520-sheet tray 2 supports media sizes up to A4
8. 520-sheet tray 3 supports media sizes up to A3
9. 100-sheet reversing automatic document feeder (ADF) supports media sizes up to A3
10. 22.8 cm (9.0-inch) functional touchscreen with 20.3 cm (8.0-inch) colour graphics display
11. Right door, access to print path and fuser
12. 100-sheet multipurpose tray 1 supports media sizes up to A3
13. Slot for cable-type security lock
14. 2 Hi-Speed USB 2.0 Host ports
15. Gigabit Ethernet port
16. Hi-Speed USB 2.0 device port



<sup>1</sup> Solutions deployed through the Hardware Integration Pocket (HIP) may require additional purchase. The HP Color LaserJet Managed MFP E78223/28 series comes with a second-generation HIP.

<sup>2</sup> An administrator must enable the easy-access USB port before use.

<sup>3</sup> Measured using ISO/IEC 24734, excludes first set of test documents. For more information, see [hp.com/go/printerclaims](http://hp.com/go/printerclaims). Exact speed varies depending on the system configuration, software application, driver, and document complexity.

<sup>4</sup> Scan speeds measured from ADF. Actual processing speeds may vary depending on scan resolution, network conditions, computer performance, and application software.

<sup>5</sup> Selection of optional paper-handling accessories required to reach maximum input capacity.

## Series at a glance



Model	HP Color LaserJet Managed MFP E78223dn	HP Color LaserJet Managed MFP E78228dn
Product number	8GS50A (Base) + 8GS14A (Speed license) or 8GS36A (Bundle)	8GS50A (Base) + 8GS15A (Speed license) or 8GS37A (Bundle)
Functions	Print, copy, scan (fax optional)	
Print speed (black and color) <sup>3</sup>	Up to 23 ppm (letter and A4)	Up to 28 ppm (letter and A4)
Scan speed (black and color) <sup>4</sup>	Simplex: Up to 45/46 ppm (letter/A4); Duplex: Up to 19 ipm (letter and A4)	
ADF capacity	Up to 100 sheets	
Input capacity (standard/maximum) <sup>5</sup>	Up to 1,140/2,180 sheets	
100-sheet multipurpose tray 1, 520-sheet tray 2, 520-sheet tray 3	Yes	

## Accessories, Supplies and Support

Supplies	5PN63A HP LaserJet Image Transfer Kit (Up to 400,000 pages)	
	5PN64A HP LaserJet Image Transfer Blade Kit (Up to 200,000 pages)	
	5PN65A HP LaserJet Transfer Roller Kit (Up to 200,000 pages)	
	8JM70A HP Color LaserJet 8JM70A Black Developer Unit (300,000 pages)	
	8JM71A HP Color LaserJet 8JM71A Magenta Developer Unit (300,000 pages)	
	8JM72A HP Color LaserJet 8JM72A Yellow Developer Unit (300,000 pages)	
	8JM73A HP Color LaserJet 8JM73A Cyan Developer Unit (300,000 pages)	
	W9048MC HP W9048MC Managed LaserJet Toner Collection Unit (33,700 pages)	
	W9215MC HP W9215MC Managed LaserJet Imaging Drum (135,000 pages)	
	W9220MC HP W9220MC Black Managed LaserJet Toner Cartridge (25,000 pages)	
	W9221MC HP W9221MC Cyan Managed LaserJet Toner Cartridge (20,000 pages)	
	W9222MC HP W9222MC Yellow Managed LaserJet Toner Cartridge (20,000 pages)	
	W9223MC HP W9223MC Magenta Managed LaserJet Toner Cartridge (20,000 pages)	
	Z7Y79A HP LaserJet Image Transfer Belt Assembly (400000400000)	
	Z7Y81A HP LaserJet Image Transfer Cleaner (150000150000)	
	Z7Y83A HP LaserJet E7 Trays 2-x Rollers (200000200000)	
	Z7Y88A HP LaserJet MP Roller (200000200000)	
	Accessories	2MU47A HP Accessibility Assistant
		2NR09A HP 2GB 144-Pin DDR3 TAA Version DIMM
		2NR12A HP Removable Hard Drive Enclosure
3JN69A HP Jetdirect 3100w BLE/NFC/Wireless Accessory		
3KR68A HP ADF Separation Pad		
3KR69A HP ADF Pick Roller Assembly		
4QL32A HP Legic Secure USB Reader		
5EL03A HP TAA Version Secure Hard Disk Drive		
5UT59A HP MFP Analog Fax Accessory 701		
5YP34A HP 5YP34A Laser HDD Accessory		
8FP31A HP Jetdirect LAN Accessory		
B5L28A HP Internal USB Ports		
B5L29A HP High-Performance Secure Hard Disk		
B5L31A HP Foreign Interface Harness		
E5K49A HP 2 GB x32 144-pin (800 MHz) DDR3 SODIMM		
J8031A HP Jetdirect 2900nw Print Server		
X3D03A HP Universal USB Proximity Card Reader		
Y1F97A HP LaserJet Dual Cassette Workgroup Feeder		
Y1G00A HP LaserJet Inner Finisher		
Y1G02A HP LaserJet Inner Finisher Hole 2/3 Punch		
Service and Support	UB4R3E HP 3 year Next Business Day w/DMR Service for Color LaserJet Managed MFP E7742x-E7822x	
	UB4R4E HP 4 year Next Business Day w/DMR Service for Color LaserJet Managed MFP E7742x-E7822x	
	UB4R6E HP 3 year 4 hour 9x5 w/DMR Service for Color LaserJet Managed MFP E7742x-E7822x	
	UB4R5E HP 5 year Next Business Day w/DMR Service for Color LaserJet Managed MFP E7742x-E7822x	
	UB4R7E HP 4 year 4 hour 9x5 w/DMR Service for Color LaserJet Managed MFP E7742x-E7822x	

## Technical specifications

Model	HP Color LaserJet Managed MFP E78223dn	HP Color LaserJet Managed MFP E78228dn
Product number	8GS50A (Base) + 8GS14A (Speed license) or 8GS36A (Bundle)	8GS50A (Base) + 8GS15A (Speed license) or 8GS37A (Bundle)
Functions	Print, copy, scan, fax (optional)	
Control panel	9.0-in (22.8 cm) functional touchscreen with 8.0-in (20.3 cm) Color Graphics Display (CGD) with touchscreen; tilting (adjustable angle) display; illuminated Home button (for quick return to the Home menu); USB High-speed 2.0 port; Hardware Integration Pocket	
<b>Print</b>		
Print technology	Laser	
Print speed	Black (A4, normal): Up to 22 ppm; Colour (A4, normal): Up to 22 ppm; Black (A4, duplex): Up to 17 ipm; Colour (A4, duplex): Up to 17 ipm; Black (A3, normal): Up to 12 ppm; Colour (A3, normal): Up to 12 ppm;	Black (A4, normal): Up to 28 ppm; Colour (A4, normal): Up to 28 ppm; Black (A4, duplex): Up to 20 ipm; Colour (A4, duplex): Up to 21 ipm; Black (A3, normal): Up to 15 ppm; Colour (A3, normal): Up to 15 ppm;
First page out	Black (A4, ready): As fast as 10.5 sec; Colour (A4, ready): As fast as 13.5 sec; Black (A4, sleep): As fast as 25 sec; Colour (A4, sleep): As fast as 25 sec;	Black (A4, ready): As fast as 8.9 sec; Colour (A4, ready): As fast as 11.0 sec; Black (A4, sleep): As fast as 25 sec; Colour (A4, sleep): As fast as 25 sec;
Print resolution	Black (best): Up to 1200 x 1200 dpi reduced speed; Colour (best): Up to 1200 x 1200 dpi reduced speed; Technology: Normal (600 x 600 4 bit); Best (1200 x 1200 1 bit);	
Monthly duty cycle	Up to 80,000 pages A4; Recommended monthly page volume: Up to 20,000	
Printer smart software features	Quality color printing for a great value is a smart choice for any business. Produce premium, professional-quality color documents at a competitive low cost with an HP Color LaserJet MFP built to make your work—and your business—look its best. Annoying interruptions and complex maintenance can slow down printing, and ultimately, the pace of business. Avoid pauses in productivity with an HP LaserJet MFP designed for maximum uptime, so you can count on reliable, results day in and day out. Only HP Enterprise printers repair themselves from attacks in real time, delivering built-in security to help keep your network safe. Automatically monitor threats, detect intrusions, and validate operating software with security offered only by HP. Accelerate workflow, improve accuracy, and easily connect people throughout your organization.	
Standard print languages	HP PCL 6, HP Postscript level 3 emulation, PDF (v 1.7), AirPrint™ compatible	
Fonts and typefaces	84 scalable TrueType fonts	
Print area	Print margins Top: 4.23 mm, Bottom: 4.23 mm, Left: 4.23 mm, Right: 4.23 mm; Maximum print area: 288.5 x 423.6 mm	
Duplex printing	Automatic (standard)	
<b>Copy</b>		
Copy speed	Black (A4): Up to 23 cpm; Colour (A4): Up to 22 cpm	; Colour (A4): Up to 28 cpm
Copier specifications	Two-sided copying; scalability; image adjustments (darkness, contrast, background cleanup, sharpness); optimized text/picture (text, mixed, printed picture, photograph); N-Up; N or Z-ordering; content orientation; collation; ID scan; job build; job storage; watermark; stamps; book mode scans; erase edges; automatically detect color/monochrome; image preview; Maximum number of copies: Up to 9999 copies; Reduce/Enlarge: 25 to 400%;	
<b>Scan</b>		
Scan speed	Normal (A4): Up to 46 ipm; Duplex (A4): Up to 19 ipm	
Scan file format	Digital Send: PDF, Hi-Compression PDF, JPEG, TIFF, MTIFF, XPS, PDF/A; Scan to easy access USB: PDF, JPEG, TIFF, MTIFF, XPS, PDF/A; Print from easy access USB: PDF, PS, Print Ready files (.prn, .pcl, .cht)	
Scanner specifications	Scanner type: Flatbed, ADF; Scan technology: Platen Scanner (CCD); Scan input modes: Front panel applications: Copy; E-mail; Fax; Save to Network Folder; Save to USB; Save to Device Memory; Open Extensibility Platform (OXP) applications; Twain version: Version 2.1; Duplex ADF scanning: Yes; Scan size maximum (flatbed): 297 x 432 mm; Optical scan resolution: UP to 600 x 600 dpi	
Scanner advanced features	Scan-to-E-mail; Scan-to-network folder (stand alone solution); Scan to Cloud; Scan to USB; Scan-to-SharePoint	
Scannable area	Maximum media size (flatbed): 297 x 432 mm; Minimum media size (ADF): 148 x 210 mm Maximum media size (ADF): 297 x 432 mm	
Bit depth/ Grey scale levels	24-bit / 256	
Digital sending	Standard: Scan to E-mail; Save-to-Network Folder; Save-to-USB drive; Send to Sharepoint; Send to FTP; Send to sFTP; Send to LAN Fax; Send to Internet Fax; Local Address Book; SMTP over SSL; Blank Page Removal; Edge Erase; Auto Color Sense; Compact PDF; Auto Straighten ; Optional: Scan to Job storage; Send to LAN Fax; Send to Internet Fax	
<b>Fax</b>		
Fax	Yes, Optional (33.6K, HP MFP Analog 700 Fax Accessory)	
Fax specifications	Fax memory: Up to 500 pages; Fax resolution: Standard: 203 x 98 dpi; Fine: Up to 203 x 196 dpi; Superfine: Up to 203 x 392 or 300 x 300 dpi; Quick dialing: Up to 1000 numbers (each with 210 destinations);	
Processor speed	1.2 GHz	
<b>Connectivity</b>		
Standard	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	
Optional	HP Jetdirect 2900nw Print Server J8031A; HP JetDirect 3100w BLE/NFC/Wireless Accessory 3JN69A	
Wireless	No wireless capabilities standard. There are optional accessories (common to all current Jedi products) that support wireless. These are listed in the accessories section, above.	

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Mobile printing capability	Apple AirPrint™; Google Cloud Print™; HP ePrint; Mopria™ Certified; PrinterOn Print	
Supported network protocols	IPv4/IPv6: Apple Bonjour Compatible (Mac OS 10.2.4 or higher), SNMPv1/v2c/v3, HTTP, HTTPS, FTP, TFTP, Port 9100, LPD, WS Discovery, IPP, Secure-IPP, IPsec/Firewall; IPv6: DHCPv6, MLDv1, ICMPv6; IPv4: Auto-IP, SLP, Telnet, IGMPv2, BOOTP/DHCP, WINS, IP Direct Mode, WS Print; Other: NetWare NDS, Bindery, NDPS, ePrint; Google Cloud Print 2.0	
Hard disk	Standard two 16 GB encrypted eMMCs (one is located on formatter board for stored jobs and solutions. Another one is located on ECB for copy/scan function); Optional HP High-Performance Secure Hard Disk; AES 256 hardware encryption or greater; Secure erase capabilities (Secure File Erase-Temporary Job Files, Secure Erase-Job Data, Secure ATA Erase-Disk), Optional 500 GB Hard Disk (located on ECB for copy/scan functions). ECB: Engine Controller Board	
Memory	Standard: 4.25 GB (Formatter 1.25 GB + ECB 3 GB); Maximum: 6.25 GB (Std. Memory + Opt. 2 GB)	
Media handling	Standard: 3 ; Maximum: 5	
Number of paper trays	Standard: 3 ; Maximum: 5	
Media types	Plain, HP EcoEFFICIENT, HP Matte 90g, Light 60-74g, Bond, Recycled, HP Matte 105g, HP Matte 120g, Mid-Weight 96-110g, Heavy 111-130g, HP Matte 150g, Extra Heavy 131-175g, HP Matte 200g, Cardstock 176-220g, Labels, Letterhead, Envelope, Preprinted, Prepunched, Colored	Plain, HP EcoEFFICIENT, HP Matte 90g, Light 60-74g, Bond, Recycled, HP Matte 105g, HP Matte 120g, HP Soft Gloss 120g, HP Glossy 120g, Mid-Weight 96-110g, Heavy 111-130g, Mid-WtGlossy 96-110g, Hvy Glossy 111-130g, HP Matte 150g, HP Glossy 150g, Extra Heavy 131-175g, XHvyGlossy 131-175g, HP Matte 200g, Cardstock 176-220g, Labels, Letterhead, Envelope, Preprinted, Prepunched, Colored
Media size	Custom (metric): Tray 1: 98 x 148 mm to 297 x 432 mm; Tray 2: 139.7 x 210 mm to 297 x 364 mm; Tray 3: 139.7 x 210 mm to 297 x 432 mm; Supported (metric): Tray 1: A3, A4, A4R, A5, A5R, A6, Ra4, B4 (JIS), B5 (JIS), B6 (JIS), Oficio, 8K, 16k, Postcard, Dpostcard (JIS), Envelope B5, Envelop C5, Envelope C6, Envelope DL; Tray 2: A4, A4R, A5, Ra4, B4 (JIS), B5 (JIS), Oficio, 16k; Tray 3: A3, A4, A4R, A5, Ra3, Ra4, B4 (JIS), B5 (JIS), Oficio, 8K, 16k; ADF: Legal; Oficio; Executive; Statement; Ledger; A3; A4; A4R; A5; B4; B5; 16K 148 x 297 mm (5.8 x 11.7) to 148 x 432 mm (5.8 x 17)	
Media handling	Standard input: 100-sheet multi-purpose tray, 2 x 520-sheet input tray, 100 sheet ADF Standard output: 500 sheet face-down output bin Optional input: Optional 2 x 520-sheet input tray ADF: Standard, 100 sheets	
Media weight	Tray 1: 60 to 176 g/m²; Tray 2, 3: 60 to 220 g/m²; ADF: Simplex: 60 to 128 g/m²; Duplex: 60 to 128 g/m²	
Input capacity	Tray 1: Sheets: 100 (75 gsm); envelopes: 10 Tray 2: Up to 520 sheets (75 gsm) Tray 3: Up to 520 sheets (75 gsm) Maximum: Up to 2180 sheets (75 gsm) (MP Tray: up to 100 sheets; Tray 2, 3, 4 & 5: up to 520 sheets) ADF: Standard, 100 sheets	
Output capacity	Standard: Up to 500 sheets Envelopes: Up to 40 envelopes Maximum: Up to 550 sheets	
Compatible operating systems	Windows Client OS (32/64 bit) -, Win10, Win8.1, Win7 Ultimate, Mobile OS-, iOS, Android, Mac-, Apple® macOS High Sierra v10.13, Apple® macOS Mojave v10.14, Apple® macOS Catalina v10.15, Discrete PCL6 Printer Driver-, For more information on the supported operating systems go to <a href="http://support.hp.com">http://support.hp.com</a> , Enter your product name and search, Click on User Guides and enter your product name and search for User Guide, Search for your (Product Name) - User Guide, Search for the Supported Operating Systems section, UPD PCL6 / PS Printer Drivers, Supported Operating systems, For more information on the supported operating systems see <a href="http://www.hp.com/go/upd">www.hp.com/go/upd</a>	
Compatible network operating systems	Windows Server 2008 R2 64-bit, Windows Server 2008 R2 64-bit (SP1), Windows Server 2012 64-bit, Windows Server 2012 R2 64-bit, Windows Server 2016 64-bit, Windows Server 2019 64-bit, Citrix Server 6.5, Citrix XenApp & XenDesktop 7.6, Novell iPrint server, Citrix Ready Kit Certification - Up to Citrix Server 7.18 for more information see <a href="http://citrixready.citrix.com">http://citrixready.citrix.com</a> , Linux- For more information see <a href="http://developers.hp.com">http://developers.hp.com</a> /hp-linux-imaging-and-printing, Unix- For more information see <a href="http://hp.com/go/unixmodelscripts">http://hp.com/go/unixmodelscripts</a> , UPD PCL6 / PS Printer Drivers-, For more information on the supported operating systems go to <a href="http://support.hp.com">http://support.hp.com</a> , Enter your product name and search, Click on User Guides and enter your product name and search for User Guide, Search for your (Product Name) - User Guide, Search for the Supported Operating Systems section, UPD PCL6 / PS Printer Drivers, Supported Operating systems, For more information on the supported operating systems see <a href="http://www.hp.com/go/upd">www.hp.com/go/upd</a>	
Minimum system requirements	Windows: 2 GB available hard disk space, Internet connection, or USB port, Internet browser. For additional OS hardware requirements see <a href="http://microsoft.com">microsoft.com</a> ; Mac: 2 GB available hard drive space, Internet connection, or USB port, Internet browser. For additional OS hardware requirements see <a href="http://apple.com">apple.com</a>	
Software included	No software solutions are included in the Box only on <a href="http://hp.com">http://hp.com</a> , <a href="http://123.hp.com">http://123.hp.com</a>	
Security management	Management security: SNMPv3, SSL/TLS, WPA2-Enterprise, 802.1X authentication (EAP- PEAP, EAP-TLS), IPP over TLS, IPsec/Firewall with Certificate, Pre-Shared Key Authentication, and Kerberos Authentication; Support for WJA-10 IPsec Configuration using IPsec Plug-in	
Printer management	HP Printer Assistant, HP Device Toolbox, HP Web JetAdmin Software, HP JetAdvantage Security Manager, HP SNMP Proxy Agent, HP WS Pro Proxy Agent, Printer Administrator Resource Kit for HP Universal Print Driver (Driver Configuration Utility - Driver Deployment Utility - Managed Printing Administrator)	
Dimensions and weight	Minimum 566 x 725 x 870 mm; Maximum: 935 x 1113 x 1262 mm;	
Printer dimensions (W x D x H)	760 x 890 x 1076 mm	
Package dimensions (W x D x H)	82.9 kg	
Printer weight	100.1 kg	
Package weight	100.1 kg	
Operating environment	Temperature: 15 to 30°C; Humidity: 20 to 80% RH	
Storage conditions	Temperature: -10 to 40°C;	
Acoustics <sup>4</sup>	Acoustic power emissions: 6.4 B(A), printing color simplex A4 at 22 ppm; Acoustic pressure emissions: 48 dB(A), printing color simplex A4 at 22 ppm	Acoustic power emissions: 6.5 B(A), printing color simplex A4 at 28 ppm; Acoustic pressure emissions: 50 dB(A), printing color simplex A4 at 28 ppm
Power <sup>8</sup>	Requirements: Input voltage: 110 to 127Vac (+/- 10%), 220 to 240Vac (+/- 10%), 50/60 Hz (+/- 3%); Consumption: 584 watts (printing), 34 watts (ready), 9.5 watts (sleep), 0.6 watts (Final sleep), 0.01 watts (off); Typical Electricity Consumption (TEC) <sup>9</sup> : 0.932 kWh/Week (Blue Angel); 0.313 kWh/Week (Energy Star 3.0); Power supply type: Internal (Built-in) power supply;	Requirements: Input voltage: 110 to 127Vac (+/- 10%), 220 to 240Vac (+/- 10%), 50/60 Hz (+/- 3%); Consumption: 665 watts (printing), 34 watts (ready), 9.5 watts (sleep), 0.6 watts (Final sleep), 0.01 watts (off); Typical Electricity Consumption (TEC) <sup>9</sup> : 1.210 kWh/Week (Blue Angel); 0.386 kWh/Week (Energy Star 3.0); Power supply type: Internal (Built-in) power supply;
Certifications <sup>7</sup>	CISPR22: 2008 (International) CISPR 32: 2012/EN 55032: 2012 Class A, EN 61000-3-2: 2014, EN 61000-3-3:2013, EN 55024:2010, EMC Directive 2014/30/EU with CE Marking (Europe), FCC 47CFR Part 15 Class A/ICES-003, Issue 6 Class A, Other EMC approvals as required by individual countries. EPEAT® Silver; ENERGY STAR® qualified Blue Angel compliant <sup>9</sup> Yes, Blue Angel DE-UZ 205—only ensured when using Original HP supplies	
What's in the box <sup>1</sup>	Engine; TCU; Drums; Assy-Color WG Nameplate and Label; Power Cords; Hardware install and setup documentation; Support flyers; (APJ only) Introductory cartridges	
Warranty	90 day parts only. Extended Warranty and support options vary by product, country and local legal requirements. Go to <a href="http://www.hp.com/support">http://www.hp.com/support</a> to learn about HP award winning service and support options in your region.	

## Footnotes

<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 [hp.com/go/PrintersThatProtect](http://hp.com/go/PrintersThatProtect). For more information: [hp.com/go/printersecurityclaims](http://hp.com/go/printersecurityclaims).

<sup>2</sup> Requires an Internet connection to the printer. Services may require registration. App availability varies by country, language, and agreements. For details, see <http://hpconnected.com>.

<sup>3</sup> Measured using ISO/IEC 24734, excludes first set of test documents. For more information, see [hp.com/go/printerclaims](http://hp.com/go/printerclaims). Exact speed varies depending on the system configuration, software application, driver, and document complexity.

<sup>4</sup> HP Web Jetadmin is available for download at no additional charge at [hp.com/go/webjetadmin](http://hp.com/go/webjetadmin).

<sup>5</sup> An FCC Class A emissions compliant device meets the less stringent (higher) levels of emissions allowed by the FCC for a product operation in a commercial environment. An FCC class A device cannot be marketed for use in a residential environment and an FCC class A device should not be purchased for use in a residential environment due to the increased risk of interference to radio communications.

## Technical specifications disclaimers

<sup>1</sup> No, please purchase USB cable separately (EMEA, Americas, AP) (Service Technician must install units).

<sup>2</sup> Approximate average yield based on ISO/IEC 19798. Actual yield varies considerably based on content of printed pages and other factors. For details, see <http://www.hp.com/go/learnaboutsupplies>

<sup>4</sup> Acoustic power of active scan/copy will be updated after review scan acoustic data.

<sup>5</sup> Maximum Memory can be expanded to 6.25 GB (System memory) by adding optional memory module. 2 GB Memory DIMM Kit (E5K49A) can be purchased separately.

<sup>6</sup> HP SureSupply alerts you when your print cartridge is running low and helps you purchase online or locally through HP or a participating retailer. Only available with Original HP supplies; Internet access required. To learn more, visit <http://www.hp.com/go/SureSupply>

<sup>7</sup> EPEAT® registered where applicable. EPEAT registration varies by country. See [www.epeat.net](http://www.epeat.net) for registration status by country.

<sup>8</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 values typically based on measurement of 115 V device.

<sup>9</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. Energy Star value typically based on measurement of 115 V device.

<sup>10</sup> Based on the BA TEC method with the following possible exceptions: 1 minute or less sleep delay setting, Wi-Fi disabled.

