

# HP LaserJet Pro MFP M428 series



The HP LaserJet Pro MFP M428—focus your time growing your business and staying ahead.

Winning in business means working smarter. The HP LaserJet Pro MFP M428 is designed to let you focus your time where it's most effective—growing your business and staying ahead of the competition.



HP LaserJet Pro MFP M428fdn



HP LaserJet Pro MFP M428fdw

## Built to keep you—and your business—moving forward

- Scan files directly to Microsoft® SharePoint, email, USB, and network folders.<sup>1</sup>
- Help save time by automating all the steps in a complicated workflow and use at a touch of a button.<sup>2</sup>
- Print wirelessly even without the network, stay connected with dual band Wi-Fi and Wi-Fi direct.<sup>3,4,5</sup>
- Print effortlessly from any device, virtually anywhere, to any HP printer—securely through the cloud.<sup>6</sup>

## Best-in-class security—detect and stop attacks<sup>7</sup>

- A suite of embedded security features help protect your MFP from being an entry point for attacks.<sup>7</sup>
- Help ensure the security of confidential information with optional PIN/Pull printing to retrieve print jobs<sup>8</sup>
- Optional HP JetAdvantage Security Manager lets you set configuration
- Thwart potential attacks and take immediate action with instant notification of possible security issues.<sup>12</sup>

## Simply designed to uncomplicate your day

- Set up this MFP fast, and easily manage device settings to help increase overall printing efficiency.
- Tackle tasks quickly and easily—with the simple 2.7" (6.8cm) color touchscreen.
- Print Microsoft office formatted files in addition to pdfs right off your USB drive.<sup>9</sup>
- Avoid interruptions with an HP LaserJet MFP designed to be streamlined for maximum productivity.

## Sustainability is smart business

- Avoid frustrating reprints, wasted supplies, and service calls using Original HP toner cartridges
- Help save paper right out of the box. The duplex print setting is set at default paper savings mode.<sup>10</sup>
- Saves up to 22% over prior products.<sup>11</sup>
- Help save energy with HP Auto-on/Auto-off technology.<sup>13</sup>

## Product walkaround



## Series at a glance

### HP LaserJet Pro M428fdw



Model (product number)	M428fdn (W1A29A)	M428fdw (W1A30A)
Functions	Print, copy, scan, fax ( <i>both models</i> )	
Print speed (A4) <sup>5</sup>	Up to 38 pages per minute (ppm) ( <i>both models</i> )	
Scan speed (A4) <sup>6</sup>	Simplex: Up to 29 ppm (black); up to 21 ppm (colour) Duplex: Up to 49 images per minute (ipm) (black); up to 36 ipm (colour)	
Scanning	50-sheet ADF with single-pass, two-sided scanning ( <i>both models</i> )	
Automatic two-sided printing	✓	✓
Control panel display	6.9 cm (2.7-inch) colour touchscreen ( <i>both models</i> )	
100-sheet multipurpose tray 1, 250-sheet tray 2	✓	✓
Optional 550-sheet tray 3	Add up to one ( <i>both models</i> )	
Input capacity (standard/maximum <sup>7</sup> )	Up to 350/900 sheets ( <i>both models</i> )	
Recommended monthly page volume <sup>8</sup>	Up to 4,000 pages ( <i>both models</i> )	
Cartridge yields <sup>9</sup> (A/X)	Black: ~3,000/10,000 pages ( <i>both models</i> )	
Dual-band Wi-Fi with Bluetooth Low Energy <sup>1,2</sup>	Not available	✓

<sup>1</sup> Wireless operations are compatible with 2.4 GHz and 5.0 GHz operations only. Learn more at [hp.com/go/mobileprinting](http://hp.com/go/mobileprinting). Wi-Fi is a registered trademark of Wi-Fi Alliance®.

<sup>2</sup> Bluetooth® is a trademark owned by its proprietor and used by HP Inc. under license. Learn more at [hp.com/go/mobileprinting](http://hp.com/go/mobileprinting).

<sup>3</sup> An administrator must enable the easy-access USB port before use.

<sup>4</sup> Requires purchase of separate USB flash drive with at least 16 GB capacity.

<sup>5</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>6</sup> Scan speeds measured from ADF. Actual processing speeds may vary depending on scan resolution, network conditions, computer performance, and application software.

<sup>7</sup> Selection of optional 550-sheet tray 3 required to reach maximum input capacity.

<sup>8</sup> Recommended Monthly Page Volume (RMPV): 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> Actual yields vary considerably based on images printed and other factors. For details visit [hp.com/go/learnabouthsupplies](http://hp.com/go/learnabouthsupplies). Pages may vary based on customer printing conditions and usage.

## HP Services

Downtime can have serious consequences, so HP provides support beyond the standard warranty. You benefit from reduced risk, maximized uptime, predictable service delivery and no unbudgeted repair costs.

Choose from:

### Optimized Care (optimum performance and stability):

4 hour Onsite Support, Maintenance Kit Replacement Service, Installation with Network Configuration Service

### Standard Care (high level of uptime):

Next Business Day Onsite Support, Maintenance Kit Replacement Service, Installation with Network Configuration Service

### Basic Care (minimum recommended support):

Next Business Day Onsite Support

### 4 hour Onsite Support:

Onsite support within four hours after a service call received within the coverage window

### Next Business Day Onsite Support:

Onsite service the next business day after the service call is received

### Maintenance Kit Replacement Service:

Onsite replacement of your printer's maintenance kit including parts, materials, and labor

### Installation with Network Configuration Service:

Assembly, network configuration, and basic administrator familiarization. For more information about HP Care Pack, HP Contractual, or HP Managed Print Services, visit [hp.com/go/printservices](http://hp.com/go/printservices)



Windows 10



HP Care Pack

## Top features

Today's businesses are always on, and always connected. Choose an MFP that can keep up with how you actually work, collaborate, and get things done.

HP Print Security isn't just about securing printers. It's about helping to secure your network with real-time threat detection, automated monitoring, and software validation—designed to detect and stop an attack as it happens.<sup>7</sup>

You have enough to worry about each day. It's easy to accomplish what you need—and exceed your own expectations—with a streamlined MFP that's made for simple use.

Business is all about resource management, and finding efficiencies is everyone's responsibility. HP LaserJet MFPs are designed with the environment in mind, so you can handle what you need while conserving energy wherever possible

### Product

<b>W1A29A</b>	HP LaserJet Pro MFP M428fdn
<b>W1A30A</b>	HP LaserJet Pro MFP M428fdw

### Accessories

<b>D9P29A</b>	HP LaserJet Pro 550-sheet Feeder Tray
<b>POR81AA</b>	HP v222w 16GB Mini USB Drive

### Supplies

<b>CF276A</b>	HP 76A Black Original LaserJet Toner Cartridge (3,000 pages)
<b>CF276X</b>	HP 76X High Yield Black Original LaserJet Toner Cartridge (10,000 pages)

### HP Care Packs

<b>UB9R7E</b>	HP 3 year Next Business Day Service for LaserJet Pro MFP M428
<b>UB9R8E</b>	HP 4 year Next Business Day Service for LaserJet Pro MFP M428
<b>UB9R9E</b>	HP 5 year Next Business Day Service for LaserJet Pro MFP M428
<b>UCOR2E</b>	HP 3 year 4 hour 9x5 Service for LaserJet Pro MFP M428
<b>UCOR3E</b>	HP 4 year 4 hour 9x5 Service for LaserJet Pro MFP M428
<b>UCOR4E</b>	HP 5 year 4 hour 9x5 Service for LaserJet Pro MFP M428
<b>UB9S0E</b>	HP 3 year Next Business Day Exchange Service for LaserJet Pro MFP M428
<b>UB9S1E</b>	HP 3 year Return to Depot Service for LaserJet Pro MFP M428
<b>UB9S2PE</b>	HP 1 year Post Warranty Next Business Day Service for LaserJet Pro MFP M428
<b>UCOR5PE</b>	HP 1 year Post Warranty 4 hour 9x5 Service for LaserJet Pro MFP M428
<b>UB9S4PE</b>	HP 1 year Post Warranty Next Business Day Exchange Service for LaserJet Pro MFP M428
<b>UB9S5PE</b>	HP 1 year Post Warranty Return to Depot Service for LaserJet Pro MFP M428

Protect your investment with HP Care Pack. Let HP certified engineers resolve your technical issues. For more details on HP Care Pack, go to [hp.com/go/cpc](http://hp.com/go/cpc)

### Paper

Contact HP via phone: Asia: 65 6253 8500

### Solutions

HP Web Jetadmin: [hp.com/go/wja](http://hp.com/go/wja)

HP Universal Print Driver: [hp.com/go/upd](http://hp.com/go/upd)

HP Imaging and Printing Security Center: [hp.com/go/ipsc](http://hp.com/go/ipsc)

## HP LaserJet Pro MFP M428 series

Model	HP LaserJet Pro MFP M428fdn	HP LaserJet Pro MFP M428fdw
Product number	W1A29A	W1A30A
Functions	Print, Copy, Scan, Fax, Email	
<b>Print</b>		
Duplex print options	Automatic (default)	
Print speed <sup>8</sup>	<b>Black (A4, normal):</b> Up to 38 ppm; <b>Black (letter, normal):</b> Up to 40 ppm; <b>Black (A4, duplex):</b> Up to 31 ipm; <b>Black (letter, duplex):</b> Up to 33 ipm	
First page out <sup>10</sup>	<b>Black (A4, ready):</b> As fast as 6.3 sec; <b>Black (A4, sleep):</b> As fast as 8.8 sec	
Print technology	Laser	
Print resolution	<b>Black (best)</b> Fine Lines (1200 x 1200 dpi); <b>Black (normal)</b> Normal (native 600 x 600 dpi; enhanced up to 4800 x 600 dpi); <b>Black (fine lines)</b> Fine Lines (1200 x 1200 dpi)	
Print resolution technology	HP FastRes 1200, HP ProRes 1200, Economode	
Print cartridges number	1 (black)	
Standard print languages	HP PCL 6, HP PCL 5c, HP postscript level 3 emulation, PDF, URF, Native Office, PWG Raster	
Printer management	HP Printer Assistant, HP Utility (Mac), 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)	
<b>Scan</b>		
Scan technology	<b>Type:</b> Flatbed, ADF; <b>Technology:</b> Contact Image Sensor (CIS)	
Scan speed <sup>14</sup>	<b>Normal (A4):</b> Up to 29 ppm/46 ipm (b&w), up to 20 ppm/34 ipm (color)	
Scan resolution	<b>Enhanced:</b> Up to 1200 x 1200 dpi; <b>Hardware:</b> Flatbed (Up to 1200 x 1200 dpi); ADF (Up to 300 x 300 dpi); <b>Optical:</b> Up to 1200 x 1200 dpi	
Digital sending standard features	Scan to email with LDAP email address lookup, Scan to network folder, Scan to USB, Scan to Microsoft SharePoint®, Scan to computer with software, Fax archive to network folder, Fax archive to email, Fax to computer, Enable/disable fax, Quick Sets	
Color scanning	Yes	
Scan Size	<b>Flatbed:</b> 216 x 297 mm; <b>ADF:</b> 216 x 356 mm	
Scan input modes	Front-panel scan, copy, email, or file buttons; HP Scan software; and user application via TWAIN or WIA	
Scan file format	PDF, JPG, TIFF	
<b>Copy</b>		
Copier smart software features	Instant-on copy; Duplex copy (2-sided to 2-sided option of "book-style" or "flip style"); up to 999 multiple copies; Scan once print many; Collation; Reduce/enlarge from 25 to 400% (custom page size presets, binding margin, and two pages to one page); Fit to page; Brightness (lighter/darker); Quality (draft/normal/best); ID copy; Enhancements (optimize for content with presets: none, text, photo, mixed); Copy preview (scan glass only)	
First copy out	<b>Black (A4):</b> As fast as 7.2 sec; <b>Black (A4, sleep):</b> As fast as 9.5 sec; <b>Black (letter):</b> As fast as 6.8 sec; <b>Black (letter, sleep):</b> As fast as 9.1 sec	
Copy resolution	<b>Color (text and graphics):</b> Up to 600 x 600 dpi	
Max no of copies	Up to 999 copies	
Copier resize	25 to 400%	
Copier settings	ID Copy; Number of copies; Resize (including 2-Up); Lighter/Darker; Enhancements; Original Size; Binding Margin; Collation; Tray Selection; Two-Sided; Quality (Draft/Normal/Best); Save Current Settings; Restore Factory Defaults	
<b>Fax</b>		
Fax speed	33.6 kbps / 3 sec per page	
Fax memory	<b>Fax memory (A4):</b> Up to 400 pages; <b>Fax memory (letter):</b> Up to 400 pages	
Fax resolution	<b>Black (best):</b> Up to 300 x 300 dpi (halftone enabled); <b>Black (standard):</b> 203 x 98 dpi; <b>Black and white (fine):</b> Up to 203 x 196 dpi; <b>Black photo grayscale:</b> 300 x 300 dpi (halftone)	
Fax Features	<b>Auto fax reduction supported:</b> Yes; <b>Auto-redialing:</b> Yes; <b>Fax delayed sending:</b> Yes; <b>Distinctive ring detection supported:</b> Yes; <b>Fax forwarding supported:</b> Yes; <b>Junk barrier supported:</b> Yes, CSID matching only (Caller ID not supported); <b>Maximum speed dialing numbers:</b> Up to 120 numbers; <b>PC interface supported:</b> Yes, only for sending; <b>Fax polling supported:</b> Yes (receive only)	
Fax smart software features	Permanent fax memory backup; Auto fax reduction; Auto redialing; Delayed sending; Fax forwarding; TAM interface; Junk barrier; Distinctive ring detection; Cover page; Block fax; Billing codes; Save and load; Fax activity reports; Dial prefix setting; Print fax log; HP Digital Fax	
<b>Connectivity</b>		
Standard connectivity	1 Hi-Speed USB 2.0; 1 rear host USB; 1 Front USB port; Gigabit Ethernet LAN 10/100/1000BASE-T network	1 Hi-Speed USB 2.0; 1 rear host USB; 1 Front USB port; Gigabit Ethernet LAN 10/100/1000BASE-T network; 802.11b/g/n / 2.4 / 5 GHz Wi-Fi radio
Mobile printing capability <sup>5</sup>	HP Smart App; Apple AirPrint™; Google Cloud Print™; HP ePrint; Mobile Apps; Mopria™ Certified; Roam capable for easy printing	Apple AirPrint™; Google Cloud Print™; HP ePrint; HP Smart App; Mobile Apps; Mopria™ Certified; Roam capable for easy printing; Wi-Fi® Direct Printing
Wireless capability	No	Yes, built-in dual-band Wi-Fi; Authentication via WEP, WPA/WPA2, WPA Enterprise; Encryption via AES or TKIP; WPS; Wi-Fi Direct; Bluetooth Low-Energy
Network capabilities	Yes, via built-in 10/100/1000Base-TX Ethernet, Gigabit; Auto-crossover Ethernet; Authentication via 802.1X	
Memory	<b>Standard:</b> 512MB DDR; 512MB Flash; <b>Maximum:</b> 512MB DDR; 512MB Flash	
Hard disk	No	
Processor speed	1200 MHz	
Duty cycle (monthly) <sup>11</sup>	Up to 80,000 pages; <b>Recommended monthly page volume<sup>12</sup>:</b> 750 to 4000	
<b>Paper handling</b>		
Input	100-sheet tray 1, 250-sheet input tray 2; 50-sheet Automatic Document Feeder (ADF)	
Output	150-sheet output bin	
Media types	Paper (plain, EcoEFFICIENT, light, heavy, bond, colored, letterhead, preprinted, prepunched, recycled, rough); envelopes; labels;	
Media weight	Tray 1: 60 to 175 g/m <sup>2</sup> ; tray 2, optional 550-sheet tray 3: 60 to 120 g/m <sup>2</sup>	
Media Sizes Custom	Tray 1: 76.2 x 127 to 215.9 x 355.6 mm; Tray 2, 3: 104.9 x 148.59 to 215.9 x 355.6 mm	
Dimensions (w x d x h) <sup>1</sup>	420 x 390 x 323 mm	
Weight	12.6 kg	
What's in the box	HP LaserJet Pro M428fdn; Preinstalled HP Black LaserJet Toner Cartridge (59A for EMEA, 58A for AMS, 76A for AP, yield ~3,000 pages); Getting Started Guide; Support Flyer; Warranty Guide; Regulatory Flyer; Power cord; Phone cord; USB cable (AP Only). HP printer software is available at <a href="http://www.hp.com/support">http://www.hp.com/support</a>	HP LaserJet Pro M428fdw; Preinstalled HP Black LaserJet Toner Cartridge (59A for EMEA, 58A for AMS, 76A for AP, yield ~3,000 pages); Getting Started Guide; Support Flyer; Warranty Guide; Regulatory Flyer; Power cord; Phone cord; USB cable. HP printer software is available at <a href="http://www.hp.com/support">http://www.hp.com/support</a>
Software included	No software solutions are included in the Box. Download software at <a href="http://123.hp.com/laserjet">http://123.hp.com/laserjet</a> or <a href="http://hp.com">http://hp.com</a>	
Warranty features	One-year Bench/Depot Repair warranty. Warranty and support options vary by product, country and local legal requirements. Contact your Contractual Vendor or go to <a href="http://hp.com/support">hp.com/support</a> to learn about HP award winning service and support options in your region. (wty code 4E; wty ID A033)	
<b>Systems</b>		
Compatible operating systems	Windows Client OS (32/64 bit), Win10, Win8.1, Win 8 Basic, Win8 Pro, Win8 Enterprise, Win8 Enterprise N, Win7 Starter Edition SP1, UPD Win7 Ultimate, Mobile OS, iOS, Android, Mac, Apple® macOS Sierra v10.12, Apple® macOS High Sierra v10.13, Apple® macOS Mojave v10.14, 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">http://www.hp.com/go/upd</a>	
Minimum system requirements	<b>PC:</b> 2 GB available hard disk space, Internet connection, USB port, Internet browser. For additional OS hardware requirements see <a href="http://microsoft.com">http://microsoft.com</a> ; <b>Mac:</b> 2 GB available hard drive space, Internet connection or USB port, OS hardware requirements see <a href="http://apple.com">apple.com</a> ;	
Security management	Secure Boot, Secure Firmware Integrity, Runtime Code Integrity, password protected EWS, secure browsing via SSL/TLS 1.0, TLS 1.1, TLS 1.2; IPP over TLS; Network: enable/disable network ports and features, unused protocol and service disablement, SNMPv1, SNMPv2, and SNMPv3, community password change; HP ePrint: HTTPS with certificate validation, HTTP Basic Access Authentication, SASL authentication; LDAP authentication and authorization; Firewall and ACL; control panel lock, certificates configuration, UPD PIN printing, Syslog, signed firmware, administrator settings, access control, 802.1x authentication (EAP-TLS, and PEAP); Encrypted data storage; Secure data erase; Automatic firmware updates; Secure Encrypted Print via optional job storage, compatible with optional HP JetAdvantage Security Manager	Secure Boot, secure firmware integrity, runtime code integrity, password protect EWS, secure browsing via SSL/TLS 1.0, TLS 1.1, TLS 1.2; IPP over TLS; Network: enable/disable network ports and features, unused protocol and service disablement, SNMPv1 & SNMPv2 community password change; HP ePrint: HTTPS with certificate validation, HTTP Basic Access Authentication, SASL authentication; LDAP authentication and authorization; Firewall and ACL; control panel lock, certificates configuration, UPD PIN printing, Syslog, signed firmware, administrator settings, access control SNMPv3, 802.1x wireless authentication (EAP-TLS, LEAP, and PEAP), authentication via WEP, WPA/WPA2 Personal, WPA2-enterprise wired; encryption via AES or TKIP; Encrypted data storage; Secure data erase; Automatic firmware updates; Secure Encrypted Print via optional job storage, Compatible with optional HP JetAdvantage Security Manager, IPPS
Fonts and typefaces	84 scalable TrueType fonts	
Control panel	2.7" Color Touchscreen	
Display	2.7" (6.86 cm) intuitive color touchscreen (CGD)	
Energy efficiency compliance	ENERGY STAR® qualified; EPEAT® Silver; CECP; Blue Angel RAL-UZ 205 <sup>16</sup>	
ENERGY STAR Qualified	Yes	

<b>Power</b>	<b>Power supply type:</b> Internal (Built-in) power supply; <b>Power supply required:</b> 110-volt input voltage: 110 to 127 VAC (+/- 10%), 50/60 Hz (+/- 2 Hz); 220-volt input voltage: 220 to 240 VAC (+/- 10%), 50/60 Hz (+/- 2 Hz) (Not dual voltage, product varies by part number with # Option code identifier); <b>Power consumption<sup>2</sup>:</b> 510 watts (active printing), 7.5 watts (ready), 0.9 watts (sleep), 0.9 watts (Auto Off/Wake on LAN, enabled at shipment), 0.06 watts (Auto-off/Manual-on), 0.06 (Manual Off); <b>Typical Electricity Consumption number<sup>18</sup>:</b> BA: 1,144 kWh/week, ES: 1.247 kWh/week
<b>Acoustics</b>	<b>Acoustic power emissions<sup>7</sup>:</b> 6.7 Bel(A) (Printing at 38 ppm); <b>Acoustic power emissions (ready):</b> Inaudible; <b>Acoustic pressure emissions bystander (active, printing):</b> 53 dB(A); <b>Acoustic pressure emissions bystander (ready):</b> Inaudible
<b>Environmental ranges</b>	<b>Operating temperature range:</b> 15 to 32.5°C; <b>Recommended operating temperature:</b> 17.5 to 25°C; <b>Operating humidity range:</b> 10 to 80% RH (non-condensing); <b>Recommended operating humidity range:</b> 30 to 70% RH
<b>Safety approvals and requirements</b>	IEC 60950-1:2005 +A1:2009+A2:2013/EN 60950-1:2006 +A11:2009+A1:2010+A12:2011+A2:2013; IEC 60825-1:2014/EN 60825-1:2014 (Class 1 Laser/LED Product); IEC 62479:2010/EN 62479:2010;
<b>Supported network protocols</b>	TCP/IP, IPv4, IPv6; Print: TCP-IP port 9100 Direct Mode, LPD (raw queue support only), Web Services Printing, HP ePrint, Apple AirPrint™, Google Cloud Print 2.0, Mopria, IPP Print; Discovery: SLP, Bonjour, Web Services Discovery; IP Config: IPv4 (BootP, DHCP, AutoIP, Manual), IPv6 (Stateless Link-Local and via Router, Statefull via DHCPv6), SSL Security and Certificate management; Management: SNMPv1, SNMPv2, SNMPv3, HTTP/HTTPS, Syslog, FTP FW Download

## Footnotes

- <sup>1</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>2</sup> Connect printer/MFP to the network and complete customization through the Embedded Web Server.
- <sup>3</sup> Wireless operations are compatible with 2.4 GHz and 5 GHz operations. App or software and HP ePrint account registration may also be required. Some features require purchase of an optional accessory. Learn more at <http://hp.com/go/mobileprinting>.
- <sup>4</sup> Feature only supported on the HP LaserJet Pro MFP M428dw and M428fdw. Wireless performance is dependent on physical environment and distance from access point, and may be limited during active VPN connections
- <sup>5</sup> Feature is supported on the HP LaserJet Pro Mfp M428dw and M428fdw only. Mobile device needs to be connected directly to the WiFi network of a wireless direct-capable MFP or printer prior to printing. Depending on mobile device, an app or driver may also be required. Learn more at <http://hp.com/go/businessmobileprinting>
- <sup>6</sup> To enable HP Roam, some devices may require firmware to be upgraded and an optional accessory to add Bluetooth® Low Wnergy (BLE) beaconing capabilities. Subscription or accessory may be required. For more information, visit <http://hp.com/go/roam>
- <sup>7</sup> Based on HP review of 2019 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>8</sup> Pin printing enabled via USB installed in rear of device.
- <sup>9</sup> Microsoft and PowerPoint are U.S. registered trademarks of the Microsoft group of companies. Feature works with Microsoft Word and PowerPoint 2003 and later. Only Latin language fonts are supported.
- <sup>10</sup> All new product introductions beginning in Fall 2019 will include consistent worldwide default duplex settings (across bundles/drivers); Spring 2019 will include consistent worldwide default duplex settings for most products across the most common drivers.
- <sup>11</sup> Based on HP Internal testing using normalized TEC Value, 2019.
- <sup>12</sup> Instant threat notifications can appear on the device control panel when a potential threat occurs from malicious intent or there is a bug or vulnerability in the firmware code of the device. If this error raises concern, please contact your company IT representative or, if unavailable, HP Support, who can investigate the cause through analysis of device syslog data using a standard SIEM tool from McAfee, Splunk, Arcsight or SIEMonster. The control panel error message may show an error code on a blue screen during code signature checks or memory write intrusions.
- <sup>13</sup> HP Auto-On/Auto-Off Technology capabilities subject to printer and settings; may require a firmware upgrade.

## Technical specifications disclaimers

- <sup>1</sup> Without trays and covers not extended.
- <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 values typically based on measurement of 115 V device.
- <sup>3</sup> Toner cartridges designed for distribution and use within a designated region only; will not work outside of designated region.
- <sup>4</sup> Declared yield value in accordance with ISO/IEC 19752. Actual yields vary considerably based on images printed and other factors. For more information, visit <http://www.hp.com/go/learnaboutsupplies>
- <sup>5</sup> Local printing requires mobile device and printer to be on the same network (usually Wi-Fi access points bridge wireless to wired connections) or have a direct wireless connection. Wireless performance is dependent on physical environment and distance from access point. Remote printing requires an Internet connection to an HP web-connected printer. Wireless broadband use requires separately purchased service contract for mobile devices. Check with service provider for coverage and availability in your area. For more information visit [hp.com/go/mobileprinting](http://hp.com/go/mobileprinting). To enable HP Roam, some devices may require firmware to be upgraded and an optional accessory to add Bluetooth® Low Energy (BLE) beaconing capabilities. Subscription may be required. For more information, visit <http://hp.com/go/roam>
- <sup>6</sup> First Copy Out from Ready and Simplex Copy Speed measured using ISO/IEC 29183, Duplex Copy Speed measured using ISO/IEC 24735, excludes first set of test documents. For more information see <http://www.hp.com/go/printerclaims>. Exact speed varies depending on the system configuration, software application and document complexity.
- <sup>7</sup> Acoustic values are subject to change. For current information see <http://www.hp.com/support>. Configuration tested: base model, simplex printing, A4 paper at an average of 38 ppm.
- <sup>8</sup> Measured using ISO/IEC 24734, excludes first set of test documents. For more information see <http://www.hp.com/go/printerclaims>. Exact speed varies depending on the system configuration, software application, driver, and document complexity.
- <sup>9</sup> Measured using ISO 24734 Feature Test, A5 Landscape Feed. Speed may vary based on content, PC, media orientation, and media type.
- <sup>10</sup> Measured using ISO/IEC 17629. For more information see <http://www.hp.com/go/printerclaims>. Exact speed varies depending on the system configuration, software application, driver, and document complexity.
- <sup>11</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>12</sup> HP recommends that the number of pages per month of imaged output 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>13</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. For more information, visit <http://www.hp.com/go/SureSupply>; only available with Original HP supplies; Internet access required.
- <sup>14</sup> Scan speeds measured from ADF. Actual processing speeds may vary depending on scan resolution, network conditions, computer performance, and application software.

To learn more, visit <http://www.hp.com>

