

# HP Color LaserJet Pro M452 series



**A fast, capable colour printer with robust security and innovative toner for more pages.<sup>2</sup>**

Ideal printing performance and robust security for how you work. This capable colour printer finishes jobs faster and delivers comprehensive security to guard against threats.<sup>1</sup> Original HP Toner cartridges with JetIntelligence produce more pages.<sup>2</sup>



HP Color LaserJet Pro M452nw

### Fast printing. Strong protection

- Grab pages and go—without waiting around. This printer wakes up and prints faster than the competition.<sup>1</sup>
- Breeze through multipage documents with two-sided printing that's faster than leading competitors.<sup>1</sup>
- Protect information and control access to confidential print jobs with HP JetAdvantage Private Print.<sup>3</sup>
- Keep printing safe from boot up to shutdown with security features that guard against complex threats.



HP Color LaserJet Pro M452dn

### More pages, performance, and protection

- Get the most prints for your money—with Original HP High Yield Colour Toner cartridges with JetIntelligence.<sup>2</sup>
- Count on professional quality at high speeds with HP ColorSphere 3 toner.
- Help ensure you're getting the authentic HP quality you paid for with innovative anti-fraud technology.
- Print right away with preinstalled toner cartridges. Replace them with optional high-yield cartridges.



HP Color LaserJet Pro M452dw

### Easy management. Efficient printing

- Easily manage print jobs directly at the printer—just tap and swipe the 3-inch (7.6 cm) touchscreen.<sup>5</sup>
- Easily print Microsoft® Word and PowerPoint® documents—now directly from your USB drive.<sup>4</sup>
- Easily manage devices and settings using HP Web Jetadmin with a suite of essential management features.<sup>6</sup>
- Print using less energy than competitors—enhanced by Original HP Toner cartridges with JetIntelligence.<sup>7</sup>

### Stay connected with easy mobile printing options

- Easily print from a variety of smartphones and tablets—generally no setup or apps required.<sup>8</sup>
- Count on wireless direct printing in the office—from mobile devices—without accessing the company network.<sup>9</sup>
- Help workers print with just a touch of their NFC-enabled mobile device to the printer—no network needed.<sup>11</sup>
- Easily access, print, and share resources with Ethernet and wireless networking.<sup>10</sup>

<sup>1</sup> Based on HP internal testing of top three leading competitors' first page out from sleep mode and duplex print speed completed 8/2015. Subject to device settings. Actual results may vary. For details see [hp.com/go/Ljclaims](http://hp.com/go/Ljclaims) <sup>2</sup> Based on cartridge yields for HP 305X compared with HP 410X Original HP LaserJet Toner Cartridges. For more information, see [hp.com/go/learnaboutsupplies](http://hp.com/go/learnaboutsupplies) <sup>3</sup> Feature is only available for the HP Color LaserJet Pro M452dw. HP JetAdvantage Private Print is available at no charge and requires that the printer be connected to the Internet with web services enabled. Not available in all countries. For more information, see [hpjetadvantage.com](http://hpjetadvantage.com) <sup>4</sup> Feature is only available for the HP Color LaserJet Pro M452dw. 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>5</sup> Feature is only available for the HP Color LaserJet Pro M452dw. Requires a wireless access point and an Internet connection to the printer. Services require registration. App availability varies by country, language, and agreements and requires a firmware upgrade. For details, visit [hpconnected.com](http://hpconnected.com) <sup>6</sup> HP Web Jetadmin is free and available for download at [hp.com/go/webjetadmin](http://hp.com/go/webjetadmin) <sup>7</sup> Based on HP testing using the ENERGY STAR® program's Typical Electricity Consumption (TEC) method or as reported in [energystar.gov](http://energystar.gov) of top three leading competitors as of 8/2015. Actual results may vary. For details see [hp.com/go/Ljclaims](http://hp.com/go/Ljclaims) <sup>8</sup> Wireless operations are compatible with 2.4 GHz operations only. App or software and HP ePrint account registration may also be required. Some features require purchase of an optional accessory. Learn more at [hp.com/go/mobileprinting](http://hp.com/go/mobileprinting) <sup>9</sup> Feature is only supported by the HP Color LaserJet Pro M452nw and M452dw. Mobile device needs to be connected directly to the Wi-Fi 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 [hp.com/go/businessmobileprinting](http://hp.com/go/businessmobileprinting) <sup>10</sup> Feature is only supported by the HP Color LaserJet Pro M452nw and M452dw. Wireless performance is dependent on physical environment and distance from access point, and may be limited during active VPN connections. <sup>11</sup> Feature is only supported by the HP Color LaserJet Pro M452dw. Requires a compatible NFC-printing-enabled mobile device. For a list of compatible NFC-printing-enabled mobile devices, see [hp.com/go/nfcprinting](http://hp.com/go/nfcprinting)

## Product walkaround

- 1 3-inch (7.6 cm) colour touchscreen with gesturing tilts up for easier viewing
- 2 Convenient front on/off button
- 3 50-sheet multipurpose tray 1
- 4 250-sheet tray 2
- 5 150-sheet output bin
- 6 Easy-access USB port to print files directly<sup>1</sup>
- 7 Built-in wireless direct printing<sup>2</sup>/NFC touch-to-print<sup>3</sup>
- 8 Front door release button (access to HP JetIntelligence Toner cartridges)
- 9 Built-in automatic two-sided printing
- 10 USB port for job storage<sup>4</sup> with PIN printing
- 11 Hi-Speed USB 2.0 printing port
- 12 Ethernet network port
- 13 Built-in wireless networking<sup>5</sup>
- 14 256 MB memory and 1.2 GHz processor
- 15 Rear door (access to print path)
- 16 Power connection

HP Color LaserJet Pro M452dw shown



Front view



Rear view

## Series at a glance



Model	M452nw	M452dn	M452dw
<b>Product number</b>	CF388A	CF389A	CF394A
<b>Print speed, pages per minute (ppm), letter/A4<sup>6</sup></b>	Up to 28/27 ppm	Up to 28/27 ppm	Up to 28/27 ppm
<b>50-sheet multipurpose tray, 250-sheet tray 2</b>	✓	✓	✓
<b>550-sheet tray 3</b>	Optional	Optional	Optional
<b>Control panel</b>	2-line LCD	2-line LCD	3-inch (7.6 cm) colour touchscreen
<b>Easy-access USB port<sup>1</sup></b>	Not available	Not available	✓
<b>Two-sided printing</b>	Manual	Automatic	Automatic
<b>Networking</b>	Gigabit Ethernet, wireless 802.11b/g/n <sup>5</sup>	Gigabit Ethernet	Gigabit Ethernet, wireless 802.11b/g/n <sup>5</sup>
<b>Mobile printing</b>	Wireless direct printing, <sup>2</sup> HP ePrint, <sup>7</sup> Apple AirPrint™, <sup>8</sup> Mopria-certified, <sup>9</sup> Google Cloud Print™ 2.0	HP ePrint, <sup>7</sup> Apple AirPrint, <sup>8</sup> Mopria-certified, <sup>9</sup> Google Cloud Print 2.0	Wireless direct printing, <sup>2</sup> NFC touch-to-print, <sup>3</sup> HP ePrint, <sup>7</sup> Apple AirPrint, <sup>8</sup> Mopria-certified, <sup>9</sup> Google Cloud Print 2.0

<sup>1</sup> Easy-access USB drive is only available for the HP Color LaserJet Pro M452dw. Feature works with PDF, JPG, and Microsoft Word and PowerPoint 2003 and later. Only Latin language fonts are supported. <sup>2</sup> Wireless direct printing is only supported by the HP Color LaserJet Pro M452nw and M452dw. Mobile device needs to be connected directly to the Wi-Fi network of a wireless direct-capable MFP or printer prior to printing. Depending on mobile device, an app or driver may also be required. Wireless performance is dependent on physical environment and distance from the access point in the MFP or printer. Learn more at [hp.com/go/businessmobileprinting](http://hp.com/go/businessmobileprinting) <sup>3</sup> Touch-to-print capability is supported by the HP Color LaserJet Pro M452dw only. Mobile device must support near-field communications (NFC)-enabled printing. For more information, see [hp.com/go/nfcprinting](http://hp.com/go/nfcprinting) <sup>4</sup> Requires purchase of separate USB flash drive with at least 16 GB capacity. <sup>5</sup> Wireless networking is only supported by the HP Color LaserJet Pro M452nw and M452dw. Wireless performance is dependent on physical environment and distance from access point, and may be limited during active VPN connections. <sup>6</sup> Printing speed measured using ISO/IEC 24734 and 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>7</sup> Printer requires ePrint account registration. App or software may be required. Wireless operations are compatible with 2.4 GHz operations only. Learn more at [hp.com/go/mobileprinting](http://hp.com/go/mobileprinting) <sup>8</sup> Supports the following devices running iOS 4.2 or later: iPad, iPad 2, iPhone (3GS or later), iPod touch (3rd generation or later). Works with HP's AirPrint-enabled printers and requires the printer be connected to the same network as your iOS device. Wireless performance is dependent on physical environment and distance from the access point. <sup>9</sup> Mopria-certified HP printer and mobile device must be connected to the same wireless network or have a direct wireless connection. Performance is dependent on physical environment and distance from the wireless access point. Wireless operations are compatible with 2.4 GHz routers only.

## 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 hr 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)



## Top Features

Shift your office into high gear with a powerful colour printer that doesn't keep you waiting. Print your first page and two-sided prints faster than the competition,<sup>1</sup> and help keep your device, data, and documents safe—from boot up to shutdown.

Print more professional-quality colour pages than ever before.<sup>2</sup> Specially designed Original HP Toner cartridges with JetIntelligence deliver better performance, higher energy efficiency, and authentic HP quality—which the competition can't match.<sup>2</sup>

Easily produce the documents you need to move work forward, while conserving energy. This power-saving printer is easy to set up and manage. Print Microsoft® Word and PowerPoint® documents from the USB port,<sup>3</sup> using the intuitive touchscreen.<sup>4</sup>

Keep business nimble when needs shift or opportunity strikes—in the office or on the go.<sup>5</sup> Print wirelessly with or without accessing the network,<sup>6,7</sup> and stay connected with Ethernet capabilities. Print with a touch from mobile devices.<sup>5,8</sup>

### Product

CF388A	HP Color LaserJet Pro M452nw
CF389A	HP Color LaserJet Pro M452dn
CF394A	HP Color LaserJet Pro M452dw

### Accessories

CF404A	HP LaserJet 550-sheet Paper Feeder
P0R81AA	HP v222w 16GB Mini USB Drive

### Supplies<sup>4</sup>

CF410A	HP 410A Black LaserJet Toner Cartridge (~2,300 pages)
CF410X	HP 410X Black LaserJet Toner Cartridge (~6,500 pages)
CF411A	HP 410A Cyan LaserJet Toner Cartridge (~2,300 pages)
CF411X	HP 410X Cyan LaserJet Toner Cartridge (~5,000 pages)
CF412A	HP 410A Yellow LaserJet Toner Cartridge (~2,300 pages)
CF412X	HP 410X Yellow LaserJet Toner Cartridge (~5,000 pages)
CF413A	HP 410A Magenta LaserJet Toner Cartridge (~2,300 pages)
CF413X	HP 410X Magenta LaserJet Toner Cartridge (~5,000 pages)

### HP Care Packs

U8TN1E	HP 3-year Next Business Day Color LaserJet M452 Hardware Support
U8TN2E	HP 4-year Next Business Day Color LaserJet M452 Hardware Support
U8TN3E	HP 5-year Next Business Day Color LaserJet M452 Hardware Support
U8TN6PE	HP 1-year Post Warranty Next Business Day Color LaserJet M452 Hardware Support

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 Fonts, Barcodes, and IPDS Emulation available at [hp.com/go/laserjetfonts](http://hp.com/go/laserjetfonts)

To learn more about available infrastructure, management, and workflow solutions, visit [hp.com/go/gsc](http://hp.com/go/gsc)

<sup>1</sup> Based on HP internal testing of top three leading competitors' first page out from sleep mode and duplex print speed completed 8/2015. Subject to device settings. Actual results may vary. For details see [hp.com/go/ljclaims](http://hp.com/go/ljclaims)  
<sup>2</sup> Based on cartridge yields for HP 305X compared with HP 410X Original HP LaserJet Toner Cartridges. For more information, see [hp.com/go/learnaboutsups](http://hp.com/go/learnaboutsups)  
<sup>3</sup> Feature is only available for the HP Color LaserJet Pro M452dw. 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>4</sup> Feature is only available for the HP Color LaserJet Pro M452dw. Requires a wireless access point and an Internet connection to the printer. Services require registration. App availability varies by country, language, and agreements and requires a firmware upgrade. For details, visit [hpconnected.com](http://hpconnected.com)  
<sup>5</sup> Wireless operations are compatible with 2.4 GHz operations only. App or software and HP ePrint account registration may also be required. Some features require purchase of an optional accessory. Learn more at [hp.com/go/mobileprinting](http://hp.com/go/mobileprinting)  
<sup>6</sup> Feature is only supported by the HP Color LaserJet Pro M452nw and M452dw. Mobile device needs to be connected directly to the Wi-Fi 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 [hp.com/go/businessmobileprinting](http://hp.com/go/businessmobileprinting)  
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<sup>8</sup> Feature is only supported by the HP Color LaserJet Pro M452dw. Requires a compatible NFC-printing-enabled mobile device. For a list of compatible NFC-printing-enabled mobile devices, see [hp.com/go/nfcpri](http://hp.com/go/nfcpri)

# HP Color LaserJet Pro M452 series

Technical specifications	HP Color LaserJet Pro M452nw (CF388A)	HP Color LaserJet Pro M452dn (CF389A)	HP Color LaserJet Pro M452dw (CF394A)
<b>Functions</b>	Print only		
<b>Print</b>			
Duplex print options	Manual (driver support provided)		Automatic (standard)
Print speed <sup>1</sup>	<b>Black (normal, A4):</b> Up to 27 ppm; <b>Black (normal, letter):</b> Up to 28 ppm; <b>Colour (normal, A4):</b> Up to 27 ppm; <b>Colour (normal, letter):</b> Up to 28 ppm; <b>Black (Landscape, A5):</b> Up to 49 ppm; <b>Colour (Landscape, A5):</b> Up to 49 ppm; <b>Black Duplex (A4):</b> Up to 24 ipm; <b>Black Duplex (letter):</b> Up to 25 ipm; <b>Colour Duplex (A4):</b> Up to 24 ipm; <b>Colour Duplex (letter):</b> Up to 25 ipm		
First page out <sup>2</sup>	<b>Black (A4, ready):</b> As fast as 9.0 sec; <b>Colour (A4, ready):</b> As fast as 9.9 sec; <b>Black (A4, sleep):</b> As fast as 11.4 sec; <b>Colour (A4, sleep):</b> As fast as 11.5 sec		
Print technology	Laser		
Print resolution	<b>Black (best/normal):</b> 600 x 600 dpi, Up to 38,400 x 600 enhanced dpi; <b>Colour (best/normal):</b> 600 x 600 dpi, Up to 38,400 x 600 enhanced dpi		
Print resolution technologies	HP ImageREt 3600, PANTONE® calibrated		
Print cartridges number	4 (1 each black, cyan, magenta, yellow)		
Standard print languages	HP PCL 6, HP PCL 5c, HP postscript level 3 emulation, PDF, URF, PCLm, Native Office, PWG Raster		
Printer management	Printer Administrator Resource Kit (Driver Configuration Utility, Driver Deployment Utility, Managed Printing Administrator); HP Web JetAdmin Software; HP Proxy Agent Software; HP Imaging and Printing Security Center; HP Utility (Mac); HP Device Toolbox (Win 7)		
Printer smart software features	N-up printing, collation, HP ePrint, Apple AirPrint™, Mopria certified, Google Cloud Print, NFC touch-to-print, wireless direct printing, HP Auto-On/Auto-Off Technology, Intuitive 3" touchscreen control panel, Print from Cloud using business apps on the control panel, HP JetAdvantage Private Print, Job Storage with PIN printing, Print from USB		
<b>Connectivity</b>			
Standard connectivity	Hi-Speed USB 2.0 port; built-in Gigabit Ethernet 10/100/1000 Base-TX network port; Easy-access USB		Hi-Speed USB 2.0 port; built-in Gigabit Ethernet 10/100/1000 Base-TX network port; Easy-access USB; Host USB
Mobile printing capability <sup>3</sup>	HP ePrint, Apple AirPrint™, Wireless Direct Printing, Mopria-certified, Google Cloud Print 2.0, Mobile Apps	HP ePrint, Apple AirPrint™, Mopria-certified, Google Cloud Print 2.0, Mobile Apps	HP ePrint, Apple AirPrint™, Wireless Direct Printing, NFC touch-to-print, Mopria-certified, Google Cloud Print 2.0, Mobile Apps
Network ready	Standard (built-in Gigabit Ethernet, Wi-Fi) [Operates as both an AP (with Wi-Fi Direct) and STA]	Standard (built-in Gigabit Ethernet)	Standard (built-in Gigabit Ethernet, Wi-Fi) [Operates as both an AP (with Wi-Fi Direct) and STA]
Network capabilities	Via built-in 10/100/1000Base-TX Ethernet, Gigabit; Auto-crossover Ethernet; Authentication via 802.1X		
Wireless capability	Yes, Built-in Wi-Fi; Authentication via WEP, WPA/WPA2, WPA Enterprise; Encryption via AES or TKIP; WPS; Wi-Fi Direct Printing	No	Yes, Built-in Wi-Fi; Authentication via WEP, WPA/WPA2, WPA Enterprise; Encryption via AES or TKIP; WPS; Wi-Fi Direct Printing; NFC touch-to-print
HP ePrint capability	Yes		
<b>Memory</b>	<b>Standard/Maximum:</b> 256 MB NAND Flash, 128 MB DRAM		<b>Standard/Maximum:</b> 256 MB NAND Flash, 256 MB DRAM
<b>Duty cycle<sup>4</sup></b>	Up to 50,000 pages; <b>Recommended monthly page volume:</b> <sup>5</sup> 750 to 4,000 pages		
<b>Processor speed</b>	1200 Mhz		
<b>Paper handling</b>			
Input	50-sheet multipurpose tray, 250-sheet input tray; <b>Optional:</b> 550-sheet tray		
Output	150-sheet output bin		
Media type	Paper (bond, brochure, coloured, glossy, letterhead, photo, plain, preprinted, prepunched, recycled, rough), postcards, labels, envelopes		
Media weight	<b>Tray 1:</b> 60 to 176 g/m <sup>2</sup> (up to 200 g/m <sup>2</sup> with postcards and HP Colour laser glossy photo papers); <b>Tray 2:</b> 60 to 163 g/m <sup>2</sup> (up to 176 g/m <sup>2</sup> with postcards, up to 200 g/m <sup>2</sup> HP Colour laser glossy photo papers); optional <b>Tray 3:</b> 60 to 163 g/m <sup>2</sup> (up to 176 g/m <sup>2</sup> with postcards, up to 150 g/m <sup>2</sup> Glossy media); Automatic duplexer: 60 to 163 g/m <sup>2</sup>		
Media sizes custom	<b>Tray 1:</b> 76 x 127 to 216 x 356 mm; <b>Tray 2, optional Tray 3:</b> 100 x 148 to 216 x 356 mm		
<b>Dimensions (W x D x H)</b>	412 x 453 x 295 mm (16.2 x 17.8 x 11.6 in)		412 x 469 x 295 mm (16.2 x 18.5 x 11.6 in)
<b>Weight</b>	17.5 kg (38.6 lb)		18.9 kg (41.7 lb)
<b>What's in the box<sup>6</sup></b>	HP Color LaserJet Pro M452nw; 4 preinstalled Introductory HP 410A LaserJet Toner cartridges (Black, Cyan, Magenta, Yellow: ~1,200 pages); In-box documentation (Getting Started Guide, Install Poster); Software drivers and documentation on CD-ROM; Power cord; USB cable	HP Color LaserJet Pro M452dn; 4 preinstalled Introductory HP 410A LaserJet Toner cartridges (Black, Cyan, Magenta, Yellow: ~1,200 pages); In-box documentation (Getting Started Guide, Install Poster); Software drivers and documentation on CD-ROM; Power cord; USB cable	HP Color LaserJet Pro M452dw; 4 preinstalled Introductory HP 410A LaserJet Toner cartridges (Black, Cyan, Magenta, Yellow: ~1,200 pages); In-box documentation (Getting Started Guide, Install Poster), warranty card (China, Mexico); Software drivers and documentation on CD-ROM; Power cord; USB cable
<b>Warranty features</b>	One-year, Bench Repair limited warranty		
<b>Systems</b>			
Compatible operating systems	Windows OS compatible with In-Box Driver: Windows XP SP3 all 32-bit editions (XP Home, XP Pro, etc), Windows Vista all 32-bit editions (Home Basic, Premium, Professional, etc), Windows 7 all 32- & 64-bit editions, Windows 8/8.1 all 32- & 64-bit editions (excluding RT OS for Tablets), Windows 10 all 32- & 64-bit editions (excluding RT OS for Tablets); Windows OS compatible with Universal Print Driver (From HP.com); Windows XP SP3 32- & 64-bit editions (XP Home, XP Pro, etc), Windows Vista all 32- & 64-bit editions (Home Basic, Premium, Professional, etc), Windows 7 all 32- & 64-bit editions, Windows 8/8.1 all 32- & 64-bit editions (excluding RT OS for Tablets), Windows 10 all 32- & 64-bit editions (excluding RT OS for Tablets); Mac OS (HP Print Drivers available from HP.com and Apple Store): OS X 10.7 Lion, OS X 10.8 Mountain Lion, OS X 10.9 Mavericks, OS X 10.10 Yosemite; Mobile OS (In-OS drivers): iOS, Android, Windows 8/8.1/10 RT; Linux OS (in-OS HPLIP); SUSE Linux (12.2, 12.3, 13.1); Fedora (17, 18, 19, 20); Linux Mint (13, 14, 15, 16, 17); Boss (3.0, 5.0); Ubuntu (10.04, 11.10, 12.04, 12.10, 13.04, 13.10, 14.04, 14.10); Debian (6.0.x, 7.x); Other OS: UNIX		
Minimum system requirements	<b>PC:</b> Windows XP (SP2) (32-bit) or newer; 233 MHz processor or higher; 512 MB RAM; 400 MB available hard disk space; CD-ROM or Internet; USB or Network connection; <b>Mac:</b> Mac OS X v 10.7 or newer; Internet; USB or Network connection; 1 GB available hard disk space		
<b>Fonts and typefaces</b>	84 scalable TrueType fonts		
<b>Control panel</b>	2-line backlit LCD graphic display; 5 buttons (Cancel, Select, Reverse, Right/Left arrows); LED indicator lights (Attention, Ready)	3.0-in intuitive colour touchscreen; 3 Buttons (Home, Help, Back)	
<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%), 60 Hz (+/- 3 Hz); 220-volt input voltage: 220 to 240 VAC (+/- 10%), 50 Hz (+/- 3 Hz) (Not dual voltage, power supply varies by part number with # option code identifier); <b>Power consumption:</b> <sup>7</sup> 570 watts (Active Printing), 17.6 watts (Ready), 2.4 watts (Sleep), 0.6 watts (Auto-On/Auto-Off, via USB connectivity), 0.05 watts (Shutdown or off)		
<b>Software included</b>	<b>For Windows OS:</b> HP Software Installer/Uninstaller, HP PCL 6 Printer Driver, HP Device Experience (DXP), HP Update, Product Registration Assist, HP Web Services Assist (HP Connected), HP Device Toolbox, HP Product Improvement Study, Online user manuals. (Software varies by OS: WinXP/Vista – driver only); Windows 7: Full solution; Windows 8+ and newer: drivers only with more apps available in MS App store; <b>For Mac OS:</b> Welcome Screen, (Directs users to HP.com or OS App Source for LaserJet Software)		
<b>Acoustic</b>	<b>Acoustic power emissions:</b> <sup>8</sup> 6.3 B(A); <b>Acoustic power emissions (ready):</b> 4.8 B(A); <b>Acoustic pressure emissions bystander (active, printing):</b> 49 dB(A); <b>Acoustic pressure emissions bystander (ready):</b> 34 dB(A)		
<b>Environmental ranges</b>	<b>Operating temperature range:</b> 15 to 30° C (59 to 86° F); <b>Recommended operating temperature:</b> 15 to 27° C (59 to 80.6° F); <b>Non-operating humidity range:</b> 10 to 95% RH (non-condensing); <b>Operating humidity range:</b> 10 to 80% RH (non-condensing); <b>Recommended operating humidity range:</b> 20 to 70% RH (non-condensing)		
<b>Security management</b>	Embedded Web Server: password-protection, secure browsing via SSL/TLS; Network: enable/disable network ports and features, SNMPv1 & SNMPv2 community password change; HP ePrint: HTTPS with certificate validation, HTTP Basic Access Authentication, SASL authentication; Firewall and ACL; SNMPv3, 802.1X, Secure Boot, authentication via WEP, WPA/WPA2 Personal, WPA2 Enterprise; Encryption via AES or TKIP	Embedded Web Server: password-protection, secure browsing via SSL/TLS; Network: enable/disable network ports and features, SNMPv1 & SNMPv2 community password change; HP ePrint: HTTPS with certificate validation, HTTP Basic Access Authentication, SASL authentication; Firewall and ACL; SNMPv3, 802.1X, Secure Boot	Embedded Web Server: password-protection, secure browsing via SSL/TLS; Network: enable/disable network ports and features, SNMPv1 & SNMPv2 community password change; HP ePrint: HTTPS with certificate validation, HTTP Basic Access Authentication, SASL authentication; Firewall and ACL; SNMPv3, 802.1X, Secure Boot, authentication via WEP, WPA/WPA2 Personal, WPA2 Enterprise; Encryption via AES or TKIP
<b>Safety approvals and requirements</b>	EN 60950-1:2006 +A11:2009 +A1:2010 +A12:2011; IEC 60950-1:2005 +A1:2009; EN 62479:2010/IEC 62479:2010; CAN/CSA C22.2 No. 60950-1-07 2nd Ed. 2011-12; Compliance of IEC 60950-1 standard considers all country deviations according to the most recent IEC/CEC CB Bulletin; UL/cUL Listed and UL CoC (US/Canada); GS Certificate (Germany, Europe); Low Voltage Directive 2006/95/EC with CE Mark (Europe); Compliance with Laser safety standards: EN 60825-1:2007/IEC 60825-1:2007 (Class 1 Laser Product); Compliance with Laser safety standards 21 CFR 1040.10 and 1040.11 except for deviations pursuant to Laser notice No. 50, Dated June 24, 2007 FDA 21 CFR subchapter J part 1010 and 1040 (FDA Accession Number via test/reporting to CDRH Factory ID, location and inspections are part of the certification process and record)		
<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, FTP Print, IPP Print; Discovery: SLP, Bonjour, Web Services Discovery; IP Config: IPv4 (BootP, DHCP, AutoIP, Manual), IPv6 (Stateless Link-Local and via Router, Stateful via DHCPv6), SSL Security and Certificate management; Management: SNMPv1, SNMPv2, SNMPv3, HTTP/HTTPS, Syslog, FTP Web Download		

<sup>1</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). Actual speed varies depending on the system configuration, software application, driver, and document complexity.  
<sup>2</sup> Measured using ISO/IEC 17629. For more information see [hp.com/go/printerclaims](http://hp.com/go/printerclaims). Actual speed varies depending on the input voltage, system configuration, software application, driver, and document complexity.  
<sup>3</sup> May require a firmware upgrade to be compatible, download at [hp.com/go/support](http://hp.com/go/support)  
<sup>4</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>5</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>6</sup> Declared cartridge yield value in accordance with ISO/IEC 19752. Actual yields vary considerably based on images printed and other factors. For more information, visit [hp.com/go/learnaboutsupplies](http://hp.com/go/learnaboutsupplies). HP Color LaserJet Pro M452 in-box cartridge may have higher yield than stated for printer units manufactured before 2017.  
<sup>7</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.

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