



# HP Color LaserJet Pro M452nw

Ideal printing performance and robust security for how you work. This capable color 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>



**Print Speed:**Black & Color (letter): Up to 28 ppm; First Page Out Time from Ready (Letter): 8.9 seconds (black), 9.5 seconds (color)

**Print Resolution:**Black & color (best): 600 x 600 dpi, Up to 38,400 x 600 enhanced dpi

**Print Resolution Technology:**HP ImageREt 3600, PANTONE calibrated

**Standard Connectivity:**Hi-Speed USB 2.0 port; built-in Gigabit Ethernet 10/100/1000 Base-TX network port; Host USB

**Wireless Capability:**Yes, Built-in Wi-Fi; Authentication via WEP, WPA/WPA2, WPA Enterprise; Encryption via AES or TKIP; WPS; Wi-Fi Direct Printing

**Standard Memory:**256 MB NAND Flash, 128 MB DRAM

**Mobile Printing Capability:**HP ePrint, Apple AirPrint™, Wireless Direct Printing, Mopria-certified, Google Cloud Print, Mobile Apps

**Paper Handling:**50-sheet multipurpose tray, 250-sheet input tray; 150-sheet output bin, Optional 550-sheet input tray

**Display:**2-line backlit LCD (text)

## Fast printing. Strong protection.

- Grab pages and go—without waiting around. This printer wakes up and prints faster than the competition.<sup>1</sup>
- Keep printing safe from boot up to shutdown with security features that guard against complex threats.

## More. Pages, Performance, and Protection.

- Get the most prints for your money—with Original HP High Yield Color 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.

## Easy management. Efficient printing.

- Easily manage tasks directly at the device. The 2-line LCD display is simple to read and operate.
- Set up this printer fast and easily manage device settings to help increase overall printing efficiency.
- 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>
- 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/learnabouthsupplies](http://hp.com/go/learnabouthsupplies) <sup>3</sup> HP Web Jetadmin is free and available for download at [hp.com/go/webjetadmin](http://hp.com/go/webjetadmin) <sup>4</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>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) <sup>7</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.

# HP Color LaserJet Pro M452nw Specifications Table

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| <b>Print Speed</b>                     | <b>Letter:</b> Up to 28 ppm black; Up to 28 ppm color <sup>14</sup> <b>First Page Out:</b> As fast as 8.9 sec black; As fast as 9.5 sec color (ready), As fast as 11.3 sec black; As fast as 11.4 sec color (sleep) <sup>16</sup>  |
| <b>Print Resolution</b>                | <b>Black (best):</b> 600 x 600 dpi, Up to 38,400 x 600 enhanced dpi; <b>Color (best):</b> 600 x 600 dpi, Up to 38,400 x 600 enhanced dpi   |
| <b>Print Technology</b>                | Laser  |
| <b>Print Resolution Technologies</b>   | HP ImageREt 3600, PANTONE calibrated   |
| <b>Print Cartridges Number</b>         | 4 (1 each black, cyan, magenta, yellow)  |
| <b>Standard Print Languages</b>        | HP PCL 6, HP PCL 5c, HP postscript level 3 emulation, PDF, URF, PCLm, Native Office, PWG Raster  |
| <b>Printer Smart Software Features</b> | N-up printing, collation, HP ePrint, Apple AirPrint™, Mopria certified, Google Cloud Print, wireless direct printing, HP Auto-On/Auto-Off Technology, Job Storage with PIN printing  |
| <b>Printer Management</b>              | 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)  |
| <b>Standard Connectivity</b>           | Hi-Speed USB 2.0 port; built-in Gigabit Ethernet 10/100/1000 Base-TX network port; Host USB  |
| <b>Network Capabilities</b>            | Via built-in 10/100/1000Base-TX Ethernet, Gigabit; Auto-crossover Ethernet; Authentication via 802.1X  |
| <b>Network Ready</b>                   | Standard (built-in Ethernet, Wi-Fi)  |
| <b>Wireless Capability</b>             | Yes, Built-in Wi-Fi; Authentication via WEP, WPA/WPA2, WPA Enterprise; Encryption via AES or TKIP, WPS, Wi-Fi Direct Printing  |
| <b>Mobile Printing Capability</b>      | HP ePrint, Apple AirPrint™, Wireless Direct Printing, Mopria-certified, Google Cloud Print 2.0, Mobile Apps  |
| <b>Memory</b>                          | <b>Standard:</b> 256 MB NAND Flash, 128 MB DRAM; <b>Maximum:</b> 256MB NAND Flash, 128MB DRAM  |
| <b>Processor Speed</b>                 | 1200 MHz   |
| <b>Duty Cycle</b>                      | <b>Monthly, letter:</b> Up to 50,000 pages <sup>7</sup>  |
| <b>Recommended Monthly Page Volume</b> | 750 to 4,000 <sup>8</sup>  |
| <b>Media Types Supported</b>           | Paper (bond, brochure, colored, glossy, letterhead, photo, plain, preprinted, prepunched, recycled, rough), postcards, labels, envelopes   |
| <b>Media Weight Supported</b>          | Tray 1: 16 to 47 lb (up to 52 lb with HP Color laser glossy photo papers); Tray 2: 16 to 43 lb (up to 47 lb with postcards, up to 52 lb with HP Color laser glossy photo papers); optional Tray 3: 16 to 43 lb (up to 47 lb with postcards, up to 40 lb with HP Color laser glossy photo papers); Automatic duplexer: 16 to 43 lb  |
| <b>Media Sizes Supported</b>           | Tray 1, Tray 2: Letter, legal, executive, 3 x 5 in, 4 x 6 in, 5 x 8 in, envelopes (No 10, Monarch); Optional Tray 3: Letter, legal, executive, 3 x 5 in, 4 x 6 in, 5 x 8 in; Automatic duplexer: Letter, legal, executive  |
| <b>Media Sizes Custom</b>              | Tray 1: 3 x 5 to 8.5 x 14 in; Tray 2, optional Tray 3: 3.94 x 5.83 to 8.5 x 14 in  |
| <b>Paper Handling</b>                  | 50-sheet multipurpose tray, 250-sheet input tray; 150-sheet output bin; <b>Duplex Options:</b> Manual (driver support provided); <b>Envelope Feeder:</b> No; <b>Standard Paper Trays:</b> 2; <b>Input Capacities:</b> Up to 300 sheets; <b>Output Capacities:</b> Up to 150 sheets; Up to 20 envelopes   |
| <b>What's in the box</b>               | <b>CF388A</b> HP Color LaserJet Pro M452nw; 4 preinstalled introductory HP 410A LaserJet Toner cartridges (Black, Cyan, Magenta, Yellow: ~1200 pages) <sup>17</sup> ; In-box documentation (Getting Started Guide, Install Poster); Software drivers and documentation on CD-ROM; Power cord; USB cable  |
| <b>Replacement Cartridges</b>          | HP 410A Black LaserJet Toner Cartridge (~2300 pages) CF410A; HP 410X Black LaserJet Toner Cartridge (~6500 pages) CF410X; HP 410A Cyan LaserJet Toner Cartridge (~2300 pages) CF411A; HP 410X Cyan LaserJet Toner Cartridge (~5000 pages) CF411X; HP 410A Yellow LaserJet Toner Cartridge (~2300 pages) CF412A; HP 410X Yellow LaserJet Toner Cartridge (~5000 pages) CF412X; HP 410A Magenta LaserJet Toner Cartridge (~2300 pages) CF413A; HP 410X Magenta LaserJet Toner Cartridge (~5000 pages) CF413X <sup>2</sup>  |
| <b>Product Dimensions</b>              | <b>W x D x H:</b> 16.2 x 17.8 x 11.6 in <sup>11</sup> ; <b>Maximum:</b> 16.2 x 24.9 x 11.6 in  |
| <b>Product Weight</b>                  | 38.6 lb <sup>1</sup>   |
| <b>Warranty Features</b>               | One-year, Bench Repair limited warranty  |
| <b>Control Panel</b>                   | 2-line backlit LCD graphic display; 5 buttons (Cancel, Select, Reverse, Right/Left arrows); LED indicator lights (Attention, Ready)  |
| <b>Display Description</b>             | 2-line LCD (text)  |
| <b>Software Included</b>               | For Windows OS: 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; For Mac OS: Welcome Screen, (Directs users to <a href="http://www.hp.com">http://www.hp.com</a> or OS App Store for LaserJet Software) |

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| <b>Fonts and Typefaces</b>                  | 84 scalable TrueType fonts   |
| <b>Compatible Operating Systems</b>         | 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 (excluding RT OS for Tablets), 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 <a href="http://www.hp.com">http://www.hp.com</a> 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 <sup>10</sup>   |
| <b>Compatible Network Operating Systems</b> | Windows OS compatible with In-Box Driver: 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 OS compatible with Universal Print Driver (UPD) or Product-Specific drivers from HP.com: Windows Server 2003/2003 R2 32-/64-bit (SP1/SP2) Standard/Enterprise/Datacenter (+ 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); Citrix (on Windows Server 2003/2003R2): Citrix MetaFrame Presentation Server, 3.0, Citrix MetaFrame XP Presentation Server (Feature Release 1, 2, and 3), Citrix Presentation Server 4.0/4.5, Citrix XenApp 5.0 (Plus Feature Pack 2 & 3); Citrix (on Windows Server 2008/2008R2): Citrix XenApp 5.0 (Plus Feature Pack 2 & 3), Citrix XenApp 6.0/6.5/7.5, Citrix XenDesktop 5.6/7.0/7.5; Citrix (on Windows Server 2012/2012R2): Citrix XenApp 7.5, Citrix XenDesktop 7.0/7.5; Novell Servers ( <a href="http://www.novell.com/print">http://www.novell.com/print</a> ): Novell Print Appliance v1.0, Novell Open Enterprise Server 11/SP1, Novell Open Enterprise Server 2 for Linux, NetWare 6.5/SP8, Novell Clients ( <a href="http://www.novell.com/print">http://www.novell.com/print</a> ); Windows 8 (32-bit / 64-bit) recommend v5.86+, 8.1 recommend v5.94+, Windows 7 (32-bit / 64-bit) recommend v5.82+, Windows Vista (32-bit / 64-bit) recommend v5.82+, Windows XP / SP3 (32-bit only) recommend v5.82+ |
| <b>Minimum System Requirements</b>          | <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>Power</b>                                | <b>Power Supply Type:</b> Internal (Built-in) power supply; <b>Power Requirements:</b> 110-volt input voltage: 110 to 127 VAC (+/- 10%), 60 Hz (+/- 3 Hz); 220-volt input voltage: 220 to 240 VAC (+/- 10%), 50/60 Hz (+/- 3 Hz) (Not dual voltage, power supply varies by part number with # Option code identifier); <b>Typical Electricity Consumption:</b> 1.515 kWh/Week <sup>4</sup> ; <b>Power Consumption:</b> 570 watts (Active Printing), 17.6 watts (Ready), 2.4 watts (Sleep), 0.6 watts (Auto-On/Auto-Off, via USB connectivity), 0.95 watts (Shutdown or Off)  |
| <b>Acoustics</b>                            | <b>Acoustic Power Emissions (active):</b> 6.3 B(A); <b>Acoustic Power Emissions (ready):</b> 4.8 B(A); <b>Acoustic Pressure Emissions (active):</b> 49 dB(A); <b>Acoustic Pressure Emissions (ready):</b> 34 dB(A) <sup>6</sup>  |
| <b>Operating Environment</b>                | <b>Operating Temperature Range:</b> 59 to 86°F; <b>Recommended Operating Temperature:</b> 59 to 80.6°F; <b>Storage Temperature Range:</b> -4 to 104°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 Humidity Operating 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   |
| <b>Accessories</b>                          | HP LaserJet 550-sheet Paper Feeder CF404A; HP v222w 16GB Mini USB Drive POR81AA  |
| <b>HP Service and Support Options</b>       | UBTN1E - HP 3 year Next Business Day Color LaserJet M452 Hardware Support; UBTN2E - HP 4 year Next Business Day Color LaserJet M452 Hardware Support; UBTN3E - HP 5 year Next Business Day Color LaserJet M452 Hardware Support; UBTN4E - HP 3 year Next Business Day Exchange Color LaserJet M452 Service; H3110E - HP Network Install Inkjet/Personal LaserJet Service   |

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

<sup>1</sup> With toner cartridges. <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. <sup>4</sup> Typical Electricity Consumption (TEC) rating represents the typical electricity consumed by a product during 1 week, measured in kilowatt-hours (kWh). <sup>5</sup> Printer ships with preinstalled introductory cartridges Black, Cyan, Magenta and Yellow (KCMY) (~1200 pages) with Auto Toner Seal Removal for all cartridges. <sup>6</sup> Acoustic values are subject to change. For current information see [hp.com/support](http://hp.com/support). Configuration tested: base model, simplex printing, A4 paper at an average of 20 ppm. <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>10</sup> Not all "Compatible Operating Systems" are supported with inbox software; Full solution software available only for Windows 7; Legacy Windows Operating Systems (XP, Vista, and equivalent servers) get print and Scan drivers only; Windows 8 and 10 have apps available in MS App Store; Windows RT OS for Tablets (32- & 64-bit) uses a simplified HP print driver built into the RT OS; UNIX models/scripts are available on HP.com (Models/scripts are printer drivers for UNIX operating systems); Linux systems use in-OS HPLIP software. <sup>11</sup> Without optional 550-sheet tray. Dimensions with optional 550-sheet tray: 16.2 x 17.8 x 16.7 in (412 x 453 x 425 mm) <sup>14</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>16</sup> Measured using ISO/IEC 17629. For more information see [hp.com/go/printerclaims](http://hp.com/go/printerclaims). Exact speed varies depending on the input voltage, system configuration, software application, driver, and document complexity. <sup>17</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.

