LASERJET PRO 400
COLOR M451 printer series

Produce professional-quality color documents with ease and fast speed. Seamlessly integrate into your office or wireless home network. HP features help you save paper and energy, and print from virtually anywhere with HP ePrint.  

Print Speed: Up to 21 ppm black (letter), Up to 21 ppm color (letter)
Print Resolution: Up to 600 x 600 dpi
Print Technology Resolution: HP ImageREt 3600
Display: 2-line LCD (text)
Monthly Volume (Duty Cycle): Up to 40,000 pages
Paper Handling: 50-sheet multipurpose tray, 250-sheet input tray 2, 150-sheet output bin, 250-sheet input tray 3 (optional)

Professional-grade speed and color
• Boost productivity and save time with print speeds up to 21 ppm letter.  
• Produce bold text and smooth color with HP ImageREt 3600 and Original HP LaserJet toner cartridges.  
• Produce color marketing materials in-house on a range of media sizes by using tips and templates from HP.  
• Print documents affordably. Get the same black cost per page as a black-and-white HP LaserJet printer.  

Manageability, productivity, and mobility
• Conserve resources and save paper, using automatic two-sided printing.  
• Proactively manage office printing with HP Web Jetadmin.  
• Conveniently locate the printer anywhere in the office, using built-in wireless connectivity.  
• Share printing resources, using built-in Ethernet.  
• Print from virtually anywhere with HP ePrint.  

Easy-to-use and resource-conserving
• Reduce energy use with HP Auto-On/Auto-Off Technology.  
• Start right away with HP Smart Install.  
• Receive consistent results with Original HP cartridges and easily reorder with HP SureSupply.  
• Take advantage of free, easy recycling—cartridges returned through HP Planet Partners are recycled responsibly.  

1 Measured using ISO/IEC 24734, excludes first set of test documents. For more information see http://www.hp.com/go/printerclaims.  
2 Wireless performance is dependent upon physical environment and distance from access point, and may be limited during active VPN connections.  
3 Requires an Internet connection to the printer. Feature works with any Internet- and e-mail-capable device. Print times may vary. For a list of supported documents and image types, see http://www.hp.com/go/eprintcenter.  
4 Compared with HP LaserJet Pro P1566/ P1606dn printer. Assuming customer is printing at least 30% of total pages in color with content similar to the color ISO/IEC 19798 test suite (http://www.iso.org/jtc1/sc28) and overall average job length of three pages. Yields established using ISO/IEC test standards. Actual yields and costs vary considerably depending on images printed, number of color pages printed, and other factors.  
5 HP Auto-On/Auto-Off capabilities subject to printer and settings.  
6 Proactively manage office printing with HP Web Jetadmin.  
7 Conveniently locate the printer anywhere in the office, using built-in wireless connectivity.  
8 Share printing resources, using built-in Ethernet.  
9 Print from virtually anywhere with HP ePrint.  

EcoHIGHLIGHTS
• Save energy—HP Auto-On/Auto-Off Technology turns your printer on when you need it, off when you don’t.  
• Reduce paper use by up to 50%, using automatic two-sided printing.  
• Lower your impact—reduce energy and paper use with HP EcoSMART Console.  

ENERGY STAR® qualified
HP LaserJet Pro 400 color M451 printer series
• Save energy—HP Auto-On/Auto-Off Technology turns your printer on when you need it, off when you don’t. 
• Reduce paper use by up to 50%, using automatic two-sided printing. 
• Lower your impact—reduce energy and paper use with HP EcoSMART Console.

www.hp.com/recycle
Please recycle your computing hardware and printing supplies. Find out how at our website.

1 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. Wireless performance is dependent upon physical environment and distance from access point, and may be limited during active VPN connections.  
2 Requires an Internet connection to the printer. Feature works with any Internet- and e-mail-capable device. Print times may vary. For a list of supported documents and image types, see http://www.hp.com/go/printerclaims.  
3 Compared with HP LaserJet Pro P1566/ P1606dn printer. Assuming customer is printing at least 30% of total pages in color with content similar to the color ISO/IEC 19798 test suite (http://www.iso.org/jtc1/sc28) and overall average job length of three pages. Yields established using ISO/IEC test standards. Actual yields and costs vary considerably depending on images printed, number of color pages printed, and other factors. HP Auto-On/Auto-Off capabilities subject to printer and settings.  
4 Compared with HP LaserJet Pro P1566/ P1606dn printer. Assuming customer is printing at least 30% of total pages in color with content similar to the color ISO/IEC 19798 test suite (http://www.iso.org/jtc1/sc28) and overall average job length of three pages. Yields established using ISO/IEC test standards. Actual yields and costs vary considerably depending on images printed, number of color pages printed, and other factors. HP Auto-On/Auto-Off capabilities subject to printer and settings.  
5 HP Auto-On/Auto-Off capabilities subject to printer and settings.  
6 Proactively manage office printing with HP Web Jetadmin.  
7 Conveniently locate the printer anywhere in the office, using built-in wireless connectivity.  
8 Share printing resources, using built-in Ethernet.  
9 Print from virtually anywhere with HP ePrint.

HP LaserJet Pro 400 color M451 printer series
• Save energy—HP Auto-On/Auto-Off Technology turns your printer on when you need it, off when you don’t. 
• Reduce paper use by up to 50%, using automatic two-sided printing. 
• Lower your impact—reduce energy and paper use with HP EcoSMART Console.

ENERGY STAR® qualified
HP LaserJet Pro 400 color M451 printer series
• Save energy—HP Auto-On/Auto-Off Technology turns your printer on when you need it, off when you don’t. 
• Reduce paper use by up to 50%, using automatic two-sided printing. 
• Lower your impact—reduce energy and paper use with HP EcoSMART Console.

www.hp.com/recycle
Please recycle your computing hardware and printing supplies. Find out how at our website.

1 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. Wireless performance is dependent upon physical environment and distance from access point, and may be limited during active VPN connections.  
2 Requires an Internet connection to the printer. Feature works with any Internet- and e-mail-capable device. Print times may vary. For a list of supported documents and image types, see http://www.hp.com/go/printerclaims.  
3 Compared with HP LaserJet Pro P1566/ P1606dn printer. Assuming customer is printing at least 30% of total pages in color with content similar to the color ISO/IEC 19798 test suite (http://www.iso.org/jtc1/sc28) and overall average job length of three pages. Yields established using ISO/IEC test standards. Actual yields and costs vary considerably depending on images printed, number of color pages printed, and other factors. HP Auto-On/Auto-Off capabilities subject to printer and settings.  
4 Compared with HP LaserJet Pro P1566/ P1606dn printer. Assuming customer is printing at least 30% of total pages in color with content similar to the color ISO/IEC 19798 test suite (http://www.iso.org/jtc1/sc28) and overall average job length of three pages. Yields established using ISO/IEC test standards. Actual yields and costs vary considerably depending on images printed, number of color pages printed, and other factors. HP Auto-On/Auto-Off capabilities subject to printer and settings.  
5 HP Auto-On/Auto-Off capabilities subject to printer and settings.  
6 Proactively manage office printing with HP Web Jetadmin.  
7 Conveniently locate the printer anywhere in the office, using built-in wireless connectivity.  
8 Share printing resources, using built-in Ethernet.  
9 Print from virtually anywhere with HP ePrint.

1 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. Wireless performance is dependent upon physical environment and distance from access point, and may be limited during active VPN connections.  
2 Requires an Internet connection to the printer. Feature works with any Internet- and e-mail-capable device. Print times may vary. For a list of supported documents and image types, see http://www.hp.com/go/printerclaims.  
3 Compared with HP LaserJet Pro P1566/ P1606dn printer. Assuming customer is printing at least 30% of total pages in color with content similar to the color ISO/IEC 19798 test suite (http://www.iso.org/jtc1/sc28) and overall average job length of three pages. Yields established using ISO/IEC test standards. Actual yields and costs vary considerably depending on images printed, number of color pages printed, and other factors. HP Auto-On/Auto-Off capabilities subject to printer and settings.  
4 Compared with HP LaserJet Pro P1566/ P1606dn printer. Assuming customer is printing at least 30% of total pages in color with content similar to the color ISO/IEC 19798 test suite (http://www.iso.org/jtc1/sc28) and overall average job length of three pages. Yields established using ISO/IEC test standards. Actual yields and costs vary considerably depending on images printed, number of color pages printed, and other factors. HP Auto-On/Auto-Off capabilities subject to printer and settings.  
5 HP Auto-On/Auto-Off capabilities subject to printer and settings.  
6 Proactively manage office printing with HP Web Jetadmin.  
7 Conveniently locate the printer anywhere in the office, using built-in wireless connectivity.  
8 Share printing resources, using built-in Ethernet.  
9 Print from virtually anywhere with HP ePrint.
TECHNICAL SPECIFICATIONS

PRODUCT NUMBER
CE956A: LaserJet Pro 400 Color M451dn CE957A: LaserJet Pro 400 Color M451nw
CE958A: LaserJet Pro 400 Color M451dw

PRINT TECHNOLOGY
Laser

PRINT SPEED
- Block (Normal, Letter): Up to 21 ppm; Color (Normal, Letter): Up to 21 ppm
- First Page Out*: As fast as 17 sec Color (letter, ready), As fast as 17 sec black (letter, ready)

PRINT RESOLUTION
- Black (Best): Up to 600 x 600 dpi; Black (Normal): Up to 600 to 600 dpi
- Color (Best): Up to 600 x 600 dpi

PRINT TECHNOLOGY RESOLUTION
HP ImageReady 3600

DUPLEX PRINT OPTIONS
- M451dn & M451dw: Automatic (standard)
- M451nw: Manual (driver support provided)

HP ePrint? Capability
Yes

MOBILE PRINTING CAPABILITY
HP ePrint, Apple AirPrint?, Wireless Direct Print?

STANDARD PRINT LANGUAGES
HP PCL 6, HP PCL 5c, HP postscript level 3 emulation

NUMBER OF PRINT CARTRIDGES
4 (1 each black, cyan, magenta, yellow)

SURESUPPLY SUPPORTED?
Yes

PRINTER MANAGEMENT
Windows: HP Device Toolbox (default install), SNTP Alerts (minimum network install), HP WebJetadmin (downloaded), Mac: HP Utility

PRINTER SMART SOFTWARE FEATURES
HP ePrint, Apple AirPrint?, Smart Install, HP Auto-Own/Auto-Off technology

M451nw & M451dw: Plus Wireless Direct Print
M451dn & M451dw: Plus Automatic two-sided printing

STANDARD CONNECTIVITY
- M451dn: Hi-Speed USB 2.0 port, 1 Fast Ethernet 10/100Base-TX network port
- M451nw & M451dw: Hi-Speed USB 2.0 port, 1 Fast Ethernet 10/100Base-TX network port

WIRELESS CAPABILITY
- M451dn: No
- M451nw & M451dw: Yes, built-in WiFi 802.11 b/g/n

NETWORK CAPABILITIES
- M451dn: Via built-in 100 Fast Ethernet
- M451nw & M451dw: Via built-in 100/10 Fast Ethernet, Wireless 802.11 b/g/n

CONTROL PANEL
2-line, 16-character backlit LCD display, 5 buttons (Cancel job, Left arrow, Right arrow, Select, Back), 2 LED lights (Attention, Ready)

FONTS AND TYPEFACES
- 84 scalable TrueType fonts

MEDIA TYPES SUPPORTED
Paper (bond, brochure, colored, letterhead, photo, plain, preprinted, prepunched, recycled, rough), postcards, transparencies, labels, envelopes

MEDIA SIZES SUPPORTED
- M451dn: Tray 1: Letter, legal, executive, 8.5 x 13 in, 3.5 x 4 in, 5 x 8 in, envelopes (No 10, Monarch); Tray 2, optional Tray 3: Letter, legal, executive, 8.5 x 13 in, 4 x 6 in, 5 x 8 in, envelopes (No 9, Monarch)
- M451dn & M451dw: Tray 1: Letter, legal, executive, 8.5 x 13 in, 3.5 x 4 in, 5 x 8 in, envelopes (No 10, Monarch); Tray 2, optional Tray 3: Letter, legal, executive, 8.5 x 13 in, 4 x 6 in, 5 x 8 in, envelopes (No 9, Monarch); Automatic duplexer: 8.5 x 13 in

MEDIA WEIGHTS SUPPORTED
- Tray 1: 60 to 176 g/m² (up to 220 g/m² with postcards and HP Color Laser glossy photo papers)
- Tray 2, Tray 3 (optional): 60 to 163 g/m² (up to 176 g/m² with postcards); Automatic duplexer: 60 to 163 g/m²

RECOMMENDED MEDIA WEIGHT
16 to 43 lb (60 to 163 g/m²)

DUTY CYCLE (MONTHLY, LETTER)^1
Up to 40,000 pages

RECOMMENDED MONTHLY PAGE VOLUME^2
Up to 750 to 2,000 pages

DISPLAY
2-line LCD (text)

MAXIMUM/STANDARD MEMORY
384 MB/128 MB

PAPER HANDLING
50-sheet multipurpose tray, 250-sheet input tray 2, 150-sheet output bin 2

Input Capacity (standard): Up to 300 Sheets, Up to 50 transparencies, Up to 10 envelopes
Input Capacity (maximum): Up to 550 Sheets (with optional tray 3)
Output Capacity: Up to 50 Sheets, Up to 50 transparencies, Up to 20 envelopes

PROCESSOR SPEED
- 600 MHz

SOFTWARE INCLUDED
Windows: HP installer/Uninstaller; HP PCL 6 print driver, Status Alerts, HP Update, DXF; Mac: Installer/Uninstaller; HP Postscript driver, HP Setup Assistant, HP Utility, HP Alerts, HP Firmware Update

MINIMUM SYSTEM REQUIREMENTS
- PC: Microsoft® Windows® Vista® (32-bit or 64-bit), Windows® 7 (32-bit or 64-bit), Windows® 8 (32-bit or 64-bit)
- Processor: 1 GHz; RAM: 1 GB; Graphic Card: Minimum: 4 GB RAM, Maximum: 16 GB RAM; Hard disk space: 40 GB (minimum)

COMPATIBLE OPERATING SYSTEMS
Full software installs supported: Microsoft® Windows® 7 32-bit and 64-bit, Windows® 8.1 (32-bit or 64-bit), Windows® 10 (32-bit or 64-bit), Mac: Mac OS X 10.5 to 10.12; Linux: Ubuntu (13.10, 14.04, 15.04, 15.10, 16.04, 16.10, 17.04, 17.10, 18.04, 18.10), Debian 8 (jessie), 9 (stretch), Ubuntu 16.04, 18.04, 18.10, 20.04 (Bionic Beaver), 20.10 (Focal), Fedora 28, 29, 30, 31, 32

OPERATING ENVIRONMENT
- Operating Temperature Range: 45º F to 95º F (7º C to 35º C)
- Operating Humidity Range: 20% to 80% RH (without condensation)

ACOUSTIC^3
Acoustic Power Emissions: 7 B(A)
Acoustic Power Emissions (Readily): 4 B(A)
Acoustic Pressure Emissions Bystander (Active, Printing): 51 dB(A)
Acoustic Pressure Emissions Bystander (Ready): 27 B(A)

POWER
- Power Requirements: Input voltage: 100 to 127 VAC (+/- 10%), 60 Hz (+/- 3 Hz) 20 to 70% Rh (non-condensing)
- Power Supply Type: Internal (Built-in) power supply
- Power Consumption^4: 425 watts (Active), 40 watts (Sleep), 0.2 watts (Off)

TEMPERATURE (TEC) (KWH/Week)
5.90 KWH/Week

PRODUCT DIMENSIONS
M451nw:
- W x D x H: 15.9 x 19.1 x 12.7 in (405 x 484 x 322 mm)
- Maximum: 15.9 x 25.9 x 12.7 in (405 x 659 x 322 mm)

M451dn & M451dw:
- W x D x H: 15.9 x 19.1 x 12.7 in (405 x 484 x 322 mm)
- Maximum: 15.9 x 27.1 x 12.7 in (405 x 689 x 322 mm)

PRODUCT WEIGHT
M451dn: 50.1 lb (22.7 kg)
M451dw, M451dn & M451nw: 52.1 lb (23.6 kg)

SECURITY MANAGEMENT
- Wireless: WEP (128 bit), WPA/WPA2 - Personal (AES, TKIP), WPA2-PSK (AES)
- Embedded Web Server: password protection, secure browsing via SSL/TLS, Network: enable/disable network ports and features, SNMPv1, SNMPv2c, external password administrator, print job lockout

WHAT’S IN THE BOX?
Printer, Four preinstalled introductory HP LaserJet toner cartridges (yield: 1,400 color composite pages)

ACCESSORIES
- HP LaserJet Pro 400 Color M451dn & M451dw models only, USB cable (M451dn & M451dw models only)
- HP ePrint: HTTPS with certificate validation, HTTP Basic Access Authorization, SAML authentication

Warranty
One-year limited warranty, return to HP or authorized service provider

HP SERVICES AND SUPPORT OPTIONS
HP 3y Nbd Excl Color LaserJet M451 HW SVC, U1HBE8 HP 1y PWD Excl Color LaserJet M451 SVC, U1HBE8 HP精神病inl inkjet/plain LaserJet SVC, H3110E

REPLACEMENT CARTRIDGES^5
- HP 305A Black LaserJet Toner Cartridge (~ 1,400 pages), CE410A
- HP 305A Cyan LaserJet Toner Cartridge (~ 1,300 pages), CE411A
- HP 305A Yellow LaserJet Toner Cartridge (~ 1,300 pages), CE412A
- HP 305A Magenta LaserJet Toner Cartridge (~ 1,300 pages), CE413A

FOR MORE INFORMATION VISIT OUR WEBSITE AT WWW.HP.COM

©2013 Hewlett-Packard Development Company, L.P. HP is a registered trademark of the Hewlett Packard Company. ENERGY STAR and the ENERGY STAR logo are registered U.S. marks. All other trademarks are the property of their respective owners. Microsoft and Windows are registered trademarks of Microsoft Corporation. Adobe and Acrobat are trademarks of Adobe Systems Incorporated. This listing of non HP products does not constitute an endorsement by Hewlett Packard Company. The information contained herein is subject to change without notice and is provided "as is" without warranty of any kind. HP shall not be liable for technical or editorial errors or omissions contained herein. June 2013 R3

^1 Measured using ISO/IEC 24734, excludes first set of test documents. For more information visit http://www.hp.com/go/learnaboutsupplies. Exact speed varies depending on the system configuration, software application, driver, and document complexity. *Exact speed varies depending on system configuration, software application, driver, and document complexity. **Uses Internetworking technology, including TCP/IP protocol, and Ethernet connections. ***Requires an Ethernet connection. ****Requires a network-attached device capable of communicating over an Ethernet network. *****Requires a network-attached device capable of communicating over an Ethernet network.