HP

Officejet Pro X451dn Printer

The next generation of printing is here. Print professional-quality color—up to twice the speed[3] and half the cost per page of color lasers,[4]—using HP PageWide Technology. Help workgroups thrive with proactive manageability tools.

ISO Speeds:[1] Up to 36 ppm black, Up to 36 ppm color
HP ePrint Capability: Yes
Connectivity: 1 Hi-Speed USB 2.0 Host, 1 Hi-Speed USB 2.0 Device, 1 Ethernet 10/100 Base-TX network
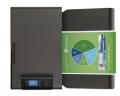**Paper Handling:** 500-sheet input tray, 50-sheet multi-purpose tray, Optional 500 sheet tray, 300-sheet face-down output bin
Print Languages: HP PCL 5c, HP PCL XL (PCL 6), native PDF, HP Postscript Level 3 emulation
Duty Cycle (monthly):[2] Up to 50,000 pages

Up to twice the speed[3] and half the cost per page[4] of color lasers

- Produce quality prints with Original HP inks, and save up to 50% on printing costs versus color lasers.[4]
- New General Office mode delivers high-quality prints at up to 55 page per minute.[5]
- Print brilliantly at breakthrough speed with the same HP PageWide Technology found in top-end digital presses.
- Depend on HP for reliable workgroup printing—designed for high volumes up to 4,000 pages a month.

Empower workgroups with an easy-to-manage ePrinter

- Proactively manage this device and remotely monitor status with industry-leading tools like HP Web Jetadmin.
- Simplify printing tasks with an easy-to-use control panel and graphic display.
- Print up to 9,200 pages per cartridge[10] and load up to 1,050 sheets at once with the optional paper tray.[6]
- Help protect your investment and extend capabilities as your needs grow with a portfolio of solutions.[12]

Connect and print - at the office or on the go[7]

- Print from your smartphone or tablet from virtually anywhere with HP ePrint.[7]
- Add this ePrinter to your office Ethernet network to easily share with your workgroup.

Conserve resources without sacrificing performance

- Keep costs in line. This Energy Star® qualified device uses up to 50% less energy than color lasers.[8]
- Save up to 50% on paper with automatic two-sided printing, and maintain efficiency at breakthrough speeds.
- Conserve resources, using up to 50% less cartridge and packaging material by weight compared with color lasers[11]
- Reduce your impact—easily recycle your Original HP ink cartridges for free through HP Planet Partners.[9]

[1]ISO speeds measured using ISO/IEC 24734. Excludes first page or first set of ISO test pages. For details see hp.com/go/printerclaims. [2]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. [3]Comparison based on manufacturers published specifications of fastest available color mode (as of August 2013) and includes color laser MFPs < 1000 USD and color laser printers < $800 USD available August 2013 based on market share as reported by IDC as of Q2 2013 and HP internal testing of printer in fastest available color mode (sample 4-page category documents tested from ISO 24734). For more information, see http://www.hp.com/go/printerclaims. [4]Cost per page (CPP) claim is based on the majority of color laser MFPs < 1000 USD and color laser printers < $800 USD as of August 2013, based on market share as reported by IDC Q2 2013. CPP comparisons for laser supplies are based on published specifications of the manufacturers' highest capacity cartridges. HP Officejet Pro X CPP based on HP 970XL/971XL cartridges estimated street price, published yield for color prints and continuous printing in default mode. Actual prices may vary. Actual yields may vary based on printer, images printed and other factors. For more information, see http://www.hp.com/go/learnaboutsupplies. [5]For more information, see http://www.hp.com/go/printerspeeds. [6]Capacity up to 1050 sheets with optional 1x500 sheet accessory paper tray not included; please purchase separately. [7]Requires an internet connection to an HP ePrint-enabled printer. Printer requires ePrint account registration. App or software may be required. Wireless operations are compatible with 2.4 GHz operations only. Print times and connection speeds may vary. Wireless broadband use requires separately purchased service contract for mobile devices. Check with service provider for coverage and availability in your area. Learn more at http://www.hp.com/go/mobileprinting. [8]Majority of color laser printers < $800 USD and color laser MFPs < $1000 as of August 2012. Energy use based on HP and HP commissioned third-party testing. Actual cost and energy usage may vary. For details, see http://www.hp.com/go/officejet. [9]Program availability varies. Original HP cartridge return and recycling is currently available in 47 countries, territories, and regions in Asia, Europe, and North and South America through the HP Planet Partners program. For more information, visit http://www.hp.com/recycle. [10]Page volume based on HP 970XL black ink cartridge. [11]Compares weight of empty cartridge and packaging materials needed for 15,000 pages using highest-capacity cartridges of major in-class competitors' color laser MFPs < 1000 USD and color laser printers < $800 USD as of October 2012. Tested by Buyers Lab Inc. For details, see http://www.hp.com/go/officejet. [12]Additional workflow solutions available through HP's software and third-party partner program. For solution details, go to http://www.hp.com/go/gsc [13]Additional workflow solutions available through HP's software and third-party partner program. For solution details, go to http://www.hp.com/go/gsc.

ENERGY STAR

Compatible with Windows®7

Mac

ePrint

vepeat BRONZE

WE SELL ENERGY STAR

HP Officejet Pro X451dn Printer

TECHNICAL SPECIFICATIONS

DUPLEX PRINT OPTIONS	Automatic (standard)
PRINT SPEED[1]	**ISO Speed:** Up to 36 ppm black, Up to 36 ppm color; **Maximum Print Speed:** Up to 55 ppm black, Up to 55 ppm color
FIRST PAGE OUT	**Black (ready):** As fast as 9.5 sec; **Color (ready):** As fast as 9.5 sec
PRINT RESOLUTION	**Black (best):** Up to 1200 x 1200 optimized dpi from 600 x 600 input dpi (on Unspecified, Plain, HP Premium Presentation Matte, and HP Brochure Matte); **Color (best):** Up to 2400 x 1200 optimized dpi from 600 x 600 input dpi (on HP Advanced Photo Papers)
PRINT TECHNOLOGY	HP PageWide Technology with pigmented inks
PRINTER DRIVERS INCLUDED	Windows PLC6 Discrete, Mac PS, Windows HP UPD, Linux, UNIX, SAP
PRINT CARTRIDGES NUMBER	4 (1 black, cyan, magenta, yellow)
PRINTER SMART SOFTWARE FEATURES	HP ePrint, HP ePrint Mobile Apps, Google Cloud Print, HP EasyColor, print preview, automatic two-sided printing, print multiple pages per sheet (2, 4, 6, 9, 16), collation, booklet printing, cover pages, tray selection, scaling, Portrait/Landscape orientation, High Quality Grayscale and Black Ink Only, General Office/Professional/Presentation/Maximum dpi print modes; **Optional:** Wireless, Auto-off
MOBILE PRINTING CAPABILITY	HP ePrint, HP ePrint Mobile Apps, Google Cloud Print, Apple AirPrint™
BORDERLESS PRINTING	No
STANDARD PRINT LANGUAGES	HP PCL 5c, HP PCL XL (PCL 6), native PDF, HP Postscript Level 3 emulation
PRINTER MANAGEMENT	HP Web Jetadmin; Embedded Web Server; HP Driver Configuration Utility; HP Driver Deployment Utility; HP Utility (Mac)
STANDARD CONNECTIVITY	1 Hi-Speed USB 2.0 Host; 1 Hi-Speed USB 2.0 Device; 1 Ethernet 10/100 Base-TX network
NETWORK CAPABILITIES	Standard (built-in Ethernet)
WIRELESS CAPABILITY	No
MEMORY	512 MB
PROCESSOR SPEED	792 Mhz
DUTY CYCLE (MONTHLY)[2]	Up to 50,000 pages
RECOMMENDED MONTHLY PAGE VOLUME[3]	Up to 500 to 4,000 pages
PAPER HANDLING	500-sheet input tray, 50-sheet multi-purpose tray, Optional 500 sheet tray, 300-sheet face-down output bin
MEDIA TYPE	Plain paper (light, intermediate, mid-weight, heavy, extra heavy, prepunched, recycled, bond, other inkjet plain paper), photo (glossy, gloss, soft gloss, satin, matte, other inkjet photo), envelopes, labels, cards, specialty papers (glossy brochure, matte brochure, tri-fold brochure, Hagaki, greeting cards, other inkjet specialty paper)
MEDIA WEIGHT	**Tray 1:** 16 to 32 lb (plain paper); 33 to 80 lb (photo); 20 to 24 lb (envelope); 32 to 48 lb (brochure); 90 to 110 lb (card) **Tray 2:** 16 to 32 lb (plain paper); 33 to 66 lb (photo); 20 to 24 lb (envelope); 32 to 48 lb (brochure); 90 to 110 lb (card) **Tray 3:** 16 to 32 lb (plain paper); 33 to 66 lb (photo); 32 to 48 lb (brochure); 90 to 110 lb (card)
MEDIA SIZES CUSTOM	**Tray 1:** 3 x 5 in to 8.5 x 14 in; **Tray 2:** 4.0 x 8.3 in to 8.5 x 11.7 in; **Optional Tray 3:** 4.0 x 8.3 in to 8.5 x 14 in
DIMENSIONS	**W x D x H:** 20.3 x 15.7 x 15 in (517 x 399 x 380 mm); **Max:** 26.7 x 26.4 x 15 in (678 x 670 x 380 mm) with MP tray down, main tray extended, output tray extension in legal position
WEIGHT	37.8 lb (17.1 kg)
WHAT'S IN THE BOX[4]	HP Officejet Pro X451dn Printer; HP 970 Setup Black Officejet Pro X Ink Cartridge (~3000 pages); HP 971 Setup Cyan Officejet Pro X Ink Cartridge; HP 971 Setup Magenta Officejet Pro X Ink Cartridge; HP 971 Setup Yellow Officejet Pro X Ink Cartridge (CMY composite ~2500 pages); power cord; installation guide; CD-ROMs (for Software, Windows and Mac printer drivers, and User's Guide). [Average based on ISO/IEC 24711 or HP testing methodology and continuous printing. Actual yield varies considerably based on content of printed pages and other factors. Some ink from included cartridge is used to start up the printer. For details see http://www.hp.com/go/learnaboutsupplies]

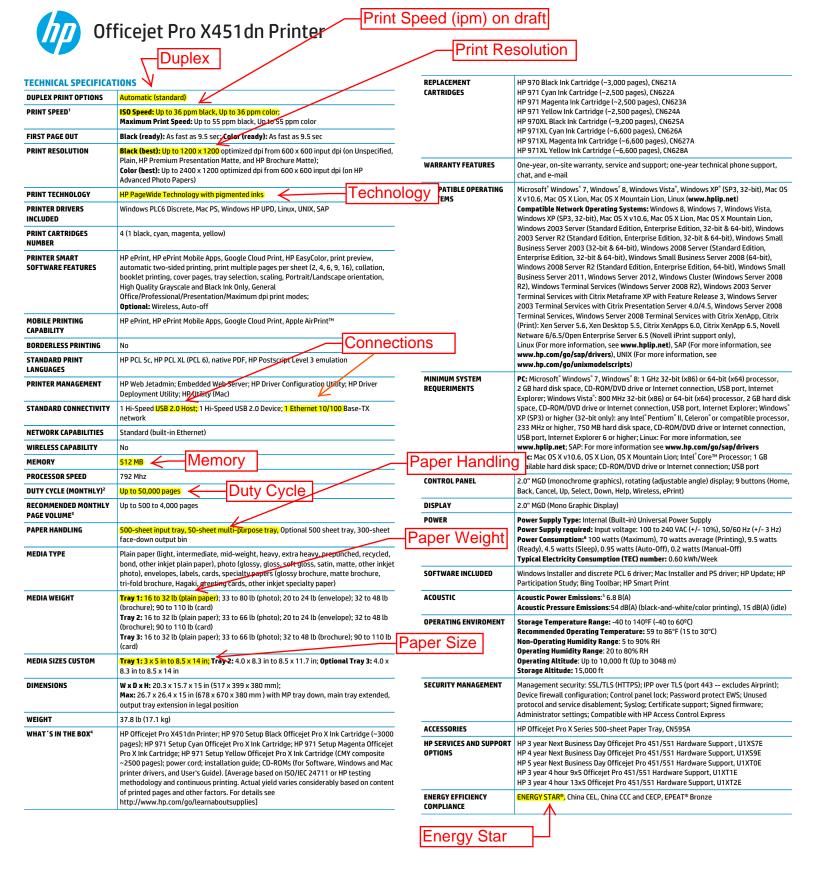|	
REPLACEMENT CARTRIDGES	HP 970 Black Ink Cartridge (~3,000 pages), CN621A HP 971 Cyan Ink Cartridge (~2,500 pages), CN622A HP 971 Magenta Ink Cartridge (~2,500 pages), CN623A HP 971 Yellow Ink Cartridge (~2,500 pages), CN624A HP 970XL Black Ink Cartridge (~9,200 pages), CN625A HP 971XL Cyan Ink Cartridge (~6,600 pages), CN626A HP 971XL Magenta Ink Cartridge (~6,600 pages), CN627A HP 971XL Yellow Ink Cartridge (~6,600 pages), CN628A
WARRANTY FEATURES	One-year, on-site warranty, service and support; one-year technical phone support, chat, and e-mail
COMPATIBLE OPERATING SYSTEMS	Microsoft® Windows® 7, Windows® 8, Windows Vista®, Windows XP® (SP3, 32-bit), Mac OS X v10.6, Mac OS X Lion, Mac OS X Mountain Lion, Linux (www.hplip.net) **Compatible Network Operating Systems:** Windows 8, Windows 7, Windows Vista, Windows XP (SP3, 32-bit), Mac OS X v10.6, Mac OS X Lion, Mac OS X Mountain Lion, Windows 2003 Server (Standard Edition, Enterprise Edition, 32-bit & 64-bit), Windows 2003 Server R2 (Standard Edition, Enterprise Edition, 32-bit & 64-bit), Windows Small Business Server 2003 (32-bit & 64-bit), Windows 2008 Server (Standard Edition, Enterprise Edition, 32-bit & 64-bit), Windows Small Business Server 2008 (64-bit), Windows 2008 Server R2 (Standard Edition, Enterprise Edition, 64-bit), Windows Small Business Server 2011, Windows Server 2012, Windows Cluster (Windows Server 2008 R2), Windows Terminal Services (Windows Server 2008 R2), Windows 2003 Server Terminal Services with Citrix Metaframe XP with Feature Release 3, Windows Server 2003 Terminal Services with Citrix Presentation Server 4.0/4.5, Windows Server 2008 Terminal Services, Windows Server 2008 Terminal Services with Citrix XenApp, Citrix (Print): Xen Server 5.6, Xen Desktop 5.5, Citrix XenApps 6.0, Citrix XenApp 6.5, Novell Netware 6/6.5/Open Enterprise Server 6.5 (Novell iPrint support only), Linux (For more information, see www.hplip.net), SAP (For more information, see www.hp.com/go/sap/drivers), UNIX (For more information, see www.hp.com/go/unixmodelscripts)
MINIMUM SYSTEM REQUERIMENTS	**PC:** Microsoft® Windows® 7, Windows® 8: 1 GHz 32-bit (x86) or 64-bit (x64) processor, 2 GB hard disk space, CD-ROM/DVD drive or Internet connection, USB port, Internet Explorer; Windows Vista®: 800 MHz 32-bit (x86) or 64-bit (x64) processor, 2 GB hard disk space, CD-ROM/DVD drive or Internet connection, USB port, Internet Explorer; Windows® XP (SP3) or higher (32-bit only): any Intel® Pentium® II, Celeron® or compatible processor, 233 MHz or higher, 750 MB hard disk space, CD-ROM/DVD drive or Internet connection, USB port, Internet Explorer 6 or higher; Linux: For more information, see www.hplip.net; SAP: For more information see www.hp.com/go/sap/drivers **Mac:** Mac OS X v10.6, OS X Lion, OS X Mountain Lion; Intel® Core™ Processor; 1 GB available hard disk space; CD-ROM/DVD drive or Internet connection; USB port
CONTROL PANEL	2.0" MGD (monochrome graphics), rotating (adjustable angle) display; 9 buttons (Home, Back, Cancel, Up, Select, Down, Help, Wireless, ePrint)
DISPLAY	2.0" MGD (Mono Graphic Display)
POWER	**Power Supply Type:** Internal (Built-in) Universal Power Supply **Power Supply required:** Input voltage: 100 to 240 VAC (+/- 10%), 50/60 Hz (+/- 3 Hz) **Power Consumption:[6]** 100 watts (Maximum), 70 watts average (Printing), 9.5 watts (Ready), 4.5 watts (Sleep), 0.95 watts (Auto-Off), 0.2 watts (Manual-Off) **Typical Electricity Consumption (TEC) number:** 0.60 kWh/Week
SOFTWARE INCLUDED	Windows Installer and discrete PCL 6 driver; Mac Installer and PS driver; HP Update; HP Participation Study; Bing Toolbar; HP Smart Print
ACOUSTIC	**Acoustic Power Emissions:[5]** 6.8 B(A) **Acoustic Pressure Emissions:** 54 dB(A) (black-and-white/color printing), 15 dB(A) (idle)
OPERATING ENVIROMENT	**Storage Temperature Range:** -40 to 140ºF (-40 to 60ºC) **Recommended Operating Temperature:** 59 to 86ºF (15 to 30ºC) **Non-Operating Humidity Range:** 5 to 90% RH **Operating Humidity Range:** 20 to 80% RH **Operating Altitude:** Up to 10,000 ft (Up to 3048 m) **Storage Altitude:** 15,000 ft
SECURITY MANAGEMENT	Management security: SSL/TLS (HTTPS); IPP over TLS (port 443 -- excludes Airprint); Device firewall configuration; Control panel lock; Password protect EWS; Unused protocol and service disablement; Syslog; Certificate support; Signed firmware; Administrator settings; Compatible with HP Access Control Express
ACCESSORIES	HP Officejet Pro X Series 500-sheet Paper Tray, CN595A
HP SERVICES AND SUPPORT OPTIONS	HP 3 year Next Business Day Officejet Pro 451/551 Hardware Support , U1XS7E HP 4 year Next Business Day Officejet Pro 451/551 Hardware Support, U1XS9E HP 5 year Next Business Day Officejet Pro 451/551 Hardware Support, U1XT0E HP 3 year 4 hour 9x5 Officejet Pro 451/551 Hardware Support, U1XT1E HP 3 year 4 hour 13x5 Officejet Pro 451/551 Hardware Support, U1XT2E
ENERGY EFFICIENCY COMPLIANCE	ENERGY STAR®, China CEL, China CCC and CECP, EPEAT® Bronze

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

HP Officejet Pro X451dn Printer Product Number: CN459A

ENERGY STAR® qualified models; see http://www.hp.com/go/energystar.

[1]Either after first page or after first set of ISO test pages. For details see www.hp.com/go/printerclaims. [2]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. [3]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. [4]Average based on ISO/IEC 24711 or HP testing methodology and continuous printing. Actual yield varies considerably based on content of printed pages and other factors. Some ink from included cartridge is used to start up the printer. For details see www.hp.com/go/learnaboutsupplies. [5]Acoustic values are subject to change. For current information see hp.com/support. Configuration tested: M575f model, simplex printing, A4 paper at an average of 30 ppm. [6]Power measurements are based on ENERGY STAR® TEC test procedure with 230 VAC, 50 Hz input.

OFFICEJET PRO X451 AND X551
SERIES PRINTERS

User Guide

HP OFFICEJET PRO X451

HP OFFICEJET PRO X551

Environmental features

Duplex printing	Automatic duplex printing is available with the Officejet Pro X451 and Officejet Pro X551. Duplex printing saves the environment and saves you money.
Print multiple pages per sheet	Save paper by printing two or more pages of a document side-by-side on one sheet of paper. Access this feature through the printer driver.
Recycling	Reduce waste by using recycled paper.
	Recycle ink cartridges by using the HP Planet Partners return process.
Energy savings	Sleep modes and timer options enable this product to quickly go into reduced power states when not printing, thus saving energy.

Energy Saving Mode

NOTE: Additional energy savings may be realized by turning off the printer if it will not be used for more than four hours.

Accessibility features

The product includes several features that aid users with limited vision, hearing, dexterity or strength.

- Online user guide that is compatible with text screen-readers.

- Ink cartridges can be installed and removed using one hand.

- All doors and covers can be opened using one hand.