Officejet Pro X451dn Printer

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

ISO Speeds: 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): Up to 50,000 pages

Up to twice the speed and half the cost of lasers
- Produce quality prints with Original HP inks, and save up to 50% on printing costs versus color lasers.
- Print at record speeds—certified by Guinness World Records as the world’s fastest desktop printer.
- New General Office mode delivers high-quality prints at top speeds while saving ink, time, and money.
- Print brilliantly at breakthrough speed with the same HP PageWide Technology found in top-end digital presses.

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 and load up to 1,050 sheets at once with the optional paper tray.
- Depend on HP for reliable workgroup printing—designed for high volumes up to 2,800 pages a month.

Connect and print—at the office or on the go
- Print from your smartphone or tablet from virtually anywhere with HP ePrint.
- 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.
- 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.
- Reduce your impact—easily recycle your Original HP ink cartridges for free through HP Planet Partners.


1 Either after first page or after first set of ISO test pages. For details see www.hp.com/go/printerclaims. 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. Comparison based on manufacturers’ published specifications of fastest available color mode (as of March 2012) and includes color laser MFPs <$1000 USD and color laser printers <$800 USD as of March 2012, based on market share as reported by IDC as of Q1 2012 and HP internal testing of printer in fastest available color mode (sample 6-page category documents tested from ISO 24734). For more information, see www.hp.com/go/printerclaims. Cost per page (CPP) claim is based on the majority of color laser MFPs <$1000 USD and color laser printers <$800 USD as of March 2012. ISO yield based on continuous printing in default mode based on market share as reported by IDC as of Q1 2012. CPP comparisons for laser supplies are based on published specifications of the manufacturers’ highest-capacity cartridges. CPP based on HP 970XL/971XL ink cartridges’ estimated street price. For more information, see www.hp.com/go/bestbuyerprices. Guinness World Record for fastest time to print 500 sheets by an office color desktop printer, April 2012. Record set on HP X551dw and X556dw models. Details at www.guinnessworldrecords.com. Record supervised and verified by www.wrightconsulting.org. Test documents ISO 24734 from sample 6-page category test file printed in fastest available color mode for all products. Competitive set includes laser and inkjet color desktop MFPs <$1000 USD and printers <$800 USD as of March 2012. Capacity up to 1,050 sheets with optional 1x500 sheet accessory paper tray not included; please purchase separately. Requires an Internet connection to an HP web-enabled printer and HP ePrint account registration (for a list of eligible printers, supported documents and image types, and other HP ePrint details, see hpconnected.com). Mobile devices require Internet connection and email capability. May require wireless access point. Separately purchased data plans or usage fees may apply. Print times and connection speeds may vary. 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 www.hp.com/go/efficiency. 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 www.hp.com/recycle. Page volume based on HP 970XL black ink cartridge. 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. Texted by Buyers Lab Inc. For details, see www.hp.com/go/efficiency.
or HP Color LaserJet devices, and enables appropriate deployment of printers and MFPs to satisfy the demands of connected individuals or groups.

**HP Officejet Pro X451dn Printer**

- **Product Number:** CN459A
- **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 Paper Photos)

**PRINT TECHNOLOGY**

HP PageWide Technology with pigment ink jet

**PRINT CARTRIDGES**

- **Number:** 4 (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/Preservation/Maximum dpi print modes; Optional: Wireless, Auto-off

**MOBILE PRINTING CAPABILITY**

HP ePrint, HP ePrint Mobile Apps, Google Cloud Print, Apple AirPrint™

**BORROWERLESS PRINTING**

No

**STANDARD PRINT LANGUAGES**

- HP PCL 5c, HP PCL XL (PCL 6), native PDF, HP Postscript Level 3 emulation

**PRINT 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**

512 MB

**DUTY CYCLE (MONTHLY)**

Up to 50,000 pages

**RECOMMENDED MONTHLY PAGE VOLUME**

Up to 500 to 2,800 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, heavy, extra heavy, prepunched, recycled, bond, other inkjet plain paper), photo (glossy, glossy, soft gloss, satin, matte, other inkjet photos), 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 60 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); 20 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 x 3.8 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 extended in legal position

**WEIGHT**

37.8 lb (17.1 kg)

**WHAT’S IN THE BOX**

- HP Officejet Pro X451dn Printer, HP 700 Black Ink Cartridge (~1,300 pages), CN621A
- HP 701 Cyan Ink Cartridge (~2,500 pages), CN622A
- HP 971 Black Ink Cartridge (~2,500 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

**COMPATIBLE OPERATING SYSTEMS**

- Microsoft® Windows®, Windows, Windows Vista®, Windows XP® (SP3, 32-bit), Mac OS X v10.4, Mac OS X Lion, Mac OS X Mountain Lion, Linux (www.hp.com)
- Linux (For more information, see www.hp.com/go/unixmodelscripts)
- ENERGY STAR and the ENERGY STAR logo are registered U.S. marks. Windows is a registered trademark of Microsoft Corporation. AirPrint, iPad, iPhone, and iPod touch are trademarks of Apple Inc., registered in the U.S. and other countries. Linux is a U.S. registered trademark of Linus Torvalds. UNIX is a registered trademark of The Open Group. Netfiling® is a trademark of Novell, Inc. Pentium and Celeron are trademarks of Intel Corporation in the U.S. and/or other countries.

**MINIMUM SYSTEM REQUIREMENTS**

- PC: Microsoft® Windows® 7, Windows® 8.1 64-bit (or 32-bit), Windows® 8 (64-bit or 32-bit), Windows® 7 (64-bit or 32-bit), Windows® Vista (32-bit or 64-bit), Windows® XP (32-bit or 64-bit), Windows® 2000, Mac OS X 10.6, Mac OS X 10.7 Lion, Mac OS X 10.8 Mountain Lion
- 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. ²Average based on ISO/IEC 15408:2006. 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. ³Average 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 cartridges is used to start up the printer. For details see www.hp.com/go/learnaboutsupplies.

**DISPLAY**

2.6” MGD (Mono graphic display)

**POWER**

- Power Supply Type: Internal (Built-in) Universal Power Supply
- Input voltage: 100 to 240 VAC (+/- 10%) 50/60 Hz (+/- 3 Hz)
- Power Consumption: 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: 0.6 kWh

**SOFTWARE INCLUDED**

- Windows installer and discrete PCL 6 driver; Mac installer and PS driver; HP Update; HP Participation Study; Bing Toolbar; HP Smart Print

**AUSTORIC**

- Acoustic Power Emissions: 6.8 BIA

**OPERATING ENVIRONMENT**

- Recommended Operating Temperature: 59 to 86°F (15 to 30°C)
- 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 (Imperial): 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

**ACCESSORIES**

- HP Officejet Pro X Series 500-sheet Paper Tray, CN595A
- HP EPrint, HP EPrint Mobile Apps, Google Cloud Print, Apple AirPrint™
- Optional: Wireless, Auto-off

For more information visit our website at www.hp.com