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,\(^5\)—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  

**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.\(^6\)  
- Depend on HP for reliable workgroup printing—designed for high volumes up to 2,800 pages a month.  

**Up to twice the speed\(^3\) and half the cost\(^4\) of lasers**  
- Produce quality prints with Original HP inks, and save up to 50% on printing costs versus color lasers.\(^6\)  
- Print at record speeds—certified by Guinness World Records as the world’s fastest desktop printer.\(^3\)  
- 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.  

**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.\(^3\)

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\(^1\) Either after first page or after first set of ISO test pages. For details see [www.hp.com/go/printerclaims](http://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. Comparison based on manufacturers’ published specifications of fastest available color mode (as of March 2012) and includes color laser MFPs <$1,000 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 4-page category documents tested from ISO 24734). For more information, see [www.hp.com/go/printerclaims](http://www.hp.com/go/printerclaims). \(^3\) Cost per page (CPP) claim is based on the majority of color laser MFPs <$1,000 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/learnaboutsupplies](http://www.hp.com/go/learnaboutsupplies). 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](http://www.guinnessworldrecords.com). Record supervised and verified by [www.wirtechconsulting.org](http://www.wirtechconsulting.org). Test documents ISO 24734 from sample 4-page category test file printed in fastest available color mode for all products. Competitive set includes laser and inkjet color desktop MFPs <$1,000 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](http://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 <$1,000 USD 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/energyinformation](http://www.hp.com/go/energyinformation). 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](http://www.hp.com/recycle). \(^5\) Page volume based on HP 970XL black ink cartridge. \(^6\) Page speed based on ISO 17752 inkjet device with various warranty periods. \(^7\) Either after first page or after first set of ISO test pages. For details see [www.hp.com/go/printerclaims](http://www.hp.com/go/printerclaims). \(^8\) Cost per page (CPP) claim is based on the majority of color laser MFPs <$1,000 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/learnaboutsupplies](http://www.hp.com/go/learnaboutsupplies). 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](http://www.guinnessworldrecords.com). Record supervised and verified by [www.wirtechconsulting.org](http://www.wirtechconsulting.org). Test documents ISO 24734 from sample 4-page category test file printed in fastest available color mode for all products. Competitive set includes laser and inkjet color desktop MFPs <$1,000 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](http://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 <$1,000 USD 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/energyinformation](http://www.hp.com/go/energyinformation). 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](http://www.hp.com/recycle). \(^9\) Either after first page or after first set of ISO test pages. For details see [www.hp.com/go/printerclaims](http://www.hp.com/go/printerclaims). \(^10\) 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 <$1,000 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 4-page category documents tested from ISO 24734). For more information, see [www.hp.com/go/printerclaims](http://www.hp.com/go/printerclaims). 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/learnaboutsupplies](http://www.hp.com/go/learnaboutsupplies). 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](http://www.guinnessworldrecords.com). Record supervised and verified by [www.wirtechconsulting.org](http://www.wirtechconsulting.org). Test documents ISO 24734 from sample 4-page category test file printed in fastest available color mode for all products. Competitive set includes laser and inkjet color desktop MFPs <$1,000 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](http://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 <$1,000 USD 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/energyinformation](http://www.hp.com/go/energyinformation). 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](http://www.hp.com/recycle). \(^11\) Either after first page or after first set of ISO test pages. For details see [www.hp.com/go/printerclaims](http://www.hp.com/go/printerclaims).
TECHNICAL SPECIFICATIONS

PRINT SPEED
- ISO Speed: Up to 36 ppm black, Up to 36 ppm color
- Maximum Print Speed: Up to 155 ppm black, Up to 55 ppm color

FIRST PAGE OUT
- Black (ready): As fast as 5.5 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

PRINT 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 970 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

MOBILE PRINTING CAPABILITY
- Mobile Printing

BORDERLESS PRINTING
- Yes

STANDARD PRINT LANGUAGES
- HP PCL 6, 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 (MONTHY*)
- 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 tray
- Tray 1: 3 x 5 in to 8.5 x 14 in; 3 x 8.3 in to 8.5 x 11.7 in; Optional Tray 3: 4 x 8.3 in to 8.5 x 11.7 in
- Recommended Media Sizes: Plain paper (light, intermediate, medium-heavy, extra heavy, extra pre-punched, 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); 20 to 24 lb (envelope); 32 to 48 lb (brochure, 90 to 110 lb (card)

MEDIA SIZES CUSTOM
- W x D: 20.3 x 15.7 x 15 in (517 x 399 x 380 mm); 26.7 x 26.4 x 15 in (678 x 670 x 380 mm) with MP tray down, main tray extended, outer tray extended in legal position

DIMENSIONS
- 37.8 lb (17.1 kg)

WEIGHT
- What’s in the Box
- HP OfficeJet Pro X451dn Printer; HP 970 Setup Black Officejet Pro X Ink Cartridge (~2400 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. Same ink from included cartridge is used to start up the printer. For details see 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 970 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 exchange, warranty service and support; one-year technical phone support, chat, and e-mail

COMPATIBLE OPERATING SYSTEMS
- Windows 7, Windows 8, Windows Vista®, Windows XP®, 32-bit, Mac OS X v10.6, Mac OS X Lion, Mac OS X Mountain Lion, Linux® (www.hplip.net)

MINIMUM SYSTEM REQUIREMENTS
- PC: Microsoft® Windows® 7, Windows® 8, 1 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.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

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: 100 watts (Maximum), 70 watts average (Printing), 9.5 watts (Ready/ 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*: 6.8 B(A)

OPERATING ENVIRONMENT
- Recommended Operating Temperature: 5 to 95% 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 3y NBD Exchange Officejet Pro X451/X551 SVC, U6Z51E
- HP 3y NBD Onsite Exchange Officejet Pro X451/X551 SVC, U6Z52E
- HP 1y PW BND onsite Exchange Officejet Pro X451/X551 SVC, U6Z54E
- HP 1y PW BND Exchange Officejet Pro X451/X551 SVC, U6Z58E

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

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. **Recommended that the number of printed pages per month be within the stated range for optimum device performance, based on factors including replacement intervals and device life over an extended warranty period. ***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 cartridges is used to start up the printer. For details see www.hp.com/go/learnaboutsupplies. *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. ***Power measurements are based on ENERGY STAR® TEC test procedure with 230 VAC, 50 Hz input.

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