### **Data sheet**

# HP PageWide Enterprise Color MFP 780dn



# The new printing paradigm

Modern business demands forward-thinking technology – it's why HP engineered the next generation of HP PageWide Enterprise to deliver a competitive edge from every angle: lowest colour cost, maximum uptime and the industry's strongest security.





## The lowest cost for colour

- Get the quality you expect with HP PageWide Technology that delivers the lowest cost per colour page.
- Print more pages and replace cartridges less often with optional high-yield cartridges.
- Print even faster and save even more per page by setting this printer to General Office mode.<sup>4</sup>
- Help keep energy costs down with the most efficient MFP in its class.<sup>5</sup>

#### Minimal interruptions. Maximum uptime.

- Minimise interruptions with an HP PageWide device designed for the least maintenance in its class.<sup>6</sup>
- Print speeds up to 50% faster than competitors as fast as 75 ppm in colour and black-and-white.
- Tailor this MFP to the needs of your business with a wide range of paper-handling
- Scan files directly to Microsoft® Office 365 and SharePoint, plus email, USB, and network folders.º

# The world's most secure printing<sup>2</sup>

- With HP Sure Start, each printer regularly checks its operating code and repairs itself from attempted hacks.
- Protect information on the printer and in transit over the network and store data on a encrypted hard disk.<sup>9</sup>
- Monitor activity to detect and stop attacks, then automatically reboot with run-time intrusion detection.
- Whitelisting checks firmware during startup to help ensure it's authentic, good code digitally signed by HP.

Dynamic security enabled printer. Only intended to be used with cartridges using an HP original chip. Cartridges using a non-HP chip may not work, and those that work today may not work in the future. Learn more at: http://www.hp.com/go/learnaboutsupplies









# **Product walkaround**

# HP PageWide Enterprise Color MFP 780dn shown

- 1. 20.3 cm (8.0-inch) pivoting colour touchscreen
- 2. Hardware Integration Pocket
- 3. Easy-access USB printing port
- 4. 100-sheet multipurpose tray 1 supports media up to 305 x 457 mm (12 x 18 inches)
- 5. 550-sheet tray 2 supports media up to  $297 \times 432 \text{ mm}$  (11.7 x 17 inches)
- 6. 200-sheet ADF with single-pass, two-sided scanning
- 7. 297 x 432 mm (11.7 x 17 inches) flatbed scanner
- 8. 500-sheet output bin
- 9. Front door access to cartridges
- 10. Automatic two-sided printing
- 11. Host USB port, Ethernet network port, Hi-speed USB 2.0 printing port



**Accessories, Supplies and Support** 

Accessories	TOB26A HP 982A Black Original PageWide Cartridge ~10,000 pages
	TOB23A HP 982A Cyan Original PageWide Cartridge ~8,000 pages
	TOB24A HP 982A Magenta Original PageWide Cartridge ~8,000 pages
	TOB25A HP 982A Yellow Original PageWide Cartridge ~8,000 pages
	TOB30A HP 982X High Yield Black Original PageWide Cartridge ~20,000 pages
	TOB27A HP 982X High Yield Cyan Original PageWide Cartridge ~16,000 pages
	TOB28A HP 982X High Yield Magenta Original PageWide Cartridge ~16,000 pages
Supplies	TOB29A HP 982X High Yield Yellow Original PageWide Cartridge ~16,000 pages
Service and support	U9RJ6E HP 3 year Next Business Day Service with Defective Media Retention for PageWide Colour 78x U9RJ7E HP 4 year Next Business Day Service with Defective Media Retention for PageWide Colour 78x U9RJ8E HP 5 year Next Business Day Service with Defective Media Retention for PageWide Colour 78x U9RK5PE HP 1 year Post Warranty Next Business Day Service with Defective Media Retention for PageWide Colour 78x U9RK6PE HP 2 year Post Warranty Next Business Day Service with Defective Media Retention for PageWide Colour 78x

# **Technical specifications**

Model	HP PageWide Enterprise Color MFP 780dn
Product number	J7Z09A
Functions	Print, copy, scan, fax (optional)
Control panel	20.3 cm (8.0 in) Colour Graphics Display (CGD) with touchscreen; Rotating (adjustable angle) display; Illuminated Home button (for quick return to the Home menu); USB High-speed 2.0 port; Hardware Integration Pocket
Print	
Print technology	HP PageWide Technology
Print speed <sup>1</sup>	Black (A4, ISO): Up to 45 ppm; Colour (A4, ISO): Up to 45 ppm; Black (A4, duplex): Up to 31 ppm; Colour (A4, duplex): Up to 31 ppm; Black (General Office): Up to 65 ppm; Colour (General Office): Up to 65 ppm
First page out <sup>2</sup>	Black (A4, ready): As fast as 7.1 sec; Colour (A4, ready): As fast as 7.1 sec; Black (A4, sleep): As fast as 17.4 sec; Colour (A4, sleep): As fast as 17.4 sec;

Model	HP PageWide Enterprise Color MFP 780dn
Product number	J7Z09A
Print resolution	<b>Black (best)</b> : Up to 1200 x 1200 optimised dpi from 600 x 600 input dpi (on Unspecified, Plain, HP Premium Presentation Matte, and HP Brochure Matte); <b>Colour (best)</b> : Up to 2400 x 1200 optimised dpi from 600 x 600 input dpi (on HP Advanced Photo Papers); <b>Technology</b> : HP PageWide Technology up to 1200 x 1200 optimised dpi from 600 x 600 input dpi
Monthly duty cycle	Up to 100,000 pages (A4); <b>Recommended monthly page volume:</b> 2,500 to 20,000
Printer smart software features	HP SureStart; Run-time Intrusion detection; Whitelisting; HP Trusted Platform Module; HP JetAdvantage Security Manager; HP Web Jetadmin; Open Extensibility Platform; FutureSmart Firmware; HP ePrint, Apple AirPrint™; HP Auto-On/Auto-Off technology; HP Colour Access Control; HP EasyColour; Front-facing USB printing; Store print jobs; HP EasyColour; 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 Greyscale and Black Ink Only; General Office/Professional/Presentation dpi print modes; Optional: HP and third party extensibility solutions; Wireless
Standard print languages	HP PCL 6; HP PCL 5c; HP postscript level 3 emulation; PDF 1.7
Fonts and typefaces	105 internal TrueType fonts scalable in HP PCL, 92 internal scalable fonts in HP Postscript level 3 emulation (Euro symbol built-in); 1 internal Unicode Fonts (Andale Mono WorldType); 2 Internal Windows Vista 8 Fonts (Calibri, Cambria); Additional font solutions available via third-party flash memory cards; HP LaserJet Fonts and IPDS Emulation available at http://www.hp.com/go/laserjetfonts
Print area	Print margins: Top: 4.23 mm (Default), 2 mm Edge-to-Edge mode, Bottom: 4.23 mm (Default), 2 mm Edge-to-Edge mode, Left: 4.23 mm (Default), 2 mm Edge-to-Edge mode, Right: 4.23 mm (Default), 2 mm Edge-to-Edge mode
Print cartridges number	4 (1 each black, cyan, magenta, yellow)
Multitasking supported	Yes
Memory card compatibility	144-pin DDR3 DIMM; HP Part Number E5K48A only
Duplex printing	Automatic (standard); Manual (driver support provided)
Copy speed	<b>Black (A4, ISO)</b> : Up to 45 cpm; <b>Colour (A4, ISO)</b> : Up to 45 cpm
Copier specifications	Two-sided copying, scalability, image adjustments (darkness, contrast, bac kground cleanup, sharpness), N-up, N or Z-ordering, content orientation, collation, booklet, ID Scan, job build, edge-to-edge, job storage; <b>Maximum number of copies</b> : Up to 9,999 copies; <b>Copy resolution</b> : Up to 600 x 600 dpi; <b>Reduce/Enlarge</b> : 25 to 400%
Copier smart software features	Auto scale; Reduce/enlarge from scanner glass (25 to 400 percent); Collate; Auto colour detection; Two-sided copying; Image adjustments (darkness, background cleanup, sharpness); Job build
Scan speed	Normal (A4): Up to 90 ipm simplex and up to 180 ipm duplex; Duplex (A4): Up to 90 ipm simplex and up to 180 ipm duplex
Scan file format	PDF, JPEG, TIFF, MTIFF, XPS, PDF/A
Scanner specifications	Scanner type: Flatbed, ADF Scan technology: Charge Coupled Device (CCD) & Contact Image Sensor (CIS); Scan input modes: Front panel applications: Copy; E-mail; Save to Network Folder; Save to USB; Save to Device Memory; Open Extensibility Platform (OXP) applications; Twain version: Version 2.1; Duplex ADF scanning: Yes, single-pass duplexing ADF; Scan size maximum (flatbed, ADF): 297 x 432 mm; Optical scan resolution: Up to 600 ppi
Scanner Advanced Features	Optimise text/picture; Image adjustments; Job build; Output quality setting; Selectable scan resolution 75 to 600 dpi; Auto detect colour; Edge Erase; Job notification; Blank page suppression; HP Quick Sets
Recommended monthly scan volume	2,000 to 50,000
Scannable area	Maximum media size (flatbed): 297 x 432 mm; Minimum media size (ADF): 68 x 148 mm; Maximum media size (ADF): 297 x 432 mm; Up to 297 x 1000 mm when "long scan size" selected
Bit depth/ Grey scale levels	24-bit / 256
Digital sending	<b>Standard</b> : Scan to E-mail; Save-to-Network Folder; Save-to-USB drive; Send to FTP; Send to Internet Fax; Local Address Book; SMTP over SSL; Blank Page Removal; Edge Erase; Auto Colour Sense; Auto Crop To Content; Compact PDF
Fax <sup>3</sup>	Optional, 33.6 kbps
Fax specifications	Fax memory: Up to 500 pages; Fax resolution: Standard: 204 x 98 dpi; Fine: 204 x 196 dpi;
	Quick dialing: Up to 1000 numbers (each with 210 destinations);
Fax smart software features	Stored faxes; Fax archiving; Fax forwarding; Scale to fit; Fax address book; LAN/Internet fax; Fax number confirmation; Holiday fax schedule
Processor speed	1.2 GHz
Connectivity	2 Hi-Speed USB 2.0 Host; 1 Hi-Speed USB 2.0 Device; 1 Gigabit Ethernet 10/100/1000T network; 1 Hardware Integration Pocket
Standard	HP Jetdirect 3000w NFC/Wireless Accessory J8030A, HP Jetdirect 2900nw Print Server J8031A
Optional	Optional, enabled with purchase of a hardware accessory
Wireless Mehilo printing capability	HP ePrint, Apple AirPrint™, Google Cloud Print
Mobile printing capability  Supported network protocols	IPv4/IPv6: Apple Bonjour Compatible (Mac OS v10.2.4 or higher), SNMPv1/v2c/v3, HTTP, HTTPS, FTP, TFTP, Port 9100, LPD, WS Discovery, IPP, Secure-IPP, IPsec/Firewall; IPv6: DHCPv6, MLDv1, ICMPv6; IPv4: Auto-IP, SLP, Telnet, IGMPv2, BOOTP/DHCP, WINS, IP Direct Mode, WS Print
Network capabilities	Via HP Jetdirect Ethernet embedded print server (standard) supports: 10Base-T, 100Base-Tx, 1000Base-T; 802.3az (EEE) support on Fast Ethernet and Gigabit Ethernet; IPsec (standard)
Memory	Standard: 3584 MB; Maximum: 3584 MB
Paper handling	Standard: 2 trays
Number of paper trays	Paper (Plain, Inkjet, Inkjet Brochure/Glossy), Photo Paper, Envelopes, Labels, Cards
Media types  Media size	Custom (metric): Tray 1: 99.1 x 127 to 304.8 x 457.2 mm; Tray 2-5: 210.1 x 148.1 to 297.2 x 431.8 mm; HCl Trays 3 & 4: A4  Supported (metric): Tray 1: RA3, A3, 8K, B4 (JIS), SRA4, RA4, A4-R, 16K, 16K-R, A5, A5-R, B5 (JIS), B5 (JIS)-R, B6 (JIS), A6; Trays 2-5: A3, 8K, B4 (JIS), SRA4, RA4, A4-R, 16K, 16K-R, A5, A5-R, B5 (JIS)-R, B6 (JIS), A6; HCl Trays 3 & 4: A4  ADF: A3, Ledger, B4-JIS, A4, B5-JIS, A5, B6-JIS, A6
Media handling	Standard input: 100-sheet multipurpose tray, 550-sheet input tray Standard output: 500-sheet output bin Optional input: 1 x 550/tray (A3/A4), 1 x 550/stand (A3/A4), 3 x 550/stand (A3/A4), HCI (2 x 2,000 sheet A4) ADF: 200 sheets, 75 g/m²

Model	HP PageWide Enterprise Color MFP 780dn
Product number	J7Z09A
Media weight	Tray 1: 60 to 220 g/m², 300 g/m² Photo Paper Only; Trays 2-5: 60 to 220 g/m²; HCl trays 3 & 4: 60 to 220 g/m²; <b>ADF</b> : 45 to 199 g/m²
Input capacity	Standard: Up to 650 sheets (MP: Up to 100 sheets; Tray 2: Up to 550 sheets)  Maximum: Up to 4,650 sheets  ADF: 200 sheets, 75 g/m²
Output capacity	Standard: Up to 500 sheets Envelopes: Up to 50 envelopes Labels: Up to 200 labels Maximum: Up to 500 sheets
Software included	HP Connected, HP Device Experience (DXP), HP PCL 6 Printer Driver, HP Software Installer/Uninstaller, Mac OS Welcome Screen (Directs users to http://www.123.HP.com or OS App Source for printer software), Online user manuals
Security management	Identity Management: Kerberos authentication, LDAP authentication, 1000 user PIN codes, optional HP and third-party advanced authentication solutions (e.g., badge readers); Network: IPsec/firewall with Certificate, Pre-Shared Key, and Kerberos authentication, Supports WJA-10 IPsec configuration Plug in, 802.1X authentication (EAP-PEAP, EAP-TLS), SNMPv3, HTTPS, Certificates, Access Control List, HP Trusted Platform Module (TPM) comes standard; Data: Storage Encryption, Encrypted PDF & Email (uses FIPS 140 validated cryptographic libraries from Microsoft), Secure Erase, SSL/TLS (HTTPS), Encrypted Credentials; Device: Security lock slot, USB port disablement, Hardware Integration Pocket for security solutions, 18 Intrusion Detection with Red Balloon Security Technology (Constant in-device monitoring for attacks), HP Sure Start Secure Boot (BIOS integrity checking with self-healing capability), Whitelisting (loads only known good code (DLLs, EXEs, etc.); Security Management: Compatible with HP JetAdvantage Security Manager,21 Device Security Syslog Messages processed and accessible in ArcSight and Splunk SIEMs; For more security settings go to http://h10032.www1.hp.com/ctg/Manual/c03602120
Printer management	HP JetAdvantage Security Manager; HP SNMP Proxy Agent; HP Web JetAdmin Software; HP WS Pro Proxy Agent; Printer Administrator Resource Kit for HP Universal Print Driver
Dimensions and Weight	
Printer dimensions (W x D x H)	<b>Minimum</b> : 813 x 591 x 458 mm; <b>Maximum</b> : 896 x 591 x 534 mm
Package dimensions (W x D x H)	790 x 760 x 933 mm
Printer weight	69 kg
Package weight	85 kg
Operating environment	<b>Temperature</b> : 15 to 30°C; <b>Humidity</b> : 30 to 70% RH
Storage	<b>Temperature</b> : Before initial setup (Non-Purged): -40 to 60°C; After initial setup (Purged): 0 to 60°C. If stored below the lowest specified operating temperature, unit must slowly warm up to an approved operating temperature (HP recommends waiting 24 hours at approved operating temperature prior to using the printer). <b>Humidity</b> : 10 to 80% RH
Acoustics	Acoustic power emissions: 6.7 B(A);
Power	Requirements: Input voltage: 100 to 240 VAC, 50/60 Hz; Consumption: 660 watts (print/copy), 42 watts (ready), 1.4 watts (sleep), 0.2 watts (auto-off), 0.2 watts (off); Typical Electricity Consumption (TEC) <sup>4</sup> : Blue Angel: 1.97 kWh/Week; Energy Star: 1.61 kWh/Week; Power supply type: Internal (Built-in) power supply
Energy savings feature technology	HP Auto-on/Auto-off Technology
Certifications	CISPR 22:2008 Class A, CISPR 32:2012 Class A, EN 55032:2012 Class A, EN 61000-3-3:2013, EN 61000-3-2:2014 ENERGY STAR® certified; Blue Angel; EPEAT (Silver)
Compatible operating systems	Android, Linux Boss (5.0), Linux Debian (7.0, 7.1, 7.2, 7.3, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 8.0, 8.1, 8.2, 8.3, 8.4, 8.5, 8.6), Linux Fedora (22, 23, 24), Linux Mint (17, 17.1, 17.2, 17.3, 18), Linux Red Hat Enterprise (6.0, 7.0), Linux SUSE (13.2, 42.1), Linux Ubuntu (12.04, 14.04, 15.10, 16.04, 16.10), OS mac OS 10.12 Sierra, OS X 10.11 El Capitan, OS X 10.10 Yosemite, UNIX, Windows 10 all 32/64-bit editions (excluding RT OS for Tablets), Windows 7 all 32/64-bit editions, Windows 8/8.1 all 32/64-bit editions (excluding RT OS for Tablets), Windows Vista all 32-bit editions (Home Basic, Premium, Professional, etc.), Windows XP SP3 32-bit editions (XP Home, XP Pro, etc.)
Minimum system requirements	Windows: 2 GB available hard disk space, OS hardware requirements see http://www.microsoft.com; Mac: 1.3 GB available hard drive space; Internet; OS hardware requirements see http://www.Apple.com for more info
Country of origin	Made in Netherlands
What's in the box	HP PageWide Enterprise Colour MFP 780dn; HP Setup Ink Cartridges (yield after setup ~8,000 pages CMY and 10,000 pages Black); Installation guide, Support flyer; Documentation on CD-ROM; Power cord
Warranty	One-year, next-business day, onsite warranty. Warranty and support options vary by product, country and local legal requirements. Go to http://www.hp.com/support to learn about HP award winning service and support options in your region.

#### **Footnotes**

1 Lowest cost per colour page claim applies to devices that are not sold under contract: Comparison of HP PageWide A3 devices with the majority of in-class colour ink/laser MEPs (£3,000-£7,499), and colour ink/laser single function printers (€1,500-€2,999) as of January/February 2017; market share as reported by IDC as of Q4 2016. Cost per page (CPP) reported by gap intelligence Pricing & Promotions Report January/February 2017 comparisons for devices/supplies not sold under contract are based on published specifications of the manufacturers' highest-capacity cartridges, inclusive of long life consumables and page yield. Average HP yield based on ISO/IEC 24711 and continuous printing in default mode. Actual yield varies based on content of printed pages and other factors. For more information, see http://www.hp.com/go/learnaboutsupplies and http://www.hp.com/go/PageWideClaims.

<sup>2</sup> Based on HP review of 2016 published security features of competitive in-class printers. Only HP offers a combination of security features that can monitor to detect and automatically stop an attack then self-validate

software integrity in a reboot. For a list of printers, visit hp.com/go/PrintersThatProtect. For more information: http://www.hp.com/go/Printersecurityclaims

3 High-yield cartridges are not included in printer purchase; purchase separately. Comparison is based on ISO 24711 cartridge yields for HP 982X series High-Yield Original PageWide Cartridges compared with HP 982A series Original PageWide Cartridges. Learn more at http://www.hp.com/go/learnaboutsupplies.

Comparison based on printing in Professional Mode.

Senergy claim based on TEC data reported on energystar.gov as of March 2017. Data normalised to determine energy efficiency of in-class A3 colour laser printers (€1,500-€2,999) and MFPs (€3,000-€7,499) as of February 2017, excluding other HP PageWide products. Subject to device settings. Actual results may vary.

6 Fewer service parts claim based on BLI analysis of leading in-class A3 MFPs as of August 2016; calculations use publicly available and/or published manufacturer rated yields for long-life consumables and assume 600,000

pages printed (using a 60% black/40% colour ratio). Learn more at http://www.hp.com/go/pagewideclaims.

<sup>7</sup> Comparison of HP PageWide A3 devices with the majority of in-class colour ink/laser MFPs (€3,000-€7,499), and colour ink/laser single function printers (€1,500-€2,999) as of April 2017; market share as reported by IDC as

of Q4 2016, excluding other HP PageWide products. HP PageWide speeds based on General Office mode and exclude first page. Learn more at http://www.HP.com/go/printerspeeds

Requires an Internet connection to the printer. Services may require registration. App availability varies by country, language, and agreements. For details, see http://www.hpconnected.com. Some features require additional purchase. A FutureSmart service pack update may be required to activate security features. Learn more at http://www.hp.com/go/printsecurity.

#### **Technical specifications disclaimers**

- ISO speeds measured using ISO/IEC 24734. Excludes first page or first set of ISO test pages. For details see http://www.hp.com/go/printerclaims.
- <sup>2</sup> Exact speed varies depending on the system configuration, software application, driver and document complexity.
  <sup>3</sup> Based on standard ITU-T test image at standard resolution and MMR encoding, the HP fax device can transmit at 3 sec/page for V.34 and 6 sec/page for V.17.
- 4 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. Energy Star value typically based on measurement of 115V device.















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