# HP Color LaserJet Enterprise M653 series



# This HP Color LaserJet with JetIntelligence merges performance, energy efficiency, and security. 1

This HP Color LaserJet Printer with JetIntelligence combines exceptional performance and energy efficiency with professional-quality documents right when you need them—all while protecting your network with the industry's deepest security.<sup>1</sup>



HP Color LaserJet Enterprise M653dn



HP Color LaserJet Enterprise M653x

## The world's most secure printing<sup>1</sup>

- With HP Sure Start, each printer regularly checks its operating code and repairs itself from attempted hacks.
- Help prevent potential attacks and take immediate action with instant notification of security issues.
- Centralize control of your printing environment with HP Web Jetadmin—and help build business efficiency.<sup>2</sup>
- Give workgroups what they need to succeed. Choose and deploy over 175 HP and third-party security features.

# High speed performance meets energy efficiency

- Speed through tasks and save paper. Print two-sided documents at up to 60 images per minute.<sup>3</sup>
- This printer wakes up fast and prints your first page faster—in as quickly as 7.7 seconds.<sup>4</sup>
- This printer uses exceptionally low amounts of energy thanks to its innovative design and toner technology.<sup>5</sup>
- Paper handling options include a wheeled stand and 550-sheet input feeder for paper sizes 4 x 6" to legal.

## More Pages, Performance, and Protection<sup>6</sup>

- ColorSphere3 toner formulation, combined with an automatic media sensor, help provide leading print quality.
- Original HP Toner Cartridges with JetIntelligence supply 46% more pages per color cartridge vs predecessor.<sup>6</sup>
- Help retain the Original HP quality you paid for with anti-fraud and cartridge authentication technology.
- Spend less time replacing toner, and more on business. Choose high-yield toner cartridges.<sup>7</sup>

## Product walkaround

- 1. 500-sheet output bin
- 2. Front door access to toner cartridges
- 3. Wi-Fi Direct printing<sup>5</sup>/Bluetooth Low Energy<sup>7</sup>
- 4. 550-sheet tray 2
- 5. 550-sheet tray 3
- 6. 10.9 cm (4.3-inch) intuitive icon-based colour touchscreen
- 7. Hardware Integration Pocket<sup>1</sup>
- 8. Easy-access USB port<sup>2</sup>
- 9. 100-sheet multipurpose tray 1
- 10. Lower right door (access to print path)
- 11. Built-in automatic two-sided printing
- 12. Slot for cable-type security lock
- 13. Built-in Gigabit Ethernet
- 14. Hi-Speed USB 2.0 printing port
- 15. USB port for connecting external USB devices



# Series at a glance





Model	HP Color LaserJet Enterprise M653dn	HP Color LaserJet Enterprise M653x
Product number	J8A04A	J8A05A
Print speeds (A4) <sup>3</sup>	Up to 56 ppm	
Control panel	10.9 cm (4.3-inch) intuitive icon-based colour touchscreen	
Automatic two-sided printing	Yes	
100-sheet tray 1, 550-sheet tray 2	Yes	
550-sheet tray <sup>4</sup>	Optional (up to two)	Yes (plus up to one optional)
550-sheet tray with stand and cabinet	Optional	Not available
3x550-sheet tray and stand	Optional	Not available
2,000-sheet HCl and 550-sheet tray with stand	Optional	Not available
Direct mobile printing	Optional wireless direct <sup>5</sup> /NFC <sup>6</sup>	Embedded Wi-Fi Direct <sup>®5</sup> /Bluetooth Low Energy <sup>®7</sup>
Wireless networking	Optional <sup>8</sup>	

### **HP Services**

Downtime can have serious consequences, so HP provides support beyond the standard warranty. You benefit from reduced risk, maximized uptime, predictable service delivery and no unbudgeted repair costs.

Choose from:

# Optimized Care (optimum performance and stability):

4 hour Onsite Support, Maintenance Kit Replacement Service, Installation with Network Configuration Service

#### Standard Care (high level of uptime):

Next Business Day Onsite Support, Maintenance Kit Replacement Service, Installation with Network Configuration Service

# Basic Care (minimum recommended support):

Next Business Day Onsite Support

#### 4 hour Onsite Support:

Onsite support within four hours after a service call received within the coverage window

#### **Next Business Day Onsite Support:**

Onsite service the next business day after the service call is received

#### **Maintenance Kit Replacement Service:**

Onsite replacement of your printer's maintenance kit including parts, materials, and labor

# Installation with Network Configuration Service:

Assembly, network configuration, and basic administrator familiarization. For more information about HP Care Pack, HP Contractual, or HP Managed Print Services, visit hp.com/go/printservices

# **Top Features**

Only HP enterprise printers repair themselves from attacks in real time while offering outstanding manageability. Automatically monitor threats, detect intrusions, and validate operating software while centrally managing your fleet with ease.

With speeds of up to 60 pages per minute<sup>3</sup>, fast first page out and a variety of paper-handling options, you get confidence that your employees can speed through their tasks without interruption.

Get more pages and help protect your printer using Original HP Toner cartridges with JetIntelligence.

**Product** 

J8A04A HP Color LaserJet Enterprise M653dn J8A05A HP Color LaserJet Enterprise M653x

#### Accessories

**B5L28A** HP Internal USB Ports

B5L29A HP High-Performance Secure Hard Disk
E5K48A HP 1 GB x32 144-pin (800 MHz)DDR3 SODIMM
F5S62A HP Trusted Platform Module Accessory
J8030A HP Jetdirect 3000w NFC/Wireless Accessory
J8031A HP Jetdirect 2900nw Print Server
P1B09A HP Color LaserJet 550-sheet Media Tray

P1B10A HP Color LaserJet 550 Sheet Paper Tray with Stand P1B11A HP Color LaserJet 3x550 Sheet Feeder and Stand

P1B12A HP Color LaserJet 1x550/2000-sheet HCI Feeder and Stand

**Supplies** 

CF450A HP 655A Black Original LaserJet Toner Cartridge (12,500 pages) CF451A HP 655A Cyan Original LaserJet Toner Cartridge (10,500 pages) CF452A HP 655A Yellow Original LaserJet Toner Cartridge (10,500 pages) CF453A HP 655A Magenta Original LaserJet Toner Cartridge (10,500 pages) CF460X HP 656X High Yield Black Original LaserJet Toner Cartridge (27,000 pages) CF461X HP 656X High Yield Cyan Original LaserJet Toner Cartridge (22,000 pages) **CF462X** HP 656X High Yield Yellow Original LaserJet Toner Cartridge (22,000 pages) CF463X HP 656X High Yield Magenta Original LaserJet Toner Cartridge (22,000 pages)

P1B91A HP LaserJet 110V Maintenance Kit (Up to 150,000 pages)
P1B92A HP LaserJet 220V Maintenance Kit (Up to 150,000 pages)
P1B93A HP LaserJet Image Transfer Belt Kit (Up to 150,000 pages)
P1B94A HP LaserJet Toner Collection Unit (Up to 100,000 pages)

#### **HP Care Packs**

U9NZ6E HP 3 year Next Business Day Service w/Defective Media Retention for Color LaserJet Enterprise M65x U9NZ7E HP 4 year Next Business Day Service w/Defective Media Retention for Color LaserJet Enterprise M65x HP 5 year Next Business Day Service w/Defective Media Retention for Color LaserJet Enterprise M65x **U9NZ8E** HP 3 year 4 hour 9x5 Service w/Defective Media Retention for Color LaserJet Enterprise M65x U9NZ9E **U9PA0E** HP 4 year 4 hour 9x5 Service w/Defective Media Retention for Color LaserJet Enterprise M65x U9PA1E HP 5 year 4 hour 9x5 Service w/Defective Media Retention for Color LaserJet Enterprise M65x **U9PC0PE** HP 1 year Post Warranty NBD Service w/Defective Media Retention for Color LaserJet Enterprise M65x U9PC1PE HP 2 year Post Warranty NBD Service w/Defective Media Retention for Color LaserJet Enterprise M65x U9PC2PE HP 1 year Post Warranty 4 hour 9x5 Service w/DMR for Color LaserJet Enterprise M65x

HP 2 year Post Warranty 4 hour 9x5 Service w/DMR for Color LaserJet Enterprise M65x

Protect your investment with HP Care Pack. Let HP certified engineers resolve your technical issues. For more details on HP Care Pack, go to hp.com/go/cpc

#### Paper

U9PC3PE

Contact HP via phone: Asia: 65 6253 8500

#### **Solutions**

HP Web Jetadmin: hp.com/go/wja HP Universal Print Driver: hp.com/go/upd HP Imaging and Printing Security Center: hp.com/go/ipsc

# HP Color LaserJet Enterprise M653 series

Model	HP Color LaserJet Enterprise M653dn	HP Color LaserJet Enterprise M653x	
Product number	J8A04A	J8A05A	
Functions	Print	30/105/1	
Print			
Duplex print options	Automatic (standard)		
Print speed <sup>8</sup>	Black (A4, normal): Up to 56 ppm; Black (letter, normal): Up to 60 ppm; Black (A4, duplex): Up to 56 ppm; Black (letter, duplex): Up to 60 ppm Color (A4, normal): Up to 56 ppm; Color (letter, normal): Up to 60 ppm; Color (A4, duplex): Up to 56 ppm; Color (letter, duplex): Up to 60 ppm		
First page out <sup>10</sup>	Black (A4, ready): As fast as 5.8 sec; Color (A4, ready): As fast as 5.8 sec; Black (A4, sleep): As fast as 7.8 sec; Color (A4, sleep): As fast as 7.8 sec		
Print technology	Laser		
Print resolution	Black (best) Up to $1200 \times 1200$ dpi; Black (normal) Up to $600 \times 600$ dpi; Black (fine lines) Up to $1200 \times 1200$ dpi Color (best): Up to $1200 \times 1200$ dpi; Color (normal): Up to $600 \times 600$ dpi; Color (fine lines): Up to $1200 \times 1200$ dpi		
Print resolution technology	HP ImageRet 3600; 600 x 600 dpi; HP ProRes 1200 (1200 x 1200 dpi); Pantone© Calibrated		
Print cartridges number	4 (1 each black, cyan, magenta, yellow)		
Standard print languages	HP PCL 6; HP PCL Sc; HP postscript level 3 emulation, native PDF printing (v 1.7), URF (AirPrint)		
Printer management  Connectivity	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		
Standard connectivity	1 Hi-Speed Device USB 2.0; 2 Hi-Speed USB 2.0 Host; 1 Gigabit/Fast Ethernet 10/100/1000 Base-TX network; Hardware Integration Pocket	1 Hi-Speed Device USB 2.0; 2 Hi-Speed USB 2.0 Host; 1 Gigabit/Fast Ethernet 10/100/1000 Base-TX network; Hardware Integration Pocket; 1 Wi-Fi direct 802.11b/g/n; 1 Bluetooth low energy	
Mobile printing capability <sup>7</sup>	HP ePrint; Apple AirPrint™; Mopria-certified	HP ePrint; Wireless direct printing; Apple AirPrint™; Mopria-certified	
Wireless capability	Optional, enabled with purchase of HP Jetdirect 2900nw Print Server J8031A or HP Jetdirect	Yes, Built-in Wi-Fi Direct, Bluetooth low energy; Optional, enabled with purchase of HP	
Network capabilities	3000w NFC/Wireless Accessory J8030A  Yes, via HP Jetdirect Ethernet embedded print server (standard) which supports: 10Base-T, 100Base-T, 100Base-T, 300Case-T; 802.3az (EEE) support on Fast Ethernet and Gig Links; IPsec (standard); 802.11a/b/g/n wireless networking (optional).	Jetdirect 2900nw Print Server J8031A  Yes, via HP Jetdirect Ethernet embedded print server (standard) which supports: 10Base-T, 100Base-Tx, 1000Base-T; 802.3az (EEE) support on Fast Ethernet and Gig Links; IPsec (standard); 802.11a/b/g/n wireless networking (standard).	
Memory	Standard: 1 GB; Maximum: 3 GB		
Hard disk	Optional, 500 GB (with accessory B5L29A)		
Processor speed Duty cycle (monthly)	1.2 GHz Up to 120,000 pages; Recommended monthly page volume: 2000 to 17,000		
Paper handling			
Input	100-sheet multi-purpose tray, 550-sheet input tray 2	100-sheet multi-purpose tray, 550-sheet input tray 2, 3	
Output	500-sheet output bin		
Media types	Paper (plain, light, bond, recycled, mid-weight, heavy, mid-weight glossy, heavy glossy, extra heavy, extra heavy glossy, cardstock, card glossy), color transparency, labels, letterhead, envelope, preprinted, prepunched, colored, rough, opaque film, user-defined		
Media weight	Tray 1: 60-220 g/m² (plain), 120 to 220 g/m² (glossy); Tray 2 and automatic two-sided printing unit: 60 to 163 g/m² (plain), 120 to 220 g/m² (glossy); Optional Trays 3, 4, 5 1x550-sheet feeders: 60 to 163 g/m² (plain), 120 to 220 g/m² (glossy); Optional Tray 4 2,000 high capacity input: 60-163 g/m² (plain)	Tray 1: 60-220 g/m² (plain), 120 to 220 g/m² (glossy); Trays 2, 3 and automatic two-sided printing unit: 60 to 163 g/m² (plain), 120 to 220 g/m² (glossy); Optional Tray 4: 60 to 163 g/m² (plain), 120 to 220 g/m² (glossy)	
Media Sizes Custom	Tray 1: $76 \times 127$ to $216 \times 356$ mm; Tray 2: $101.6 \times 148$ to $216 \times 356$ mm; Optional 550-sheet trays: $101.6 \times 148$ to $216 \times 356$ mm; Optional 2,000-sheet high-capacity tray: custom sizes not supported in this tray	Tray 1: $76 \times 127$ to $216 \times 356$ mm; Trays 2, 3: $101.6 \times 148$ to $216 \times 356$ mm; Optional Tray 4: $101.6 \times 148$ to $216 \times 356$ mm	
Dimensions (w x d x h)	510 x 458 x 510 mm	510 x 458 x 640 mm	
Weight	31.3 kg HP Color LaserJet Printer; HP Black Original LaserJet Toner Cartridge (~12,500 yield), HP	37.5 kg  HP Color LaserJet Printer; HP Black Original LaserJet Toner Cartridge (~12,500 yield), HP	
What's in the box <sup>2</sup>	Cyan, Magenta and Yellow Original LaserJet Toner Cartridges (~12,500 yield each) (toner cartridges installed);CD with software drivers and documentation; Documentation (Hardware Install Guide); Power cord	Cyan, Magenta and Yellow Original Laser Jet Toner Cartridges (~10,500 yield each) (toner cartridges installed); CD with software drivers and documentation; Documentation (Hardware Install Guide); Power cord; 1x550-sheet paper feeder	
Software included	HP Connected, HP Device Experience (DXP), HP PCL 6 (XPS) Printer Driver, HP Software Installer/Uninstaller, Mac OS Welcome Screen (Directs users to 123.HP.com or OS App Source for printer software), Online user manuals		
Warranty features	One-year, next-business day, onsite warranty. Warranty and support options vary by product, country and local legal requirements. Go to hp.com/support to learn about HP award winning		
Systems	service and support options in your region.		
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 macOS 10.12 Sierra, OS X 10.10 Yosemite, OS X 10.11 El Capitan, UMIX, Windows 10 all 32-& 64-bit editions (excluding RT OS for Tablets), Windows 7 all 32-& 64-bit editions (More Side), Premium, Professional, etc.), Windows Y SP 53 32-bit editions (PH Drome, XP Pro, etc.)		
Minimum system requirements	PC:2GB available hard disk space, OS hardware requirements see microsoft.com;		
Security management	Mac: 1.3 GB available hard drive space; Internet; OS hardware requirements see Apple.com for more info Identity management: Kerberos authentication; LDAP authentication; 1000 user PIN codes; optional HP and 3rd 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; 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; Intrusion Detection with Red Balloon Security Technology - Constant in-device monitoring for attacks; SureStart Secure Boto - BloS Integrity Checking with self-healing capability; Whitelisting - loads only known good code (DLLs, EXEs,); Security management: Compatible with HP JetAdvantage Security Manager, Device Security Syslog Messages processed and accessable in Arcsight and Splunk SIEMs		
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 Laser Jet Fonts and IPDS Emulation available at http://www.hp.com/go/laserjetfonts		
Control panel	4.3-in (10.92 cm) Color Graphics Display (CGD) with touchscreen; rotating (adjustable angle) display; Home button		
Display  Energy efficiency compliance	4.3-in (10.92 cm) Color Graphics Display (CGD) with touchscreen; rotating (adjustable angle)  ENERGY STAR® qualified; EPEAT® Silver; EPEAT® Gold (#AAZ; #201 options only); CECP¹  ENERGY STAR® qualified; EPEAT® Silver; CECP¹		
ENERGY STAR Qualified	Yes		
Power	Power supply type: Built in 115V or 220V Power Supply (not dual voltage, power supply varies by part number with option code identifier); Power supply required: Input voltage: 100V to 127V nominal (+/-10%), 50 - 60Hz nominal (+/-3Hz), 12 A; Input voltage: 220V to 240V nominal, (+/-10%), 50 - 60Hz nominal (+/-3Hz), 6 A; Power consumption <sup>2</sup> : 780 watts (printing), 31 watts (ready), 0.7 watts (sleep), 0.7 watts (Auto Off/Manual On), 0.1 (Manual Off); Typical Extrictly Consumption number 2.2.7 kWh/Week (Blue Angel); 0.693 kWh/Week (Energy Star 3.0)		
Acoustics	Acoustic power emissions: $6.9  B(A)$ ; Acoustic power emissions (ready): $4.6  B(A)$ ; Acoustic pressure emissions bystander (active, printing): $54  dB(A)$ ; Acoustic pressure emissions bystander (ready): $31  dB(A)$	Acoustic power emissions: $6.8B(A)$ ; Acoustic power emissions (ready): $4.6B(A)$ ; Acoustic pressure emissions bystander (active, printing): $53dB(A)$ ; Acoustic pressure emissions bystander (ready): $31dB(A)$	
Environmental ranges	Operating temperature range: 15 to 30°C; Recommended operating temperature: 17.5 to 25°C; Non-operating humidity range: 10 to 90% RH; Operating humidity range: 10 to 80% RH; Recommended operating humidity range: 30 to 70% RH		
Safety approvals and requirements	EC 60950-1:2005 +A1:2009 +A2:2013 (International); EN60950-1:2006 +A11:2009 +A1:2010 +A1:2010 +A1:2011 +A2:2013 (EU); EN 60825-1:2014 / IEC 60825-1:2014 (Class 1 Laser Product); EN 62479:2010 / IEC 62479:2010 Low Voltage Directive 2014/35/5U with CE Mark (Europe); GS Certificate (Germany, Europe); UL/cUL Listed and UC CoC (US/Canada); CAN/CSA C22.2 No. 60950-1-07 Amendment 2:2014; Other safety approvals as required by individual countries	EC 60950-1:2005 +A1:2009 +A2:2013 (International); EN60950-1:2006 +A11:2009 +A1:2010 +A12:2011 +A2:2013 (EU); EN 60825-1:2014 / IEC 60825-1:2014 (Class 1 Laser Product); EN 62479:2010 / IEC 62479:2010 EN 62479:2010 EN 62479:2010 EN 62479:2010 EN 62011:2007 Low Volltage Directive 2014/35/EU with CE Mark (Europe); GS Certificate (Germany, Europe); UL/cUL Listed and UC CoC (US/Canada); CAN/CSA (22.2 No. 60950-1-07 Amendment 2:2014; Other safety approvals as required by individual countries	
Supported network protocols		raw queue support only), Web Services Printing, IPP 2.0, Apple AirPrint <sup>™</sup> , HP ePrint, FTP Print, HCP, AutolP, Manual, TFTP Config, ARP-Ping), IPv6 (Stateless Link-Local and via Router,	

#### **Footnotes**

- 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: hp.com/go/Printersecurityclaims.

  2 HP Web Jetadmin is available for download at no additional charge at hp.com/go/webjetadmin.

  3 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.

- document complexity.

  4 Measured after 15 min in sleep. Exact speed varies depending on the system configuration, software application, driver, document complexity and time in sleep.

  5 Energy claim based on TEC data reported on energystar.gov as of January 2017. Data normalized to determine energy efficiency of in-class laser printers with published speed of 50 to 60 ppm. Subject to device settings. Actual results may vary.

  6 More pages versus predecessor cartridges claim based on page-yield comparison of HP M647A and HP 648A Color Original LaserJet Toner Cartridges with HP 656X High Yield Color Original LaserJet Toner Cartridges.

information, see hp.com/go/learnaboutsupplies
7 HP 656X High Yildo Original LaserJet Toner Cartridges not included; please purchase separately.
8 An FCC Class A emissions compliant device meets the less stringent (higher) levels of emissions allowed by the FCC for a product operation in a commercial environment. An FCC class A device cannot be marketed for use in a residential environment and an FCC class A device should not be purchased for use in a residential environment due to the increased risk of interference to radio communications

#### Product walkaround disclaimers

- Solutions deployed through the Hardware Integration Pocket (HIP) may require additional purchase.

  An administrator must enable the easy-access USB port before use.

  Measured using ISO/IEC 24734; excludes first set of test documents. For more information, see hp.com/go/printerclaims. Exact speed varies depending on the system configuration, software application, driver, and document
- Measured using ISO/IEC 24734; excludes first set of test documents. For more information, see hp.com/go/printerctaims. Exact speed varies depending on the system configuration, software application, driver, and document complexity.
  4. All models come with 100-sheet multipurpose tray 1 and 550-sheet tray 2; the M653x model comes with an additional 550-sheet tray 3. The M653x model can add one more 550-sheet tray, but cannot add any other optional paper-handling accessories. All other models can add up to two optional 550-sheet trays or any of the other accessories.
  5. Wi-Fi Direct printing is embedded in the HP Color Laser Jet Enterprise M653x model. All other models can add wireless direct by purchasing the optional HP Jetdirect 3000w NFC/Wireless Direct Accessory. Mobile device needs to be connected directly to the signal of a Wi-Fi Direct "supported MFP or printer prior to printing. Depending on mobile device, an app or driver may also be required. For details, see hp.com/go/mobileprinting. Wi-Fi Direct is a registered trademark of Wi-Fi Alliance.
  6 Touch-to-print capability is optional for all models (except the M653x) with the purchase of the optional HP Jetdirect 3000w NFC/Wireless Direct Accessory. Mobile device must support Near Field Communication (NFC)-enabled printing. For more information, see hp.com/go/businessmobileprinting.
  6 Bluetooth Low Energy is only available on the HP Color Laser Jet Enterprise M653x. Bluetooth® is a trademark owned by its proprietor and used by HP Inc. under license.
  8 All models can add wireless networking with the purchase of the optional HP Jetdirect 2900nw Print Server. Wireless performance is dependent on physical environment and distance from access point, and may be limited during artive VPN ronnertions.

active VPN connections

#### Technical specifications disclaimers

| FEPATP egistered where applicable. EPEAT registration varies by country. See http://www.epeat.net for registration status by country.

2 Cartridges included; yields 10,500 color (C/Y/M) and 12,500 black pages. Pages based on ISO/IEC 19798 and continuous printing. Actual yields vary considerably based on images printed and other factors. For details see http://www.hp.com/go/learnaboutsupplies. Pages may vary based on customer printing conditions and usage.

3 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.

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 First vertice.

Sassed on the BA TEC method with the following possible exceptions: 1 minute or less sleep delay setting, Wi-Fi disabled.

Average color composite (C/M/Y) and black declared yields based on ISO/IEC 19798 and continuous printing. Actual yields vary considerably based on images printed and other factors. For details see http://www.hp.com/go/learnaboutsupplies.

ntp://www.np.com/go/reaniaboutsuppies.
May require a firmware upgrade to be compatible, download at http://www.hp.com/go/support
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

\* Measured using ISO/IEC 24/34, excludes IRIS set or lest outcoments, For more information see http://www.np.com/go/printert.cains.co.cac.speed varies depending on the system configuration, software application document complexity.

9 Measured using ISO/IEC 17629. For more information see http://www.hp.com/go/printerclaims. Exact speed varies depending on the system configuration, software application, driver, and document complexity.

10 Measured after 15 min in sleep. Exact speed varies depending on the system configuration, software application, driver, document complexity and time in sleep.

12 Declared yield value in accordance with ISO/IEC 19752. Actual yields vary considerably based on images printed and other factors. For more information, visit http://www.hp.com/go/learnaboutsupplies

#### To learn more, visit http://www.hp.com

