

# HP Color LaserJet Enterprise M653 series



This HP Color LaserJet with JetIntelligence merges performance, energy efficiency, and security.<sup>1</sup>

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 M653dh



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>

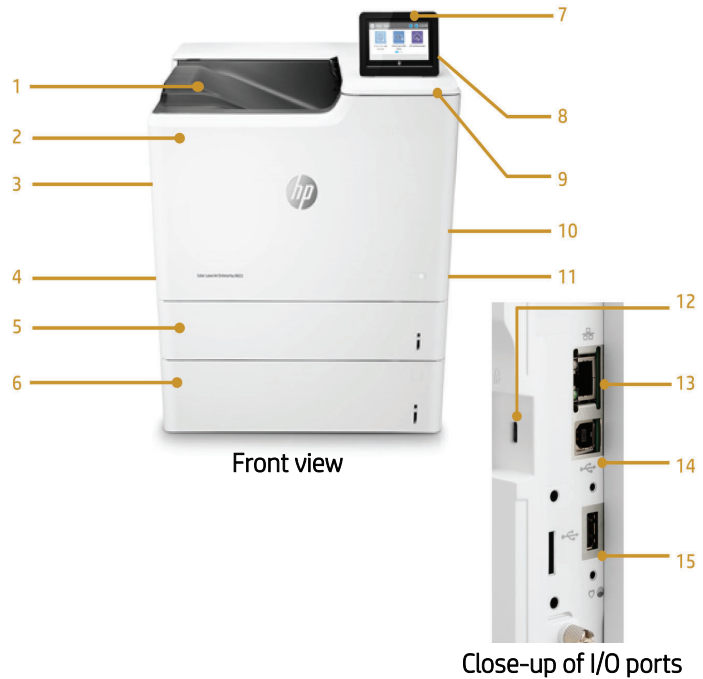
- ColorSphere3 toner formulation, combined with an automatic media sensor, help provide leading print quality.
- Original HP Toner Cartridges with JetIntelligence supply 46% more pages per color cartridge vs predecessor.<sup>6</sup>
- Help retain the Original HP quality you paid for with anti-fraud and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

<sup>1</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](http://hp.com/go/PrintersThatProtect). For more information: [hp.com/go/printersecurityclaims](http://hp.com/go/printersecurityclaims). <sup>2</sup> HP Web Jetadmin is available for download at no additional charge at [hp.com/go/webjetadmin](http://hp.com/go/webjetadmin). <sup>3</sup> 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. <sup>4</sup> Measured after 15 min in sleep. Exact speed varies depending on the system configuration, software application, driver, document complexity and time in sleep. <sup>5</sup> Energy claim based on TEC data reported on [energystar.gov](http://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. <sup>6</sup> 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. For more information, see [hp.com/go/learnabouthsupplies](http://hp.com/go/learnabouthsupplies). <sup>7</sup> HP 656X High Yield Original LaserJet Toner Cartridges not included; please purchase separately. <sup>8</sup> 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.

## HP Color LaserJet Enterprise M653x

### Product walkaround

1. 500-sheet output bin
2. Front door access to toner cartridges
3. Wi-Fi Direct printing<sup>6</sup>/Bluetooth Low Energy<sup>8</sup>
4. Built-in automatic two-sided printing
5. 550-sheet tray 2
6. 550-sheet tray 3
7. 4.3-inch (10.9 cm) icon-based color touchscreen
8. Hardware Integration Pocket<sup>2</sup>
9. Easy-access USB port
10. 100-sheet multipurpose tray 1
11. Lower right door (access to print path)
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 M653dh	HP Color LaserJet Enterprise M653dn	HP Color LaserJet Enterprise M653x
Product number	J8A06A	J8A04A	J8A05A
Print speeds (letter/A4) <sup>4</sup>	Up to 60/56 ppm	Up to 60/56 ppm	Up to 60/56 ppm
Control panel	4.3-inch (10.9 cm) icon-based color touchscreen	4.3-inch (10.9 cm) icon-based color touchscreen	4.3-inch (10.9 cm) icon based color touchscreen
Automatic two-sided printing	✓	✓	✓
100-sheet tray 1, 550-sheet tray 2	✓	✓	✓
550-sheet paper feeder <sup>5</sup>	Optional (up to two)	Optional (up to two)	✓ (plus up to one optional)
550-sheet paper feeder with stand and cabinet <sup>5</sup>	Optional	Optional	Not available
3x550-sheet paper feeder and stand <sup>5</sup>	Optional	Optional	Not available
1x550-sheet/2,000-sheet HCL feeder and stand <sup>5</sup>	Optional	Optional	Not available
Direct mobile printing	Optional wireless direct <sup>6</sup> /NFC <sup>7</sup>	Optional wireless direct <sup>6</sup> /NFC <sup>7</sup>	Embedded Wi-Fi Direct <sup>6</sup> / Bluetooth <sup>®</sup> Low Energy
Wireless networking	Optional <sup>9</sup>	Optional <sup>9</sup>	Optional <sup>9</sup>

<sup>1</sup> Built-in automatic two-sided printing is not supported on the M652n model. <sup>2</sup> Solutions deployed through the Hardware Integration Pocket (HIP) may require additional purchase. <sup>3</sup> An administrator must enable the easy-access USB port before use.

<sup>4</sup> Measured using ISO/IEC 24734; excludes first set of test documents. For more information, see [hp.com/go/printerclaims](http://hp.com/go/printerclaims). Exact speed varies depending on the system configuration, software application, driver, and document complexity. <sup>5</sup> All models come with 100-sheet multipurpose tray 1 and 550-sheet tray 2. In addition, the M652n, M652dn, and M653dn models can add up to two additional 550-sheet paper feeders; or, they can add one of the other accessories (550-sheet paper feeder with stand and cabinet, 3x550-sheet paper feeder and stand, or 1x550-sheet/2,000-sheet paper feeder (tray 3) and it can add one additional 550-sheet HCL feeder and stand). The M653x model comes standard with -sheet paper feeder; it does not support any other paper-handling accessories. <sup>6</sup> Wi-Fi Direct printing is embedded in the HP Color LaserJet 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<sup>®</sup> 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](http://hp.com/go/mobileprinting). Wi-Fi Direct is a registered trademark of Wi-Fi Alliance<sup>®</sup>. <sup>7</sup> 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](http://hp.com/go/businessmobileprinting). <sup>8</sup> Bluetooth Low Energy is standard only on the HP Color LaserJet Enterprise M653x, and it cannot be added to other models. Bluetooth<sup>®</sup> is a trademark owned by its proprietor and used by HP Inc. under license. <sup>9</sup> 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 active VPN connections.

## 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. HP Care Pack Services provide a comprehensive suite of protection services designed to keep HP hardware and software up and running so employees can stay productive.

### Next Business Day Onsite with Defective Media Retention:

Customers can retain their hard disk drive and keep control of sensitive data.

### Same Day Onsite – 4 hour 9x5:

Sends an HP technician to customers' site the same business day for repair, within 4 hours, if the issue cannot be resolved through remote support. Various support window times are available, for different requirements.

For carepack availability visit: [hp.com/go/cpc](http://hp.com/go/cpc)



## 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.<sup>1</sup>

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.<sup>6</sup>

### Accessories

- P1B09A - HP Color LaserJet 550-sheet Paper Feeder
- P1B10A - HP Color LaserJet 550-sheet Paper Feeder with Stand and Cabinet
- P1B11A - HP Color LaserJet 3x550-sheet Paper Feeder with Stand
- P1B12A - HP Color LaserJet 1x550/2000-sheet Feeder and Stand
- J8031A - HP Jetdirect 2900nw Print Server
- J8030A - HP Jetdirect 3000w NFC/Wireless Accessory
- F5S62A - HP Trusted Platform Module Accessory
- B5L28A - HP Internal USB Ports
- B5L29A - HP Secure High Performance Hard Disk Drive
- E5K48A - HP 1GB DDR3 x32 144-Pin 800MHz SODIMM

### Supplies

- CF450A - HP 655A Black Original LaserJet Toner Cartridge (~12,500 pages)
- CF460X - HP 656X High Yield Black Original LaserJet Toner Cartridge (~27,000 pages)
- CF451A - HP 655A Cyan Original LaserJet Toner Cartridge (~10,500 pages)
- CF461X - HP 656X High Yield Cyan Original LaserJet Toner Cartridge (~22,000 pages)
- CF452A - HP 655A Yellow Original LaserJet Toner Cartridge (~10,500 pages)
- CF462X - HP 656X High Yield Yellow Original LaserJet Toner Cartridge (~22,000 pages)
- CF453A - HP 655A Magenta Original LaserJet Toner Cartridge (~10,500 pages)
- CF463X - HP 656X High Yield Magenta Original LaserJet Toner Cartridge (~22,000 pages)
- P1B91A - HP LaserJet 110V Maintenance Kit (~150,000 pages)
- P1B92A - HP LaserJet 220V Maintenance Kit (~150,000 pages)
- P1B93A - HP LaserJet Image Transfer Belt Kit (~150,000 pages)
- P1B94A - HP LaserJet Toner Collection Unit (~100,000 pages)

### Services

- U9NZ6E - HP 3 year Next Business Day Service w/Defective Media Retention
- U9NZ9E - HP 3 year 4 hour 9x5 Service w/Defective Media Retention
- U9PC0PE - HP 1 year Post Warranty NBD Service w/Defective Media Retention
- U9PC2PE - HP 1 year Post Warranty 4 hour 9x5 Service w/DMR

<sup>1</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](http://hp.com/go/PrintersThatProtect). For more information: [hp.com/go/printersecurityclaims](http://hp.com/go/printersecurityclaims). <sup>2</sup> HP Web Jetadmin is available for download at no additional charge at [hp.com/go/webjetadmin](http://hp.com/go/webjetadmin). <sup>3</sup> 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. <sup>4</sup> Measured after 15 min in sleep. Exact speed varies depending on the system configuration, software application, driver, document complexity and time in sleep. <sup>5</sup> Energy claim based on TEC data reported on [energystar.gov](http://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. <sup>6</sup> 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. For more information, see [hp.com/go/learnabouthsupplies](http://hp.com/go/learnabouthsupplies). <sup>7</sup> HP 656X High Yield Original LaserJet Toner Cartridges not included; please purchase separately. <sup>8</sup> 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.

# HP Color LaserJet Enterprise M653 series

Technical Specifications	HP Color LaserJet Enterprise M653dh (U8A06A)	HP Color LaserJet Enterprise M653dn (U8A04A)	HP Color LaserJet Enterprise M653x (U8A05A)
<b>Print speed</b>	Letter: Up to 60 ppm black; Up to 60 ppm color <sup>8</sup> ; <b>First Page Out Black:</b> As fast as 5.7 sec; <b>First Page Out Color:</b> As fast as 5.7 sec <sup>10</sup>		
<b>Print resolution</b>	Black (best): Up to 1200 x 1200 dpi; <b>Colour (best):</b> Up to 1200 x 1200 dpi		
<b>Print Technology</b>	Laser; <b>Print Resolution Technologies:</b> HP ImageRet 3600; 600 x 600 dpi; HP ProRes 1200 (1200 x 1200 dpi); Pantone® Calibrated		
<b>Print Cartridges Number</b>	4 (1 each black, cyan, magenta, yellow)		
<b>Standard Print Languages</b>	HP PCL 6; HP PCL 5c; HP postscript level 3 emulation, native PDF printing (v 1.7), URF (AirPrint)		
<b>Printer Smart Software Features</b>	Print preview, duplex printing, print multiple pages per sheet (2, 4, 6, 9, 16), collation, watermarks, store print jobs, easy-access USB		
<b>Printer Management</b>	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		
<b>Standard Connectivity</b>	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
<b>Network Capabilities</b>	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 (optional).		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).
<b>Wireless Capability</b>	Optional, enabled with purchase of HP Jetdirect 2900nw Print Server J8031A or HP Jetdirect 3000w NFC/Wireless Accessory J8030A		Yes, Built-in Wi-Fi Direct, Bluetooth low energy; Optional, enabled with purchase of HP Jetdirect 2900nw Print Server J8031A
<b>Mobile Printing Capability</b>	HP ePrint; Apple AirPrint™; Mopria-certified <sup>7</sup>		HP ePrint; Wireless direct printing; Apple AirPrint™; Mopria-certified <sup>7</sup>
<b>Memory</b>	Standard: 1 GB; Maximum: 2 GB		
<b>Processor Speed</b>	1.2 GHz / <b>Hard disk:</b> Standard, minimum 500 GB HP High-Performance Secure Hard Disk (AES 256 hardware encryption or greater); FIPS140 certified		1.2 GHz / <b>Hard disk:</b> Optional, 500 GB (with accessory B5L29A)
<b>Duty Cycle</b>	Monthly, letter: Up to 120,000 pages <b>Recommended Monthly Page Volume:</b> 2000 to 17,000 pages		
<b>Paper Handling</b>	<b>Input Capacities:</b> 100-sheet multi-purpose tray, 550-sheet input tray 2; Up to 650 sheets standard labels legal; <b>Output Capacities:</b> 500-sheet output bin; Up to 500 sheets standard labels legal; <b>Duplex Options:</b> Automatic (standard); <b>Envelope Feeder:</b> No; <b>Standard Paper Trays:</b> 2; <b>Media Types Supported:</b> 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; <b>Media Weight Supported:</b> Tray 1: 16 to 58 lb (plain) 32 to 58 lb (glossy); Tray 2 and automatic two-sided printing unit: 16 to 90 lb (plain) 32 to 58 lb (glossy); Optional Trays 3, 4, 5 1x550-sheet feeders: 16 to 90 lb (plain) 32 to 58 lb (glossy); Optional Tray 4 2,000-sheet high capacity input: 16 to 58 lb (plain); <b>Media Sizes Supported:</b> Tray 1: letter, legal, executive, statement, Oficio, 3 x 5 in, 4 x 6 in, 5 x 7 in, 5 x 8 in, envelopes (No. 9, No. 10, Monarch); Tray 2: letter, legal, executive, statement, Oficio, 4 x 6 in, 5 x 7 in, 5 x 8 in; Optional 550-sheet trays: letter, legal, executive, statement, Oficio, 4 x 6 in, 5 x 7 in, 5 x 8 in; Optional 2,000-sheet high-capacity tray: letter, legal; <b>Media Sizes Custom:</b> Tray 1: 3 x 5 to 8.5 x 14 in; Tray 2: 4 x 5.83 to 8.5 x 14 in; Optional 550-sheet trays: 4 x 5.83 to 8.5 x 14 in; Optional 2,000-sheet high-capacity tray: custom sizes not supported in this tray		
<b>Product Dimensions</b>	<b>W x D x H:</b> 20.08 x 18.03 x 20.08 in; <b>Maximum:</b> 37.91 x 30.31 x 20.08 in		<b>W x D x H:</b> 20.08 x 18.03 x 25.20 in; <b>Maximum:</b> 37.91 x 30.31 x 25.20 in
<b>Product Weight</b>	68.9 lb		82.7 lb
<b>What's in the box</b>	HP Color LaserJet Printer; HP Black Original LaserJet Toner Cartridge (~12,500 yield), HP Cyan, Magenta and Yellow Original LaserJet 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 (only J8A05A) <sup>2</sup>		
<b>Warranty Features</b>	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 service and support options in your region.		
<b>Energy Efficiency Compliance</b>	ENERGY STAR® qualified; EPEAT® Gold (#AAZ, #201 options only)	ENERGY STAR® qualified; EPEAT® Silver; EPEAT® Gold (#AAZ, #201 options only); CECP	ENERGY STAR® qualified; EPEAT® Silver; CECP
<b>Control Panel</b>	4.3-in (10.92 cm) Color Graphics Display (CGD) with touchscreen; rotating (adjustable angle) display; Home button		
<b>Display Description</b>	4.3-in (10.92 cm) Color Graphics Display (CGD) with touchscreen; rotating (adjustable angle)		
<b>Software Included</b>	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		
<b>Fonts and Typefaces</b>	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 <a href="http://www.hp.com/go/laserjetfonts">http://www.hp.com/go/laserjetfonts</a>		
<b>Compatible Operating Systems</b>	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 10.10 Yosemite, OS X 10.11 El Capitan, 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 32bit editions (Home Basic, Premium, Professional, etc.), Windows XP SP3 32-bit editions (XP Home, XP Pro, etc.)		
<b>Compatible Network Operating Systems</b>	Citrix MetaFrame Presentation Server 3.0, Citrix MetaFrame XP Presentation Server (Feature Release 1, 2, and 3), Citrix on Windows Server 2003/2003R2, Citrix on Windows Server 2008/2008R2/2008 R2 SP1, Citrix on Windows Server 2012/2012R2, Citrix Presentation Server 4.0/4.5, Citrix XenApp 5.0 (Plus Feature Pack 2 & 3) for Windows Server 2008 Terminal Services 32- and 64-bit, Citrix XenApp 6.0/6.5 [for Windows Server 2008 R2 Terminal Services, 32- and 64-bit], Citrix XenApp 6.0/6.5/7.5 [for Windows Server 2008 R2 SP1 Terminal Services, 32- and 64-bit], Citrix XenApp 7.5 [for Windows Server 2012 and 2012 R2 Terminal Services, 64-bit], Citrix XenDesktop 5.6 [for Windows Server 2008 R2 Terminal Services, 32- and 64-bit], Citrix XenDesktop 5.6/7.0/7.5 [for Windows Server 2008 R2 SP1 Terminal Services, 32- and 64-bit], Citrix XenDesktop 7.0/7.5 [for Windows Server 2012 and 2012 R2 Terminal Services, 64-bit], Novell NetWare 6.5/SP9 Novell Clients <a href="http://www.novell.com/iprint">www.novell.com/iprint</a> , Novell iPrint Appliance v1.0, Novell Open Enterprise Server 1.1/SP1, Novell Open Enterprise Server 2 for Linux, Novell Servers <a href="http://www.novell.com/iprint">www.novell.com/iprint</a> , Windows Server 2003/2003 R2 32-/64-bit (SP1/SP2) Standard/Enterprise/Datacenter (+ Cluster & Terminal Services), Windows Server 2003/2003 R2 32-bit (SP1/SP2) Standard/Enterprise (+ Cluster & Terminal Services), Windows Server 2008/2008 R2 32-/64-bit (SP1/SP2) Standard/Enterprise (+ Cluster & Terminal Services), Windows Server 2008 R2 64-bit (SP1) Standard/Enterprise (+ Cluster & Terminal Services), Windows Server 2008/2008 R2 32-/64-bit (SP1/SP2) Standard/Enterprise/Datacenter (+ Cluster & Terminal Services), Windows Server 2012/2012 R2 64-bit Standard/Foundation/Essentials/Datacenter (+ Cluster & Terminal Services)		
<b>Minimum System Requirements</b>	PC: 2GB available hard disk space, OS hardware requirements see microsoft.com; MAC: 1.3 GB available hard drive space; Internet; OS hardware requirements see Apple.com for more info		
<b>Power</b>	<b>Power Supply Type:</b> Built in 115V or 220V Power Supply (not dual voltage, power supply varies by part number with option code identifier); <b>Power Requirements:</b> 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; <b>Power Consumption:</b> 780 watts (printing), 31 watts (ready), 0.7 watts (sleep), 0.7 watts (Auto Off/Manual On), 0.1 (Manual Off) <sup>3</sup>		
<b>Acoustics</b>	<b>Acoustic Power Emissions:</b> 6.9 B(A); <b>Acoustic Pressure Emissions:</b> 54 dB(A)		<b>Acoustic Power Emissions:</b> 6.8 B(A); <b>Acoustic Pressure Emissions:</b> 53 dB(A)
<b>Operating Environment</b>	<b>Operating Temperature Range:</b> 59 to 86°F; <b>Recommended Operating Temperature:</b> 63.5 to 77°F; <b>Storage Temperature Range:</b> -4 to 104°F; <b>Non-Operating Humidity Range:</b> 10 to 90% RH; <b>Operating Humidity Range:</b> 10 to 80% RH; <b>Recommended Humidity Operating Range:</b> 30 to 70% RH		
<b>Security Management</b>	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 WIA-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 Boot - BIOS 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 accessible in Arcsight and Splunk SIEMs		

<sup>1</sup> EPEAT® registered where applicable. EPEAT registration varies by country. See <http://www.epeat.net> for registration status by country. <sup>2</sup> 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. <sup>3</sup> 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. <sup>4</sup> 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. <sup>5</sup> Based on the BA TEC method with the following possible exceptions: 1 minute or less sleep delay setting, Wi-Fi disabled. <sup>6</sup> 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>. <sup>7</sup> May require a firmware upgrade to be compatible, download at <http://www.hp.com/go/support> <sup>8</sup> 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. <sup>9</sup> Measured using ISO 24734 Feature Test, A5 Landscape Feed. Speed may vary based on content, PC, media orientation, and media type. <sup>10</sup> 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. <sup>11</sup> Measured after 15 min in sleep. Exact speed varies depending on the system configuration, software application, driver, document complexity and time in sleep. <sup>12</sup> 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>

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