

# HP LaserJet Managed E50145 series



## Handle business solutions securely, plus help conserve energy with HP EcoSmart toner

Choose an HP LaserJet Enterprise printer designed to handle business solutions securely and efficiently, and helps conserve energy with HP EcoSmart black toner. Keep up with the demands of growing business with a printer you can rely on.<sup>9</sup>

**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.**  
<http://www.hp.com/go/learnaboutsplies>



HP LaserJet Managed E50145dn

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

- Each printer in your fleet checks its operating code and repairs itself from attacks.
- Your printer's outgoing network connections are inspected to stop suspicious requests and thwart malware.
- Memory activity is monitored to continually detect and stop attacks.
- Firmware is automatically checked during startup to determine if it's authentic code—digitally signed by HP.

### Low costs, low energy use

- Stay productive with reliable cartridges, and help save energy while printing with HP EcoSmart black toner.<sup>9</sup>
- Spend less time replacing toner, and more on business. Choose optional high-yield toner cartridges.<sup>2</sup>
- Enhanced energy savings—up to 29% over prior products<sup>9</sup> plus save with Auto-on/Auto-off technology.<sup>3</sup>
- This printer fits in tight places to boost performance in almost any workspace.

### Your whole fleet. At your control.

- Centralize control of your printing environment with HP Web Jetadmin<sup>5</sup>—and help build business efficiency.
- Gain insights into print costs, behaviors, utilization to drive efficiencies with this cloud-based printer.
- Set security configuration policies and automatically validate settings for every HP printer in your fleet.<sup>4</sup>

### Enhanced productivity keeps business moving

- Submit print jobs on the go and securely release them at any HP Roam-enabled office printer, securely.<sup>8</sup>
- Scan files directly to Microsoft® Office and SharePoint, plus email, USB, and network folders.<sup>6</sup>
- Easily print from a variety of smartphones and tablets—generally no setup or apps required.<sup>7</sup>
- Don't wait for documents. Print your first page in as little as 5.9 seconds from energy-efficient sleep mode.

<sup>1</sup> Based on HP review of 2018 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 <http://www.hp.com/go/PrintersThatProtect>. For more information: <http://www.hp.com/go/printersecurityclaims> <sup>2</sup> High Yield Black Original LaserJet Toner Cartridges not included; please purchase separately <sup>3</sup> HP Auto-On/Auto-Off Technology capabilities are subject to printer and settings. <sup>4</sup> HP Web Jetadmin is available for download at no additional charge at <http://www.hp.com/go/webjetadmin> <sup>5</sup> HP JetAdvantage Security Manager must be purchased separately. To learn more, please visit <http://www.hp.com/go/securitymanager> <sup>6</sup> Requires an Internet connection to the printer. Services may require registration. App availability varies by country, language, and agreements. For details, see [hponconnected.com](http://hponconnected.com). <sup>7</sup> Wireless operations are compatible with 2.4 GHz operations only. App or software and HP ePrint account registration may also be required. Some features require purchase of an optional accessory. Learn more at <http://www.hp.com/go/mobileprinting> <sup>8</sup> To enable HP Roam, some devices may require firmware to be upgraded and an optional accessory to add Bluetooth® Low Energy (BLE) beaconing capabilities. Subscription may be required. For more information, visit [hp.com/go/roam](http://hp.com/go/roam) <sup>9</sup> Based on HP testing using the ENERGY STAR® program's Typical Electricity Consumption (TEC) method or as reported in [energystar.gov](http://energystar.gov) as of May 2019. Actual results may vary. HP testing is based on using the default Sleep Timer setting for all products and using the Network port. Default Sleep Timer setting is 0 minutes. Increasing the Sleep Timer setting longer than the default value can increase TEC.

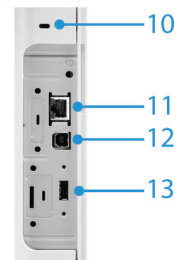
## HP LaserJet Managed E50145dn

### Product walkaround

1. 2nd generation Hardware Integration Pocket<sup>1</sup>
2. Easy-access USB port<sup>2</sup>
3. Top cover release button
4. 100-sheet multipurpose tray 1 supports media sizes up to 8.5 x 14 inches (216 x 356 mm)
5. 4.3-inch (10.9 cm) color touchscreen
6. 250-sheet output bin
7. Top cover (access to JetIntelligence toner cartridge)
8. Automatic two-sided printing
9. 550-sheet input tray 2 supports media sizes up to 8.5 x 14 inches (216 x 356 mm)
10. Slot for cable-type security lock
11. Gigabit Ethernet, Host USB port
12. Hi-Speed USB 2.0 printing port
13. USB port for connecting external USB devices



Front view



Close-up of I/O ports

### Series at a glance



Model	HP LaserJet Managed E50145dn
Product number	1PU51A
Print speed (black) <sup>3</sup>	Up to 45/43 pages per minute (ppm) (letter/A4)
First page out (from ready) <sup>4</sup>	As fast as 5.9/5.9 seconds (letter/A4)
Automatic two-sided printing	√
100-sheet multipurpose tray 1, 550-sheet input tray 2	√
Optional 550-sheet paper tray	Add up to three
Optional printer cabinet	Add up to one
Input capacity (standard/maximum <sup>5</sup> )	Up to 650/2,300 sheets
Recommended monthly page volume <sup>6</sup>	2,000 to 15,000 pages
Managed Cartridge yield	Black: ~23,000 pages <sup>7</sup>
Optional wireless direct printing/NFC touch-to-print <sup>8</sup>	√

<sup>1</sup> Solutions deployed through the Hardware Integration Pocket (HIP) may require additional purchase. The HP LaserJet Managed E50145dn printer comes with a second-generation HIP. <sup>2</sup> An administrator must enable the easy-access USB port before use. <sup>3</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>4</sup> Measured using ISO/IEC 17629. 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> Purchase of optional paper trays required to reach maximum input capacity. <sup>6</sup> Recommended Monthly Page Volume: HP recommends that the number of printed pages per month be within the stated range for optimum device performance, based on factors including supplies replacement intervals and device life over an extended warranty period. <sup>7</sup> Average black declared yields based on ISO/IEC 19752 and continuous printing. Actual yields vary considerably based on images printed and other factors. For details see [hp.com/go/learnaboutsups](http://hp.com/go/learnaboutsups). HP Managed Cartridges are not included in printer purchase; purchase separately. <sup>8</sup> Wireless networking requires purchase of the 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. <sup>9</sup> Touch-to-print capability requires purchase of the optional HP Jetdirect 3100w BLE/NFC/Wireless Accessory. Mobile device must support Near Field Communication (NFC)-enabled printing. For more information, see [hp.com/go/businessmobileprinting](http://hp.com/go/businessmobileprinting).

## 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.

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

## Top features

HP printers have the industry's strongest security<sup>1</sup> because they're always on guard, continually detecting and stopping threats while adapting to new ones. And only HP printers automatically self-heal from attacks, so IT doesn't need to intervene.

Good resource management is good business. Help reduce costs and energy use with an HP LaserJet designed to be more efficient than its predecessors, using HP JetIntelligence toner cartridges. HP, like you, is committed to keeping business moving.

Every business values a problem solver. Help get more control with a robust management system and solutions that keep up with modern business.

Easy-to-use features, fast print speeds, and simple mobile printing options help you keep up with the speed of business.

---

### Accessories

F2A72A	HP LaserJet 550 Sheet Paper Tray
F2A73A	HP LaserJet Printer Cabinet
1PV95A	HP USB Port 100pc M507/M528 Accessory
5EL03A	HP TAA Version Secure Hard Disk Drive
B5L28A	HP Internal USB Ports
B5L29A	HP Secure High Performance Hard Disk Drive
J8031A	HP Jetdirect 2900nw Print Server
G6W84A	HP 1 GB 90-Pin DDR3 DIMM
2MU47A	Accessibility Assistant
J8030A	HP Jetdirect 3000w NFC/Wireless Accessory
3JN69A	HP JetDirect 3100w BLE/NFC/Wireless Accessory
2NR12A	HP Removable Hard Drive Enclosure
X3D03A	HP USB Universal Card Reader
Y7C05A	HP HIP2 Keystroke Reader
4QL32A	HP Legic Card Reader

---

### Supplies

W9008MC HP Black Managed LaserJet Toner Cartridge (~23,000 pages)

---

### Services

UB7E7E - HP 3 years Next Business Day w/DMR LaserJet Enterprise E50145 MNGD SVC  
 UB7E8E - HP 4 years Next Business Day w/DMR LaserJet Enterprise E50145 MNGD SVC  
 UB7E9E - HP 5y Next Business Day w/DMR LaserJet Enterprise E50145 MNGD SVC  
 UB7F0E - HP3 years 4 hours 9x5 w/DMR LaserJet Enterprise E50145 MNGD SVC  
 UB7F1E - HP 4 years 4 hours 9x5 w/DMR LaserJet Enterprise E50145 MNGD SVC  
 UB7F2E - HP 5 years 4 hours 9x5 w/DMR LaserJet Enterprise E50145 MNGD SVC  
 UB7F3E - HP3 years Chnl Parts Only LaserJet Enterprise E50145 MNGD SVC  
 UB7F4E - HP 4 years Chnl Parts Only LaserJet Enterprise E50145 MNGD SVC  
 UB7F5E - HP 5 years Chnl Parts Only LaserJet Enterprise E50145 MNGD SVC

---



<sup>1</sup> Based on HP review of 2018 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 <http://www.hp.com/go/PrintersThatProtect>. For more information: <http://www.hp.com/go/printersecurityclaims> <sup>2</sup> High Yield Black Original LaserJet Toner Cartridges not included; please purchase separately <sup>3</sup> HP Auto-On/Auto-Off Technology capabilities are subject to printer and settings. <sup>4</sup> HP Web Jetadmin is available for download at no additional charge at <http://www.hp.com/go/webjetadmin> <sup>5</sup> HP JetAdvantage Security Manager must be purchased separately. To learn more, please visit <http://www.hp.com/go/securitymanager> <sup>6</sup> Requires an Internet connection to the printer. Services may require registration. App availability varies by country, language, and agreements. For details, see [hpconnected.com](http://hpconnected.com). <sup>7</sup> Wireless operations are compatible with 2.4 GHz operations only. App or software and HP ePrint account registration may also be required. Some features require purchase of an optional accessory. Learn more at <http://www.hp.com/go/mobileprinting>

# HP LaserJet Managed E50145 series

Technical Specifications		HP LaserJet Managed E50145dn (1PU51A)
Print speed		<b>Letter:</b> Up to 45 ppm black <sup>1</sup> ; <b>First Page Out Black (ready):</b> As fast as 5.9 sec; <b>First Page Out Black (sleep):</b> As fast as 10 sec <sup>9</sup>
Print resolution		<b>Black (best):</b> Up to 1200 x 1200 dpi
Print Technology		Laser; <b>Print Resolution Technologies:</b> 300 dpi, 600 dpi, HP FastRes 1200, HP ProRes 1200
Print Cartridges Number		1 (black)
Standard Print Languages		HP PCL 6, HP PCL 5 (HP PCL 5 driver available from the Web only), HP postscript level 3 emulation, native PDF printing (v 1.7), Apple AirPrint™
Printer Smart Software Features		Print preview, duplex printing, print multiple pages per sheet (2, 4, 6, 9, 16), collation, watermarks, store print jobs, easy-access USB
Printer Management		HP Device Toolbox; HP JetAdvantage Security Manager; HP Printer Assistant; HP Web JetAdmin Software; HP SNMP Proxy Agent; HP WS Pro Proxy Agent; Printer Administrator Resource Kit for HP Universal Print Driver (Driver Configuration Utility and Driver Deployment Utility; Managed Printing Administrator)
Standard Connectivity		2 Hi-Speed USB 2.0 Host; 1 Hi-Speed USB 2.0 Device; 1 Gigabit Ethernet 10/100/1000 network
Network Capabilities		HP Jetdirect 2900nw Print Server J8031A, HP Jetdirect 3000w NFC/Wireless Accessory J8030A, HP Jetdirect 3100w BLE/NFC/Wireless
Wireless Capability		Optional, enabled with purchase of a wireless hardware accessory. Single band Wireless Station and Wi-Fi Direct functionality available with HP Jetdirect 3000w NFC/Wireless Accessory J8030A, Dual band Wireless Station and Wi-Fi Direct functionality available with HP Jetdirect 3100w BLE/NFC/Wireless Accessory 3JN69A, Dual band Wireless Station functionality available with HP Jetdirect 2900nw Print Server J8031A
Mobile Printing Capability		Apple AirPrint™; Google Cloud Print™; HP ePrint; Mopria™ Certified; ROAM capable for easy printing <sup>4</sup>
Memory		<b>Standard:</b> 512 MB; <b>Maximum:</b> 1.5 GB, MAX memory, when 1 GB Accessory DIMM is installed
Processor Speed		1.2 GHz / <b>Hard disk:</b> Optional, 500 GB minimum encrypted hard disk drive
Duty Cycle		<b>Monthly, letter:</b> Up to 150,000 pages <sup>5</sup> ; <b>Recommended Monthly Page Volume:</b> 2000 to 15,000 <sup>6</sup>
Paper Handling		<b>Input Capacities:</b> 100-sheet multipurpose Tray 1, 550-sheet input Tray 2, automatic duplex printing; Up to 650 sheets standard labels legal; <b>Output Capacities:</b> 250-sheet output bin; Up to 250 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 (bond, color, letterhead, plain, preprinted, prepunched, recycled, rough); envelopes; labels; cardstock; transparencies; user-defined; <b>Media Weight Supported:</b> Tray 1: 16 to 53 lb; tray 2+: 16 to 32 lb; <b>Media Sizes Supported:</b> Tray 1: letter, legal, executive, statement, 5 x 7 in, 4 x 6 in, 5 x 7 in, 5 x 8 in, 8.5 x 13 in, envelopes (No. 9, No. 10, Monarch); Tray 2: letter, legal, executive, statement, 5 x 7 in, 5 x 8 in, 8.5 x 13 in; Optional 550-sheet tray: letter, legal, executive, statement, 5 x 7 in, 5 x 8 in, 8.5 x 13 in; Optional Automatic Duplexer: letter, legal, 8.5 x 13 in; <b>Media Sizes Custom:</b> Tray 1: 3 x 5 to 8.5 x 14 in; Tray 2: 4.14 x 5.83 to 8.5 x 14 in; Optional 550-sheet Tray: 4.14 x 5.83 to 8.5 x 14 in
Product Dimensions		<b>W x D x H:</b> 16.46 x 14.80 x 12.83 in; <b>Maximum:</b> 16.46 x 25.16 x 12.83 in
Product Weight		25.5 lb <sup>2</sup>
What's in the box		HP LaserJet Managed E50145dn Printer; Black Toner Cartridge (installed); Fixed-Size Cassette Guides; Regulatory flyer; Unpack flyer; Installation Guide; Power cord; Warranty Cards; Support flyers/ phone number list <sup>1</sup>
Replacement Cartridges		HP Black Managed LaserJet Toner Cartridge (~23,000 pages) W9008MC <sup>3</sup>
Warranty Features		One-year, next-business day, onsite warranty. Warranty and support options vary by product, country and local legal requirements. Contact your Contractual Vendor or go to hp.com/support to learn about HP award winning service and support options in your region. (lwy code 4G; wty ID A001)
Energy Efficiency Compliance		Blue Angel; EPEAT® Silver; CECP; ENERGY STAR® qualified <sup>10</sup>
Control Panel		4.3-in (10.92 cm) Color Graphics Display (CGD) with touchscreen; rotating (adjustable angle) display; Home button
Display Description		4.3-in (10.92 cm) Color Graphics Display (CGD) with touchscreen; rotating (adjustable angle)
Software Included		No software solutions are included in the Box, only on www.hp.com/support
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 World Type); 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>
Compatible Operating Systems		Android; Linux Boss (5.0), Linux Debian (7.0-8.6), Linux Fedora (22-24), Linux Mint (17-17.3) 18, Linux Red Hat Enterprise (6 & 7), Linux SUSE (13.2 & 42.1), Linux Ubuntu (12.04 & 14.04 & 15.1 & 16.04 & 16.10), MacOS High Sierra 10.13, MacOS Mojave 10.14, MacOS X 10.15, Windows 7-32, Windows 7-64, Windows 8.1-32, Windows 8.1-64, Windows 10-32, Windows 10-64, UNIX
Compatible Network Operating Systems		Windows Server 2008-32, Windows Server 2008-64, Windows Server 2008 R2-64, Windows Server 2012-64, Windows Server 2012 R2-64, Windows Server 2016-64, Windows Server 2019, Citrix with Microsoft Windows Server 2012 and 2012 R2 Editions and Microsoft Server 2016, Citrix XenApp and XenDesktop 7.x, Citrix with Microsoft Windows Server 2008 R2 SP1 Edition, Citrix XenApp 6.0, Citrix XenApp 6.5, Citrix XenApp and XenDesktop 7.5 (supports Windows Server 2008 R2 SP1 operating system), Citrix XenServer 6.x+, Windows 7 SPI (32-bit / 64-bit) recommend iPrint Client v5.99+, Windows 8 (32-bit / 64-bit) recommend iPrint Client v5.99+, Windows 8.1 (32-bit / 64-bit) recommend iPrint Client v5.99+, Novell / Micro Focus (Novell iPrint has been rebranded to Micro Focus go to <a href="https://www.novell.com/products/iprint/">https://www.novell.com/products/iprint/</a> ), Novell iPrint Appliance Server Platforms supported, Novell iPrint Appliance v1.1, Novell iPrint Clients supported (recommend iPrint v5.94 or newer for all Windows Platforms), Novell Open Enterprise Server 11 / SP1, Services Terminal Server Cluster Server, VMware ESX 4.x+ Workstation 9.x+, XEN on SUSE Linux Enterprise Server (SLES) 11 / SP3
Minimum System Requirements		<b>PC:</b> 2 GB available hard disk space, Internet connection, USB port, Internet browser. (For Additional OS hardware requirements see microsoft.com); <b>MAC:</b> 2 GB Available hard drive Space, Internet connection or USB port, OS hardware requirements see apple.com
Power		<b>Power Requirements:</b> Input voltage: 100 V to 127 V nominal (+/-10%), 50 - 60 Hz nominal (+/- 3 Hz), 7.5 A; Input voltage: 220 V to 240 V nominal (+/-10%), 50 - 60 Hz nominal (+/- ), 4 A; <b>Power Consumption:</b> 601 watts (Active Printing), 7.60 watts (Ready), 2.61 watts (Sleep), 0.06 watts (Auto-Off), 0.06 watts (Off), Auto Off/Wake on LAN 0.73 Watt <sup>11</sup> <b>Typical Electricity Consumption (TEC) number:</b> 1.257 kWh/Week (Blue Angel); 1.310 kWh/Week (Energy Star) <sup>12</sup> ; <b>Best Technical Electricity:</b> 1.257 kWh/week <sup>13</sup>
Acoustics		<b>Acoustic Power Emissions:</b> 6.8 B(A); <b>Acoustic Pressure Emissions:</b> 54 dB(A) <sup>14</sup>
Operating Environment		<b>Operating Temperature Range:</b> 50 to 90.5°F; <b>Recommended Operating Temperature:</b> 59 to 80.6°F; <b>Storage Temperature Range:</b> -4 to 104°F; <b>Operating Humidity Range:</b> 10 to 80% RH; <b>Recommended Humidity Operating Range:</b> 30 to 70% RH
Security Management		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 WPA-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,...); Connection Inspector - helps ensure network connections to device are safe, Security management: Compatible with HP JetAdvantage Security Manager, HP Printer Security Plugin for Microsoft SCCM, Device Security Syslog Messages processed and accessible in ArcSight, Splunk, and McAfee(ESM) SIEMs

<sup>1</sup> In box cartridge yields 5,000 black pages based on ISO/IWC 19752 and continuous printing. Actual pages may vary considerably based on images printed and other factors. For more information, visit: <http://www.hp.com/go/learnaboutsupplies>. <sup>2</sup> With print cartridges <sup>3</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> <sup>4</sup> To enable HP Roam, some devices may require firmware to be upgraded and an optional accessory to add Bluetooth® Low Energy (BLE) beaconing capabilities. Customer can purchase the HP Jetdirect 3100w BLE/NFC/Wireless accessory or the RadBeacon USB. <sup>5</sup> 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. <sup>6</sup> HP recommends that the number of pages per month of imaged output be within the stated range for optimum device performance, based on factors including supplies replacement intervals and device life over an extended warranty period. <sup>7</sup> Measured using ISO 24734 Feature Test, A5 Landscape Feed. Speed may vary based on content, PC, media orientation, and media type. <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/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>10</sup> EPEAT® registered where applicable. EPEAT registration varies by country. See <http://www.epeat.net> for registration status by country <sup>11</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. Power consumption values typically based on measurement of 115 V device. <sup>12</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 115 V device. <sup>13</sup> Best TEC is not applicable to the ES 2.0 TEC. This measurement was made with the printer configuration optimized for energy efficiency. Minimum Sleep Delay was used, Wi-Fi Direct was disabled, and Active I/O - Energy Efficient Ethernet was used. <sup>14</sup> Acoustic values are subject to change. For current information see <http://www.hp.com/support>. Configuration tested: base model, simplex printing, A4 paper at an average of 43 ppm.

## Learn more at [hp.com](http://hp.com)

