

HP LaserJet Enterprise 5501 dn Printer



Simplify document workflows with blazing-fast speeds and customizable features. Seamlessly integrates with your existing fleet, scales for the future, and delivers industry-leading security to safeguard your data.



Get the power to be more productive

- Save time with fast printer wake-up and print speeds up to 52 ppm to power through your tasks.²
- Stay ahead with FutureSmart firmware updates, keeping your fleet always up to date.³
- Customize workflows your way with printer and software configurations for your unique needs.

Simplify work with automated workflows

- Wherever you are in your digital transformation, find the perfect fit—on-premises or cloud, tailored to you.
- Easily integrate your device into your fleet and workflows with seamless compatibility.

Protect what matters with the most secure printer¹

- Keep your work protected—HP Wolf silently detects and repairs your printer from cyberattacks.¹
- Simplify compliance—HP Security Manager enforces policies automatically, so you're always audit-ready.⁴
- Get peace of mind with future-ready security — the world's first printers protected against quantum attacks.⁶

Save energy and help reduce waste

- Reduce costs and environmental impact with printers and toner cartridges that use less energy.⁷
- Meet the rigorous criteria of EPEAT Gold, Energy Star, and Blue Angel with our energy efficient designs.⁸
- Help reduce plastic waste with TerraJet Toner Cartridges designed with recycled plastics.⁹
- Easily recycle your used HP TerraJet Toner Cartridges for free through the HP Planet Partners Program.¹⁰

Product walkaround

[A29Z3A] - HP LaserJet Enterprise 5501dn Printer

- 1. 2.7-inch color non-touch display (6.8cm)
- 2. Automatic 2-sided printing
- 3. 100-sheet multipurpose tray 1 supports media sizes up to Legal (8.5x14 inch)
- 4. 250-sheet output bin supports media sizes up to Legal (8.5x14 inch)
- 5. Hardware Integration Pocket (for connecting accessories and third-party devices)¹
- 6. 550-sheet tray 2 supports media sizes up to Legal (8.5x14 inch)



Accessories, Supplies and Support

Supplies	W1590A HP 159A Black Original LaserJet Toner Cartridge - 1 Black(~5,000 pages) W1590X HP 159X Black Original LaserJet Toner Cartridge - 1 Black(~10,000 pages) W1590Y HP 159Y Black Original LaserJet Toner Cartridge - 1 Black(~26,000 pages)
Accessories	6C7M6A HP LaserJet 550-sheet Paper Tray B01KLA HP LaserJet 3x550 Sheet Paper Tray with Stand B01KTA HP LaserJet 550 Sheet Paper Tray with Storage Stand B01KSA HP LaserJet Envelope Feeder Kit 9R1U0A HP JetDirect 3200w Wifi 6 Bluetooth Wireless Accessory X3D03B HP USB Universal Card Reader C3ZL8A HP JetDirect 3200w Wifi 6/Expander Accessory
Service and Support	UP8F3E HP 3y NBD ONS DMR LJ Ent 5501 SVC UP8F4E HP 4y NBD ONS DMR LJ Ent 5501 SVC UP8F5E HP 5y NBD ONS DMR LJ Ent 5501 SVC UP8F6PE HP 1y PW NBD ONS DMR LJ Ent 5501 SVC UP8F7E HP 3y 4h ONS DMR LJ Ent 5501 SVC UP8F8E HP 4y 4h ONS DMR LJ Ent 5501 SVC UP8F9E HP 5y 4h ONS DMR LJ Ent 5501 SVC UP8G0PE HP 1y PW 4h ONS DMR LJ Ent 5501 SVC UP8G1E HP 3y Parts Only DMR LJ Ent 5501 SVC UP8G2E HP 4y Parts Only DMR LJ Ent 5501 SVC UP8G3E HP 5y Parts Only DMR LJ Ent 5501 SVC UP8G4PE HP 1y PW PartsOnly DMR LJ Ent 5501 SVC U67T2E HP Print CarbonEmissionsSync A4 Only SVC U9JT2E HP Inst SVC w/nw Workgroup Printer

¹ Product availability may differ per Market, please contact your Market Category Manager for availability information.

Technical specifications

Model	HP LaserJet Enterprise 5501dn Printer
Product number	A29Z3A
Functions	Print
Control panel	2.7-in (6.86 cm) QVGA LCD (color graphics) display with 24-key pad
Print	
Print technology	Laser
Print speed ⁵	Black (A4, normal): Up to 50 ppm ; Black (A4, duplex): Up to 41 ipm
First page out ⁷	Black (A4, ready): As fast as 4.1 sec ; Black (A4, sleep): As fast as 7.3 sec
Print resolution	Black (best): Up to 1200 x 1200 dpi ; Technology: Normal (600x600 dpi with FastRes), Fine Lines (1200x1200 dpi), Quickview (300x300 dpi), Economode
Monthly duty cycle ⁸	Up to 150,000 pages A4; Recommended monthly page volume⁹: 2500 to 12,500
Printer smart software features	Print preview, duplex printing, print multiple pages per sheet (2, 4, 6, 9, 16), collation, watermarks, store print jobs
Standard print languages	HP PCL 6, HP PostScript level 3 emulation, native PDF printing (v 1.7), Apple AirPrint™
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 information available in the user guide and documentation for this printer model at http://www.hp.com/support .
Print area	Print margins Top: 4.23 mm, Bottom: 4.23 mm, Left: 4.23 mm, Right: 4.23 mm; Maximum print area : 212 x 352 mm
Duplex printing	Automatic
Processor speed	Dual Core (1.4 GHz)
Connectivity	
Standard	1 Gigabit Ethernet 10/100/1000 Base-T network; 1 Hardware Integration Pocket 2nd generation (HIP2); 1 Hi-Speed USB 2.0 (device); 1 Hi-Speed USB 2.0 (host)
Optional	HP Jetdirect 3200w WiFi 6 Bluetooth Wireless Accessory 9R1U0A; HP Jetdirect LAN Accessory 8FP31A
Mobile printing capability	Apple AirPrint™; Mopria™ certified
Supported network protocols	Via built-in networking solution: TCP/IP, IPv4, IPv6; Print: TCP-IP port 9100 Direct Mode, LPD (raw queue support only), Web Services Printing, IPP 2.0, Apple AirPrint™, HP ePrint, FTP Print, Google Cloud Print; Discovery: SLP, Bonjour, Web Services Discovery; IP Config: IPv4 (BootP, DHCP, AutoIP, Manual, TFTP Config, ARP-Ping), IPv6 (Stateless Link-Local and via Router, Statefull via DHCPv6); Management: SNMPv2/v3, HTTP/HTTPS, Telnet, TFTP Config, FTP FW Download, Syslog; Security: SNMPv3, SSL Cert Management, Firewall, ACL, 802.1x
Network capabilities	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); WiFi 2.4/5 GHz wireless networking (optional); Second Ethernet port (optional); Microsoft Universal Print (MUP) support
Hard disk	Standard, 8 GB eMMC
Memory	Standard: 2 GB ; Maximum: 2 GB
Media handling	
Number of paper trays	Standard: 2 ; Maximum: 5 ¹⁶
Media types	Paper (bond, color, letterhead, plain, preprinted, prepunched, recycled, rough); envelopes; labels; cardstock; transparencies; user-defined
Media size	Custom (metric): Tray 1: 76.2 x 127 to 216 x 356 mm; Tray 2: 105 x 148 to 216 x 356 mm; Optional 550-sheet Tray: 105 x 148 to 216 x 356 mm; Envelope Feeder Accessory: 98 x 162 to 178 x 254 mm Supported (metric): Tray 1: A4, A5, A6, RA4, B5 (JIS), B6 (JIS), 10 x 15 cm, Oficio (216 x 340), 16K, postcards (JIS single and double), envelopes (B5, C5, C6, DL); Tray 2: A4, A5, A6, RA4, B5 (JIS), B6 (JIS), Oficio (216 x 340), 16K, postcards (JIS double); Optional 550-sheet Tray: A4, A5, A6, RA4, B5 (JIS), B6 (JIS), Oficio (216 x 340), 16K, postcards (JIS double); Optional Automatic Duplexer: A4, RA4, Oficio (216 x 340); Envelope Feeder Accessory: B5, C5, C6, DL

Technical specifications

Model	HP LaserJet Enterprise 5501dn Printer
Product number	A29Z3A
Media handling	Standard input: 100-sheet multipurpose feeder, 550-sheet input feeder Standard output: 250-sheet output bin Optional input: Optional 1 x 550-sheet paper feeder, 1 x 550-sheet feeder with cabinet, 2000-sheet feeder high capacity input with 1 x 550-sheet paper feeder, optional 3 x 550-sheet feeder, optional envelope feeder
Media weight	Feeder 1: 60 to 200 g/m²; Feeder 2: 60 to 120 g/m²; Automatic Duplexer: 60 to 120 g/m²
Input capacity	Tray 1: Sheets: 100; Envelopes: 10 Tray 2: Sheets: 550; labels: up to 500 Tray 3: Sheets: 550; Envelope Accessory Tray: 50 Envelopes Maximum: Up to 2300 sheets
Output capacity	Standard: Up to 250 sheets Envelopes: Up to 30 envelopes Transparencies: Up to 75 sheets Maximum: Up to 250 sheets
Compatible operating systems ¹⁴	Windows 11 (64-bit and ARM64); Windows 10 (32-bit, 64-bit and ARM64); Android; iOS; macOS 14 Sonoma; macOS 15 Sequoia; macOS Tahoe v26; Linux: Debian 10; Linux: Debian 11; Linux: Elementary 6P; Linux: Fedora 31; Linux: Fedora 32; Linux: Fedora 33; Linux: Fedora 34; Linux: Fedora 35; Linux: Linuxmint 20.1; Linux: Linuxmint 20.2; Linux: Manjorolinux 20.2; Linux: Manjorolinux 21.0.7; Linux: Mxlinux 21; Linux: OpenSuse 15.1; Linux: OpenSuse 15.2; Linux: OpenSuse 15.3; Linux: Rhel 6; Linux: Rhel 7; Linux: Rhel 8; Linux: Ubuntu 20.04; Linux: Ubuntu 20.10; Linux: Ubuntu 21.04; Linux: Ubuntu 21.10; Linux: Zorin 15; Linux: Zorin 16; Chrome OS
Compatible network operating systems	Citrix; SAP; Windows Server 2016 64-bit; Windows Server 2019 64-bit; Windows Server 2022 64-bit; Windows Server 2025 64-bit
Minimum system requirements	Windows: 2 GB available hard disk space, Internet connection, USB port, Internet browser. For additional OS hardware requirements see microsoft.com Mac: 2 GB available hard drive space, Internet connection or USB port, OS hardware requirements see apple.com;
Software included	No software solutions are included in the Box, only on http://hp.com;
Security management	Identity management: Role Based Access Control (RBAC) Walk-up and Remote Access; Admin PW Protected EWS and Remote Access, Self-signed Certificate; Encrypted passwords; Personal on-device user accounts; Account Lockout (time-based); Kerberos AuthN; LDAP authentication; 1000 user PIN codes; Optional HP and 3rd party passwordless, MFA solutions (e.g.: badge readers); Protected Access (embedded) end user passwordless MFA for Microsoft® Entra ID; Proximity card reader, single sign-on, smart card, CAC support. Network protection: IPsec/firewall with Certificate; Elliptic Curve Cryptography (ECC, EC-based certificates); Pre-Shared Key; Kerberos AuthN; Web Jetadmin fleet proxy; 802.1X (EAP-PEAP; EAP-TLS); SNMPv3; HTTPS with Server Certificate Validation; Certificate Provisioning and CA support; Access Control List. Data privacy and protection: Storage Encryption; Encrypted PDF & Email (uses FIPS 140 validated crypto libraries from Microsoft®); Secure Erase with job storage (3x overwrite for HDD, cryptographic erase for SDD); SSL/TLS 1.2, TLS 1.3 support (HTTPS; Encrypted Credentials; Secure encrypted print support via UPD; AI-enabled Guided Redaction data security (select models). Device protection: Continuous malware monitoring; HP SureStart with Quantum Resistant BIOS firmware Integrity checking, PQC protection, and self-healing recovery; Allowlisting code validation (DLLs, EXEs, etc.) at time of use; Memory Shield hardware-enforced Runtime Intrusion Detection and Control Flow Integrity with self-healing recovery; AI-powered Connection Inspector network behavior anomaly detection with self-healing recovery; Trusted Platform Module 2.0; Configurable Service PIN; EU RED, UK PSTI, Australia Cybersecurity Act 2024 compliant; Embedded VPN (select HP Enterprise models); HP LaserJet Workflow Accelerator Card support (select HP Enterprise models); Wi-Fi security; WPA Enterprise; Security lock slot; USB host port disablement; Hardware integration pocket (HIP). Testing, Validation, Governance, and Compliance: FIPS 140-2, 140-3, Common Criteria Certification; NIST security checklist; Supply Chain Security ISO/IEC 20243 Certifications. Fleet security management: HP Security Manager policy and device certificate management, fleet firmware vulnerability assessment; Compatible with Device Security Syslog Messages processed and accessible in SIEM tools; HP Workforce Experience Platform Support (select models); Original HP Enterprise Cartridge Security.
Printer management	HP Printer Assistant; HP Device Toolbox; HP Web JetAdmin Software; HP Security Manager; Printer Administrator Resource Kit for HP Universal Print Driver (Driver Configuration Utility - Driver Deployment Utility)
Dimensions and weight	
Printer dimensions (W x D x H)	Minimum 400 x 400 x 305 mm; Maximum: 400 x 725 x 305 mm (rear jam access door open, front cartridge door open, all feeders open and extended)
Printer weight ⁴	~11.8 kg
Operating environment	Temperature: 10 to 32.5°C Humidity: 30 to 70% RH
Storage conditions	Temperature: -20 to 40°C
Acoustics ¹	Acoustic power emissions: 6.9 B(A) Acoustic pressure emissions: 54 dB(A)
Power ¹⁰	Requirements: Input Voltage: 100V - 127V AC, 50 - 60Hz, 8.8A; or Input Voltage: 220V - 240V AC, 50 - 60Hz, 4.6A; Consumption: 552.4 watts (Printing), 4.89 watts (Ready), 0.76 watts (Sleep), 0.02 watts (Auto-Off), 0.02 watts (Off); Typical Electricity Consumption (TEC) ¹¹ : 0.419 kWh/Week (Blue Angel); 0.400 kWh/Week (ENERGY STAR 3.0); Power supply type: Built-in 3-Pin 115V or 220V Internal Power Supply
Energy savings feature technology	HP Auto-Off Technology; Instant-on Technology; Low-power sleep mode; Power save; TerraJet Toner
Certifications ²	UL/cUL (US/Canada); RCM (Australia); TUV and GS Mark (Germany); Department of Industrial Standards of Cambodia; Bureau of Standards, Metrology and Inspection Ministry of Economic Affairs - BSMI (Taiwan); Certificate of China Compulsory Product Certification - CCC (China); Bureau of Indian Standards - BIS Registration (India); PSB (Singapore); Eastern European country approvals; CE Marking; Other Safety & EMC Certification approvals as required by individual countries. Electromagnetic emission standard: CISPR 22:2008 (International) Class A, CISPR 32:2015 (International) Class A / EN 55032:2015 Class A + A11:2020, CISPR 35:2016 (International) / EN 55035:2017 + A11:2020, EN IEC 61000-3-2:2019 + A11:2021, EN IEC 61000-3-3:2013+A1:2019 + A2:2021, FCC 47 CFR Part 15 Class A, ICES-003, Issue 7 Class A. Other EMC approvals as required by individual countries. CECP; IT ECO Declaration; Blue Angel; EPEAT® Gold India; EPEAT® Gold Australia; EPEAT® Gold Canada; EPEAT® Gold US; SEPA; KOECO; EPEAT® registered; ENERGY STAR® certified; Korea MEPS; Vietnam MEPS Blue Angel compliant ¹² Yes, Blue Angel DE-UZ 219—only ensured when using Original HP supplies
Sustainable impact specifications	Recyclable through HP Planet Partners; Contains at least 5% post-consumer recycled plastic
Country of origin	Vietnam
What's in the box ³	A29Z3A HP LaserJet Enterprise 5501dn Printer; HP Original LaserJet Toner Cartridge (~6,000 pages); Regulatory flyer; Unpack Flyer; Installation Guide; Power cord; Warranty Cards; Support flyers/phone number list
Warranty	One-year, onsite warranty service. 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. (warranty code 4G; warranty ID A001)

Footnotes

¹ HP's most advanced embedded security features are available on HP Managed and Enterprise devices with HP FutureSmart firmware 4.5 or above. Claim based on HP review of published features as of June 2025 of competitive in-class printers. Only HP offers a combination of security features to automatically detect, isolate, stop, and recover from attacks with a self-healing reboot, in alignment with NIST SP 800-193 guidelines for device cyber resiliency. Printers are most vulnerable to attack when they are booting up and during runtime (when the printer is in sleep mode and in use). Only HP Enterprise printers protect the device during 100% of the printer's life with Sure Start BIOS protection, Memory Shield with hardware-based Runtime Intrusion Detection and Control Flow Integrity to detect and recover from zero-day threats in addition to Connection Inspector network behavioral anomaly detection all with self-healing recovery. For a list of compatible products, visit hp.com/go/PrintersThatProtect For more information, visit hp.com/go/PrinterSecurityClaims.

² 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.

³ Some features enabled by future HP FutureSmart firmware upgrades may not be available on older devices, if for example, physical product characteristics limit the functionality of the new feature.

⁴ HP Security Manager must be purchased separately. For details, see hp.com/go/securitymanager.

⁶ Based on HP's internal analysis of business Printers with preinstalled encryption, authentication, malware protection, post-quantum digital signature, and initial BIOS firmware integrity protection with automatic self-healing recovery finding that no other in-class Printers implement a quantum-resistant cryptographic scheme to protect the integrity of the BIOS and firmware as of March 2025.

⁷ Energy reduction in HP LaserJet Enterprise 5501-5502 and 5601-5602 with HP Original 159 TerraJet Toner Cartridges compared to predecessor HP LaserJet Enterprise M507 and M528 with HP Original 89 Toner Cartridges. Calculated in 2026 based on normalized Energy Star® Typical Electricity Consumption (TEC) data. See hp.com/TerraJet/energysaving for more information.

⁸ HP voluntarily designs and tests its printing systems to prevent emissions that exceed Blue Angel and EPEAT eco-label guidelines. Based on US, Canada, India, and Australia EPEAT® registration according to IEEE 1680.1-2018 EPEAT®. EPEAT® status varies by country. Visit www.energystar.gov/productfinder for more information on models of the HP LaserJet Enterprise 5500/MFP 5600 series that are ENERGY STAR certified in North America. ENERGY STAR and the ENERGY STAR logo are registered U.S. marks. HP printer, HP paper and Original HP supply - Blue Angel DE-UZ 219 Emissions Criteria.

⁹ Recycled plastic in Original HP 159 and 160 TerraJet Toner Cartridges measured in 2026 and expressed as a percentage of total weight of plastic. See hp.com/TerraJet/plasticreductions for more information.

¹⁰ Program availability varies. For more information, visit hp.com/hprecycle.

Technical specifications disclaimers

¹ Active Printing measured on worse case bundle/mode, printing A4 simplex at 50ppm.

² EPEAT® registered where applicable. EPEAT registration varies by country. See <http://www.epeat.net> for registration status by country. ENERGY STAR and the ENERGY STAR logo are registered U.S. marks.

³ In box cartridge yields 6,000 black pages based on ISO/IEC 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>.

⁴ With print cartridges

⁵ Measured using ISO/IEC 24734, excludes first set of test documents. For more information see <https://www.hp.com/go/printerclaims>. Exact speed varies depending on the system configuration, software application, driver, and document complexity.

⁶ Measured using ISO/IEC 24734 Feature Performance Test, excludes first set of test documents. For more information see <https://www.hp.com/go/printerclaims>. Exact speed varies depending on the system configuration, software application, driver, and document complexity.

⁷ Device first page out time based on HP internal measurement of printer activation until page exit. Measurement based on industry-standard ISO/IEC 17629 can be found at <http://www.hp.com/go/printerclaims>. Exact speed varies depending on the system configuration, software application, driver, and document complexity.

⁸ 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.

⁹ 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. The range shown is based on 60 months of output for the lower monthly value and 12 months of output for the higher monthly value.

¹⁰ Power consumption values based on measurement of 115V device. 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.

¹¹ Typical Electricity Consumption (TEC) rating represents the typical electricity consumed by a product during 1 week, measured in kilowatt-hours (kWh).

¹² 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 and 230V for Blue Angel.

¹³ Product Documentation and Support; HP Mac OS Print Driver; HP Easy Admin ; HP Universal Scan Solution; Printer Administrator Resource Kit (Driver Configuration; HP Universal Print Drivers PCL6 GDI & PS GDI for Windows; SAP Print Drivers for more information; HP JetAdvantage Security Manager; HP Command Center; Chrome Extension; Available on <https://support.hp.com> unless noted; HP Insights (WXP); HP WebJetAdmin; HP Workpath HPLIP Linux Printer Driver for more information see <http://hplipopensource.com/hplip-web/index.html>; HPX;

¹⁴ Citrix Server versions updates release every quarter, for updates see <https://www.citrix.com/en-in/downloads/citrix-virtual-apps-and-desktops/>; Citrix XenApp & XenDesktop versions updates release every quarter, for updates see <https://www.citrix.com/en-in/downloads/citrix-virtual-apps-and-desktops/>; Citrix Ready Kit Certification - see <http://citrixready.citrix.com> for the latest qualification for HP Printers;

¹⁵ Envelope feeder available as an accessory kit and requires that an additional Tray must be present in the Tray 3 position. Additional trays can be ordered as accessories to suit your requirements.

