Data sheet

HP LaserJet Enterprise 8501 Printer series

The ultimate workflow experience

Boost office productivity with fast print speeds and effortless management.

Rely on exceptional performance
- Stay productive and always ready for what's next with upgradeable HP FutureSmart features.[2]
- Save valuable time. High-quality prints are delivered quickly—with speeds up to 70 ppm.[3]

Secure what matters[1]
- Your work is secure with HP Wolf Security[4], silently detecting and repairing your printer from cyber attacks.
- Protect your network with the world's first quantum-resistant business printers.[4]
- Protect data stored on your device with the embedded HP Trusted Platform Module.[5] Passwords, keys, and more.

Simplify print management
- Receive an easy-to-install printer at your office. No third-party technician needed.
- Easily maintain on your own—or get assistance from HP Services when you need it.
- Simplify management with long-lasting consumables and parts that minimize intervention.

Reduce your impact with sustainably designed tech
- Our energy efficient designs meet the rigorous criteria of EPEAT Gold, Energy Star and Blue Angel.[6]
- With HP Planet Partners, we offer a convenient way to recycle HP supplies after their use.[7]
- With every page you print, HP invests in helping to protect, manage, and restore forests.[8]

This printer is intended to work only with cartridges that have a new or reused HP chip, and it uses dynamic security measures to block cartridges using a non-HP chip. Periodic firmware updates will maintain the effectiveness of these measures and block cartridges that previously worked. A reused HP chip enables the use of reused, remanufactured, and refilled cartridges. More at: http://www.hp.com/learn/ds

Product walkaround

1. 500-sheet output bin
2. 70 ppm
3. Automatic, 2-sided printing
4. HP Wolf Enterprise Security
5. 4.3-inch Color touchscreen
6. Power button
7. Right door access to the print path
8. Hardware Integration Pocket
9. Easy access USB port
10. 2,180-sheet input

Series at a glance

Model	HP LaserJet Ent 8501dn Prntr	HP LaserJet Ent 8501x Prntr	HP LaserJet Ent 8501x+ Prntr
Product number	9S187A	AJ7J3A	AQ1E4A
Print speed	70 ppm		
Input capacity	1,140 sheets	2,180 sheets	
Recommended Monthly Page Volume	60,000		
Control Panel	4.3-inch Color touchscreen		
Finisher	N/A		Stapler/Stacker Finisher included

Accessories, Supplies and Support

Supplies	**9U1Q5A** HP LaserJet Toner Collection Unit (Average cartridge yields 300,000 standard pages. Declared yield value in accordance with ISP/IEC 19752.)
	W1760A HP LaserJet Black Toner Crtg (Average cartridge yields 45,000 standard pages. Declared yield value in accordance with ISP/IEC 19752.)
	W1766A HP LaserJet Black Imaging Drum (Average cartridge yields 600,000 standard pages. Declared yield value in accordance with ISP/IEC 19752.)
Accessories	**2NR12A** HP Removable Hard Drive Enclosure
	2TD64A HP Accessibility Kit
	3JN69A HP Jetdirect 3100w BLE/NFC/Wireless
	478C2A HP Printing Voice Assistant
	4QL32A HP Legic Secure USB Reader
	8FP31A HP Jetdirect LAN Accessory
	B5L31A HP Foreign Interface Harness
	X3D03A HP Universal USB Proximity Card Reader
	Y1G14A HP LaserJet Stapler/Stacker Finisher Staples
	Y7C05A HP HIP2 Keystroke Reader
Service and Support	**UF8K1E** HP 3 year Next Business Day Onsite with DMR Service for LaserJet Enterprise 8501
	UF8K2E HP 4 year Next Business Day Onsite with DMR Service for LaserJet Enterprise 8501
	UF8K3E HP 5 year Next Business Day Onsite with DMR Service for LaserJet Enterprise 8501
	UF8K4PE HP 1 year Post Warranty Next Business Day Onsite with DMR Service for LaserJet Enterprise 8501
	UF8K9E HP 3 year 4 hour Onsite with DMR Service for LaserJet Enterprise 8501
	UF8L0E HP 4 year 4 hour Onsite with DMR Service for LaserJet Enterprise 8501
	UF8L1E HP 5 year 4 hour Onsite with DMR Service for LaserJet Enterprise 8501
	UF8L2PE HP 1 year Post Warranty 4 hour Onsite with DMR Service for LaserJet Enterprise 8501
	UF8K5E HP 3 year Parts Exchange with DMR Service for LaserJet Enterprise 8501
	UF8K6E HP 4 year Parts Exchange with DMR Service for LaserJet Enterprise 8501
	UF8K7E HP 5 year Parts Exchange with DMR Service for LaserJet Enterprise 8501
	UF8K8PE HP 1 year Post Warranty Parts Exchange with DMR Service for LaserJet Enterprise 8501
	U9JT3E HP Installation Service with network configuration for Department Printer (1 unit)
	UF8L4E HP Maintenance Kit Replacement Service for LaserJet Enterprise 8501 Fuser Kit 110v
	UF8L5E HP Maintenance Kit Replacement Service for LaserJet Enterprise 8501 Fuser Kit 220v
Solutions	Security: HP Access Control; HP Security Manager; HP Advance; HP Secure Print and Insights
	Mobile and universal print: HP Universal Print Driver (UPD)
	Management: Embedded Web Server

Technical specifications

Model	HP LaserJet Ent 8501dn Prntr	HP LaserJet Ent 8501x Prntr	HP LaserJet Ent 8501x+ Prntr
Product number	9S187A	AJ7J3A	AQ1E4A
Functions	Print		
Control panel	4.3-in (10.92 cm) Color Graphics Display (CGD) with touchscreen; rotating (adjustable angle) display; Speaker		
Print			
Print technology	Laser		
Print speed[3]	**Black (A4, normal)**: Up to 70 ppm **Black (A4, duplex)**: Up to 70 ipm **Black (A3, normal)**: Up to 35 ppm		
First page out[4]	**Black (A4, ready)**: As fast as 5.6 sec **Black (A4, sleep)**: As fast as 12.9 sec (15 min)		
Print resolution	**Black (normal)**: Up to 600 x 600 dpi; **Black (fine lines)**: Up to 1,200 x 1,200 dpi;		
Print technology	**Technology**: 1,200 x 1,200 dpi (Fine lines); 600 x 600 dpi (Normal); 300 x 300 dpi (Quick view)		
Monthly duty cycle	Up to 250,000 pages A4; **Recommended monthly page volume**: Up to 60,000		
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		
Standard print languages	HP PCL 5e, HP PCL 6, HP Postscript level 3 emulation, PDF (v 1.7), AirPrint™ compatible		
Fonts and typefaces	84 scalable TrueType fonts		
Print area	**Print margins** Top: 4.23 mm, Bottom: 4.23 mm, Left: 4.23 mm, Right: 4.23 mm; Maximum print area: 311.5 x 448.7 mm		
Duplex printing	Automatic		
Processor speed	1.6 GHz (Quad Core), 1.4 GHz (Dual Core)		
Storage Standard	256 GB SSD		

Model	HP LaserJet Ent 8501dn Prntr	HP LaserJet Ent 8501x Prntr	HP LaserJet Ent 8501x+ Prntr
Product number	9S187A	AJ7J3A	AQ1E4A
Connectivity			
Standard	1 Gigabit Ethernet 10/100/1000T network; 1 Hardware Integration Pocket 2nd generation (HIP2); 1 Hi-Speed USB 2.0 (host); 1 SuperSpeed USB 3.0 (device); 1 SuperSpeed USB 3.0 (host)		
Optional	HP Jetdirect 3100w BLE/NFC/Wireless Accessory 3JN69A		
Wireless	Optional, enabled with purchase of a hardware accessory		
Mobile printing capability	Apple AirPrint™; Mopria™ Certified; Wi-Fi® Direct Printing; PrinterOn Print		
Supported network protocols	IPv4/IPv6: Apple Bonjour Compatible (Mac OS 10.2.4 or higher), AirPrint, SNMPv1/v2c/v3, HTTP, HTTPS, Port 9100, LPD, WS Discovery, IPP, Secure-IPP, IPsec/Firewall; IPv6: DHCPv6, MLDv1, ICMPv6; IPv4: Auto-IP, SLP, LLMNR, IGMPv2, BOOTP/DHCP, WINS, IP Direct Mode, WS Print; HP Web Services		
Hard disk	None		
Memory	**Standard:** 6 GB; **Maximum:** 6 GB		
Media handling			
Number of paper trays	**Standard:** 3 ; **Maximum:** Up to 3	**Standard:** 5 ; **Maximum:** Up to 5	
Media types	Plain, HP EcoEFICIENT, HP Matte 90 g, Light 60-74 g, Bond, Recycled, HP Matte 105 g, HP Matte 120 g, HP Soft Gloss 120 g, Mid-Weight 96-110 g,Heavy 111-130 g, HP Matte 150 g, Extra Heavy 131-175 g, HP Matte 200 g, Card-stock 176-220 g, Light Paperboard 221-255 g, Paperboard 256-300 g, Heavy Paperboard, Mono Transparency, Labels, Letterhead, Envelope, Heavy Envelope, Preprinted, Pre-punched, Colored		
Media size	**Custom (metric):** Tray 1: 98 x 139.7 to 320 x 457.2 mm; Tray 2: 98 x 139.7 to 297 x 390 mm; Tray 3: 140 x 182 to 320 x 457.2 mm ; **Supported (metric):** Tray 1: A3, A4, A4R, A5, A5R, A6, RA3, SRA3, RA4, SRA4, B4 (JIS), B5 (JIS), B6 (JIS), 10x15cm, Oficio, 8K, 16k, Postcard (JIS), Postcard (JIS), Envelope B5, Envelope C5, Envelope C6, Envelope DL; Tray 2: A4, A4R, A5, A5R, A6, RA4, B4 (JIS), B5 (JIS), B6(JIS), Oficio, 8K, 16k, Envelope B5, Envelop C5, Envelope C6, Envelope DL; Tray 3: A3, A4, A4R, A5, RA3, RA4, B4 (JIS), B5 (JIS), Oficio, 8K, 16k	**Custom (metric):** Tray 1: 98 x 139.7 to 320 x 457.2 mm; Tray 2: 98 x 139.7 to 297 x 390 mm; Tray 3: 140 x 182 to 320 x 457.2 mm; Tray 4: 140 x 182 to 320 x 457.2 mm; Tray 5: 140 x 182 to 320 x 457.2 mm ; **Supported (metric):** Tray 1: A3, A4, A4R, A5, A5R, A6, RA3, SRA3, RA4, SRA4, B4 (JIS), B5 (JIS), B6 (JIS), 10x15cm, Oficio, 8K, 16k, Postcard (JIS), Postcard (JIS), Envelope B5, Envelope C5, Envelope C6, Envelope DL; Tray 2: A4, A4R, A5, A5R, A6, RA4, B4 (JIS), B5 (JIS), B6(JIS), Oficio, 8K, 16k, Envelope B5, Envelop C5, Envelope C6, Envelope DL; Tray 3: A3, A4, A4R, A5, RA3, RA4, B4 (JIS), B5 (JIS), Oficio, 8K, 16k; Tray 4: A3, A4, A4R, A5, RA3, RA4, B4 (JIS), B5 (JIS), Oficio, 8K, 16k; Tray 5: A3, A4, A4R, A5, RA3, RA4, B4 (JIS), B5 (JIS), Oficio, 8K, 16k	
Media handling	**Standard input:** 100-sheet multi-purpose tray, 2 x 520-sheet input tray **Standard output:** 500 sheet	**Standard input:** 100-sheet multi-purpose tray, 4 x 520-sheet input tray **Standard output:** 500 sheet	**Standard input:** 100-sheet multi-purpose tray, 4 x 520-sheet input tray **Standard output:** 3,250 sheet
Media weight	Tray 1, 2, 3: 60 to 325 g/m²;	Tray 1, 2, 3: 60 to 325 g/m²; Tray 4, 5: 60 to 300 g/m²;	
Input capacity	**Standard:** 100-sheet multi-purpose tray, 2 x 520-sheet input tray Up to 1,140 sheets (Tray 1: up to 100 sheets; Tray 2: up to 520 sheets; Tray 3: up to 520 sheets) ; **Maximum:** Up to 1,140 sheets	**Standard:** 100-sheet multi-purpose tray, 4 x 520-sheet input tray Up to 2,180 sheets (Tray 1: up to 100 sheets; Tray 2: up to 520 sheets; Tray 3: up to 520 sheets; Tray 4: up to 520 sheets; Tray 5: up to 520 sheets) ; **Maximum:** Up to 2,180 sheets	
Output capacity	**Standard:** Up to 500 sheets Envelopes: Up to 40 envelopes Transparencies: Up to 100 sheets **Maximum:** Up to 500 sheets		**Standard:** Up to 3,250 sheets Envelopes: Up to 40 envelopes Transparencies: Up to 100 sheets **Maximum:** Up to 3,250 sheets
Compatible operating systems	Windows 11; Windows 10; Windows Client OS; Android; iOS; macOS 12 Monterey; macOS 13 Ventura; MacOS v14 Sonoma; Windows 8.1		
Compatible network operating systems	Windows Server; Linux; Citrix		
Minimum system requirements	**Windows:** 2 GB available hard disk space, Internet connection, or USB port, Internet browser. For additional OS hardware requirements see microsoft.com; **Mac:** 2 GB available hard drive space; Internet connection or USB port; Internet browser. For additional OS hardware requirements see apple.com		
Software included	No software solutions are included in the Box only on http://hp.com, https://support.hp.com/		
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 authentication, Supports WJA-10 IPsec configuration Plug-in, 802.1X authentication (EAP-PEAP; EAP-TLS), SNMPv3, HTTPS, Certificates; Data: Storage Encryption, Encrypted PDF & Email, SSL/TLS (HTTPS), Encrypted Credentials; Device: HP Sure Start Secure Boot (BIOS Integrity Checking with self-healing capability), Intrusion Detection (Constant in-device monitoring for attacks), Whitelisting (loads only known good code), HP Memory Shield™, Embedded Trusted Platform Module, HP Connection Inspector, Security lock slot, USB port disablement; Security management: Compatible with HP Security Manager, Device Security Syslog Messages processed and accessible in Arcsight and Splunk SIEMs		
Printer management	HP Web JetAdmin Software, HP Security Manager, HP SNMP Proxy Agent (Part of HP WebJetAdmin), HP WS Pro Proxy Agent (Part of HP WebJetAdmin), Printer Administrator Resource Kit for HP Universal Print Driver (Driver Configuration, Utility - Driver, Deployment Utility - Managed Printing Administrator)		
Dimensions and weight			
Printer dimensions (W x D x H)	**Minimum** 585 x 695 x 714 mm; **Maximum:** 1083.5 x 1197.6 x 736.7 mm	**Minimum** 585 x 695 x 970 mm; **Maximum:** 1083.5 x 1197.6 x 993.2 mm	**Minimum** 1293 x 695 x 1050 mm; **Maximum:** 1677.2 x 1197.6 x 1050 mm
Package dimensions (W x D x H)	755 x 850 x 980 mm	890 x 972 x 1184 mm	1,565 x 972 x 1,207 mm
Printer weight[2]	65.47 kg	93.72 kg	133.95 kg
Package weight	75.87 kg	133.22 kg	200.05 kg
Operating environment	**Temperature:** 15 to 30°C; **Humidity:** 20 to 80% RH		
Storage conditions	**Temperature:** -10 to 40°C		
Acoustics[1]	**Acoustic power emissions:** 7.1 B(A) (printing mono simplex A4 at 70 ppm); **Acoustic pressure emissions:** 55 dB(A) (printing mono simplex A4 at 70 ppm)		**Acoustic power emissions:** 7.4 B(A) (printing mono simplex A4 at 70 ppm); **Acoustic pressure emissions:** 58 B(A) (printing mono simplex A4 at 70 ppm)
Power	**Requirements:** Input voltage: 110 to 127 VAC (+/-10%), 50/60 Hz (+/-3 Hz), 12.0 A 220 to 240 VAC (+/-10%), 50/60 Hz (+/-3 Hz), 7.0 A 100 VAC (+/-10%), 50/60 Hz (+/-3 Hz), (Not dual voltage, power supply varies by part number with # Option code identifier) ; **Consumption:** 1,024.37 watts (printing), 40.08 watts (ready), 0.86 watts (sleep), 0.11 watts (auto-off), 0.11 watts (manual-off) ; **Typical Electricity Consumption (TEC):** 1.027 kWh/Week ; **Power supply type:** Internal (Built-in) power supply		
Energy savings feature technology	Power save		
Certifications	CISPR 22:2008 (International) - Class A, CISPR 32:2015 (International) - Class A, EN 55032: 2015 (EU) - Class A, CISPR 11:2016, EN 55011:2016, EN 61000-3-2: 2019, EN 61000-3-3: 2013+A1:2019, EN 55024: 2010+A1:2015, EN 55035:2017+A11:2020, EN60601-1-2:2015, EMC Directive 2014/30/EU, FCC CFR 47 Part 15 Class A / ICES-003, Issue 7:2020 Class A, Other EMC approvals as required by individual countries Blue Angel; EPEAT® registered; ENERGY STAR® certified **Blue Angel compliant** Yes, Blue Angel DE-UZ 219—only ensured when using Original HP supplies		
Sustainable impact specifications	FSC Certified Packaging; 10% post-consumer recycled plastic		
Replacement cartridges[5]	HP 176A Black LJ Toner Cartridge W1760A (ISO Yield 45,000)		
What's in the box	Installation guide; regulatory flyer; power cords; manual		
Page yield (set-up/inbox cartridges)	HP 176A Black LJ Starter Toner Cartridge (ISO Yield 25,000) W1760AS		
Warranty	One-year, onsite warranty. Warranty and support options vary by product, country and local legal requirements.		

Footnotes

[1] The HP LaserJet Enterprise 8801/8601/8501 printer series is the top-tier model in our HP Enterprise portfolio, featuring the highest print and scan speeds, along with advanced printing solutions for easy print management.
[2] 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.
[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.
[4] HP Security is now HP Wolf Security. Security features vary by platform, please see product data sheet for details. 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 2024 published features of competitive in-class printers. Only HP offers multiple security features that automatically detect, stop, and recover from attacks with a self-healing reboot in alignment with NIST SP 800-193 guidelines for device cyber resiliency. For a list of compatible products, visit: hp.com/go/PrintersThatProtect. For more information, visit: hp.com/go/PrinterSecurityClaims. HP Security Manager must be purchased separately. To learn more, please visit hp.com/go/securitymanager. Post Quantum Cryptography (PQC): Based on HP's internal analysis of business Printers with preinstalled encryption, authentication, malware protection, and BIOS-level 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 as of 2025. PQC will be available in Fall'25 with Firmware 25.9.2.2+.
[5] Use of the HP Trusted Platform Module may require a firmware upgrade.
[6] 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.epeat.net for more information. 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.
[7] Program availability varies. For more information, visit hp.com/hprecycle.
[8] HP works collaboratively with our partners including WWF and Conservation International to manage, restore, and protect forests in many countries around the world. With HP, every print—regardless of paper brand—is addressed through HP's Forest Positive Framework to counteract risks of deforestation. To learn more visit hp.com/forestfirst.
[9] HP Web Jetadmin is free and available for download at hp.com/go/webjetadmin.
[10] See hp.com/go/TonerRecycledContent for list. Post-consumer recycled is based on the definition set in the EPEAT standard for imaging equipment, and is expressed as percent of total weight of plastic.

Technical specifications disclaimers

[1] Acoustic values are subject to change. For current information see http://www.hp.com/support
[2] Including Starter toner cartridge weight
[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.
[4] Based on HP internal evaluation measuring the time from print initiation to page exit. Exact speed varies depending on the system configuration, software application, driver, and document complexity. Additionally, for information of First Page Out measured using ISO/IEC 17629, see hp.com/go/printer claims.
[5] Approximate average yield based on ISO/IEC 19752. Actual yield varies considerably based on content of printed pages and other factors. For details see http://www.hp.com/go/learnaboutsupplies.