HP DesignJet T650 24-in Printer 2025 Edition

The world's smallest plotters[1]—intuitive and responsibly designed.

INTUITIVE—Easy, effortless printing

- Simplify printing with the new HP Click Print solutions—save time with real-print preview.[2]
- Print multi-size A4/A to A1/D projects automatically, without manually switching the media source.
- Print your jobs and manage your plotter virtually anywhere, anytime with the HP app.[3]

RESPONSIBLY DESIGNED—Reduce energy and plastic use

- Save 65% energy[4] with the printer on/off auto scheduler and enjoy efficient ink maintenance routines[5].
- Minimize plastic waste by more than 70% with a new molded fiber packaging and removal of most plastic bags.[6]
- Made with at least 40% recycled plastic[7] and the first HP large format printer containing recycled metal.[8]
- Certified by UL ECOLOGO®.[9] Registered in EPEAT Gold and achieves EPEAT Climate+[10].

OPTIMIZED—Fits the way you work

- Save space with the world's smallest plotters[1] designed to fit your office, including a built-in stand.
- Avoid waiting by the printer with printing as fast as 26 seconds per A1/D plot.[11]
- Protect your printer from cyberthreats with HP Wolf Essential Security.
- Get high-quality results—HP Bright Office Inks deliver better line accuracy[12] and up to 34% more gamut.[13]

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

Messaging Footnotes

[1] Based on competitive comparison of operational footprint. Test performed by Sogeti and commissioned by HP in May 2024.
[2] HP One-click printing with HP Click software. HP Click software is only compatible with Original HP ink supplies. Applicable to PDF, JPEG, TIFF, DWF, and HP-GL/2 files.
[3] Requires HP Smart app download available at https://www.hp.com/go/mobileprinting. Certain features are available in English language only, and may vary by printer model/country, and between desktop/mobile applications. HP reserves the right to introduce charges for use of functionality facilitated by the HP app. Internet access required and may not be available in all countries. HP account required for full functionality. List of supported operating systems available in app stores.
[4] The percentage reductions in energy consumption are based on tests conducted by HP, 2024. Data based on the implementation of auto-scheduled on/off usage in various printer models, measured on a monthly basis. Actual savings may vary depending on the specific usage patterns, printer models, and environmental conditions.
[5] Use up to 96% less ink for routine maintenance vs. competitor. Based on HP internal testing, June 2024, comparing the HP DesignJet T200 Printer series and Canon iPF TM printer series in terms of ink used during routine printhead cleanings.
[6] The HP DesignJet T200/T600 Series 2025 Edition plotter uses polystyrene-free packaging with molded pulp cushions made from recycled fiber-based material. The plastic reduction is expressed as a percentage of the total packaging plastic weight. The reduction varies depending on the printer model, with at least a 53% reduction in the new 36-inch model and at least a 72% reduction in the new 24-inch model, compared to the previous T200/T600 models.
[7] Recycled plastic is expressed as a percentage of the total weight plastic. Post-consumer recycled content is based on the definition set in the EPEAT standard for imaging equipment, IEEE 1680.2.
[8] Incorporation of a minimum of 5% of certified recycled metal, expected to be implemented in units manufactured after April 1st, 2025. Recycled metal is expressed as a percentage of the total weight of the metal according to ISO 14021 definitions for metal. This number is the minimum and may vary slightly due to manufacturing processes and material availability.
[9] UL ECOLOGO® Certified HP 712 inks meet a range of stringent human health and environmental considerations. For certifications, see http://www.ul.com/EL and http://www.ul.com/gg
[10] The T200/T600 is EPEAT Gold in the U.S. and Canada and has achieved EPEAT Climate+. See https://www.epeat.net for registration status and tier levels by country.
[11] The HP DesignJet T650 2025 Edition 24-in delivers A1/D prints in 26 seconds.
[12] Better line accuracy based on test commissioned by HP and performed by Sogeti in June, 2024. Clear lines based on the number of line breaks found in 2 mm of line. On vertical and diagonal 1px RGB (160,160,160) lines. Printed on Oce 75 g plain paper using equivalent fast print modes. For output produced with HP DesignJet T200 Printer series, Canon iPF TM printer series and Canon iPF TC-20. Test performed under the same conditions in all printers measuring with QEA PIAS II digital microscope tool.
[13] Up to 34% more color gamut based on test commissioned by HP and performed by Sogeti in June 2024, of gamut volume comparing prints from the HP DesignJet T200 Printer series, Canon iPF TM printer series, Canon iPF TC-20 and Epson SC-T3100 on Oce 75gsm plain paper using equivalent fast/draft print modes.

Datasheet

Technical specifications

Print

Print speed	26 sec/page on D, 81 D prints per hour[1]
Print resolution	Up to 2400 x 1200 optimized dpi
Technology	HP Thermal Inkjet
Margins	Roll: 0.2 x 0.2 x 0.2 x 0.2 in; Sheet: 0.2 x 0.2 x 0.2 x 0.7 in (manual feed); 0.2 x 0.2 x 0.2 x 0.2 in (input tray)
Ink types	Dye-based (C, M, Y); pigment-based (K)
Ink cartridges	4 (C, M, Y, K)
Ink drop	5.5 pl (C, M, Y); 12 pl (K)
Cartridge size	80 ml (K); 38 ml (K); 29 ml (C, M, Y)
Page Yield	20 ml of ink yields 101 A1/D pages, taking into account maintenance routines[2]
Printheads	1 (cyan, magenta, yellow, black)
Printhead nozzles	1376
Line accuracy	±0.1%[3]
Minimum line width	0.0008 in
Max optical density	8 L* min/2.10 D[4]

Media

Applications	Line drawings; Presentations; Renderings
Handling	Sheet feed, roll feed, automatic sheet feeder, media bin, automatic horizontal cutter
Maximum media width	24 in
Media rolls	1
Roll size	11 to 24 in
Maximum roll weight	9 lb
Maximum roll diameter	3.9 in
Sheet/board size	Auto sheet feeder: 8.3 x 11 to 13 x 19 in; manual feed: 8.3 x 11 to 24 x 74.7 in
Standard sheets/boards	Auto sheet feeder: A, B; manual feed: A, B, C, D
Media types	Bond and coated paper (bond, coated, heavyweight coated, plain, bright white, blueprint), technical paper (natural tracing), film (clear, matte), photographic paper (satin, gloss, semigloss, polypropylene), self-adhesive (adhesive, polypropylene)

Embedded controller

Memory	1 GB
Hard disk	None
Native print languages	HP-GL/2, HP-RTL, CALS G4, JPEG, URF

Connectivity

Interfaces	Gigabit Ethernet (1000Base-T), Hi-Speed USB 2.0, Wi-Fi 802.11a/b/g/n, Wi-Fi Direct
Printing paths	HP Click App, HP Click Driver, HP app, Windows and MacOS printer drivers, HP-GL/2 driver for Windows, Apple AirPrint, Android Default Print Service, Printing support for ChromeOS, Email printing
Remote print enabled	Yes

One-click multi-size printing	Yes
Drivers	Raster driver for macOS and Windows, HP-GL/2 driver for Windows, HP Click Driver for Windows 11
Security features	HP Wolf Essential Security: Secure boot with HW root of trust; Firmware Code Signature Validation; Automatic FW Updates; HTTPS Redirect enabled by default; SNMPv1/2 read-only by default; SNMPv3 disabled by default; Write-protected memory; HP Cartridge Security; Unique password; Disable USB ports; TLS 1.2; 802.1x; IPv4 & IPv6 Compatibility; CA/JD Compatibility

Dimensions (W x D x H)

Printer	39.9 x 23.8 x 36.7 in
Shipping	45.5 x 22.6 x 18.1 in

Weight

Printer	65 lb
Shipping	83.8 lb

Included

What's in the box	HP DesignJet T650 24-in Printer, printer stand, automatic sheet feeder, roll cover, printhead, introductory ink cartridges, spindle, quick reference guide, setup poster, power cord
HP Software and solutions	HP Click App for Windows and macOS, HP Click Driver for Windows 11, HP app for Windows, macOS, Android and iOS

Environmental ranges

Operating temperature	41 to 104ºF
Operating humidity	20 to 80% RH
Operating altitude	Up to 9843 ft
Storage temperature	-13 to 131ºF
Recycled plastic in printer	40%

Acoustics

Sound pressure	Printing: 42 dB(A) (operating), <16 dB(A) (idle)
Sound power	Printing: 5.8 B(A) (operating), <3.4 B(A) (idle)

Power

Consumption	<35 W (printing), <5.6 W (ready), <2.1 W (sleep), <0.2 W (standby)
Requirements	Input voltage (auto ranging): 100-240 V (±10%), 50/60 Hz (±3 Hz), 1200 mA max

Certification

Safety	USA and Canada (CSA certified); EU (LVD, EN 60950-1 and EN 62368-1 compliant); Russia, Belarus, Khazakstan (EAC); Ukraine (UA); Singapore (PSB); China (CCC); Argentina (IRAM); India (BIS); Mexico (NYCE)
Electromagnetic	Compliant with Class B requirements, including: USA (FCC rules), Canada (ICES), EU (EMC/RED Directives), Australia (ACMA), New Zealand (RSM), China (CCC), Japan (VCCI); Certified as Class B product: Korea (KCC)
Environmental	ENERGY STAR; WEEE; EU RoHS; EAEU RoHS; REACH; ErP; EPEAT Climate+ Gold; UL Ecologo
Warranty	Two-year limited hardware warranty

Ordering information

Product

5HB08T	HP DesignJet T650 24-in Printer 2025 Edition

Accessories

B3Q36A	HP DesignJet 24-in Spindle

Original HP printing supplies

3ED58A	HP 713 DesignJet Printhead Replacement Kit
3ED67A	HP 712 29-ml Cyan DesignJet Ink Cartridge
3ED68A	HP 712 29-ml Magenta DesignJet Ink Cartridge
3ED69A	HP 712 29-ml Yellow DesignJet Ink Cartridge
3ED70A	HP 712 38-ml Black DesignJet Ink Cartridge
3ED71A	HP 712 80-ml Black DesignJet Ink Cartridge
3ED77A	HP 712 3-pack 29-ml Cyan DesignJet Ink Cartridge
3ED78A	HP 712 3-pack 29-ml Magenta DesignJet Ink Cartridge
3ED79A	HP 712 3-pack 29-ml Yellow DesignJet Ink Cartridge

Use Original HP inks and printheads, and HP large format printing materials, to experience consistent high quality and reliable performance that enable less downtime. These critical components are designed and engineered together as an optimized printing system, and Original HP inks are designed to maximize the life of HP printheads. Protect your HP printer investment by using Original HP inks for full HP warranty protection. For more information, visit https://hp.com/go/OriginalHPinks

Original HP large format printing materials

HP Universal Bond Paper (FSC® certified)[5] (recyclable)[6]
HP Coated Paper (FSC® certified)[5] (recyclable)[6]
HP Heavyweight Coated Paper (FSC® certified)[5] (recyclable)[6]
For the entire HP Large Format Printing Materials portfolio, please see HPLFMedia.com.

Service and Support

U42W2E HP 3y Next Business Day support for DesignJet T650-24
U42W3E HP 4y Next Business Day support for DesignJet T650-24
U42W4E HP 5y Next Business Day support for DesignJet T650-24

HP Support Services offer installation and extended support services (e.g. 2, 3, 4, and 5 years). For more information, please visit http://www.hp.com/go/cpc

Specification Footnotes

[1] Mechanical printing time. Printed in Fast mode with Economode on, using HP Bright White Inkjet Paper (bond) and Original HP inks. Actual performance may vary based on a variety of conditions, including but not limited to network configuration.

[2] Calculation done taking into account two normal printhead cleanings and ink on an A1/D CAD drawing with black and color lines and a pixel coverage of 5.2%.

[3] ±0.1% of the specified vector length or ±0.2 mm (whichever greater) at 23ºC (73ºF), 50-60% relative humidity, on A0/E printing material in Best or Normal mode with HP Heavyweight Coated roll feed and Original HP inks.

[4] With HP Premium Instant Dry Photo Gloss media with Original HP inks.

[5] BMG trademark license code FSC®-C115319, see http://www.fsc.org. HP trademark license code FSC®-C017543, see http://www.fsc.org.

[6] Can be recycled through commonly available recycling programs.

November 2024