Datasheet

HP DesignJet T650 Printer

Simply the HP's easiest large-format plotters[1]—affordability without tradeoffs

Extreme simplicity

- Print multi-size A3/B and A1/D or A0/E projects automatically, without manually switching the media source.
- Save time with the world's easiest job submission[2]—send multiple files in one click with HP Click.[3]
- Print with confidence you'll get the results you expect with an intuitive driver and true print preview.

Fits your office and budget

- Save space with the world's smallest plotters[4] designed to fit your office, including a built-in stand.
- Use up to 95% less ink for routine maintenance vs competitor and get up to 100 extra A1/D pages per month.[5]
- More sustainable design reduces CO2e up to 7.3 tons/year by units sold by using up to 30% recycled plastic.[6]

Fits the way you work

- Avoid waiting by the printer with high-speed printing as fast as 25 seconds per A1/D plot.[8]
- Be more productive—save time from job prep to final print by printing your projects up to 2x faster.[2]
- Print your jobs and manage your plotter from virtually anywhere, anytime with the HP Smart app.
- Get high-quality results—HP Bright Office Inks plot up to 31% more line accuracy and up to 65% more gamut.[7]

For more information, please visit http://www.hp.com/go/designjett650

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

[1] The HP DesignJet T600 Printer series and the HP DesignJet Studio Printer series are the only solutions providing seamless printing of both large- and small-format sheets automatically in a multi-size print basket compared to competitive alternatives with comparable size and features as of January, 2020.
[2] Three-click printing with HP Click software compared to up to 11 clicks with competitive alternatives when printing 5 files of different sizes. Applicable to PDF, JPEG, TIFF, DWF, and HP-GL/2 files. Based on testing the HP DesignJet T650 36-in Printer, from job prep to print is up to 2x faster than competitive alternatives with comparable size and features as of January, 2020.
[3] One-click printing with HP Click software. Applicable to PDF, JPEG, TIFF, DWF, and HP-GL/2 files.
[4] HP DesignJet T650 36-in series printers are up to 17% smaller compared to competitive alternatives with comparable size and features as of January, 2020. The world's smallest large-format plotters based on most compact footprint.
[5] Based on HP internal testing, January 2020, comparing the HP DesignJet T200 Printer, that uses the same ink and print mode as the HP DesignJet T600 Printer series, and Canon TM-200 and TM-300 Printers in terms of ink used during routine printhead cleanings.
[6] More sustainable design compared to the previous printer models (HP DesignJet T500 Printer series) replaced with the HP DesignJet T600 Printer series. Based on calculations in accordance with ISO 14040/14044 Life Cycle Assessments using ReCiPe (H) v. 1.1 (2016) on GaBi 8.5 (2018) software and scaled to reflect expected yearly sales.
[7] Up to 31% more line accuracy based on HP internal testing, September 2019 of 1 pixel vertical line straightness comparing prints from the HP DesignJet T600 Printer series and Canon TM-305 Printer on plain paper using equivalent fast/draft print modes. Up to 65% more color gamut based on HP internal testing, September 2019, of gamut volume comparing prints from the HP DesignJet T600 Printer series and Canon TM-305 Printer on Oce 75gsm plain paper using equivalent fast/draft print modes.
[8] The HP DesignJet T650 Printer series 24-inch models deliver A1/D prints in 26 seconds and 36-inch models deliver A1/D prints in 25 seconds.

Technical specifications

Print	
Print speed	24-in: 26 sec/page on A1, 81 A1 prints per hour 36-in: 25 sec/page on A1, 82 A1 prints per hour[1]
Print resolution	Up to 2400 x 1200 optimized dpi
Technology	HP Thermal Inkjet
Margins	Roll: 5 x 5 x 5 x 5 mm Sheet: 5 x 5 x 5 x 17 mm (manual feed); 5 x 5 x 5 x 5 mm (input tray)
Ink types	Dye-based (C, M, Y); pigment-based (K)
Page Yield	20 ml of ink yields 101 A1/D pages, taking into account maintenance routines[2]
Ink drop	5.5 pl (C, M, Y); 12 pl (K)
Printheads	1 (cyan, magenta, yellow, black)
Printhead nozzles	1376
Line accuracy	±0.1%[3]
Minimum line width	0.02 mm
Max optical density	8 L* min/2.10 D[4]
Media	
Handling	Sheet feed, roll feed, automatic sheet feeder, media bin, automatic horizontal cutter
Roll size	24-in: 279 to 610 mm 36-in: 279 to 914 mm
Sheet size	Auto sheet feeder: 210 x 279 to 330 x 482 mm 24-in manual feed: 210 x 279 to 610 x 1897 mm 36-in manual feed: 210 x 279 to 914 x 1897 mm
Standard sheets	Auto sheet feeder: A4, A3 24-in manual feed: A4, A3, A2, A1 36-in manual feed: A4, A3, A2, A1, A0
Grammage	60 to 280 g/m² (roll/manual feed); 60 to 220 g/m² (auto sheet feeder)
Thickness	Up to 0.3 mm
Applications	Line drawings; Presentations; Renderings
Memory	1 GB
Hard disk	None
Connectivity	
Interfaces	Gigabit Ethernet (1000Base-T), Hi-Speed USB 2.0, Wi-Fi 802.11a/b/g/n, Wi-Fi Direct
Native print languages	HP-GL/2, HP-RTL, CALS G4, JPEG, URF
Printing paths	Print Anywhere with HP Smart app, HP Click, HP driver for macOS, HP driver for Windows, printing support for Chrome OS, email printing, HP Print Service Plugin for Android, Apple AirPrint
Drivers	Raster driver for Windows and macOS
Dimensions (w x d x h)	
Printer	24-in: 1013 x 605 x 932 mm 36-in: 1317 x 605 x 932 mm
Shipping	24-in: 1155 x 575 x 475 mm 36-in: 1470 x 575 x 590 mm
Weight	
Printer	24-in: 29.5 kg, 36-in: 35.4 kg
Shipping	24-in: 38 kg, 36-in: 56 kg
What's in the box	HP DesignJet T650 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, HP Smart app, HP Print Preview for Windows, HP Easy Start, HP DesignJet Utility for Windows, HP Support Assistant
Remote print enabled	Yes
One-click multi-size printing	Yes
Environmental ranges	
Recycled plastic in printer	30%
Operating temperature	5 to 40ºC
Operating humidity	20 to 80% RH
Operating altitude	Up to 3000 m
Storage temperature	-25 to 55ºC
Acoustics	
Sound pressure	42 dB(A) (operating), <16 dB(A) (idle)
Sound power	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 Gold
Warranty	One-year limited hardware warranty

Ordering information

Product	
5HB08A	HP DesignJet T650 24-in Printer
5HB10A	HP DesignJet T650 36-in Printer
Accessories	
B3Q36A	HP DesignJet 24-in Spindle
B3Q37A	HP DesignJet 36-in Spindle
Original HP printing supplies	
3ED28A	HP 712B 38-ml Black DesignJet Ink Cartridge
3ED29A	HP 712B 80-ml Black DesignJet Ink Cartridge
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
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 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

UD5H2E (24-in)/UD5J6E (36-in) HP 2 year NBD Onsite Support
UD5H3E (24-in)/UD5J7E (36-in) HP 3 year NBD Onsite Support
UD5H4E (24-in)/UD5J8E (36-in) HP 4 year NBD Onsite Support
UD5H5E (24-in)/UD5J9E (36-in) HP 5 year NBD Onsite Support
UD5H6PE (24-in)/UD5K0PE (36-in) HP 1 year Post Warranty NBD Onsite Support
UD5H7PE (24-in)/UD5K1PE (36-in) HP 2 year Post Warranty NBD Onsite Support

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

ECO highlights

- ENERGY STAR® certified[1] and EPEAT® Gold registered[2]
- Free, convenient HP ink cartridge recycling[3]
- FSC®-certified papers and a range of recyclable HP media with a take-back program[4]
- Reduces CO2e up to 7.3 tons/year by units sold by using up to 30% recycled plastic[5]

Please recycle printing hardware and eligible printing supplies and prints. Find out how at our website: http://www.hp.com/ecosolutions

[1] ENERGY STAR and the ENERGY STAR mark are registered trademarks owned by the U.S. Environmental Protection Agency.
[2] EPEAT® registered where applicable. EPEAT registration varies by country. See http://www.epeat.net for registration status by country.
[3] Visit http://www.hp.com/recycle to see how to participate and for HP Planet Partners program features and availability; program may not be available in your area.
[4] BMG trademark license code FSC®-C115319, see http://www.fsc.org. HP trademark license code FSC®-C017543, see http://www.fsc.org. Not all FSC®-certified products are available in all regions. Many HP printing materials are recyclable through commonly available recycling programs. For information about HP large format printing materials, please visit http://www.HPLFMedia.com.
[5] More sustainable design compared to the previous printer models (HP DesignJet T500 Printer series) replaced with the HP DesignJet T600 Printer series. Based on calculations in accordance with ISO 14040/14044 Life Cycle Assessments using ReCiPe (H) v. 1.1 (2016) on GaBi 8.5 (2018) software and scaled to reflect expected yearly sales.

[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.

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