

Datasheet



# HP DesignJet T650 Printer series

Simply the world's easiest large-format plotters<sup>1</sup>—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 —send multiple files in one click with HP Click software.5
- 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<sup>3</sup> 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.2
- 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.<sup>4</sup>
- Be more productive—save time from job prep to final print by printing your projects up to 2x faster.
- Print your jobs and manage your plotter from virtually anywhere, anytime with the HP Smart
- Get high-quality results—HP Bright Office Inks plot up to 31% more line accuracy and up to 65% more gamut.8

### For more information, please reach out to us at www.reproproducts.com or 866-665-7604.

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. More at: http://www.hp.com/go/learnaboutsupplies

<sup>&</sup>lt;sup>1</sup> 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.

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.

3 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.

4 The HP DesignJet T600 Printer series 24-models deliver A1/D prints in 26 seconds and 36-inch models deliver A1/D prints in 25 seconds.

One-click printing with HP Click software. Applicable to PDF, JPEG, TIFF, DWF, and HP-GL/2 files.

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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.

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.

<sup>&</sup>lt;sup>8</sup> 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

### **Technical specifications**

Print	
Print speed	24-in: 26 sec/page on D, 81 D prints per hour 36-in: 25 sec/page on D, 82 D prints per hour <sup>1</sup>
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 (5 x 5 x 5 x 5 mm) Sheet: 0.2 x 0.2 x 0.2 in (5 x 5 x 5 x 5 mm)
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 <sup>2</sup>
Ink drop	5.5 pl (C, M, Y); 12 pl (K)
Printheads	1 (cyan, magenta, yellow, black)
Printhead nozzles	1376
Line accuracy	±0.1% <sup>3</sup>
Minimum line width	0.0008 in (0.02 mm)
Max optical density	8 L* min/2.10 D <sup>4</sup>
Media	
Handling	Sheet feed, roll feed, automatic sheet feeder, media bin, automatic horizontal cutter
Roll size	24-in: 11 to 24 in (279 to 610 mm) 36-in: 11 to 36 in (279 to 914 mm)
Sheet size	Auto sheet feeder: 8.3 x 11 to 13 x 19 in 24-in manual feed: 8.3 x 11 to 24 x 74.7 in 36-in manual feed: 8.3 x 11 to 36 x 74.7 in
Standard sheets	Auto sheet feeder: A, B 24-in manual feed: A, B, C, D 36-in manual feed: A, B, C, D, E
Grammage	60 to 280 g/m² (roll/manual feed); 60 to 220 g/m² (auto sheet feeder)
Thickness	Up to 11.8 mil
Applications	Line drawings; Presentations; Renderings
Memory	1 GB
Hard disk	None
Connectivity	
Interfaces	Gigabit Ethernet (1000Base-T), Hi-Speed USB 2.0, Wi-Fi 802.11
Print languages (standard)	HP-GL/2, HP-RTL, CALS G4, JPEG, URF
Drivers	Raster driver for Windows and macOS
Dimensions (w x d x h)	
Printer	24-in: 39.9 x 23.8 x 36.7 in (1013 x 605 x 932 mm) 36-in: 51.9 x 23.8 x 36.7 in (1317 x 605 x 932 mm)
Shipping	24-in: 45.5 x 22.6 x 18.1 in (1155 x 575 x 475 mm) 36-in: 57.9 x 22.6 x 23.2 in (1470 x 575 x 590 mm)
Weight	
Printer	24-in: 65 lb (29.5 kg) 36-in: 78 lb (35.4 kg)
Shipping	24-in: 83.8 lb (38 kg) 36-in: 123.5 lb (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	40.1.40.405
· · · ·	41 to 104ºF
Operating humidity	41 to 1049- 20 to 80% RH
Operating humidity	20 to 80% RH
Operating humidity Operating altitude Storage temperature	20 to 80% RH Up to 9843 ft
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Operating humidity Operating altitude Storage temperature Acoustics Sound pressure Sound power Power Consumption Requirements	20 to 80% RH  Up to 9843 ft  -13 to 131 °F (-25 to 55 °C)  42 dB(A) (operating), <16 dB(A) (idle)  >5.8 B(A) (operating), <3.4 B(A) (idle)  <35 W (printing), <5.6 W (ready), <2.1 W (sleep), <0.2 W (standby)
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Operating humidity Operating altitude Storage temperature Acoustics Sound pressure Sound power Power Consumption Requirements Certification Safety	20 to 80% RH  Up to 9843 ft  -13 to 131°F (-25 to 55°C)  42 dB(A) (operating), <16 dB(A) (idle)  >5.8 B(A) (operating), <3.4 B(A) (idle)  <35 W (printing), <5.6 W (ready), <2.1 W (sleep), <0.2 W (standby)  Input voltage (auto ranging): 100-240 V (±10%), 50/60 Hz (±3 Hz), 1200 mA max  USA and Canada (CSA certified)

### **Ordering information**

#### Product

B3Q36A HP DesignJet 24-in Spindle

#### Original HP printing supplies

BED58A	HP 713 DesignJet Printhead Replacement Kit
BED67A	HP 712 29-ml Cyan DesignJet Ink Cartridge
BED68A	HP 712 29-ml Magenta DesignJet Ink Cartridge
BED69A	HP 712 29-ml Yellow DesignJet Ink Cartridge
BED70A	HP 712 38-ml Black DesignJet Ink Cartridge
BED71A	HP 712 80-ml Black DesignJet Ink Cartridge
BED77A	HP 712 3-pack 29-ml Cyan DesignJet Ink Cartridge
BED78A	HP 712 3-pack 29-ml Magenta DesignJet Ink Cartridge
BED79A	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

0,1396A HP Universal Bond Paper (FSC® certified)<sup>5</sup> (recyclable)<sup>6</sup> 610 mm x 45.7 m (24 in x 150 ft)
C6019B HP Coated Paper (FSC® certified)<sup>5</sup> (recyclable)<sup>6</sup> 610 mm x 45.7 m (24 in x 150 ft)
C6029C HP Heavyweight Coated Paper (FSC® certified)<sup>5</sup> (recyclable)<sup>6</sup> 610 mm x 30.5 m (24 in x 100 ft) For the entire HP Large Format Printing Materials portfolio, please see HPLFMedia.com.

#### Service and Support

UDSH2E (24-in)/UDSJ6E (36-in) HP 2 year NBD Onsite Support
UDSH3E (24-in)/UDSJ7E (36-in) HP 3 year NBD Onsite Support
UDSH3E (24-in)/UDSJ7E (36-in) HP 3 year NBD Onsite Support
UDSH4E (24-in)/UDSJ8E (36-in) HP 4 year NBD Onsite Support
UDSH5E (24-in)/UDSSPE (36-in) HP 3 year NBD Onsite Support
UDSH5PE (24-in)/UDSKPE (36-in) HP 3 year NBD Onsite Support
UDSH7E (24-in)/UDSKPE (36-in) HP 2 year Post Warranty NBD Onsite Support
UDSH7PE (24-in)/UDSKPE (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

- FNFRGY STAR® certified1 and EPEAT® Gold registered2
- ENERGY 5 JAR'S Certified and EFEAT "Joint registered" Free, convenient HP ink cartridge recycling<sup>3</sup> FSC®-certified papers and a range of recyclable HP media with a take-back program<sup>4</sup> Reduces CO2e up to 7.3 tons/year by units sold by using up to 30% recycled plastic<sup>5</sup>

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

<sup>1</sup> ENERGY STAR and the ENERGY STAR mark are registered trademarks owned by the U.S. Environmental

<sup>1</sup> ENERGY STAR and the ENERGY STAR mark are registered trademarks owned by the U.S. Environmental Protection Agency,

<sup>2</sup> EPEAF\* registered where applicable. EPEAF registration varies by country. See http://www.epeat.net for registration status by country,

<sup>3</sup> 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.

<sup>4</sup> BMG trademark license code FSC\*-C115319, see http://www.fsc.org. HP trademark license code FSC\*-C017543, see http://www.fsc.org. HP trademark license code PSC\*-C017543, see http://www.fsc.org. HP trademark license code http://www.fsc.org. HP trademark license code http://www.fsc.org. HP trademark license code http://www.HP printing materials are recyclable through commonly available recycling programs. For information about HP large formar printing materials, please visit http://www.HPLFMedia.com.

<sup>5</sup> More sustainable design compared to the previous printer models (HP Designlet T500 Printer series) replaced with the HP Designlet T600 Printer series. Based on calculations in accordance with ISO 140401/10442 Life Cycle Assessments using ReCiPe (H) v. 1.1 (2016) on GaBi 8.5 (2018) software and scaled to reflect expected yearly sales.

















Nechanical 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.

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 4.0.2 mm (whichever greater) at 23°C (73°F), 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°-C015319, see http://www.fsc.org.

6 Can be recycled through commonly available recycling programs.