HP Jet Fusion 580 Color 3D Printer

Produce functional parts in full color—with voxel control—in a fraction of the time¹

Full spectrum color parts with voxel control

- Produce brilliant, full-color functional parts while maintaining optimal mechanical properties.
- Stay ahead with a future-ready technology.
- Prototype and produce functional parts, averaging up to 100 parts per week.²

Accurate, functional parts with intricate detail

- Produce engineering-grade thermoplastic parts with optimal mechanical properties.
- Achieve fine detail and high dimensional accuracy for small features.
- Get accurate and repeatable results.

Accelerate design—create, test, iterate in hours

- Produce multiple prototype iterations in the same time it takes to print a single part.¹
- Access convenient in-house automated 3D printing with the most compact HP Jet Fusion 3D device.
- Get the parts you want when you need them, easily, reliably, and predictably with immediate access to support.
- Prototype, then do final part production on the HP Jet Fusion 4200 3D Printing Solution, using the same technology.

For more information, please visit hp.com/go/3DPrinter580
A fully integrated, compact design

An easy-to-use solution that integrates material mixing and loading, printing, and reclaiming material in one device.

- Intuitive user interface
- Enclosed, automated material mixing, loading, and reclamation systems
- Full spectrum color with voxel-level control
- Designed for small/medium-sized product development teams, design firms, and universities averaging up to 100 parts per week

Image shows the HP Jet Fusion 580 Color 3D Printer

Data courtesy of Phoenix Children's Hospital: Heart of Jemma
Reinventing 3D printing
HP Jet Fusion 580 Color 3D Printer

1. Prepare designs:
Open your 3D models and check for errors with the easy-to-use HP SmartStream 3D Build Manager.

2. Send to print:
Pack your models in the 3D build manager and press “Send to print” to submit your job to the printer.

3. Select job:
Choose your print job at the printer.

4. Add supplies:
Insert 3D materials and agent cartridges into the printer as needed.

5. Automated material mixing and loading:
The printer automatically mixes fresh and reusable material and loads it into the print area. Agents are automatically loaded into the print area as well.

6. Print with voxel-level control:
Press “Start” to begin printing with fine detail and high dimensional accuracy, thanks to HP’s multi-agent printing process.

7. Automated material extraction and reclamation:
After printing is finished, the printer automatically extracts and reclaims unfused material for future builds. You can use up to 80% reusable material in builds while maintaining consistent performance.*

8. Job done:
You receive an alert when your parts are ready and the reclamation process is complete.

9. Retrieve parts:
Simply open the printer and retrieve your parts for final cleaning and post processing.

10. HP Jet Fusion 3D Solution Services – with you at every step:
Accelerate your design cycle with immediate access to support, affordable solution services, and comprehensive training.

*HP Jet Fusion 3D Printing Solutions using HP 3D High Reusability CB PA 12 provide up to 80% powder reusability ratio, producing functional parts batch after batch. For testing, material is aged in real printing conditions and powder is tracked by generations (worst case for reusability). Parts are then made from each generation and tested for mechanical properties and accuracy.
Technical information
HP Jet Fusion 580 Color 3D Printer

**Printer performance**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology</td>
<td>HP Multi Jet Fusion technology</td>
</tr>
<tr>
<td>Effective building volume</td>
<td>Up to 332 x 190 x 248 mm (13.1 x 7.5 x 9.8 inches)</td>
</tr>
<tr>
<td>Building speed</td>
<td>1,871 cm³/hr (111 in³/hr)</td>
</tr>
<tr>
<td>Full build job time for 248-mm (9.8-in) buildable height</td>
<td>As fast as 20 hours</td>
</tr>
<tr>
<td>Layer thickness</td>
<td>0.08 mm (0.003 inches)</td>
</tr>
<tr>
<td>Printhead resolution</td>
<td>1200 dpi</td>
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</tbody>
</table>

**Dimensions (w x d x h)**

- Printer: 1565 x 955 x 1505 mm (61.6 x 37.6 x 59.3 inches)
- Shipping: 1770 x 1143 x 2013 mm (69.7 x 45 x 79.3 inches)
- Operating area: 2785 x 2530 x 2440 mm (109.6 x 99.3 x 96 inches)

**Weight**

- Printing: 650 kg (1433 lb)
- Shipping: 850 kg (1874 lb)

**Environmental ranges**

- Operating temperature: 20-30°C (68-86°F)
- Operating humidity: 20-70%RH without condensation

**Acoustics**

- Front operating position: 72 dB (without muffler) / 70 dB (with muffler)
- Rear bystander position: 80 dB (without muffler) / 75 dB (with muffler)

**Network**

- Gigabit Ethernet (10/100/1000Base-T), supporting the following standards: TCP/IP, DHCP (IPv4 only), TLS/SSL

**Hard disk**

- HDD 1 TB (AES-256 encrypted, disk wipe DoD 5220M) & SSD 1 TB (AES-256 encrypted)

**Software**

- Included software: HP SmartStream 3D Build Manager
- HP SmartStream 3D Command Center
- Supported file formats: 3MF, STL, OBJ, VRML v.2

**Power**

- Consumption: 6.5-6.3 kW (typical)
- Requirements: One dedicated circuit configuration: input voltage 200 - 240 V (line-to-line), 36 A max, 50/60 Hz

**Certification**

- Safety: NA (US & Canada); ISO 11201-2010 for machinery, 1.0 meters horizontally
- Environmental: REACH compliant

**Warranty & service coverage included**

- One-year limited hardware warranty

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Eco Highlights

- HP 3D powders and agents are not classified as health hazards
- Cleaner, more comfortable experience—enclosed printing system, and automatic powder management
- Minimizes waste due to industry-leading reusability of powder
- Take-back program for agent cartridges

Find out more about HP sustainable solutions at hp.com/ecosolutions

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Ordering information

**Printer**

- M2K85A HP Jet Fusion 580 Color 3D Printer
- M2K87A HP 3D400 Pinhead Kit
- M2K86A HP 3D450 Pinhead Kit
- M2K84A HP 3D400 Color Pinhead Kit

**Original HP printheads**

- V1Q76A HP Jet Fusion Muffler

**Printer accessories**

**Recommended cleaning accessories**

- Guyson MultiBlast3D (Recommended for EMEA and AMS regions)
- Defin 300 BL (Recommended for EMEA region)

**Original HP agents**

- Tiger-Vac C-10 EX (4W)
- HP Recommended Explosion-Proof Vacuum. Promotional code*: TVC-111805A-HP2 (Recommended for EMEA region)

**Original HP 3D high reusability materials**

- V1R30A HP 3D HR CB PA 12 10L (14 kg)

**HP Jet Fusion 3D Solution Services**

- U9ZR4E HP Ready-to-print Service
- U9ZR9E HP Advanced Operation Training (HP Training Center)
- U9ZR7E HP 3 year 2nd Business Day onsite Hardware Support w/DMR

**HP 3D long-term consumables**

- U9ZR1E HP 3D400 Air Inlet Filter
- U9ZR2E HP 3D400 Print Area Filter
- U9ZR3E HP 3D400 Air Exhaust Filter
- U9ZR5E HP 3D400 Pinhead Cleaning Roll
- U9ZR6E HP 3D400 Lamp Module

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**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: hp.com/go/learnaboutsupplies

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Learn more about HP Multi Jet Fusion technology at hp.com/go/3Dprint

1. Based on internal and third-party testing for HP Jet Fusion 580 Color and 540 3D Printers, printing and cooling time is a fraction of the time of the printing times of comparable plastic fused deposition modeling (FDM), stereolithography (SLA), and material jetting solutions from $20,000 USD to $120,000 USD on market as of June, 2017. Testing variables for the HP Jet Fusion 580 Color 3D Printer: Part quantity: 1 full build chamber of parts from HP Jet Fusion 3D at 10% of packing density versus same number of parts on above-mentioned competitive devices; Part size: 30 cm³; Layer thickness: 0.08 mm/0.003 inches. Comparator testing variables are comparable.
2. Assuming 220 working days of 30 cm³ parts at a 10% packing density using HP 3D High Reusability CB PA 12 material, and up to 80% powder reusability ratio.
3. Based on 0.08-mm (0.003-in) layer thickness and 10 sec/layer.
4. Assumes default “Auto Cool and Reclaim” print mode. Job duration begins at the moment the job is selected to print at the control panel and ends at the time the parts are ready to be removed from the build chamber. Does not include part cleaning.
5. Measurements positions conform to ISO 11201-2010 for machinery, 1.0 meters horizontally and 1.5 meters above the floor.
6. 6. The HP Jet Fusion 3D Printing Solution should be connected to the HP Cloud in order to enable the correct functioning of the printer and to offer better support.
7. Liters refers to the materials container size and not the actual materials volume. Materials are measured in kilograms.
8. The HP powder and agents do not meet the criteria for classification as hazardous according to GHS and Regulation (EC) 1272/2008 as amended.
9. Compared to manual print retrieval process used by other powder-based technologies. The term “cleaner” does not refer to any indoor air quality requirements and/or consider related indoor air quality regulations or testing that may be applicable.
10. Compared to PA 12 materials available as of June, 2017. HP Jet Fusion 3D Printing Solutions using HP 3D High Reusability CB PA 12 provide up to 80% powder reusability ratio, producing functional parts batch after batch.
11. Printing supplies eligible for recycling vary by printer. Visit hp.com/recycle to see how to participate and for HP Planet Partners program availability; program may not be available in your area. Where this program is not available, and for other consumables not included in the program, consult your local waste authorities on appropriate disposal.

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Connect with an HP 3D Printing expert or sign up for the latest news about HP Jet Fusion 500 Series 3D Printers at hp.com/go/3DPrinter500

Learn more about HP Multi Jet Fusion technology at hp.com/go/3Dprint

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