HP Jet Fusion 540 3D Printer

Accelerate your creation workflow—produce functional parts in a fraction of the time\(^1\)

**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.
- Prototype and produce functional parts, up to 100 parts per week.\(^2\)

**Streamline design—create, test, iterate in hours**
- Produce multiple prototype iterations in the same time it takes to print a single part.\(^3\)
- 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.
- Get immediate access to support and comprehensive training with affordable HP Jet Fusion 3D Solution Services.

**Print consistent white parts with voxel control**
- Produce clean, white models.
- Access a wide range of future materials and applications with the HP Multi Jet Fusion Open Platform.
- Stay ahead with a future-ready technology.
- Prototype, then do final part production on the HP Jet Fusion 4000 series, using the same technology.

For more information, please visit [hp.com/go/3DPrinter540](http://hp.com/go/3DPrinter540)

Data courtesy of NACAR
A fully integrated, compact design

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

Prototype, then produce with the same technology

Transition seamlessly from prototyping on an HP Jet Fusion 540 3D Printer to final part production on an HP Jet Fusion 3D 4210/4200 Printing Solution. Achieve consistent part properties with the same HP Multi Jet Fusion technology.
Reinventing 3D printing
HP Jet Fusion 540 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 reclams 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.

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*HP Jet Fusion 3D Printing Solutions using HP 3D High Reusability CB PA 12 provide up to 80% post-production surplus powder reusability, 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 540 3D Printer

<table>
<thead>
<tr>
<th>Printer performance</th>
<th>Technology</th>
<th>HP Multi Jet Fusion technology</th>
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</thead>
<tbody>
<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>
<td></td>
</tr>
<tr>
<td>Building speed</td>
<td>2.340 cm/hr (142 in/hr)</td>
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<tr>
<td>Full build job time for 248-mm (9.8-in) buildable height</td>
<td>As fast as 18 hours</td>
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<tr>
<td>Partial build job time for 25-mm (1-in) buildable height</td>
<td>As fast as 5 hours</td>
<td></td>
</tr>
<tr>
<td>Layer thickness</td>
<td>0.08 mm (0.003 inches)</td>
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<tr>
<td>Printhead resolution</td>
<td>1200 dpi</td>
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</tbody>
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### 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) |

### Operating environment

| Temperature | 20-30°C (68-86°F) |
| Humidity | 20-70% RH without condensation |

### Network

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

### Hard disk

HDD 1TB (AES-256 encrypted, disk wipe DoD 5520M) & SSD 1TB (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 | 4.5-6.3 kW (typical) |
| Requirements | One dedicated circuit configuration: input voltage 200 - 240 V (line-to-line), 36 A max, 50/60 Hz |

### Certification

Safety

Electromagnetic compatibility

Environmental REACH compliant

### Warranty & service coverage included

One-year limited hardware warranty

### Ordering information

| Printer | M2X86A | HP Jet Fusion 540 3D Printer |
| Accessories | SRD52A | HP Jet Fusion Muffer |
| Original HP printheads | V1Q67A | HP 3D400 Printhead Kit |
| Original HP agents | V1Q80A | HP 3D400 500-mi Detailing Agent |
| Original HP agents | V1Q71A | HP 3D400 500-mi Fusing Agent |
| Original HP agents | V1Q81A | HP 3D400 250-mi Blunt Fusing Agent |

### Eco Highlights

- Powders and agents are not classified as hazardous.
- Cleaner, more comfortable workplace—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](http://hp.com/ecosolutions).

### HP Jet Fusion 500 Series 3D Printers

HP Jet Fusion 500 Series 3D Printers were awarded the “Seal of Design Quality” at the 2018 Red Dot Awards, an honor that is only awarded to products that display outstanding design quality and innovation.

### Ordering information

| Printer | M2X86A | HP Jet Fusion 540 3D Printer |
| Accessories | SRD52A | HP Jet Fusion Muffer |
| Original HP printheads | V1Q67A | HP 3D400 Printhead Kit |
| Original HP agents | V1Q80A | HP 3D400 500-mi Detailing Agent |
| Original HP agents | V1Q71A | HP 3D400 500-mi Fusing Agent |
| Original HP agents | V1Q81A | HP 3D400 250-mi Blunt Fusing Agent |

### HP Jet Fusion 3D Solution Services

| HP 3D long-term consumables | V1R30A | HP 3D HR CB PA 12 10L/14 kg |

### 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](http://hp.com/go/learnaboutsupplies)

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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 metal jetting solutions from $20,000 USD to $120,000 USD on market as of June, 2017. Testing variables for the HP Jet Fusion 540 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 cm cube; Layer thickness: 0.08 mm. 2. Compared to manual print retrieval process used by other powder-based technologies. The term “cleaner” does not refer to any indoor air quality requirements. 3. 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 cm cube; Layer thickness: 0.08 mm. 4. Does not include part cleaning. 5. Partial build job time for 25-mm (1-in) buildable height is up to 80% powder reusability ratio. 6. 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 cm cube; Layer thickness: 0.08 mm. 7. Assumed default cooling and auto extraction printing options. 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. 8. 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 cm cube; Layer thickness: 0.08 mm. 9. Does not include part cleaning. 10. Printing supplies eligible for recycling vary by printer. Visit [hp.com/recycle](http://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.