

HP Jet Fusion 3D 4210 Printing Solution

Accelerate your business' transformation to industrial-scale 3D manufacturing



Unlock 3D manufacturing-scale economics with the HP Jet Fusion 3D 4210 Printing Solution. Start producing engineering-grade parts—now at up to 65% lower cost¹ and up to 10 times faster.²

Breakthrough economics for production runs¹

- Achieve up to 65% lower cost-per-part¹—high-volume 3D production is now truly economically viable.
- Discover a world of new high-volume applications, made possible with HP Multi Jet Fusion technology.
- Best balance between economics and part quality, with industry-leading surplus powder reusability.³

Superior,⁴ consistent part quality

- Get excellent dimensional accuracy and fine detail,⁴ enabled by HP's unique Multi-Agent printing process.
- Produce truly functional parts with optimal mechanical properties⁵—up to 10 times faster.²
- Predictable and reliable final printed parts that match your design.⁴
- Access new future materials and applications with the HP Multi Jet Fusion Open Platform.

Breakthrough productivity for manufacturing environments

- Produce more parts per day with continuous printing, fast cooling⁶—add parts while printing for urgent jobs.
- Experience enhanced performance thanks to a higher disk capacity and additional memory.
- Cleaner experience with an enclosed Processing Station and materials not classified as hazardous.⁷
- Plan production times more accurately and predictably to help increase your overall operational efficiency.

Ordering information

| | | | |
|---|--|---|---|
| Printer | M0P44B | HP Jet Fusion 3D 4200 Printer | |
| | U9V59E | HP Upgrade to HP Jet Fusion 3D Printer 4210 HS ⁸ | |
| Accessories | M0P49C | HP Jet Fusion 3D 4200 Processing Station with Fast Cooling ¹ | |
| | U9VT0E | HP Upgrade to HP Jet Fusion 3D Processing Station with Fast Cooling ⁶ 4210 HS ⁸ | |
| | M0P45B | HP Jet Fusion 3D Build Unit | |
| | M0P54B | HP Jet Fusion 3D External Tank 5 units Bundle | |
| | M0P54D | HP Jet Fusion 3D External Tank Starter Kit | |
| | 3WL35A | HP Jet Fusion 3D Material Unloading Kit ⁹ | |
| | 3FW24A | HP Jet Fusion 3D Material Loading 3 units Bundle ⁹ | |
| Recommended accessories | Girbau DY130 Dyeing Solution ¹⁰ | Please consult with your local HP Partner First 3D Printing Specialist | |
| Original HP Printheads | F9K08A | HP 3D600 Printhead | |
| | V1Q77A | HP 3D710 Printhead | |
| Original HP Agents | V1Q60A | HP 3D600 3L Fusing Agent | |
| | V1Q61A | HP 3D600 3L Detailing Agent | |
| | V1Q63A | HP 3D700 5L Fusing Agent | |
| | V1Q64A | HP 3D700 5L Detailing Agent | |
| | V1Q78A | HP 3D710 5L Fusing Agent | |
| | V1Q79A | HP 3D710 5L Detailing Agent | |
| Other supplies | V1Q66A | HP 3D600 Cleaning Roll | |
| Original HP 3D materials | V1R10A | HP 3D High Reusability PA 12 30L (13 kg) ¹¹ | |
| | V1R16A | HP 3D High Reusability PA 12 300L (130 kg) ¹¹ | |
| | V1R34A | HP 3D High Reusability PA 12 300L (130 kg) Production Material ¹¹ | |
| | V1R20A | HP 3D High Reusability PA 12 1400L (600 kg) ^{8, 11, 12} | |
| | V1R12A | HP 3D High Reusability PA 11 30L (14 kg) ^{11, 13} | |
| | V1R18A | HP 3D High Reusability PA 11 300L (140 kg) ^{11, 13} | |
| | V1R36A | HP 3D High Reusability PA 11 300L (140 kg) Production Material ^{11, 13} | |
| | V1R11A | HP 3D High Reusability PA 12 Glass Beads 30L (15 kg) ¹¹ | |
| | V1R22A | HP 3D High Reusability PA 12 Glass Beads 300L (150 kg) ¹¹ | |
| | V1R35A | HP 3D High Reusability PA 12 Glass Beads 300L (150 kg) Production Material ¹¹ | |
| | V1R23A | HP 3D High Reusability PA 12 Glass Beads 1400L (700 kg) ^{9, 11, 12} | |
| | Certified HP 3D materials | EVNV1R14A | VESTOSINT® 3D Z2773 PA 12 30L (14 kg) ¹¹ |
| | | EVNV1R17A | VESTOSINT® 3D Z2773 PA 12 300L (140 kg) ¹¹ |
| HP Jet Fusion 3D Solution Services | U9Z57E | HP Ready To Print Service | |
| | U9EL9E | HP Installation w/Introduction to Basic Operation SVC for HP Jet Fusion 3D Processing Station with FC | |
| | 1MZ23B | HP 3D Printer Initial Maintenance Kit | |
| | 1MZ24A | HP 3D Printer Yearly Maintenance Kit | |
| | 1MZ25B | HP 3D Post Processing Maintenance Kit | |
| | U9EK7E | HP Advanced Operation Training Service for Jet Fusion 3D Printer (HP Training Center) | |
| | U9VP8E | HP 3 year NBD* Onsite Hardware Support with DMR** | |
| | U9WG0E | HP 3 year NBD* Onsite Build Unit Support | |
| | U9VT2E | HP 3 year NBD* Onsite Support for Processing Station with Fast Cooling | |
| | U9VQ3E | HP 3 year Shared HW Support, Parts NBD* with DMR** and 2 onsite visits for Printer | |
| | U9WG5E | HP 3 year Shared Hardware Support, Parts NBD* and 2 onsite visits for Build Unit | |
| | U9VT7E | HP 3 year Shared Hardware Support, Parts NBD* and 2 onsite visits for Processing Station with FC | |
| | U9UB1E | HP Train to Maintain Service for Jet Fusion 3D Printer*** | |
| | U9Z59E | HP Uptime Kit for Jet Fusion 3D Printer*** | |
| | U9ZT1E | HP Uptime Kit for Jet Fusion 3D Processing Station*** | |
| | U9ZT0E | HP Uptime Kit for Jet Fusion 3D Build Unit*** | |
| | U9ZN5E | HP Bulk Enablement Upgrade Service ⁹ | |

* Next Business Day

** Defective Media Retention

*** This is only for Shared Hardware Support Services

Technical specifications¹⁴

HP Jet Fusion 3D 4210 Printer

| | | |
|---|---|--|
| Printer performance | Technology | HP Multi Jet Fusion technology |
| | Effective building volume | 380 x 284 x 380 mm (15 x 11.2 x 15 in) |
| | Building speed | 4115 cm ³ /hr (251 in ³ /hr) ¹⁵ |
| | Layer thickness | 0.08 mm (0.003 in) |
| | Print resolution (x, y) | 1200 dpi |
| Dimensions (w x d x h) | Printer | 2210 x 1200 x 1448 mm (87 x 47 x 57 in) |
| | Shipping | 2300 x 1325 x 2068 mm (91 x 52 x 81 in) |
| | Operating area | 3700 x 3700 x 2500 mm (146 x 146 x 99 in) |
| Weight | Printer | 750 kg (1653 lb) |
| | Shipping | 945 kg (2083 lb) |
| Network¹⁶ | Gigabit Ethernet (10/100/1000Base-T), supporting the following standards: TCP/IP, DHCP (IPv4 only), TLS/SSL | |
| Hard disk | HDD 1TB (AES-256 encrypted, disk wipe DoD 5520M) & SSD 500GB (AES-256 encrypted) | |
| Software | Included software | HP SmartStream 3D Build Manager, HP SmartStream 3D Command Center |
| | Supported file formats | 3MF, STL |
| | Certified third-party software | Autodesk® Netfabb® Engine for HP, Materialise Magics with Materialise Build Processor for HP Multi Jet Fusion, Siemens NX AM for HP Multi Jet Fusion |
| Power | Consumption | 9 to 11 kW (typical) |
| | Requirements | Input voltage three phase 380-415 V (line-to-line), 30 A max, 50/60 Hz / 200-240 V (line-to-line), 48 A max, 50/60Hz |
| Certification | Safety | IEC 60950-1+A1+A2 compliant; United States and Canada (UL listed); EU (LVD and MD compliant, EN60950-1, EN12100-1, EN60204-1, and EN1010) |
| | Electromagnetic | Compliant with Class A requirements, including: USA (FCC rules), Canada (ICES), EU (EMC Directive), Australia (ACMA), New Zealand (RSM) |
| | Environmental | REACH |
| Warranty & Service coverage included | One-year limited hardware warranty | |

HP Jet Fusion 4210 Processing Station with Fast Cooling⁶

| | | |
|---|---|---|
| Features | Automated mixing, sieving, and loading; semi-manual unpacking; fast cooling; ⁶ external storage tank | |
| Dimensions (w x d x h) | Processing Station with Fast Cooling ⁶ | 2990 x 934 x 2400 mm (117.7 x 36.8 x 94.5 in) |
| | Shipping | 3499 x 1176 x 2180 mm (137.8 x 46.3 x 85.8 in) |
| | Operating area | 3190 x 2434 x 2500 mm (125.6 x 95.8 x 99 in) |
| Weight | Processing Station with Fast Cooling ⁶ | 480 kg (1058 lb) |
| | Loaded | 810 kg (1786 lb) |
| | Shipping | 620 kg (1367 lb) |
| Power | Consumption | 2.6 kW (typical) |
| | Requirements | Input voltage single phase 200-240 V (line-to-line), 19 A max, 50/60Hz or 220-240 V (line-to-neutral), 14 A max, 50Hz |
| Certification | Safety | UL 2011, UL508A, NFPA, C22.2 NO. 13-14 compliant; United States and Canada (UL listed); EU (MD compliant, EN 60204-1, EN 12100-1 and EN 1010) |
| | Electromagnetic | Compliant with Class A requirements, including: USA (FCC rules), Canada (ICES), EU (EMC Directive), Australia (ACMA), New Zealand (RSM) |
| | Environmental | REACH |
| Warranty & Service coverage included | One-year limited hardware warranty | |

Eco Highlights



- Powders or agents are not classified as hazardous⁷
- Cleaner, more comfortable workplace—enclosed printing system, and automatic powder management⁷
- Minimizes waste due to industry-leading reusability of powder¹⁷
- Take-back program for printheads¹⁸

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

For more information, please visit hp.com/go/JetFusion3Dsolutions



1. Based on internal testing and public data, HP Jet Fusion 3D 4210 Printing Solution average printing cost-per-part is 65% lower versus the average cost of comparable fused deposition modeling (FDM) and selective laser sintering (SLS) printer solutions from \$100,000 USD to \$300,000 USD on market as of April, 2016 and is 50% lower versus the average cost of comparable SLS printer solutions for \$300,000 USD to \$450,000 USD. Cost analysis based on: standard solution configuration price, supplies price, and maintenance costs recommended by manufacturer. Cost criteria: printing 1.4 full build chambers of parts per day/5 days per week over 1 year of 30 cm³ parts at 10% packing density on fast print mode using HP 3D High Reusability PA 12 material, and the powder reusability ratio recommended by manufacturer.
2. Based on internal testing and simulation, HP Jet Fusion 3D average printing time is up to 10 times faster than average printing time of comparable fused deposition modeling (FDM) and selective laser sintering (SLS) printer solutions from \$100,000 USD to \$300,000 USD on market as of April, 2016. Testing variables for the HP Jet Fusion 4210/4200 Printing Solutions: Part quantity: 1 full build chamber of parts from HP Jet Fusion 3D at 20% 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.
3. Industry-leading surplus powder reusability based on using HP 3D High Reusability PA 12 at recommended packing densities and compared to selective laser sintering (SLS) technology, offers excellent reusability without sacrificing mechanical performance. Tested according to ASTM D638, ASTM D256, ASTM D790, and ASTM D648 and using a 3D scanner for dimensional accuracy. Testing monitored using statistical process controls.
4. Based on HP's unique Multi-Agent printing process. Excellent dimensional accuracy and fine detail within allowable margin of error. Based on dimensional accuracy of ±0.2 mm/0.008 inches on XY for hollow parts below 100 mm/3.94 inches and ±0.2% for hollow parts over 100 mm/3.94 inches, using HP 3D High Reusability PA 12 material, measured after sandblasting. See hp.com/go/3Dmaterials for more information on materials specifications.
5. Based on the following mechanical properties: Tensile strength at 48 MPa (XYZ), Modulus at 1700-1800 MPa (XYZ). ASTM standard tests with HP 3D High Reusability PA 12 material. See hp.com/go/3Dmaterials for more information on materials specifications.
6. Fast Cooling is enabled by HP Jet Fusion 3D Processing Station with Fast Cooling and is recommended only for HP 3D High Reusability PA 12 and HP 3D High Reusability PA 12 Glass Beads.

HP Jet Fusion 3D Processing Station with Fast Cooling accelerates parts cooling time vs recommended manufacturer time of selective laser sintering (SLS) printer solutions from \$100,000 USD to \$450,000 USD, as tested in April, 2016. Fused deposition modeling (FDM) not applicable. Continuous printing requires an additional HP Jet Fusion 3D Build Unit (standard printer configuration includes one HP Jet Fusion 3D Build Unit).

7. 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 air quality regulations or testing that may be applicable. The HP powder and agents do not meet the criteria for classification as hazardous according to Regulation (EC) 1272/2008 as amended.
8. This SKU is required for the HP Jet Fusion 3D 4210 Printing Solution.
9. This product number is sold directly by HP.
10. This product will be available in Europe in August 2018, and in the Americas in September 2018.
11. Liters refers to the materials container size and not the actual materials volume. Materials are measured in kilograms.
12. Additional material management equipment is required.
13. Available in the second half of 2018.
14. For latest technical specifications, please visit hp.com/go/3DPrint.
15. Based on 0.08-mm (0.003-in) layer thickness and 7.55 sec/layer.
16. 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.
17. HP Jet Fusion 3D printing solutions using HP 3D High Reusability PA 12 and HP 3D High Reusability PA 11 provide 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 recyclability). Parts are then made from each generation and tested for mechanical properties and accuracy.
18. 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.

© Copyright 2017, 2018 HP Development Company, L.P. The information contained herein is subject to change without notice.

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

4AA7-1532ENA, November 2018

This is an HP Indigo digital print.

