HP Jet Fusion 5600 Series 3D printing solutions



HP Jet Fusion 5600 Series 3D printing solutions

Enhance your manufacturing capabilities and optimize applications for flexible production at scale¹

Ideal for high volume production environments

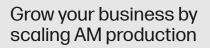
Save time and money with predictable manufacturing³

• Optimize applications for scalable production with access to process development capabilities

Gain process flexibility to

enhance applications²

- Leverage data and KPI analytics that streamline application development
- Become your own process expert through the transfer of knowledge and support from HP's technical experts
- Improve yield rates and help reduce costs with optimized print modes and calibrations for consistent part quality-part to part, build to build, system to system
- Build confidence in your production processes with access to data reports
- Reduce unplanned downtime through improved hardware reliability



- Produce robust final parts with best-in-class isotropy using our latest generation HP Jet Fusion platform
- Maximize overall equipment effectiveness (OEE) through enhanced part repeatability and system reliability
- Unlock MJF's highest process capabilities to optimize and scale applications

HP 3D hardware, software, and services designed to help you scale into volume production



HP Digital Production Suite—delivering the science and power of HP Multi Jet Fusion technology

HP Digital Production Suite provides the control and analytics required to scale additive manufacturing for a complete supply chain solution.

Design

Development

Production



Design

Production

HP 3D Process Development Expand HP full suite of create proc Maintain a l

Expand HP Multi Jet Fusion applications with access to a full suite of process parameter settings. Experiment and create processes designed to scale.

Maintain a library with your testing procedures.

Design

Development

Production



Integration with industry-leading software partners					
	materialise innovators you can count on	materialise ∞-am software platform	SIEMENS		

The HP Jet Fusion 5600 Series 3D printing solution is currently available with HP 3D High Reusability PA 12, enabled by Evonik



Strong, low-cost⁴ parts and a reduced carbon footprint⁵

Reduce total cost of ownership⁶ and produce strong, functional, detailed complex parts with HP 3D High Reusability PA 12, enabled by Evonik. This robust thermoplastic provides industry-leading surplus powder reusability.⁷

Statements: Biocompatibility, REACH, RoHS (for EU, Bosnia-Herzegovina, China, India, Japan, Jordan, Korea, Serbia, Singapore, Turkey, Ukraine, Vietnam), PAHs, Statement of Composition for Toy Applications, UL 94, and UL 746A. Meets strict automotive safety standards, including the Federal Motor Vehicle Safety Standard (FMVSS).⁸





Working together through your digital manufacturing journey: HP 3D Solution Services

Whether you're just starting out or you're in full production, we're here to help you successfully navigate your 3D printing adoption journey with a world-class service experience, dedicated to making digital manufacturing and new growth a reality for your business.

HP 3D Printing Prepare Services

From preparing your site to installing and calibrating your equipment; and printing your first parts to helping you explore the full potential of HP 3D Printing, we'll help get you started on the right track with HP 3D Printing Prepare Services.

HP 3D Printing Care Services

Your uptime is our top priority. From preventive maintenance to proactive, big data-driven analytics, we're looking for every opportunity to help you improve the return on your investment through HP 3D Printing Care Services.

HP 3D Printing Grow Services

Accelerate your transformation with HP 3D Printing Grow Services, designed to help you grow, move into new materials, applications, and use cases, and further optimize your manufacturing processes.

Learn more: hp.com/go/3DSupport

HP 3D Professional Services: Accelerate your transformation to additive manufacturing (AM)

HP 3D Professional Services help organizations identify viable strategic opportunities, optimize design for breakthrough applications, and streamline manufacturing processes to enable mass customization and scale production.



Adopt

Identify new opportunities and advanced design techniques enabled with HP Multi Jet Fusion technology.

Develop

Look to improve your product positioning and market differentiation through innovation and new application development.

Manufacture

Set up customized, repeatable, and scalable manufacturing processes with HP 3D Factory Services.

4



Accelerate your move to HP 3D Printing with HP Integrated Financial Solutions

Leverage the latest technology to help accelerate your growth, profitability, and competitiveness. Partner with HP Integrated Financial Solutions to help accelerate your time to value. Enjoy the flexibility to meet both your technology and financial plans while allocating your cash to other priorities.

Financing options include a low per-month payment for HP Jet Fusion 5600 Series 3D printing solutions, enabling the flexibility to:

- Avoid a large upfront payment
- Align payments with revenue by using deferred or step payment options
- Simplify your administration-bundle hardware and services into a single agreement
- Change as your requirements evolve; refresh every 3-5 years

Financing and service offerings are available through Hewlett-Packard Financial Services Company and its subsidiaries and affiliates (collectively HPFSC), in certain countries, and are subject to credit approval and execution of standard HPFSC documentation. Rates and terms are based on customer's credit rating, offering types, services, and/or equipment type and options. Not all customers may qualify. Not all services or offers are available in all countries. Other restrictions may apply. HPFSC reserves the right to change or cancel this program at any time without notice.

Learn more: hp.com/go/3DIntegratedFinancialSolutions

HP 3D as a Service (HP 3DaaS)⁹: Gain new levels of cost predictability with the flexibility to scale your business as you grow

In this business climate, there are many advantages to a pay-as-you-go business model when the focus is on outcomes. Paying on a usage basis puts the focus on your business results rather than equipment or transactions.

HP Jet Fusion 3D printing solutions are reinventing design and manufacturing-from accelerating design cycles to running efficient volume production with repeatable part quality.

Speed up your digital manufacturing transformation with HP 3DaaS:

- Predictable: Usage-based price per successful build¹⁰ gives you certainty around your variable costs
- Convenient: Gain new operational efficiencies by simplifying supplies ordering and inventory management
- Affordable: Avoid up-front investment and help align your costs directly with your revenue by paying monthly¹¹

HP 3DaaS includes:

- HP 3D Printing Care Services: HP 3D Production Care or HP 3D Shared Care
- HP Supplies and Automatic Replenishment⁹
- HP 3D Preventive Maintenance Kits
- Online dashboard for convenient billing and usage tracking

Contact your local HP sales representative for more information or learn more at hp.com/go/3DaaS

HP Jet Fusion 5600 Series 3D printers

PRINTER	Technology	HP Multi Jet Fusion technology		
PERFORMANCE	Effective build volume	380 x 284 x 380 mm (15 x 11.2 x 15 in)		
	Humidity	40-80%		
	Building speed ¹²	Up to 3,466 cm ³ /hr (211 in ³ /hr)		
	Layer thickness ¹²	0.09 mm (.0035 in)		
	Job processing resolution (x,y)	1200 dpi		
	Print resolution (x,y)	1200 dpi		
DIMENSIONS	Printer	2210 x 1268 x 1804 mm (87 x 50 x 71 in)		
(W x D x H)	Shipping	2300 x 1325 x 2027 mm (91 x 52 x 80 in)		
	Operating area	3700 x 3700 x 2500 mm (146 x 146 x 99 in		
WEIGHT	Printer	880 kg (1940 lb)		
	Build unit	140.5 kg (309.7 lb)		
NETWORK ¹³	Shipping 1037.5 kg (2287 lb) Gigabit Ethernet (10/100/1000Base-T), supporting the			
	following standards: TCP/IP, DHCP (IPv4 only), TLS/SSL			
PROCESSOR AND	Processor	Intel [®] Core [™] i7 7770 (3.6 GHz, up to 4.2 GHz)		
MEMORY	Memory	64 GB DDR4		
HARD DISK	1TB HDD SED (AES-256 e			
		ncrypted), TGC-OPAL 2.01 compliant		
SOFTWARE	Compatible software	HP 3D Build Manager HP 3D Command Center		
	oontindro	HP 3D Center		
		HP 3D API HP 3D Process Development		
	Cumporte d file formate	•		
	Supported file formats	3MF, STL, OBJ, and VRML (v2.0)		
	Certified third-party software	Autodesk [®] Netfabb with HP Workspace, Materialize Build		
	and party continue	Processor for HP Multi Jet Fusion		
		technology, Siemens NX AM for HP Multi Jet Fusion technology		
POWER	Consumption	12 kW ¹⁴		
- Onen	Requirements	380-415 V (line-to-line), 50 A max,		
		50/60 Hz		
		200-240 V (line-to-line), 80 A max, 50/60 Hz		
CERTIFICATIONS	Safety	IEC 60950-1+A1+A2 compliant; United		
AND STATEMENT	,	States and Canada (UL listed); EU		
		(LVD and MD compliant, EN 60950-1, EN 12100-1, EN 60204-1, and EN 1010)		
	Electromagnetic	Compliant with Class A requirements,		
	Liectionagnetic	including: USA (FCC rules), Canada		
		(ICES), EU (EMC Directive), Australia		
		(ACMA), New Zealand (RSM), Korea (KCC)		
	Environmental statement	REACH compliant		
WARRANTY &	One-year limited hardware warranty			
SERVICE COVERAGE				
ENVIRONMENTAL SPECIFICATIONS	Temperature	20-30°C (68-86°F)		
	during installation	20, 2000 (69, 960E)		
	Operating temperature	20-30°C (68-86°F)		
	Recommended temperature for best performance	20-30°C (68-86°F)		
	Storage temperature	-25 to 55°C (-13 to 131°F)		
	Operating humidity	40-80% without condensation		
		< 90% without condensation		
	Storage humidity	< 0.0% without condensation		

HP Jet Fusion 5200 Series 3D processing stations

FEATURES	Automated mixing and loading with ultrasonic sieving and accessible sieve mesh; semi-manual unpacking; high-temperature unpacking; automated external storage tank; optional trained self-service deep-cleaning; optional cooling unit			
DIMENSIONS (W x D x H)	Processing station	2990 x 934 x 2400 mm (117.7 x 36.8 x 94.5 in)		
	Shipping	2389 x 1176 x 2182 mm (94 x 46.3 x 85.9 in)		
	Operating area	3190 x 2434 x 2500 mm (125.6 x 95.8 x 99 in)		
WEIGHT	Processing station	485 kg (1069 lb)		
	Loaded	724 kg (1596 lb)		
	Shipping	620 kg (1366 lb)		
POWER	Consumption	2.6 kW (typical)		
	Requirements	Input voltage single phase 200-240 V (line-to-line) 19 A max, 50/60 Hz (line-to-neutral) 14 A max, 50 Hz		
CERTIFICATIONS AND STATEMENT	Safety	UL 2011, UL 508A, NFPA 70/ NFPA 79, C22.2 NO. 14-13 compliant; United States and Canada (UL listed); EU (MD compliant, EN 60204-1, EN 12100-1, EN 1127-1, EN-ISO 11201 and EN 1010)		
	Electromagnetic	Compliant with Class A requirements, including USA (FCC rules), Canada (ICES), EU (EMC Directive), Australia (ACMA), New Zealand (RSM), Korea (KCC)		
	Environmental REACH compliant statement			
WARRANTY & SERVICE COVERAGE INCLUDED	One-year limited hardware warranty			
ENVIRONMENTAL SPECIFICATIONS	Temperature during installation	20-30°C (68-86°F)		
	Operating temperature	20-30°C (68-86°F)		
	Recommended temperature for best performance	20-30°C (68-86°F)		
	Storage temperature	-25 to 55°C (-13 to 131°F)		
	Operating humidity	40-80% without condensation		
	Storage humidity	< 90% without condensation		

HP 3D Printing materials have their own restrictions published in material data sheets

Ordering information

PRINTER	7L1F1B	HP Jet Fusion 5600 3D Printer	HP 3D LONG-TERM CONSUMABLES ORIGINAL HP AGENTS	8VJ68A	HP Jet Fusion 5200/4200 Series 3D Vacuum Pump Filter	
ACCESSORIES	7Q9U6A	HP Jet Fusion 5600 3D Build Unit		2X0E1A	HP Jet Fusion 5200 Series 3D Automatic Unpacking Station E-cabinet Fan Filter	
	3FW27A	HP Jet Fusion 5200 3D Processing Station				
	815Z7A	HP Jet Fusion 3D Automation Accessory		2X0E2A	HP Jet Fusion 5200 Series 3D Automatic Unpacking Station	
	2W883A	HP Jet Fusion 5200 Series 3D Automatic Unpacking Station		2X0E3A	Pneumatic Filter HP Jet Fusion 5200 Series 3D	
	2M7W6A	HP Jet Fusion 5200 Series 3D Automatic External Tank			Automatic Unpacking Station Top Lid Filter	
	4QG11A	HP Jet Fusion 5200 3D Automatic External Tank Starter Kit		V1Q63A	HP 3D700 5L Fusing Agent	
	4QG10A	HP Jet Fusion 5200		V1Q64A	HP 3D700 5L Detailing Agent HP 3D600 Cleaning Roll	
		3D Natural Cooling Unit	OTHER SUPPLIES	V1Q66A		
	5ZR22A	HP Jet Fusion 5200 3D Natural Cooling Unit Starter Kit	ORIGINAL HP 3D HIGH REUSABILITY	V1R10A	HP 3D High Reusability PA 12, enabled by Evonik, 30L (13kg)	
	870A3A	HP Jet Fusion 5600 to 5620 Printer Upgrade Kit	MATERIALS ¹⁵	V1R16A	HP 3D High Reusability PA 12, enabled by Evonik, 300L (130kg)	
	8Z084A	HP Jet Fusion 5620 to 5620 Pro Printer Upgrade Kit		V1R34A	HP 3D High Reusability PA 12, enabled by Evonik, Production Material 300L	
	5ZR20A	HP Jet Fusion 5210 3D Processing Station Installation Kit			(130 kg) ¹⁶	
	5ZR24A	HP Jet Fusion 5210 Pro 3D Processing Station Installation Kit		V1R20A	HP 3D High Reusability PA 12, enabled by Evonik, 1400L (600 kg) ^{17,18}	
HP JET FUSION 3D POWDER HANDLING AUTOMATION SOLUTION		Please contact your local HP 3D Printing specialist	HP JET FUSION 3D SOLUTION SERVICES ¹⁹	UB4P2E	HP Digital Manufacturing Site Readiness Assessment Tier 1 Service for HP Jet Fusion 5600/5200/4200 Series 3D printing solutions	
HP PROCESS DEVELOPMENT PACKAGE		Please contact your local HP 3D Printing specialist		U67MQE	HP Ready-to-Print Service for HP Jet Fusion 5600 Series 3D printing solutions	
HP OFFICEJET PRO 7740 WIDE FORMAT ALL-IN-ONE		For more information on availability in your region, please check with your local HP 3D Printing specialist		U67MSE	HP Ready-to-Grow Service for HP Jet Fusion 5600 Series 3D printing solutions	
PRINTER	7L4S2A	HP Jet Fusion 3D Alignment Plate Accessory	* Next Business Day	UB9V8E	HP 3-year Next Business Day* Onsite HW Support w/DMR** Production Care for HP JF 5600/5200/4200 3D printer	
	7L4S1A	HP Jet Fusion 3D Thermocamera Calibration Tool		UB7M7E	HP 3-year Next Business Day* Onsite HW Support w/DMR** Foundation Care for HP JF 5600/5200/4200 3D printer	
	3FW24A	HP Jet Fusion 3D Material Loading 3 units Bundle		H0JQ4AC	HP Shared Care Jet Fusion 5600	
	3WL35A	HP Jet Fusion 3D Material Unloading Kit		3D printer **Defective Media Retention		
RECOMMENDED THIRD-PARTY ACCESSORIES	Hovmand Forklift 5200	Please consult with your local HP Amplify 3D printing specialist				
ORIGINAL HP PRINTHEADS	F9K08A	HP 3D600 Printhead				

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

Connect with an HP 3D Printing expert or sign up for the latest news about HP Jet Fusion 3D Printing: hp.com/go/3Dcontactus

For more information, please visit: hp.com/JetFusion5600

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: <u>hp.com/go/learnaboutsupplies</u>.

- 1. The HP Jet Fusion 5600 Series 3D printing solution is currently available with HP 3D High Reusability PA 12, enabled by Evonik.
- 2. Customize the HP Multi Jet Fusion process to meet TCO or quality targets with the optional Process Development Package, which includes access to process parameter settings, analytics capabilities, and knowledge transfer. The Process Development Package is not included, sold separately.
- 3. Based on internal HP testing as of July 2023, comparing the HP Jet Fusion 5600 Series 3D printing solution with other printers in the HP Jet Fusion portfolio.
- 4. Based on internal testing and public data for solutions on market as of April, 2016. 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, enabled by Evonik material, and the powder reusability ratio recommended by manufacturer, and printing under certain build conditions and part geometries.
- 5. Carbon footprint reduction calculated by Evonik.
- 6. Compared to selective laser sintering (SLS) and fused deposition modeling (FDM) technologies, HP Multi Jet Fusion technology can reduce the overall energy requirements needed to attain full fusing and reduce the system requirements for large, vacuum-sealed ovens. In addition, HP Multi Jet Fusion technology uses less heating power than SLS systems for better material properties and material reuse rates, minimizing waste.
- Based on using 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. Testing monitored using statistical process controls.
- This product is certified for Federal Motor Vehicle Safety Standard (FMVSS) 302 for Flammability of Interior Materials-Passenger Cars, Multipurpose Passenger Vehicles, Trucks, and Buses.

- 9. HP Supplies and Automatic Replenishment is currently available in the US, Canada, Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Poland, Portugal, Spain, Sweden, UK, and South Korea. HP 3DaaS service only (HP Supplies not included) is available in Mexico, Brazil, Israel, Hungary, Romania, Slovenia, Turkey, United Arab Emirates, Greece, South Africa, China, Singapore, and Taiwan.
- 10. A successful build is a printed job that ends with the exit code "job_completed_successfully."
- 11. HP 3DaaS defined usage-based price applies for a one-year term.
- 12. Based on using HP 3D High Reusability PA 12, enabled by Evonik, Balanced Print mode, at 0.09 mm (0.0035 in) layer thickness. Faster times are achievable with HP 3D Process Development.
- 13. 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.
- 14. PA 12 in Balanced print mode.
- 15. Liters refers to the materials container size and not the actual materials volume. Materials are measured in kilograms.
- 16. Compatible with the HP Jet Fusion 5620 pro/5620 3D printing solutions.
- 17. Compatible with the HP Jet Fusion 5620 Pro 3D printing solution.
- 18. Additional material management equipment is required.
- 19. Should the HP Jet Fusion 3D printer or printing solution alert you that preventive maintenance is required, you must purchase the kit separately if you do not have one or if the kit provided was already used. If preventive maintenance is not completed in a timely manner, HP may request that you take corrective actions. HP may charge any extra costs due to the lack of maintenance. Required only if under HP 3D Foundation Care.

© Copyright 2023 HP Development Company, L.P.

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.

4AA8-3303ENW, October 2023

