HP Industrial Filament (IF) 3D Printer 600 High Temperature (HT) Solution



High-performance materials for demanding applications.	Open platform. Expanded materials choice.	Designed to support regulated industries[8]	Industrial Confidence. Backed by HP
▪ Process advanced high-performance polymers with up to 500°C extrusion and a heated chamber up to 195°C.[1] ▪ Up to 58% lower ULTEM™ 9085 material cost per part compared to the leading FFF solution.[2] ▪ Maintain controlled printing conditions with intelligent thermal management.[3] ▪ Achieve more consistent printing outcomes with automated material drying, conditioning, and post-annealing.[3],[4]	▪ Choose from HP-validated, eligible third-party, or materials of your choice.[5,6] ▪ Expand material and application possibilities through the Open Filament Network.[5] ▪ Customize printing parameters and profiles for application-specific requirements.[6] ▪ Accelerate development, validation, and deployment with HP IF 3D Expert Services.[7]	▪ Enable material-to-part traceability through NFC-tagged spools, integrated registration, and automated process logging.[8] ▪ Generate traceable material and process records throughout the print workflow.[8] ▪ Support customer qualification workflows with documented controls and traceable production records.[8] ▪ Support deployment in regulated environments with recognized safety and cybersecurity requirements.[9]	▪ Benefit from HP's industrial additive manufacturing expertise. ▪ Help maintain production continuity with HP IF 3D Services.[10] ▪ Triple-stage filtration designed to help manage particulates and VOCs.[11]

HP IF 3D Printer 600 HT specifications

PRINTING	Print technology:	Fused Filament Fabrication (FFF)
	Build volume:[12]	380 × 380 × 420 mm (60,480 cm^3) 15 x 15 x 16,5 in
	Min. layer height:	50 µm
	Number of printheads:	2; purging system
	Nozzle diameter:	0.5/0.5 mm or 0.4/0.4 mm
	Filament diameter:	1.75 mm
	Printhead temperature (max.):	500°C
	Buildplate temperature (max.):	190°C
	Chamber temperature (max.):	195°C (active heating)
	Filament chamber temperature (max.):	50°C
	Achievable part accuracy:	Parts are printed with an accuracy of 0.125 mm or 0.0014 mm/mm whichever is greater. Accuracy in Z-axis includes an additional tolerance of 0.000/+ layer height
SPEED	Travel move:	1 m/s
	Printing speed:	0.4 m/s
DIMENSIONS AND MASS	External dimensions (WxDxH):	915 x 980 x 2020 mm
	Mass:	365 kg
CONSTRUCTION	Chassis:	Steel
	External:	Steel and vacuformed ABS, chamber lined with satin stainless steel
	Build surface:	Borosilicate glass and vacuum sealed PEI sheet
ENVIRONMENT	Operating temperature:	18 to 30 °C
	Operating humidity:	30 to 60% without condensation
	Storage temperature:	–25 to +55°C
POWER	Electrical ratings:	230–240 V~ (±10%), 50/60 Hz, 20 A (max), 4.6 kW (max), 1.5 kW (average), SCCR 5 kA
	Mains connection:	EC 60309 power inlet, 32 A, 2P+PE. Matching IEC 60309 plug included. Detachable power supply cord not provided.
	Communication:	Ethernet
COMPRESSED AIR	Pressure:	Maximum 6 bar
	Line diameter:	8 mm
	Airflow:	Minimum 50 l/min
SOFTWARE	Slicing software:	3DGence SLICER 4.0
	Cloud based services:	3DGence CONNECT
HP 3D FILAMENT MATERIALS	ULTEM™ 9085 (by SABIC), PEEK, Victrex AM200, PEEK-CF, ABS, PC, PA-CF	
OPEN MATERIALS (EXAMPLES)*	PEI, PEEK, PEEK-CF, PEAK, ABS, PC, PA-CF, and others	
SUPPORTING MATERIALS	HIPS, HPSM-10, HPSM-30	
SAFETY	Advanced Filtration Unit:	High-efficiency three-stage filtration: Pre-filter (G4), HEPA H13 particle filter, and activated carbon
PRODUCT CERTIFICATIONS	CE and NRTL (UL2011) listed	
WHAT IS INCLUDED?	HP Industrial Filament 3D Printer 600 High Temperature (HT)	
	One HP IF 3D Printing Module (M280, M360, or M500), selected based on application requirements.	
	Set of accessories	
	Signal tower	
	Emergency stop circuit	
	Air Treatment Unit (ATU)	
	Advanced filtration unit	
PRINTER MODULES	HP Industrial Filament 3D Printer 280 Module with dual-extruder	
	HP Industrial Filament 3D Printer 360 Module with dual-extruder	
	HP Industrial Filament 3D Printer 500 Module with dual-extruder	



HP IF 3D Material Management System specifications

DIMENSIONS	Dryer dimensions (WxDxH):	3 chambers: 850 × 630 × 1740 mm
	Max. dimensions with open door [WxDxH]:	3 chambers: 850 × 1090 × 1740 mm
ENVIRONMENT	Operating temperature:	+10 to +30°C relative humidity from 30% to 60% w/o condensation
	Operating humidity:	30%–60% RH (non-condensing)
	Storage temperature:	–25 to +55°C relative humidity 10% to 85% w/o condensation
POWER	Electrical ratings:	230–240 V~ (±10%), 50/60 Hz, 16 A (max), 3.6 kW (max)
	Mains connection:	IEC 60309 power inlet, 32 A, 2P+PE. Matching IEC 60309 plug included. Detachable power supply cord not provided.
TEMPERATURES	Operating temperature range:	50°C - 200°C
CONNECTION	Communication:	Ethernet
DRYING	Operating technology:	Dry air [actively dried]
	Drying chamber space [WxDxH]:	470 × 260 × 320 mm
	Drying chamber volume:	39,1 l
	Number of material slots in one chamber:	4
	Number of chambers in the dryer:	3
	Maximum filament spool diameter:	220 mm
	Maximum thickness of the spool:	90 mm
	Material tracking system:	Smart Material Manager
	Third-party materials:	Yes, in the CUSTOM option
	Drying process settings:	Predefined / Edition in the CUSTOM option
	Recrystallization process settings:	Predefined
SOFTWARE	Device monitoring and archiving:	Locally and 3DGence CONNECT
	Software updates:	Automatic, via USB and Internet
CONSTRUCTION	Electronics:	3DGence
	NFC TAG Reader:	Yes, on the front of the device
	Display:	10" TFT capacitive display with 1280 x 768 px resolution
PRODUCT CERTIFICATIONS	CE and NRTL listed	
ACCESSORIES	Print recrystalization kit	
	Drying agent cartridges (one for each drying chamber)	
	Drawers for storing materials in the drying chamber (one for each drying chamber)	

