

FUNMAT PRO 610HT

Large Scale • High Temperature • Industrial Production



Printing Capability

Ideal for printing High Performance Polymers like PEI, PEEK, PEEK-CF, PEEK-GF, PEKK, PPSU and many others.



Large Scale Production

Filament auto-reloading function and a build volume of 610 x 508 x 508 mm.



Advanced Thermal Design

Uniform 300 °C (572 °F) heated chamber, avoid warping and cracking.



High Precision & High Quality

Advanced servo control system with high precision screw guide.

INTAMSYS has paved the way with their breakthrough FUNMAT PRO 610HT. Equipped to effectively handle the tough requirements needed to print with high-performance thermoplastics, this machine unlocks industrial-grade, high-quality additive manufacturing capabilities. The FUNMAT PRO 610HT is capable of handling almost every high-performance thermoplastic material available on the market. It comes with a dual extruder that can reach 500 °C and a heated chamber of 300 °C for premium repeatability with your part designs. This is INTAMSYS's biggest printer yet, this is a larger solution, boasting a build volume of 610 x 508 x 508 mm. The FUNMAT PRO 610HT has found its home in many settings including automotive, aerospace, oil & gas, and more.



Technical Parameters

Printing

Technology	FFF (Fused Filament Fabrication)	Materials*	PEI (ULTEM™) 9085, PEI (ULTEM™) 1010, PEEK, PEEK-CF, PEEK-GF, PEKK, PPSU, PPS, PC, PC-ABS, PPA-CF, PPA-GF, PA6/66, PA6-CF, PA12, PA12-CF, ABS+, ABS, ASA, etc.
Build Volume	610 x 508 x 508 mm (24 x 20 x 20 in)	Nozzle Temperature	Max. 500 °C (932 °F)
Layer Thickness	0.1-0.5 mm	Chamber Temperature	Max. 300 °C (572 °F)
Number of Nozzles	2	Filament Chamber	Max. 50 °C (122 °F)
Number of Spools	4 (Max 3 Kg/pc)	Functions	Auto-cleaning Nozzles, Filament Auto-reloading, Filament Jam Warning, Filament Absence Warning, Remote Control, Remote Printing
Filament Diameter	1.75 mm		
Print Speed	Max. 160 mm/s		
Nozzle Diameter	Default: 0.4 mm (Optional: 0.6/0.8 mm)		
Leveling	Auto Leveling		

Machine

Voltage	3P 380 V 30 A/phase, 50 ~ 60Hz or 3P 200 V 50 A/phase, 50 ~ 60Hz	Filament Chamber	4 Independent Sealed Chambers, With Active Heating And Dry Compressed Air (External Air Compressor Is Required), Keep Filament Dry During Printing, Auto Filament Feeding
Max. Power	15 kW	Travel Speed	Max. XY 400 mm/s, Max. Z 50 mm/s
Connectivity	WiFi, Ethernet, USB	Resolution	XY : 12.5 µm; Z: 1.25 µm
Screen	10" Touch Screen	Printer Size	With Warning Lights: 1710 x 1425 x 2350 mm (67.3 x 56.1 x 92.5 in)
Build Plate	Flexible Buildplates with Vacuum Adsorption System	Printer Weight	1450 Kg (3086 lb)
Build Chamber	Fully Enclosed Printing Chamber		
Motor System	Servo Control System With High Precision Ball Screw		
Cooling	Liquid Cooling System & Fan		

Safety

Safety Design	Independent Safety PLC, Electromagnetic Safety Door Lock, Over-temperature Protection, Overload Protection, Emergency Stop Button, Double-layer Thickened Heat-insulated Front Door, Heat-resistant Shield, Three-color Warning Light.
Safety Standards	EN60204
Certification	CE, FCC, SGS

Slicing

Slicing Software	INTAMSUITE™
Supported File Types	.stl/.obj/.x3d/.3mf/.stp/.iges
Operating System	Windows

Operating Environment

Working Temperature	15 °C ~ 30 °C (59 °F ~ 86 °F)
Working Humidity	30 ~ 70 %
Storage Temperature	-10 °C ~ 54 °C (14 °F ~ 129.2 °F)
Storage Humidity	10 ~ 85 %

*Printing materials are not limited to this table, recommended printing materials are fully validated on the printer.