



High-Performance Material Printing

Supports the full PAEK family with 2× higher Z-axis mechanical strength and 40+ MPa tensile strength.

Delivers reliable mechanical performance under high temperature and load-bearing conditions for aerospace and medicalcritical applications.



High-Speed Printing System

Dual independent extruders optimized for PAEK achieve speeds up to 200 mm/s, 3× faster than conventional printers.

Combines speed and mechanical strength to cut lead times and enable true production throughput.



Continuous Production Solution

Built for continuous manufacturing with a 3 kg active-drying filament box and INTAMQuality data tracking.

Ensures week-long printing, full traceability, and consistent high-temperature performance.



Intelligent Control Platform

Driven by INTAMSUITE NEO, integrating multi-physics control of temperature, flow, and path.

Smart monitoring and remote management deliver stable, efficient, and predictable high-performance printing.



The FUNMAT PRO 310 APOLLO marks a new era of industrial-grade FFF 3D printing - combining high-performance materials, ultra-fast printing, and production-level consistency.

From PEEK prototyping to PAEK end-use part manufacturing, INTAMSYS redefines the benchmark for industrial FFF performance and reliability.

Technical Parameters

Printing

Technology	FFF (Fused Filament Fabrication)	Filament Diameter	1.75 mm
Build Volume	Single nozzle: 305 x 260 x 260 mm; Dual nozzle: 260 x 260 x 260 mm	Materials*	PEEK, PEEK-CF/GF, PEKK, VICTREX AM 200 FIL, PC, PC-ABS, PC-FR, ABS-HS, PPA-CF/GF, PA6/66, PA12, ASA, PPS, PPS-CF/GF, and various fiber-reinforced and support materials
Layer Thickness	0.1 - 0.3 mm		
Number of nozzles	2 (IDEX)		
Nozzle Temperature	Max. 450 °C	Functions	Nozzle clogging alarm, platform over-temperature alarm, filament run-out detection, printing recovery from power loss, remote monitoring, remote control, remote printing, software and hardware OTA, filament auto-loading, material Identification, dual side brushes (for prime tower removal), INTAMQuality
Printing Speed	Max. 500 mm/s PAEK: Max. 200mm/s		
Printing Acceleration	Max. 8000 mm/s ²		
Chamber Temperature	Max. 100 °C		
Platform Temperature	Max. 160 °C		
Leveling	Mesh Leveling (Max.100 Points) Dual-extruder auto calibration		

Machine

Voltage	100-120V/16A or 200-240V/8A 50-60Hz	Cooling	Fan
Max. Power	1800 W	Filament Box	3 kg sealed chamber with reusable molecular sieve, real-time temp/humidity monitoring, and 65°C internal heating
Connectivity	WiFi, Ethernet, USB	Number of Spools	2 (Max. 3 Kg/pcs)
Screen	7-inch Touch Screen	Resolution	XY: 16 μm; Z: 1.25 μm
Build Plate	HPP build plate; EP build plate	Filtering System	HEPA +Activated Carbon, Replaceable
Build Chamber	Fully enclosed heated chamber	Overall Dimensions	700 x 655 x 700 mm
Nozzle Maintenance	Modular design for fast maintenance and quick replacement		

Safety

Safety design	Safety door lock, over temperature protection, overload protection, warning labels
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Slicing

Slicing Software	INTAMSUITE NEO	Working Temperature	0°C ~ 30°C (32°F ~ 86°F)
Supported File Types	.stl/.3mf/.obj/.x3d/.g/oltp/.stp/ .step/.iges	Working Humidity	20 % ~ 70 %
Operating System	Windows 10/11	Storage Temperature	-20°C ~ 55°C (-4°F ~ 131°F)
		Storage Humidity	10 % ~ 90 %

Operating Environment

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