

High Temperature 3D Printer

MAGIC-HT-PRO

Applicable to PEEK, PEKK, PEI, PPSU & other High Performance Polymers

Equipped with Individual Lifting Dual Nozzle Liquid Cooling System

Excellent Temperature Conditions



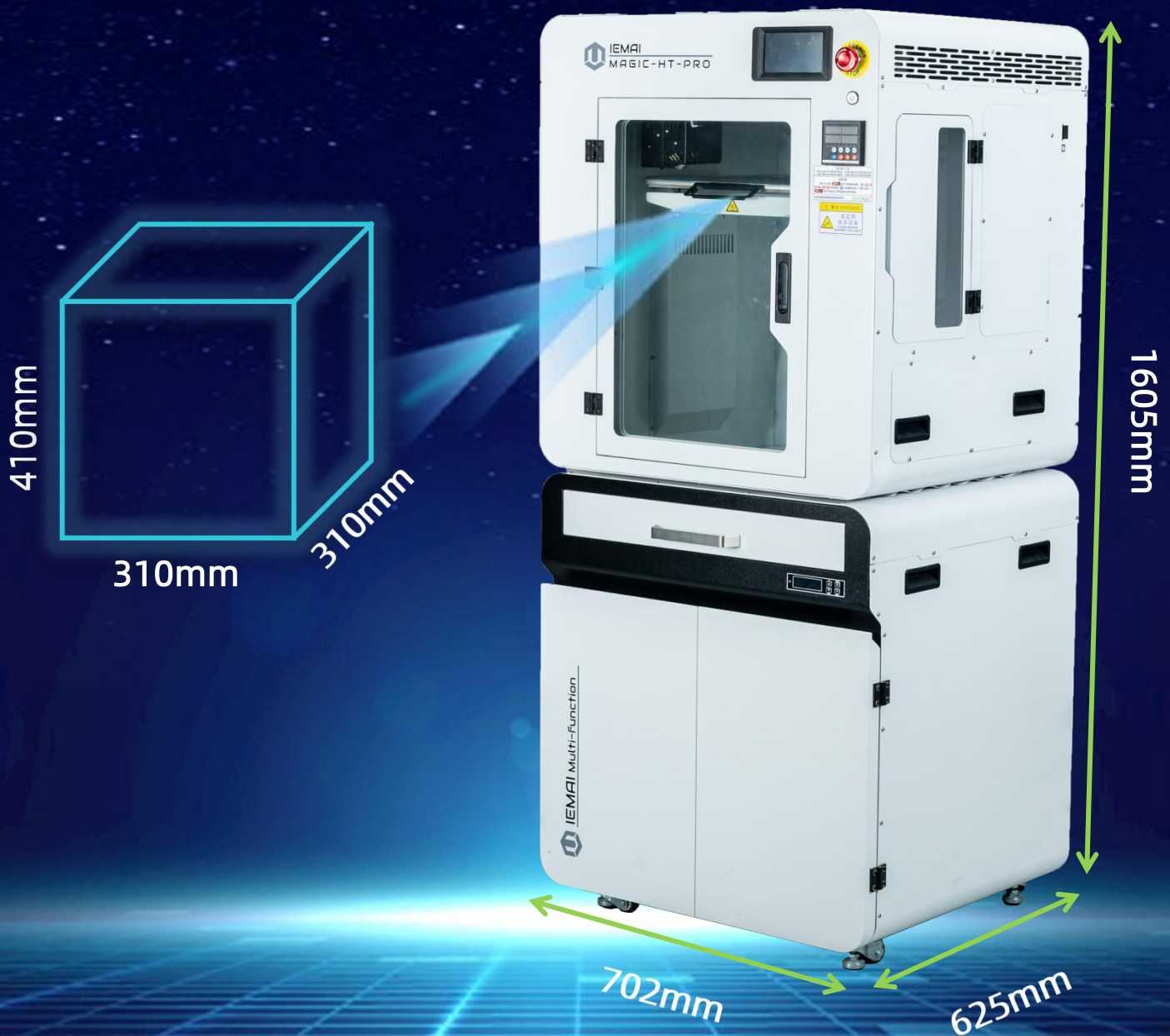
Build Volume



310 x 310 x 410mm³ Build Volume

Best selection for aviation, automobile, medical, manufacturing, polymer, scientific research, etc. fields

Powerful Slicing Software with built-in parameter packages for various materials printing



Features



Printing Temperature: 500°C

Advanced extrusion designs which can be operate continuously in temperatures up to 500°C
Enables printing of demanding high performance polymers

Chamber Temperature: 120°C

Chamber temperature can reach up to 120°C
Ensure optimal ambient temperature for high temperature materials

Hot Bed Temperature: 200°C

Bed temperature can up to 200°C for ensure the adhesion of the print mode

Automatic Leveling

Automatic leveling makes operation easier and higher printing success rate

Double-layer Thermal Insulation Constant Temperature Structure

The double-layer thermal insulation structure keeps control circuit operate stably within acceptable operating temperature range.

Individual Lifting Dual Nozzle Liquid Cooling System

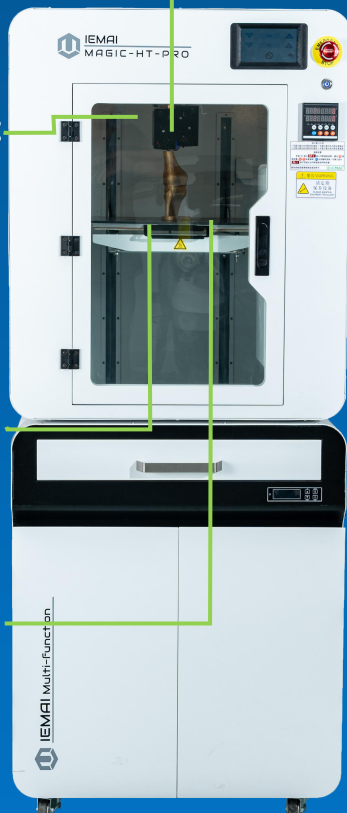
Liquid cooling provides more cooling efficiency.
Individual lifting dual nozzle provides perfect support material printing.

Tool Drawer

Personalize design.
Store tools or accessories in a convenient environment.

Material Moisture-proof Cabinet

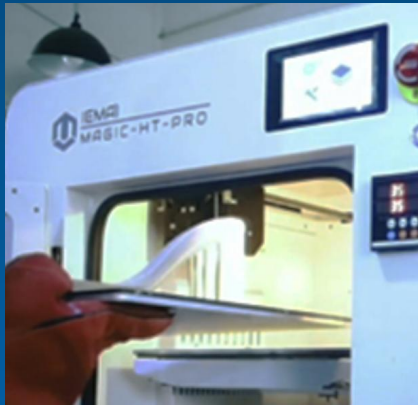
Store materials in a safe and closed environment.
10% humidity suitable for storage of high performance polymers.



Printer Parameters



Individual Lifting Dual Nozzle Modular



Snap-on Bottom Plate



Personalize Design

Size and Weight

Build Volume	310*310*410mm
Machine Size	702*625*800mm (printer)
	702*625*800mm (cabinet)
Package Size	780*690*980mm (printer)
	780*690*980mm (cabinet)
Net Weight	122KG (printer) +77KG (cabinet)
Cross Weight	150KG (printer) +105KG (cabinet)

Temperature and Accuracy

Printing Temperature	Maximum 500C°
Hot Bed Temperature	Maximum 200C°
	Snap-on bottom plate, carbon fiber
Chamber Temperature	MAximum 120C°
Material Storage	Desiccant moisture-proof
Material Storage	Minimum 10% RH
Positioning Accuracy	X/Y: 12.5μm; Z: 1.25μm

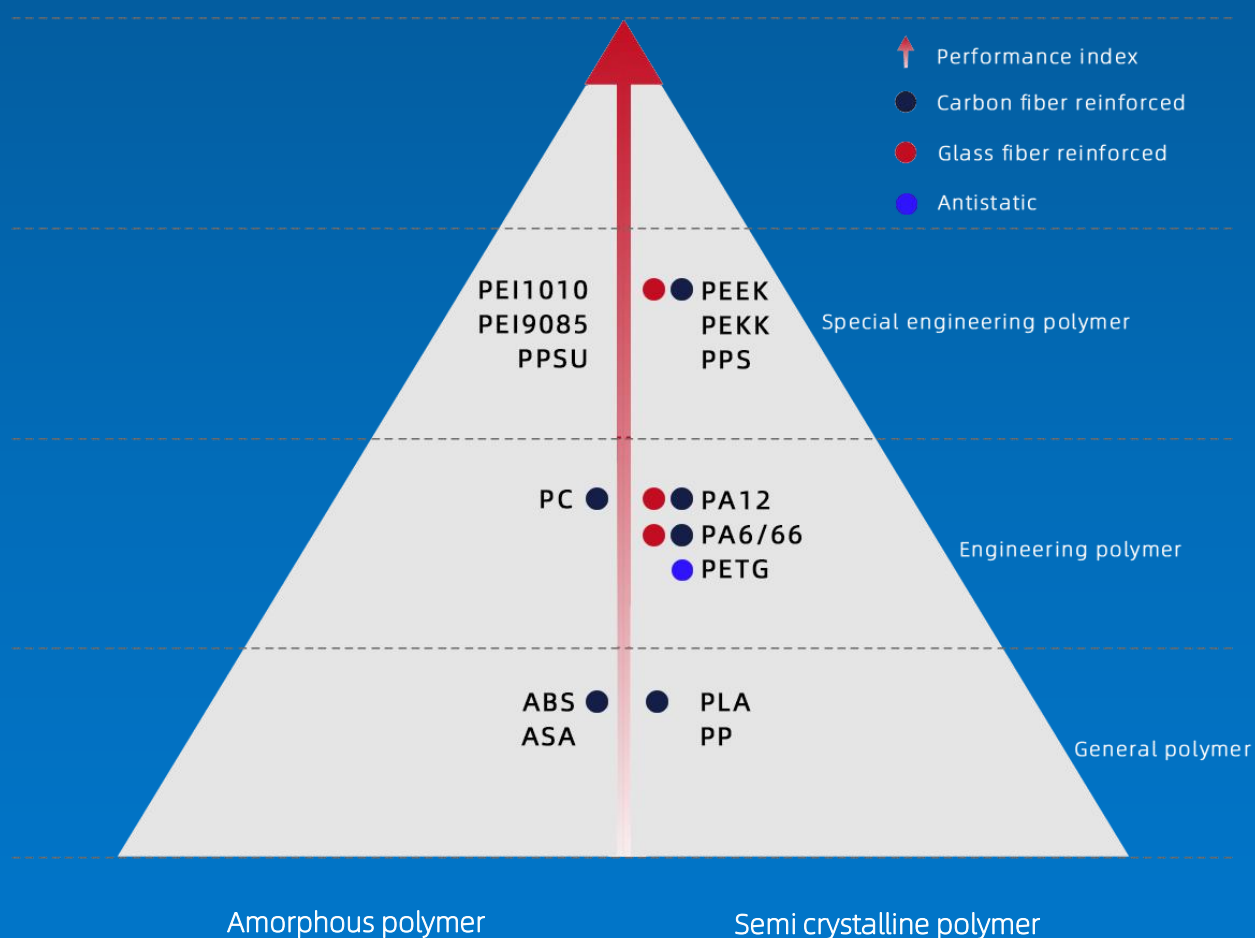
Extrusion System

Nozzle Quantity	2 electric individual lifting module
Cooling Method	Liquid cooling (heat dissipation zone) / air cooling (model cooling)
Nozzle Size	0.4mm (standard)
	0.6mm (optional)
Nozzle Material	Copper alloy (pure) / hardened steel (fiber reinforced)
Recommended Layer Thickness	0.05-0.3mm

Software and Functionality

Slicing Software	IEMAI 3D EXPERT, CURA, S3D
Functionality	Power failure recovery, filament detection, automatic leveling, automatic shutdown, LAN control
Power	220V±10% 50-60Hz maximum power 3050W
Data Transmission	SD Card, WIFI
File Type	STL, 3MF, G-code, etc.
Operating System	Windows 64 Bits

Enrich user printing experience with the most selective printing materials
and excellent temperature conditions of MAGIC-HT-PRO
(Not limit to thermoplastic polymers, but also enhanced & modified
polymers)



Polymer Performance Comparison Table



Material	Tensile Strength (Mpa) ISO 527	Elongation (%) ISO 527	Flexural Sterngth (Mpa) ISO 178	Flexural Modulus (Mpa) ISO 178	Notched Impact Strength (KJ/m2) ISO 179	HDT (C°) ISO 75 1.8Mpa	Tg (C°)	Support Material
PEEK	100	40	170	4200	6	152	143	HT-SP
PEKK	90	5	150	3000	5.2	139	160	HT-SP
PEI 9085	54	3	90	2050	12.7	158	186	HT-SP
PEI 1010	85	6	160	3300	5	190	215	HT-SP
PPSU	65	6.5	92	2152	13.8	212	220	HT-SP
PPS	50	5	83	2300	30	182	86	HT-SP
CF-PEEK	112	10	170	6338	92	300	147	HT-SP
GF-PEEK	105	2.5	130	7625	73	300	143	HT-SP
GF-PA	51	9	72	2720	43	157	70	PVA E-REMOVE
CF-PA	30	1.5	50	1904	16	140	74	PVA E-REMOVE
CF-ABS	48	3	78	5280	16	78	105	PVA E-REMOVE
CF-PC	72	2.5	92	5880	18	135	143	PVA E-REMOVE
ESD-PETG	30	5	55.8	1890	8.5	68	78	PVA E-REMOVE
PA	52	150	67	1600	0.5	155	67	PVA E-REMOVE
PC	60	12	94	2044	25	99	113	PVA E-REMOVE
ABS	46	2.5	69	2350	19	97	—	PVA E-REMOVE
ASA	43.8	6.7	73.4	3206	10.5	100	98	PVA E-REMOVE
PETG	53	4	171	2040	4.5	68	80	PVA E-REMOVE
PP	14	10	7.8	244	0.35	105	—	PVA E-REMOVE
TPU	—	330	—	—	—	—	—	PVA E-REMOVE
PLA	46.6	1.9	85	3283	2.68	58	61	PVA E-REMOVE