SMART3D
Macro Models

Additive Manufacturing
unleashed

MASTERTEC3D

SMART3D Macro Models

For the office

Macro Prototyping Unit
Entry-level industrial 3D printer

Macro Prototyping Unit
High Temperature
Best office solution for high performance materials

Macro Wide Format
Largest 3D printer for the office

For the factory

Macro Wide Format
High Temperature
High speed solution for large,
high performance parts

Macro Production Module
Low volume manufacturing platform

Macro Production Module
High Temperature
Low volume manufacturing
in high performance materials

MASTERTEC3D

SMART3D Macro Models

Features

	PU	PU HT	WF	WF HT	PM	PM HT
Build volume	350 x 350 x 400 mm 13.8 x 13.8 x 15.7″	350 x 350 x 400 mm 13.8 x 13.8 x 15.7″	710 x 400 x 400 mm 28 x 15.7 x 15.7″	710 x 400 x 400 mm 28 x 15.7 x 15.7″	4 units 350 x 350 x 400 mm 13.8 x 13.8 x 15.7″	4 units 350 x 350 x 400 mm 13.8 x 13.8 x 15.7″
Chamber temperature	120°C	200°C	120°C	200°C	120°C	200°C
Motion system	Belts	Hybrid – Beltless	Hybrid – Beltless	Servo motors	Hybrid – Beltless	Hybrid – Beltless
Extrusion system	Bowden	Direct	Direct	Direct	Direct	Direct
Accuracy	± 0.2 mm or ± 0.002 mm per mm of travel (whichever is greater)	0.05 mm	0.05 mm	0.005 mm	0.05 mm	0.05 mm
Built-in Hybrid Drying Technology™	No	No	Yes	Yes	Yes	Yes
Automatic material back-up	No	No	Yes	Yes	Yes	Yes
Dedicated computer	No	No	No	No	Yes	Yes
Cloud/LAN connectivity	Included	Included	Included	Included	Included	Included
Serverless connectivity	Via upgrade	Via upgrade	Via upgrade	Included	Included	Included
Supported materials	Most FFF materials excluding ULTEM, PEKK and PPSU	All FFF materials including ULTEM, PEKK and PPSU	Most FFF materials excluding ULTEM, PEKK and PPSU	All FFF materials including ULTEM, PEKK and PPSU	Most FFF materials excluding ULTEM, PEKK and PPSU	All FFF materials including ULTEM, PEKK and PPSU

SMART3D Macro Models

Production Module
High Temperature
Definition

Target user	Production Engineer
Space	Factory
Main industries	Manufacturing Automotive Aerospace Medical Railway
Main applications	Low volume manufacturing

Specifications

Technology	Fused Filament Fabrication (FFF)
Build volume per print chamber	W: 350 mm - D: 350 mm - H: 400 mm W: 13.8" - D: 13.8" - H: 15.7"
Print chambers	4
Filament diameter	1.75mm
Print head	Dual extrusion with automatic nozzle lifting
Maximum nozzle temperature	500°C
Maximum chamber temperature	200°C, actively controlled
Layer resolution	Up to 20 µm
Extrusion flow	47 mm^3/s (default) – 120 mm^3/s (accessory)
Accuracy	0.05 mm
Bed leveling	Automatic
Air filtration	HEPA filter and activated carbon
Supported materials	All Smart3D Materials All third-party FFF polymer materials
XY motion	Precision linear guides / hybrid motors
Z motion	Precision leadscrews
Dedicated computer	Yes
Displays	4 1" LCDs
Monitoring	Live camera
Material drying	Built-in Hybrid Drying Technology™
Material capacity	4 spools per print chamber
Material backup	Automatic
Connectivity	Ethernet, WiFi, USB, USB drive, NFC
Power requirements	Three-phase
Supplied software	Smart3D Slicer, Smart3D Cloud, Smart3D LAN, Smart3D Serverless, Print Queuing