RAISE3D

Raise3D **RMF500**

Distinct Cost Efficiency

- Energy savings of more than 70% when printing without a heated chamber
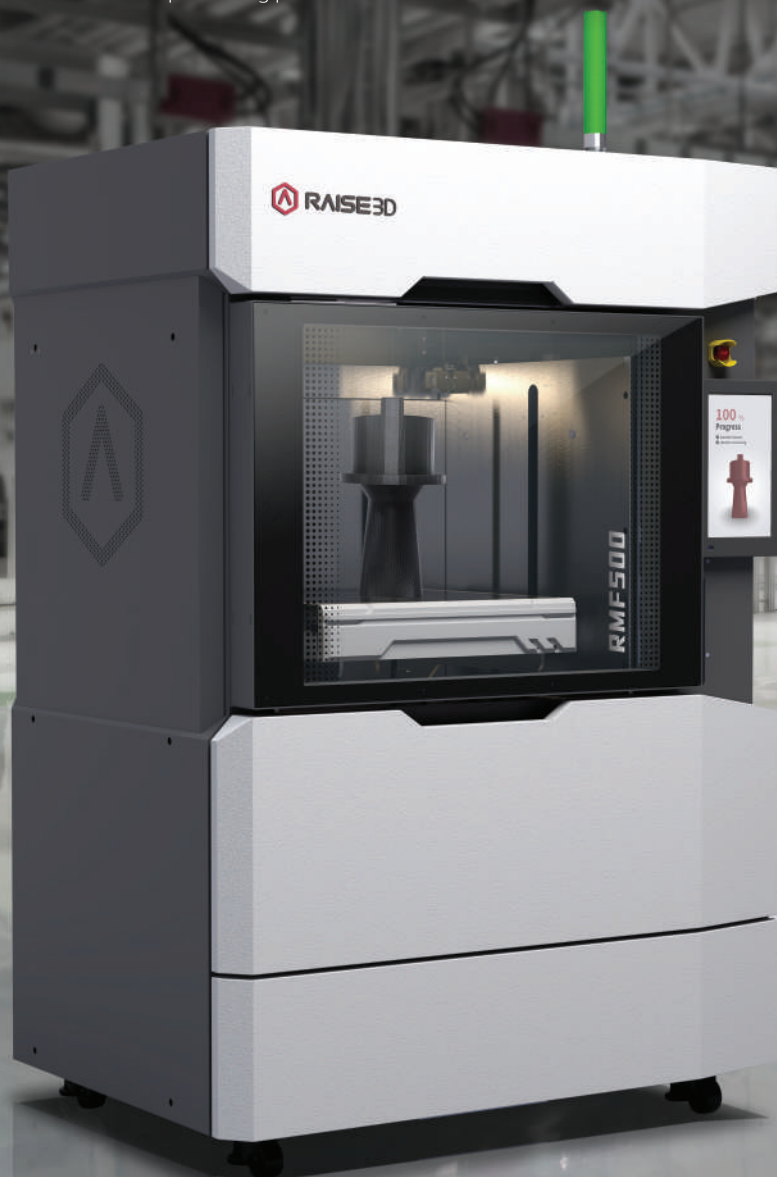- Up to 50% reduction in equipment and material costs

Repeatability and Precision

- Years of design experience and top-of-the-line components together deliver high repeatability for continuous production
- 1 μm closed loop drive system to ensure positioning precision

Professional Performance with Composite Filament

- Specialized for use with Raise3D Industrial PA12 CF and PA12 CF's corresponding support filament
- Expanding Family: Raise3D Industrial PPA CF, PPS CF, PET CF, PPA GF and OFP Certified Third-Party Filament

Industrial Manufacturing Productivity

- Printing speed in excess of 300mm/s, within a 500 x 500 x 500 mm build volume
- Linear motor-driven system with an acceleration of over 5000 mm/s^2

Technical Specifications

PRINTER	RMF500	
CONSTRUCTION	Build Volume (W × D × H)	
	Single Extruder Print	Dual Extruder Print
	500 × 500 × 500 mm	500 × 500 × 500 mm
	Machine Size (W × D × H)	
	1340 × 990 × 2370 mm	
ELECTRICAL	Power Supply Input	30 A @ 3-Phase 380 V AC

GENERAL		
	Print Technology	FFF
	Print Head	Independent Dual Electric Nozzle Extrusion System
	Filament Diameter	1.75 mm
	XYZ Positioning Resolution	1, 1, 0.09765 micron
	Print Head Travel Speed	≤ 300 mm/s
	Build Plate	PEI Build Plate with Vacuum Manifold
	Max Build Plate Temperature	110°C
	Heated Bed Material	Steel
	Build Plate Leveling	Auto leveling
	Supported Materials	Raise3D Industrial PA12 CF, Raise3D Industrial PA12 CF Support (PPA CF, PPS CF, PET CF and PPA GF Coming soon)
	Nozzle Diameter	0.6 mm (Default), 0.8 mm (Coming soon)
	Max Nozzle Temperature	330°C
	Connectivity	Wi-Fi, LAN, USB port, Live camera
	Operating Ambient Temperature	15-30°C, 30-70% RH Non-Condensing (HOLD)
	Storage Temperature	-40°C to +54°C, 10-85% RH Non-Condensing (HOLD)

SOFTWARE		
	Slicing Software	ideaMaker
	Supported File Types	STL/ OBJ/ 3MF/ OLTP
	Supported OS	Windows/ macOS/ Linux
	Machine Code Type	GCODE

PRINTER CONTROLLER		
	User Interface	13.3-inch Touchscreen
	Network	Ethernet, Wireless 802.11 b/g/n, Dual Mode Wi-Fi
	Screen Resolution	1920 × 1080
	Motion Controller	Rockchip ARM Cortex-M4
	Logic Controller	Rockchip RK3399 ARM Dual Cortex-A72 and Quad Cortex-A53 1.8 GHz
	Memory	2 GB
	Onboard Flash	16 GB
	Micro SD Card	128 GB
	OS	Embedded Linux
	Ports	USB 2.0 × 1