Raise3D RMF500 Technical Specifications

Raise3D RMF500 is a reliable and precise industrial 3D printer that produces small batch customized part with high repeatability. It inherits Raise3D's proven expertise in FFF technology and polymer material science. Raise3D RMF500 has a large build volume of 500 × 500 × 500 mm and a maximum printing speed of 500 mm/s, making it an ideal choice for industrial manufacturing.

Printer		Raise3D RMF500
Printer Hardware	Print Technology	Fused Filament Fabrication (FFF), Powered by Hyper FFF®
	Build Volume (W × D × H)	500 × 500 × 500 mm (19.7 × 19.7 × 19.7 inch) In normal printing mode
		Maximum Length on the Diagonal=707 mm (27.8 inch)
	Extrusion System	IDEX (Independent Dual Extruders), Auto Nozzle Wiping, Filament Run-out Detection
	Max Nozzle Temperature	330ºC
	XYZ Positioning Resolution (XYZ Step Size)	1, 1, 0.09765 micron
	Print Head Speed/Acceleration	Up to 500 mm/s Speed and Up to 15000 mm/s² Acceleration*
	Build Plate	Spring Steel Plate, Soft Magnetic Adsorption, Auto Bed Leveling
	Build Platform Temperature	Up to 110ºC
	Nozzle Diameter	0.4 mm (Default), 0.2/ 0.6/ 0.8/ 1.0 mm (Compatible)
	Filament Feeding	Auto Filament Switching
Materials	Filament	1.75 mm diameter. Load four 1 kg or 2.5 kg filaments (2 filaments for 1 nozzle)
	Raise3D Hyper Core Filaments (For high-speed Printing)	Hyper Core ABS CF15, Hyper Core PPA CF25 Coming Soon: Hyper Core PPA GF25
	Raise3D Hyper Speed Filaments (For high-speed Printing)	Hyper Speed ABS, Hyper Speed PLA
	Raise3D Industrial Filaments	Industrial PET CF, Industrial PET Support Coming Soon: Industrial PPA CF, Industrial PPA Support, Industrial PPA GF, Industrial PET GF, Industrial PETG ESD
	3rd Party Filaments	Supported by OFP (Open Filament Program) through Validation
Software and Network	Connectivity	Wi-Fi, LAN, USB port, Live camera
	Network	Ethernet, Wireless 802.11 b/g/n, 2 × 2 MU-MIMO WLAN
	Display	33.8 cm (13.3 inch) Color Touchscreen (1920 × 1080)
	Slicing Software	ideaMaker
	Supported File Types	STL/ OBJ/ 3MF/ OLTP
	Supported OS	WINDOWS/ macOS/ LINUX
Operation and Shipping	Power Supply Input	3-Phase 380 V AC 25 A
	Operating Ambient Temperature	15 - 30°C, 30 - 70 % RH Non-Condensing (HOLD)
	Storage Temperature	-40 to 54°C, 10 - 85 % RH Non-Condensing (HOLD)
	Machine Size (W × D × H)	1340 × 990 × 2370 mm (52.8 × 38.9 × 93.3 inch)
	Weight	Net Weight: 790 kg (1741.7 lbs) Gross Weight: 1048.1 kg (2310.7 lbs)
	Shipping Dimensions	1800 × 1160 × 2260 mm (70.9 × 45.7 × 89.0 inch)

*Test data from Raise3D Lab

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