

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	<p>Print Technology Fused Filament Fabrication (FFF), Powered by Hyper FFF™</p> <p>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)</p> <p>Extrusion System IDEX (Independent Dual Extruders), Auto Nozzle Wiping, Filament Run-out Detection</p> <p>Max Nozzle Temperature 330°C</p> <p>XYZ Positioning Resolution (XYZ Step Size) 1, 1, 0.09765 micron</p> <p>Print Head Speed/Acceleration Up to 500 mm/s Speed and Up to 15000 mm/s² Acceleration*</p> <p>Build Plate Spring Steel Plate, Soft Magnetic Adsorption, Auto Bed Leveling</p> <p>Build Platform Temperature Up to 110°C</p> <p>Nozzle Diameter 0.4 mm (Default), 0.6 mm (Coming Soon)</p> <p>Filament Feeding Auto Filament Switching</p>
Materials	<p>Filament 1.75 mm diameter. Load four 1 kg or 2.5 kg filaments (2 filaments for 1 nozzle)</p> <p>Raise3D Hyper Core Filaments (For high-speed Printing) Hyper Core ABS CF15, Hyper Core PPA CF25 Coming Soon: Hyper Core PPA GF25</p> <p>Raise3D Hyper Speed Filaments (For high-speed Printing) Hyper Speed ABS V2, Hyper Speed PLA</p> <p>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</p> <p>3rd Party Filaments Supported by Open Filament Program through Validation</p>
Software and Network	<p>Connectivity Wi-Fi, LAN, USB port, Live camera</p> <p>Network Ethernet, Wireless 802.11 b/g/n, 2 × 2 MU-MIMO WLAN</p> <p>Display 33.8 cm (13.3 inch) Color Touchscreen (1920 × 1080)</p> <p>Slicing Software ideaMaker</p> <p>Supported File Types STL/ OBJ/ 3MF/ OLTP</p> <p>Supported OS WINDOWS/ macOS/ LINUX</p>
Operation and Shipping	<p>Power Supply Input 3-Phase 380 V AC 25 A</p> <p>Operating Ambient Temperature 15 - 30°C, 30 - 70 % RH Non-Condensing (HOLD)</p> <p>Storage Temperature -40 to 54°C, 10 - 85 % RH Non-Condensing (HOLD)</p> <p>Machine Size (W × D × H) 1340 × 990 × 2370 mm (52.8 × 38.9 × 93.3 inch)</p> <p>Weight Net Weight: 790 kg (1741.7 lbs) Gross Weight: 1048.1 kg (2310.7 lbs)</p> <p>Shipping Dimensions 1800 × 1160 × 2260 mm (70.9 × 45.7 × 89.0 inch)</p>

*Test data from Raise3D Lab