RAISE3D

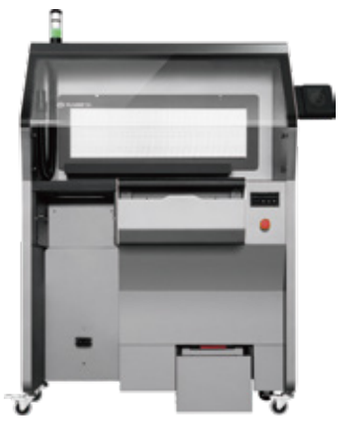
2015 - 2025
10th Anniversary

Raise3D RMS220 Series

Rapid Manufacturing Simplified

Raise3D RMS220
SLS Printer

Raise3D Build Unit 220
Build Unit



Raise3D C220-P
Cleaning Station

Raise3D RMS220 Series is a set of powerful selective laser sintering (SLS) production system, optimized for productivity, stability, and easy to use and maintenance. It enables the highspeed printing of engineering plastics and composites. When running at full capacity, the max throughput for parts can reach up to 5kg/day, which allows the users to produce end-use parts efficiently.

High-Efficiency Batch Production

- Maximum daily output of 5 kg (using PA12)
- Large build volume of 220 × 220 × 350 mm
- Print speed of 2.2 L/h (20% packing density)
- Maximum scanning speed of 30,000 mm/s

Low Total Cost of Ownership (TCO) and High Output

- 75W laser ensures high productivity and high turnover rates of machine
- Easily get started within 10 minutes
- 0.58 m^2 footprint minimizes space requirements and reduces energy consumption

Extraordinary Precision and Reliability

- Dimensional accuracy of ±0.2 mm
- Minimum thin-wall thickness of 0.5 mm (using Raise3D PA11)
- 4 zone self-calibrating IR heating system ensures consistent and repeatable print results

Industrial and Functional SLS Material

- Supports a broad range of materials: Raise3D PA12, Raise3D PA12 GB, Raise3D TPU90A, Raise3D TPU90A White, Raise3D PA11
- Fast material change, taking only 45 minutes (1/3 the time of traditional SLS printers)

Application

Tools and fixtures

Industrial complex parts

Circuit housings

Electrical switches

Customized shoe insoles

Automative spare parts

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Raise3D RMS220 Series Technical Specification

Raise3D RMS220 Specification	
Print Technology	Selective laser sintering (SLS)
Print Volume (W × D × H)	220 × 220 × 350 mm (8.7 × 8.7 × 13.8 inch)
Laser	75 W fiber laser, wavelength 1064 nm
Galvo	High speed, high precision galvo system, with F-theta length
	max scanning speed 30000 mm/s
Material type	Powder
Printing Speed	2.2 L/h (packing density 20% by weight)
Max Powder Temp.	220 °C
Max Platform Temp.	180 °C
Max Cylinder Temp.	180 °C
Active Cooling	Yes
RFID	Yes
Hopper Size	31.5 L, 40 L if extended with material box
Powder Level Sensor	Yes
Layer Height	0.05-0.40 mm
	We recommend 0.1-0.25 mm layer height for stable printing.
Connectivity	Wi-Fi, LAN, USB, real-time camera
Air Filter	HEPA + activated carbon filter
Slicer	ideaMaker
Input File Formats	STL/ OBJ/ 3MF/ OLTP/ STEP/ STP/ IGES/ IGS
Operation System	WINDOWS/ macOS/ LINUX
Export File Format	.slscode

Raise3D C220-P Specification	
Print Volume (W × D × H)	220 × 220 × 350 mm (8.7 × 8.7 × 13.8 inch)
Supported Printer	Raise3D RMS220 Series SLS Printer
Hopper Size	Fresh powder hopper: 20L
	Used powder hopper: 20L
RFID	Yes

Materials	
Supported Materials	Raise3D PA12 Powder/ Raise3D PA12 GB Powder/ Raise3D TPU90A Powder/
	Raise3D TPU90A White Powder/ Raise3D PA11 Powder

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