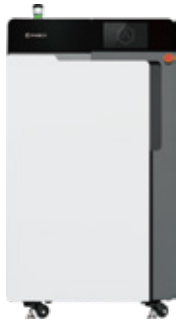


Raise3D RMS220 Series

Rapid Manufacturing Simplified



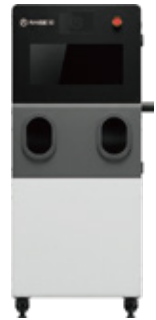
Raise3D RMS220
SLS Printer



Raise3D Build Unit 220
Build Unit



Raise3D C220-P
Cleaning Station



Raise3D B520
Sandblasting Station

Raise3D RMS220 Series is a set of powerful selective laser sintering (SLS) production system, optimized for productivity, stability, easy to use and maintain. 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.

* (at 20% packing density)

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*
- Maximum scanning speed of 30,000 mm/s

* (at 20% packing density)

Low Total Cost of Ownership (TCO) and High Output

- 75W laser ensures high productivity and faster return of investment
- Only 10 minutes preparation time for each job
- 0.58 m² footprint* minimizes space requirements and reduces energy consumption
- Two atmosphere types available: air/ nitrogen
- Nitrogen generator included and built in

* (printer only)

Extraordinary Precision and Reliability

- Uncompromising dimensional accuracy
- Minimum 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 PA NEXT, Raise3D PA NEXT GB, Raise3D TPU90A, Raise3D TPU86A, Raise3D PA11 (For more details, please refer to TDS)
- Fast material switch, taking only 45 minutes (1/3 the time of traditional SLS printers)
- Third party material option

Application



Tools and fixtures



Industrial complex parts



Circuit housings



Orthotics and prosthetics



Customized shoe insoles



Automotive spare parts

Raise3D RMS220 Series Technical Specification

RMS220 Specification

Print Technology	Selective laser sintering (SLS)
Print Volume (W × D × H)	220 × 220 × 350 mm (8.7 × 8.7 × 13.8 inch) / 17 L
Laser	75 W infrared fiber laser, wavelength 1064 nm
Galvo	High speed, high precision galvo system, with F-theta length max scanning speed 30000 mm/s
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
Hopper Size	31.5 L, 40 L if extended with powder container
Layer Height	0.05-0.40 mm We recommend 0.1-0.2 mm layer height for stable printing.
Machine Size (W × D × H)	Machine body: 861 × 685 × 1560 mm (33.9 × 27 × 61.4 inch) With tower light: 861 × 685 × 1760 mm (33.9 × 27 × 69.3 inch)
Input	Printer: 200-240VAC, 50/60Hz, 230VAC@15A Build Unit 220: 20-26VDC, 24VDC@6A
Atmosphere	Air/ Nitrogen (Built in nitrogen generator in RMS220, compressed air required.)

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
Machine Size (W × D × H)	Machine body: 1238 × 823 × 1740 mm (48.7 × 32.4 × 68.5 inch) Incl. control panel & tower light: 1384 × 823 × 1928 mm (54.5 × 32.4 × 75.9 inch)

B520 Specification

Supported Printer	Raise3D RMS220, Third-party powder sintering 3D printers
Machine Size (W × D × H)	Incl. door handle: 765 × 990 × 1790 mm (30.1 × 39 × 70.5 inch) Door handle not included: 695 × 990 × 1790 mm (27.4 × 39 × 70.5 inch)
Supported Process	Sandblasting: Automatic / Manual Polishing (polishing module required): Automatic
Blasting Basket Size	Standard: $\varnothing 262 \times 520$ mm / $\varnothing 10.3 \times 20.5$ inch Large: $\varnothing 467 \times 520$ mm / $\varnothing 18.4 \times 20.5$ inch
Recommended Capacity	Standard: 10L/ Large: 30L
Media Hopper Size	9L, approximately equal to 14kg of glass beads
Waste Hopper Size	15L

Materials

Supported Materials	Raise3D PA NEXT Black Powder/ Raise3D PA NEXT GB Black Powder/ Raise3D PA11 Black Powder/ Raise3D TPU86A Black Powder/ Raise3D TPU86A White Powder/ Raise3D TPU90A Black Powder/ Raise3D PA12 Black Powder/ Raise3D PA12 GB Black Powder
OMP (Open Material Program)	Support selected third-party materials Optional fully open material license available