



RSPro Product Line

A New Dimension in Stereolithography 3D Printing

- Cost-effective ownership throughout entire life cycle.
- Freedom to collaborate and innovate: open design for materials and machine access.
- Printed parts demonstrate excellent sidewall quality and fine detail, contributing to lower post-finishing requirements.

System Features

- Scanning speed of up to 12-15 m/s.
- Closed-loop control regulates platform movement, laser power, resin level, resin temperature, and vacuum pressure to ensure accuracy and stability.
- Granite recoater rim for enhanced stability.
- Layer thickness as low as 0.002-0.003 in (0.05-0.07 mm) for excellent surface quality.
- Ethernet connectivity
- Plunger-style leveling.
- Pump-fed auto refill capability.
- Components from top international brands—Spectra-Physics, SCANLAB, and Panasonic.
- Full freedom of choice in materials: equipment uses any 355 nm SL material.
- Three levels of access (Operator, Engineer, and Expert) controlled by user.

Versatile Application Range · High Accuracy · Excellent Surface Aesthetics



Technical Data

* Specifications are subject to change; consult with your sales representative for confirmation of current offering.

	RSPro 450	RSPro 600	RSPro 800
Build Envelope Capacity	17.7 × 17.7 × 15.7 in (450 × 450 × 400 mm)	23.6 × 23.6 × 19.7 in (600 × 600 × 500 mm)	31.5 × 31.5 × 21.7 in (800 × 800 × 550 mm)
Maximum Part Weight	77.2 lb (35 kg)	169.8 lb (77 kg)	330.7 lb (150 kg)
Accuracy <small>* Accuracy may vary depending on parameters, part geometry and size, pre-processing or post-processing methods, materials and environment.</small>	Part size < 3.9 in (100 mm): ±0.004 in (±0.1 mm) Part size ≥ 3.9 in (100 mm): ±0.1% × L	Part size < 3.9 in (100 mm): ±0.004 in (±0.1 mm) Part size ≥ 3.9 in (100 mm): ±0.1% × L	Part size < 3.9 in (100 mm): ±0.006 in (±0.15 mm) Part size ≥ 3.9 in (100 mm): ±0.15% × L
Beam Size	Nominal 0.003 -0.005 in (0.08 -0.12 mm)	Nominal 0.005 -0.008 in (0.12 - 0.20mm)	Nominal 0.005 - 0.008 in (0.12 - 0.20 mm)
Scanning Speed	15m/s (Maximum); 6-10m/s (Typical)	12m/s (Maximum); 6-10m/s (Typical)	12m/s (Maximum); 6-10m/s (Typical)
Layer Thickness	0.002 in (0.05 mm) minimum; 0.01 in (0.25 mm) maximum	0.002 in (0.05 mm) minimum; 0.01 in (0.25 mm) maximum	0.003 in (0.07 mm) minimum; 0.01 in (0.25 mm) maximum
Weight	3,406 lb (1,545 kg) with 331 lb (150 kg) initial fill inside	3968 lb (1,800 kg) (with 728 lb (330 kg) initial fill inside)	4409 lb (2000 kg) (with 1235 lb (560 kg) initial fill inside)
Machine Size (WxDxH)	55.6 × 54.3 × 90.1 in (1411 × 1380 × 2289 mm)	62.9 × 63.5 × 83.5 in (1598 × 1612 × 2121 mm)	70.8 × 63.1 × 83.4 in (1798 × 1602 × 2118 mm)

RSPro 450 / 600 / 800

Laser	Solid-state frequency tripled Nd: YVO ₄
Wavelength	354.7 nm
Controller	UnionTech™ RSCON
Part Preparation	Materialise Magics
Operating Systems	Windows 7, Windows 10
Input Data File Format	STL
Network Type and Protocol	Ethernet, IEEE 802.3 using TCP/IP and NFS
Electrical Requirements	200-240 VAC, 50/60 Hz, single phase
Laser Warranty	5,000 hours or 15 months (whichever comes first)
Base Plate/Recoater Rim	Granite
Systems Control	Closed-loop
Power (nominal)	At head 800 mW (typical 300 mW at material surface under nominal optical path condition)

Operating Environment:

Temperature Range	72–79°F (22–26°C)
Maximum Change Rate	1 °C/hour
Relative Humidity	< 40 % non-condensing

Accessories :

Platform Change Carts	Manual offload cart optional
Processing and Finishing	Post-Curing Unit
System Warranty	One-year warranty (under UnionTech's Purchase Terms and Conditions)

UnionTech

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