



A New Dimension in Stereolithography
3D Printing

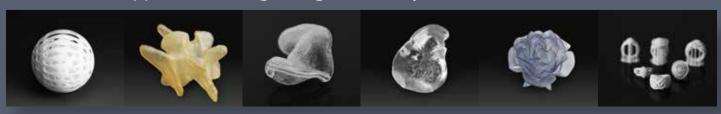
- Cost-effective ownership throughout entire life cycle.
- Freedom to collaborate and innovate: open design for materials and machine access.
- Printed parts demonstrate excellent sidewall quality and fine detail, contributing to lower post-finishing requirements.

System Features

- Scanning speed can reach 12 m/s.
- Key components from international top brands.
- Automatic control of surface level and processing parameters.

- Granite recoater frame for enhanced recoating stability.
- · CE certification.
- Convenient assembly and disassembly of platform.

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.

	PILOT 250	PILOT 450
Build Envelope Capacity	9.8 x 9.8 x 9.8 in (250 x 250 x 250 mm)	17.7 × 17.7 × 15.7 in (450 × 450 × 400 mm)
Maximum Part Weight	38.6 lb (17.5 kg)	77.2 lb (35 kg)
Accuracy	Part size < 1 in (25.4 mm):	Part size < 3.9 in (100 mm):
Accuracy may vary depending on parameters, part geometry and size, pre-processing or post-processing methods, materials and environment.	±0.001 in (±0.025 mm)	±0.004 in (±0.1 mm)
	Part size ≥1 in (25.4 mm):	Part size ≥ 3.9 in (100 mm):
	±0.1% × L	±0.1% x L
Beam Size	Standard Beam (0.12 – 0.20 mm) or Small Beam (0.06 – 0.08 mm) ,optional	Nominal 0.003 -0.005 in (0.08 -0.12 mm)
Scanning Speed	12m/s (Maximum) ;	12m/s (Maximum);
	6 -10m/s (Typical)	6-10m/s (Typical)
Layer Thickness	0.002 in (0.05 mm) minimum;	0.002 in (0.05 mm) minimum;
	0.01 in (0.25 mm) maximum	0.01 in (0.25 mm) maximum
Weight	1709 lb (775 kg)	2392 lb (1085 kg)
	(with 106 lb (48 kg) initial fill inside)	(with 353 lb (160 kg) initial fill inside)
Machine Size (WxDxH)	43.5 x 41.4 x 77.3 in	52.4 x 53.9 x 84.3 in
	(1105×1052×1965 mm)	(1331×1368×2140 mm)

PILOT 250 / 450

Laser	Solid-state frequency tripled Nd: YVO₄	
Wavelength	355 nm	
Controller	UnionTech™ RSCON	
Part Preparation	PolyDevs or 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)	
Recoater Frame	Granite	
Systems Control	Closed-loop	
Power (nominal)	Typically 250 ~ 350 mW on the target surface of the material 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	

UnionT∈ch

Processing and Finishing

Accessories :
Additional Resin Vat

System Warranty



Optional

Post-Curing Unit (optional)



One-year warranty (under UnionTech's Purchase Terms and Conditions)

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