Bring industrial-strength performance and part quality to your organization

SLA™ 5000

SOLID IMAGING SYSTEM

Tested and proven in some of the world's most successful organizations, the SLA 5000 delivers the performance, part quality, and flexibility your organization needs to compete at the highest level.

BUILD MORE PARTS IN LESS TIME. SLA 5000's patented SmartSweep™ technology eliminates unnecessary sweeper motion, resulting in the fastest possible build times; its .05 mm (.002 in) build layer* creates a smooth finish that requires far less post-processing time. Use its large 508 x 508 x 584 mm (20 x 20 x 23 in) build envelope to build larger single parts, or more smaller parts at once. And SLA 5000's solid-state laser technology will deliver up to 35% more power over the SLA 3500.

TACKLE A FULL RANGE OF SOLID IMAGING APPLICATIONS. SLA 5000 is compatible with a range of 3D Systems stereolithography materials, including our durable SL 7510 resin, and our heat-resistant SL 5530HT resin.

GET ECONOMY AND RELIABILITY THAT PROTECT YOUR INVESTMENT. SLA 5000's long-life solid-state laser and low power requirements ensure a predictable, manageable cost of ownership. Its automatic resin dispensing system refills the vat for you — so you spend less time on maintenance and build preparation, and more time up and running. And like all our SLA systems, the SLA 5000 comes complete with 3D Lightyear™ and Buildstation™ software, so you can support your entire organization without additional per-user costs.

INVEST IN A PROVEN SOLUTION. A mainstay at companies like GM, AlliedSignal, and Daimler-Benz, SLA 5000 is built to handle mission-critical solid imaging workloads. Depend on it to help you innovate, cut costs, and beat your competition to market with the highest-quality products you've ever produced.

COUNT ON A TOTAL SOLUTION. Every SLA 5000 system includes easy-to-use 3D Lightyear file preparation software. Every system works with a variety of our specially formulated resins, covering a broad range of modeling and prototyping applications. And every system is backed by 3D Systems' Global Support, which you can tailor to meet your production needs and your budget. Turn to 3D Systems Educational Services for expert hands-on training in the latest solid imaging methodologies and techniques. And tap the resources of the 3D Systems Technology Center for demos, benchmarks or for additional modelmaking capacity. It's a complete solid imaging solution you won't find anywhere else.

Use the SLA 5000 Solid Imaging System for:

- » prototypes for design verification and testing
- » patterns for casting and molding
- » tools for pre-production tooling
- » parts for manufacturing aids, vendor solicitation and limited production runs

** Dependent upon part geometry, build parameters and materials.*

"Rapid prototyping, and plenty of it, means more and smarter planning sooner — and far fewer bugs. So put down that planning memo and make something!"

— Tom Peters,
Co-author of
In Search of Excellence

SLA 5000 Specifications

Standards and Regulations: This SLA product conforms to Federal Performance Standard CFR21 Subchapter J Class I laser product in normal operation, Class IV during field service. The SLA 5000 complies with CE requirements.

LASER	
Type	Solid state frequency tripled Nd:YVO_4
Wavelength	354.7 nm
Power at vat at 5000 hours	216 mW
Warranty	5000 hours or 18 months (whichever comes first)

RECOATING SYSTEM	
Process	Zephyr recoater
ACES	0.1 mm (0.004 in) *
QuickCast	0.1 mm (0.004 in) *
Tooling style	0.05 mm (0.002 in) *

OPTICAL & SCANNING	
Beam (diameter @ $1/e^2$)	0.20 - 0.30 mm (0.008 - 0.012 in)
Maximum recommended part drawing speed	5.0 m/sec (200 in/s)

ELEVATOR	
Vertical resolution	0.00177 mm (0.00007 in)
Position repeatability	± 0.013 mm (0.0005 in)
Maximum part weight	68.04 kg (150 lb)

VAT CAPACITY	
(Note: Other vat sizes available)	
Volume	253.6 L (67 U.S. gal)
Maximum build envelope	508 x 508 x 584 mm XYZ (20 x 20 x 23 in)
Interchangeable vat	Yes

SOFTWARE	
Operating system	Windows NT
Network type and protocol	Ethernet, IEEE 802.3 using TCP/IP and NFS

POWER
200 - 240 VAC 50/60 Hz, single phase, 15 amps

AMBIENT TEMPERATURE	
Temperature range	20 - 26°C (68 - 79°F)
Maximum change rate	1°C/hour (1.8°F/hour)
Relative humidity	Less than 50%, non-condensing

SIZE	
Crated	
Process module:	W1.55 x D2.10 x H2.36 m (W61 x D83 x H93 in)
Accessory kit:	W1.22 x D1.22 x H1.35 m (W48 x D48 x H53 in)
Uncrated	
Process module:	W1.88 x D1.19 x H2.02 m (W74 x D47 x H79.5 in)
Accessory kit:	n/a

WEIGHT	
Crated	
Process module:	1363 kg (3000 lb)
Accessory kit:	322 kg (709 lb)
Uncrated	
Process module:	1318 kg (2900 lb)
Accessory kit:	284 kg (624 lb)

OPTIONS
1. Additional interchangeable vats and depths
2. Additional platforms

WARRANTY
One (1) year from installation date. Includes parts, labor and buildstation software upgrades. Laser under separate warranty.

* Dependent upon part geometry, build parameters and materials.

3D Systems
26081 Avenue Hall
Valencia, CA 91355 USA
661.295.5600
fax: 661.294.8406
1.888.337.9786

www.3dsystems.com

France
telephone +33 1 69 35 17 17

Germany
telephone +49 6151 357 303

Hong Kong
telephone (852) 2923 5022

Italy
telephone +39 039 68 904 00

Spain
telephone +34 937 502 190

UK
telephone +44 1442 282600

P/N 70313 Rev. 8-99