

Build detailed prototypes with exceptional precision

# SLA™ 250

SOLID IMAGING SYSTEM

The most widely used stereolithography systems in the world, SLA 250s are ideal for building small, detailed, precision parts — and for introducing your organization to the benefits of solid imaging.

**SLA 250/30: ENTRY-LEVEL SOLID IMAGING.** The SLA 250/30 builds highly-detailed parts as large as 250 x 250 x 250 mm (10 x 10 x 10 in), suitable for a wide variety of solid imaging applications. It's the most affordable solid imaging system you can buy today.

**SLA 250/50: FOR FASTER, MORE VERSATILE PERFORMANCE.** With double the laser power of the SLA 250/30, the SLA 250/50 lets you build more parts in less time, making it an ideal solution for small-but-busy shops. And its patented Zephyr recoating system yields higher throughput than earlier technology, especially when building trapped volumes — perfect for building injection-mold cavities and other demanding applications.

**SLA 250/50HR: FOR THE ULTIMATE IN PRECISION.** SLA 250/50HR delivers all the features of the SLA 250/50, *plus* a high-resolution laser. With its small beam diameter, it can deliver parts with very small features, and extremely fine detail.

**REVOLUTIONIZE YOUR BUSINESS — NO MATTER WHICH SYSTEM YOU CHOOSE.** Convey your ideas more effectively. Test more innovations in less time. Detect flaws and bugs *before* you



proceed to costly tooling and manufacturing. No matter which SLA 250 system you choose, you'll trim time and expense at every stage of product development — and beat your competition to market with the highest quality products you've ever produced.

**COUNT ON A TOTAL SOLUTION.** Every SLA 250 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 250 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

*"SLA gives us the ability to predict future marketing trends. We are able to be first out the door with what the customer wants."*

— Morrison Cousins  
Vice President of Design,  
Tupperware, Inc.

# SLA 250 Specifications

Standards and Regulations: This SLA product conforms to Federal Performance Standard CFR21 Subchapter J Class I laser product in normal operation, Class IIIb during field service. The SLA 250 Series complies with CE requirements.



## LASER

	SLA 250/30	SLA 250/50	SLA 250/50HR
Type	HeCd	HeCd	HeCd
Wavelength	325 nm	325 nm	325 nm
Power at vat (@ 2,000 hours)	12 mW	24 mW	6 mW
Warranty (one (1) year prorated)	2,000 hours	2,000 hours	2,000 hours

## RECOATING SYSTEM

	SLA 250/30	SLA 250/50	SLA 250/50HR
Process	Doctor Blade	Zephyr	Zephyr
Min. Recommended layer thickness*	0.15 mm (0.006 in) for ACES and QuickCast	0.1 mm (0.004 in) for ACES and QuickCast	0.0625 mm (.0025 in)** for TECHWEAVE only

## OPTICAL & SCANNING

	SLA 250/30	SLA 250/50	SLA 250/50HR
Spot size (diameter @ 1/e <sup>2</sup> )	0.20-0.28 mm (0.008-0.011 in)	0.20-0.28 mm (0.008-0.011 in)	0.06-0.08 mm (0.0025-0.0035 in)
Maximum part drawing speed	762 mm/sec (30 in/sec)	762 mm/sec (30 in/sec)	635 mm/sec (25 in/sec)

## ELEVATOR

Vertical resolution	0.0025 mm (.0001 in)
Maximum part weight	9.1 kg (20 lb)

## VAT CAPACITY

	SLA 250/30	SLA 250/50	SLA 250/50HR
Volume	32.2 L (8.5 U.S. gal)		
Maximum build envelope	250 x 250 x 250 mm** (10 x 10 x 10 in)		
Interchangeable vat	No	Yes	Yes

## SOFTWARE

Operating system	MS-DOS
Network type and protocol	Ethernet, IEEE 802.3 using TCP/IP and NFS

## POWER (other options available)

120 VAC ± 10%, 10A, 50/60 Hz or 230 VAC ± 10%, 5.2A, 50/60 Hz

## 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	W1.42 x D0.91 x H2 m (W56 x D36 x H79 in)
Uncrated	W1.24 x D0.69 x H1.64 m (W49 x D27 x H64.5 in)

## WEIGHT

Crated	461 kg (1014 lb)
Uncrated	362 kg (796 lb)

## WARRANTY

One (1) year including parts and labor  
Laser under separate warranty

\* Dependent upon part geometry, build parameters and material.

\*\* For the SLA 250HR, optimal part building is obtained in a 5 x 5 in square area about the center of the platform; this is especially true as layer thickness is reduced toward the 0.0025 in minimum layer thickness.

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