

# VIPER

si2 SLA® SYSTEM

Technology:	Stereolithography, SLA
Material Class:	Liquid; Photo Reactive

## Two solid imagers in one – for unprecedented versatility

The Viper si2 SLA system is our first solid imaging system to combine standard AND high-resolution part building in the same system. Now, with one machine, you can tackle an unequalled range of solid imaging applications. And you can take advantage of scores of cost-saving, productivity-enhancing innovations, including state-of-the-art components, improved system software, and much more.

## A dual resolution and long life laser – another 3D Systems first.

The Viper si2 system lets you choose between standard resolution mode, for the best balance of build speed and part resolution, and high resolution (HR) mode for ultra-detailed small parts and features – all from a carefully integrated digital signal processor (DSP) controlled high speed scanning system with a single, solid-state laser that delivers 100 mW of available power.

**Build superior quality parts for every application.** The Viper si2 system builds parts with a smooth surface finish, high accuracy and excellent fine feature detail that require minimal finishing. It's ideal for a myriad of solid imaging applications, from rapid modelling and prototyping, to patterns for investment casting.

**Lower your cost of ownership thanks to scores of design improvements.** Longer laser life is just the beginning. Optimised for our SL materials, the system's new solid-state Viper laser delivers fast draw speeds, and high throughput. What's more, the entire system – from optics and electronics to the external enclosure has been designed from the ground up for maximum productivity, reliability and serviceability.

**State-of-the-art software.** The Viper si2 system operates with the latest versions of Lightyear part preparation and Buildstation control software. Lightyear software provides ease of use and the Buildstation software provides a reliable build process with little user intervention.



## Tackle all these applications with one machine:

- Small to medium-sized concept and communication models
- Small to medium-sized prototypes
- Patterns for investment casting using the QuickCast buildstyle
- Parts with extremely fine detail

## Benefits

- Long laser life
- Low cost of ownership
- Fast scanning system
- Excellent part quality
- Great range of applications

SLA® SYSTEM



**SYSTEMS**

*the solid imaging company*

# Viper si2 SLA System Specifications

Standards and Regulations: This SLA system conforms to Federal Laser Product Performance Standards 21CFR1040.10 Class I laser in normal operation. During field service, emission levels can correspond to Class IV laser product. The Viper si2 system complies with CE requirements.



**SYSTEMS**

*the solid imaging company*

LASER	
Type	Solid state Nd:YVO <sub>4</sub>
Wavelength	354.7 nm
Power at vat	100 mW available
Laser Warranty	7500 hours or 12 months (whichever comes first)
RECOATING SYSTEM	
Process	Zephyr recoating system
OPTICAL & SCANNING	
Beam (diameter @ 1/e <sup>2</sup> )	Standard mode 0.250 +/- 0.025 mm Hi res mode 0.075 +/- 0.015 mm
ELEVATOR	
Vertical resolution	0.0025 mm
Position repeatability	0.0076 mm
Maximum part weight	9.1 kg
Typical velocity during part building	5 mm/sec
VAT CAPACITY	
Volume	32.21 L
Maximum build envelope in standard mode	250 x 250 x 250 mm XYZ
Maximum build envelope in HR mode	125 x 125 x 250 mm XYZ
Interchangeable vat	Yes
SYSTEM CONTROLLER & SOFTWARE	
Control software	Buildstation 5.3 software
Operating system	Windows NT (4.0 with Service Pack 3 or higher)
Input data file format	.stl .slc
Network type and protocol	Ethernet, IEEE 802.3 10/100 Base-T
POWER	
100 - 120 VAC +/-10% 50/60 Hz, 6 amps	15 amp, 115V
220 - 240 VAC +/-10% 50/60 Hz, 3 amps	8 amp, 230V
UPS power rating	2KVA minimum
AMBIENT TEMPERATURE	
Temperature range	23°C +/- 3°C
Maximum change rate	1°C/hour
Relative humidity	20 - 50%, non condensing
SIZE	
Crated machine	W168 x D102 x H211 cm
Uncrated machine	W134 x D86 x H178 cm
WEIGHT	
Crated machine	564 kg
Uncrated machine	463 kg
OPTIONS	
Additional interchangeable vats	
Additional build platforms	
Post Curing Apparatus (PCA) equipment	
SYSTEM WARRANTY	
One year from installation date. Includes parts, labor, and 3D Systems' software upgrades.	

## 3D Systems Europe Ltd.

Mark House

Mark Road

Hemel Hempstead

Herts HP2 7UA

tel (+44) 1442 282 600

fax (+44) 1442 282 601

email marketing.uk@3dsystems.com

## 3D Systems GmbH

Postfach 12 02 07

D-64239 Darmstadt

Germany

tel (+49) 61 51 / 3 57-0

fax (+49) 61 51 / 3 57-333

email info@3dsystems-europe.com

[www.3dsystems.com](http://www.3dsystems.com)

Nasdaq: TDSC

### FRANCE

tel (+33) 1 69 35 17 17

### HONG KONG

tel (+852) 2923 5077

### ITALY

tel (+39) 039 68 904 00

### JAPAN

tel (+81) 3 5451 1690

### USA

tel (+1) 661 295 5600 ext. 2882

© Copyright 2003 by 3D Systems Inc. All rights reserved. Specifications subject to change without notice. The 3D logo and SLA are registered trademarks and 3D Systems, si2, Lightyear, Buildstation, PCA, and Zephyr are trademarks of 3D Systems. "the solid imaging company" is a service mark of 3D Systems. All other product names or services mentioned are trademarks or registered trademarks of their respective companies.