

# Stereolithography Printers

Prototypes, tools and production parts with stereolithography (SLA) 3D printers



3D Systems—the inventor of stereolithography (SLA) and the only SLA manufacturer offering the total solution with integrated hardware, software and materials fine-tuned to achieve renowned SLA parts quality—brings you legendary precision, repeatability and reliability in SLA 3D printers.

# The Original 3D Printing Technology, Fine-Tuned for Even Greater Speed and Reliability

We didn't just invent SLA, we are advancing SLA

# UNRIVALED ACCURACY AND PRECISION, FROM MICRO TO MACRO

SLA printers are able to print highly detailed, tiny parts just a few millimeters in size, all the way up to 1.5-meter long parts—all at the same exceptional resolution and accuracy. Even large parts remain highly accurate from end-to-end, with virtually no part shrinkage or warping.

### **PRODUCTION QUALITY**

3D Systems has released 21 different SLA printers over the last three decades, each providing significant improvements over the previous version, offering you exceptional part quality. Our customers do not have to compromise speed or feature detail because we utilize two laser spot sizes per layer—delivering the best surface finish, small feature definition and throughput.

#### DOZENS OF ENGINEERED PLASTIC MATERIALS

In the last 30 years, 3D Systems has supported more than 80 SLA additive materials, tuned to customers' application needs, through innovation and partnerships. Get the mechanical specifications you need with a wide variety of differentiated materials.

#### 24/7 UTILIZATION

Get the highest productivity possible with the fastest print technology for large and production runs. Quick interchangable material delivery modules keep machines running to advance your part manufacturing workflow, while 3D Connect Service offers proactive and preventative support.

### **SLA 750 & SLA 750 DUAL**

Ultra-high speed, production SLA and full workflow solution

The SLA 750 and SLA 750 Dual deliver ultra-high speeds and productivity for cost-efficient, high-quality production manufacturing. A modular system, the SLA 750 is field-upgradeable to the dual-laser SLA 750 Dual, enabling up to 2X speed improvements and up to 3X the throughput of previous SLA systems. SLA 750 printers are part of a full workflow solution that includes the PostCure 1050 for high speed, high volume drying and curing and a range of production-grade resin materials.

## ProJet® 6000 & ProJet® 7000

Compact SLA with powerful performance

The ProJet 6000 offers all the benefits of SLA in a smaller footprint, so you can print with fine feature detail in a wide choice of performance-engineered materials that match or exceed traditional plastic properties.

The Projet 7000 offers the same SLA benefits of the Projet 6000, with more than double the build volume so you can print even larger parts for prototyping, rapid tooling and end-use with fine-feature detail.

## ProX<sup>®</sup> 950

**Extra-large format SLA** 

The ProX 950 SLA printer builds parts with outstanding surface smoothness, feature resolution, edge definition and tolerances. Offering the broadest range of materials among all SLA 3D printers, it is also highly efficient, with minimal waste and low total cost of ownership. Combined with exceptional productivity and reliability, it's no wonder that 3D Systems' SLA printers are the #1 choice of professional service bureaus.

## **Materials Spotlight**

# Widest range of materials for application diversity

3D Systems' Accura® SLA materials are the industry's gold standard for accuracy, providing excellent resolution, surface finish and dimensional tolerances. In addition to functional prototypes and end-use parts, Accura materials create investment casting patterns, master patterns for rapid tooling and fixtures.



#### PRODUCTION RIGID

Rigid, environmentally stable plastics offering similar aesthetics and material performance to injection-molded ABS.



# PRODUCTION TOUGH, DURABLE

Tough, environmentally stable plastics offering similar aesthetics and material performance to injection-molded polypropylene.



### **CLEAR AND CASTABLE**

Exceptional clarity makes SLA ideal for printing bottles, light covers, housings, QuickCast® sacrificial patterns for investment casting and more.



# HIGH TEMPERATURE AND COMPOSITE

With heat deflection temperatures ranging from 65°C to over 215°C, these materials offer exceptional performance under extreme conditions.



### **SPECIALTY MATERIALS**

Choose from Accura specialty materials, including for jewelry casting or dental models production.



### All-in-one software for plastic printing

An end-to-end software for plastic printers to prepare, optimize and print 3D CAD data. 3D Sprint delivers all the tools you need to quickly and efficiently go from design to high quality true-to-CAD printed parts without needing additional third party software.



**Print True-to-CAD Parts** - Smart geometry processing and powerful slicing technology eliminate geometry processing artifacts.

**Streamline Time to Finished Parts** - Extensive automated toolset facilitates the entire 3D printing process, saving on material and post-processing time without compromising on part quality.

**Increase Productivity with Optimized Data Management** - Accurately estimate print time and optimize material levels and usage both before and during the print operation.

## NOTON

### Intelligent Manufacturing OS

Oqton automates the end-to-end additive workflow across and beyond the production floor. Oqton allows you to upload prepared jobs or use the platform's integrated build preparation tools. Schedule and track production orders, and connect your machines to enable full traceability and valuable data insights.

Oqton's Manufacturing OS allows you to schedule all your production and post-production processes in a smart and efficient way. Powered by artificial intelligence, the Oqton Manufacturing OS helps you manage all your machines, orders, and production materials for efficient machine utilization.

Leverage the Industrial Internet of Things to connect all your factory floor equipment. Monitor your machines and processes remotely. Use process-based alerts to bring you piece of mind and easily generate automated reports and insightful live dashboards.

	ProJet® 6000 HD	ProJet® 7000 HD	SLA 750	SLA 750 DUAL	ProX <sup>®</sup> 950
PRINTER PROPERTIES					
<b>3D Printer Size Crated</b> (WxDxH)	1676 x 889 x 2006 mm (66 x 35 x 79 in)	1860 x 982 x 2070 mm (73.5 x 38.5 x 81.5 in)	1887 x 1887 x 2515 mm (73.5 x 73.5 x 99 in)	1887 x 1887 x 2515 mm (73.5 x 73.5 x 99 in)	242 x 173 x 254 cm (95 x 68 x 100 in)
<b>3D Printer Size Uncrated</b> (WxDxH)	787 x 737 x 1829 mm (31 x 29 x 72 in)	984 x 854 x 1829 mm (39.0 x 34.0 x 72 in)	1370 x 1539 x 2255 mm (54 x 61 x 89 in)	1370 x 1539 x 2255 mm (54 x 61 x 89 in)	220 x 160 x 226 cm (87 x 63 x 89 in)
3D Printer Weight Crated (not incl. MDM) 3D Printer Weight Uncrated (not incl. MDM)	272 kg (600 lb) 181 kg (400 lb)	363 kg (800 lb) 272 kg (600 lb)	998 kg (2200 lbs) 771 kg (1700 lbs)	1044 kg (2300 lbs) 817 kg (1800 lbs)	1951 kg (4300 lbs) 1724 kg (3800 lbs)
Electrical Requirements	100-240 VAC, 50/60 Hz, single-phase, 750 W	100-240 VAC, 50/60 Hz, single-phase, 750 W	200-240 VAC, 1- Ph, 50/60Hz, 24A	200-240 VAC, 1- Ph, 50/60Hz, 30A	200-240 VAC 50/60 Hz, single-phase, 50 amps
Operating Temperature Range	18-28 °C (64-82 °F)	18-28 °C (64-82 °F)	18°C to 28°C	18°C to 28°C	20-26 °C (68-79 °F)
Interchangeable Material Deliverable Modules (MDMs) with Integrated Elevator and Removable Applicator	Additional MDM (3 sizes)	Additional MDM (2 sizes)	Additional MDM (3 sizes)	Additional MDM (3 sizes)	Additional MDM (1 size)
Accessories	ProCure™ 350 UV Finisher Parts Washer Right Height Table	ProCure™ 350 UV Finisher	In-Vat ProCure 750	er Cart : Mixer ) UV Finisher re 1050	Manual Offload Cart ProCure™ 1500 UV Finisher

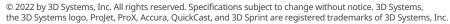
PRINTING SPECIFICATIONS					
Max Part Size & Build Volume (xyz) <sup>1</sup>	Flexible build volume options with interchangeable material delivery modules (MDM)				
Max Part Size Full	250 x 250 x 250 mm (10 x 10 x 10 in) 40 I (10.6 U.S. gal)	380 x 380 x 250 mm (15 x 15 x 10 in) 84 l (22.2 U.S. gal)	750 x 750 x 550 mm (29.5 x 29.5 x 21.65 in) 558 l (147.4 U.S. gal)	750 x 750 x 550 mm (29.5 x 29.5 x 21.65 in) 558 l (147.4 U.S. gal)	1500 x 750 x 550 mm (59 x 29.5 x 21.65 in); 935 I (247 U.S. gal)
Max Part Size Half	250 x 250 x 125 mm (10 x 10 x 5 in) 5.8 U.S. gal (22 l)	N/A	N/A	N/A	N/A
Max Part Size Short	250 x 250 x 50 mm (10 x 10 x 2 in) 24 I (6.3 U.S. gal)	380 x 380 x 50 mm (15 x 15 x 2 in) 32 I (8.5 U.S. gal)	750 x 750 x 50 mm (29.5 x 29.5 x 1.97 in) 176 l (46.5 U.S. gal)	750 x 750 x 50 mm (29.5 x 29.5 x 1.97 in) 176 l (46.5 U.S. gal)	N/A
Max Part Weight	9.6 kg (21.1 lb)	21.6 kg (47.6 lb)	86 kg (190 lbs)	86 kg (190 lbs)	150 kg (330 lbs)
Accuracy	0.025-0.05 mm per 25.4 mm (0.001-0.002 inch per inch) of part dimension <sup>3</sup>		>34 mm (1.34 inch): $\pm$ 0.15% of feature size <sup>2</sup> <34 mm (1.34 inch): $\pm$ 0.051 mm (0.002 inch) <sup>2</sup>		0.025-0.05 mm per 25.4 mm (0.001-0.002 inch per inch) of part dimension <sup>2</sup>
Intelligent Scanning Strategy	Fine point scanning for small features and external		Hyper-Scan™ Vector Technology Proprietary scan algorithm developed especially for efficient, high-quality production.		Automated in build dual mode speeds on each layer: Fine point scanning for small features and external surfaces, broader scanning for larger features and internal surfaces.
Fine Feature/Outer Surface Scanning Larger Feature/Internal Surface Scanning	Down to 75 μm (0.003 in) 750 μm (0.030 in)	Down to 75 μm (0.003 in) 750 μm (0.030 in)	125 μm (0.005 in) 1000 μm (0.030 in)	125 μm (0.005 in) 1000 μm (0.030 in)	125 μm (0.005 in) 750 μm (0.030 in)

MATERIALS			
Build Materials	See material selector guide and individual material datasheets for specifications on available materials.		
Material Packaging	2L click-in cartridges for hands-free, drip-free automated refill process	10KG click-in cartridges	

SOFTWARE AND NETWORK			
<b>SLA Printer Interface Software</b> (also refered to as printer control code)	Fast and intuitive printer interface software with advanced capabilities to maximize machine utilization. Use advanced tools to restart any build and edit recoating parameters on the fly to ensure a successful build.		
3D Sprint® Software	Prepares and optimizes design file data, and manages the additive manufacturing process on plastic 3D printers.		
3D Sprint Software and Hardware Requirements	Windows 10 (64-bit), U Intel® or AMD® processor with a minimum of 2.0GHz, 4 GB RAM, 7GB of available hard-disk space, OpenGL 2.1 and GLSL 1.20 enabled graphics card, 1280x960 screen resolution, Graphics card: Intel HD or Iris (HD 4000 or newer), or Nvidia GeForce GTX 285, Quadro 1000 or newer, or AMD Radeon HD 6450 or newer Internet Explorer 9 or newer Microsoft .NET Framework 4.6.1 (installed with application)		
3D Connect <sup>™</sup> Capable	3D Connect Service provides a secure cloud-based connection to 3D Systems service teams for support.		
Printer Network Compatibility	Network ready with 10/100 Ethernet interface 4MB, USB port	Ethernet, IEEE 802.3 using TCP/IP and NFS, USB port	
Printer Operating System	Windows® 7	Windows® 10	
Input Data File Formats Supported	STL, CTL, OBJ, PLY, ZPR, ZBD, AMF, WRL, 3DS, FBX, MJPDDD, 3DPRINT, BFF, IGES, IGS, STEP, STP, SLI		

 $<sup>^{\</sup>mbox{\scriptsize 1}}$  Maximum part size is dependent on geometry, among other factors.

Warranty/Disclaimer: The performance characteristics of these products may vary according to product application, operating conditions, material combined with, or with end use. 3D Systems makes no warranties of any type, express or implied, including, but not limited to, the warranties of merchantability or fitness for a particular use.





Accuracy may vary depending on build parameters, part geometry and size, part orientation, and post-processing methods.