

PSLA 270

UNMATCHED PRODUCTIVITY.
PREMIER PARTS.
REAL PRODUCTION.



ACCURATE, PROJECTOR-BASED SLA WITH UP TO 5X THROUGHPUT

A BREAKTHROUGH IN PERFORMANCE AND PRODUCTIVITY

The PSLA 270 is a high speed, projector-based SLA additive manufacturing solution designed for time-sensitive and high part volume production.

A compact, mid-frame 3D printing solution, the PSLA 270 can deliver batch-level, true production-grade parts in a fraction of the time it would take for conventional SLA, and with unmatched levels of first article success, part quality and repeatability.

DELIVER IN ONE SHIFT WHAT USED TO TAKE MANY

When you are under pressure to deliver parts the same day, or in a single shift, the PSLA 270 is your solution of choice.

Featuring a new hybrid configuration, with dual HD projectors fixed above and curing into the vat of resin below, you gain from all the speed advantages of raster-based curing, with all the first-article success and job reliability of SLA vat-based printing.

Whether you are building large bulky parts or packing a platform with small components, outcomes remain consistently accurate and fast across all geometries, builds and printers.



PSLA 270

KEY FEATURES & BENEFITS

- Print speeds <38mm per hour
- Repeatability of up to 6 Sigma with more than 99.9% of parts within +/- 100 microns across different PSLA 270 printers
- Part surface smoothness <RA 0.25 µm
- Material change <3 minutes
- Roll in/roll out vat with datum-located vat-to-frame lock
- Automated Material Delivery Module (MDM) with large 9kg bottle
- Ability to hand-pour material
- Simple-scan QR codes for bottles
- Reversible 10" UI screen and door. Easy slide-off side panels
- 3D Sprint software for file preparation, editing, printing, and management
- All-new intuitive UI touchscreen and MT Connect for rich data reporting features
- Online and offline printer modes
- Fits through standard 30 in / 76 cm doorframe
- Job delay & schedule feature



Print Time	3 hrs
'Typical' SLA Print Time	8 hrs
Time Saved	5 hrs

Optimized Actuator Bracket

Figure 4® PRO-BLK 10:

- Engineered for long term environmental UV and humidity stability
- Rigid, durable and strong with thermoplastic behavior

THE LEADING PORTFOLIO OF PRODUCTION GRADE RESINS

The PSLA 270 is designed to operate with the Figure 4 range of engineering and production-grade resins delivering printed parts with an injection-molded like quality and best-in-class smoothness.

Choose from our ever-expanding range of rigid, tough, durable with thermoplastic-like behaviors, castable, heat-resistant, and biocompatible capable materials in a range of colors and translucencies. Printed parts exhibit long-term UV and humidity stable mechanical properties; up to 8 years for indoor use and up to 2 years for outdoor exposure.

END-TO-END FILE TO PRINT SOFTWARE

The PSLA 270 uses 3D Sprint, an advanced, single-interface software for file preparation, editing, printing, and management. Quickly and efficiently go from design to high quality, true-to-CAD parts without needing additional third-party software. 3D Sprint is optimized for production environments with the latest time-saving workflows, UI, and UX to maximize printer capacity and build volume utilization for batch run jobs.

THE NEXT-GENERATION IN 3D PRINTERS

Welcome to the PSLA 270: a high-resolution printer that merges the speed and production-grade material benefits of Figure 4 light projection technology with the repeatable, high-quality outcomes of SLA.

WHAT IS IT FOR?

- Low and mid-run production parts
- Functional prototypes
- Production jigs/fixtures
- Aesthetic models
- Hot air/fluid flow testing
- Egg-shell molding of silicone parts
- Investment casting patterns
- Tooling inserts

WHO IS IT FOR?

- Service Bureaus
- Motorsport, Transportation & Automotive
- Consumer Technology & Electronics
- Sporting Goods, Toys & Consumer Goods
- Aerospace & Defense
- Medical Device & Medical Modeling
- Research & Academic
- Dental Orthodontics

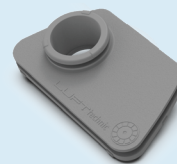


Print Time	4 hrs
'Typical' SLA Print Time	11 hrs
Time Saved	5 hrs

Medical Skull for Surgery Planning

Figure 4® Rigid White:

- Biocompatible-capable, production-grade white material
- Ideal for high mechanical load-bearing parts that remain functional and stable for years



Print Time	3 hrs
'Typical' SLA Print Time	8 hrs
Time Saved	5 hrs

Textured Access Panel

Figure 4® Rigid Gray:

- Accurate, low distortion material for first-article print success
- Excellent for digital texturing

PRINTER PROPERTIES	
Build Volume (xyz) / Max Part Size (including supports)	242 x 265 x 300 mm (9.5 x 10.4 x 11.8 in)
Technology	Projectors over vat
Projectors	2x 7-watt, 90 µm combined 3840 x 2160 dpi
Wavelength	405 nm
Resolution	90 µm pixel size
Accuracy	+/- 100 µm < 25 mm, +/- 0.2% > 25 mm
Layer Thickness	50-150 µm (material dependent)
Speed	Up to 38 mm / hour (material dependent)
Vat Capacity	55 L
Interface	10" PCAP touchscreen, ethernet, camera with remote UI access & stream to browser
Operating Environment	19 – 28 C (64-82 F), 20-55% humidity
Power Required	110-240VAC 50/60Hz Single Phase, 10A
Dimensions (doors closed)	71 x 73 x 183 cm / 28 x 29 x 72 in
Floor Space (occupied)	~0.51 sq m / 5.5 sq ft
Weight (printer + vat empty)	181 kg / 400 lbs + 45.4 kg / 100 lbs estimated
Certifications & Declarations	CE, FCC, cTUVus, REACH, RCM, KC, CALRPOP 65, TASCA, Conflict Minerals

MATERIALS	
Build Material	Figure 4 high-performance, long-term stable, production-capable photopolymer materials. See the 3D Systems Material Finder for available offerings.
Material Packaging	9 kg / 1 kg bottles

SOFTWARE AND NETWORK	
3D Sprint® Software	Easy build job set-up, submission, and job queue management; Automatic placement and build optimization tools; Part stacking and nesting capability; Extensive part editing tools; Automatic support generation; Job statistics reporting tools
Client Hardware Minimum Specifications	<ul style="list-style-type: none"> • Intel® or AMD® processor with a minimum of 2.0GHz and 4GB RAM • OpenGL 2.1 and GLSL 1.20 enabled graphics card; screen resolution 1280x960 • Dedicated Graphics Card: Nvidia GeForce GTX 285, Quadro 1000, AMD Radeon HD 6450, or newer • 10GB of available hard-disk space; additional space may be needed for cache. Temporary file cache requires about 3GB free disk space for every 100 million points. • Internet Explorer 9 or newer • Other: 3 button mouse with scroll, keyboard, Microsoft .NET Framework 4.8 installed with application
3D Connect™ Capable	3D Connect Service provides a secure cloud-based connection to 3D Systems service teams for support.
Connectivity	Network ready with 10/100/1000 base ethernet interface; USB port
E-mail Notice Capability	Yes
Client Operating System	Windows 8.1 ~ Windows 11 (64-bit)
Input Data File Formats Supported	STL, CTL, OBJ, PLY, ZPR, ZBD, AMF, WRL, 3DS, FBX, IGES, IGS, STEP, STP, MJPDDD