



stratasys

alphacam  
SOLUTIONS FOR A 3D WORLD®

# Stratasys Neo®450s 3D Printer



## A versatile printer, with flexible options to suit multiple needs

The compact Neo450s 3D printer builds on the foundation of the proven Neo800 3D printer, providing a versatile 17.72 x 17.72 x 15.75 in. (450 x 450 x 400 mm) build platform and featuring standard and high-detail build modes.

The Neo450s 3D printer enables the production of small to medium functional prototypes, tooling, and master patterns with exceptional surface quality, accuracy, detail, and consistent repeatability.

### Why choose the Neo450s?

- Exceptional part sidewall quality:** Outstanding scanning resolution reduces finishing time by up to 50%.
- Compact design, versatile performance:** Print single large-sized or many smaller detailed parts on the 17.72 x 17.72 x 15.75 in. (450 x 450 x 400 mm) build volume.
- Open resin system:** Compatible with all commercially available 355nm SLA resins, allowing the freedom of material selection.
- Intuitive Titanium™ software:** Easy-to-use software optimizes build time and part quality with build history, parameter detail, hardware usage and part traceability data reporting.
- Customer-driven development:** Customer suggestions and feedback are encouraged, driving user-focused software updates.
- Accessible support:** Remote diagnostics or convenient on-site support from our exceptional service team.
- Quality assurance:** The Neo450s 3D printer is carefully designed and engineered throughout, using premium components, parts and finishes.
- Connected services:** Stay connected and updated with the built-in camera, emailed progress reports and status updates.

3D Printer Specifications <sup>††</sup>		Neo450s 3D Printer
<b>Laser &amp; Scanning System</b>	<b>Laser</b>	2 Watt; 355 nm, solid-state frequency tripled Nd: YVO <sup>4</sup>
	<b>Beam Focus</b>	Dynamic & Variable
	<b>Beam Size</b>	80 to 750 µm
	<b>Scanning Speed</b>	Up to 400 in./s (10 m/s)
<b>Layer Resolution</b>	50 to 200 µm*	
<b>Minimum Feature Size</b>	0.006 in. (0.15 mm) in X & Y <sup>†</sup> 0.016 in. (0.4 mm) in Z <sup>†</sup>	
<b>Build Modes</b>	High Detail & Standard Detail (HD & SD)	
<b>Accuracy</b>	Dimension <3.94 in. ±0.004 in.; Dimension >3.94 in. ±0.1% <sup>†</sup> Dimension <100 mm ±0.1 mm; Dimension >100 mm ±0.1% <sup>†</sup>	
<b>Material Compatibility</b>	Open resin system - compatible with commercially available 355 nm stereolithography resins	
<b>Capacities</b>	<b>Build (XYZ)</b>	Short: 17.72 x 17.72 x 1.97 in. (450 x 450 x 50 mm) Half: 17.72 x 17.72 x 7.87 in. (450 x 450 x 200 mm) Full: 17.72 x 17.72 x 15.75 in. (450 x 450 x 400 mm)
	<b>Vat Fill</b>	Short: 10 US gal (95 lb <sup>†</sup> ) [38 ltr (43kg <sup>†</sup> )] Half: 22 US gal (203 lb <sup>†</sup> ) [82 ltr (92kg <sup>†</sup> )] Full: 37 US gal (348 lb <sup>†</sup> ) [141 ltr (158 kg <sup>†</sup> )]
<b>Software</b>	<b>Operating System</b>	Windows 10 Pro
	<b>Input File Format</b>	SLC
	<b>Control Software</b>	Titanium
	<b>Build Prep Software</b>	GrabCAD or Materialise Magics
	<b>Remote Editor</b>	Titanium Assistant (Optional)



# Stratasys Neo<sup>®</sup>450s 3D Printer

3D Printer Specifications <sup>††</sup>		Neo450s 3D Printer
<b>Connectivity</b>	<b>Ethernet</b>	Fully compliant with IEEE 802.3, IEEE 802.3u, IEEE 802.3ab
	<b>USB Port</b>	USB 3.1
<b>Features &amp; Build Options</b>		Build validation / Build time estimator / Material usage estimator / Open build parameters enabling any material to be processed / On-the-fly parameter adjustment & part deletion / Upper surface build quality optimization / Bubble remover with automated option / Scheduled start
<b>Advanced Services &amp; Reporting Tools</b>		Industry 4.0 compliant / Full part traceability / Logging of machine utilization; build history; parameters; material usage; formatted data export / System & build status email notification <sup>§</sup> / Onboard camera / Resin viscosity tracking / User level access control / Scheduled lighting
<b>Support</b>		1-click "snapshot" job diagnostic pack for remote support / Remote diagnostics <sup>§</sup>
<b>Electrical Requirements</b>	<b>110 ~ 120 Volt, 50/60 Hz</b>	300 W Typical operation, 550 W Max
	<b>220 ~ 240 Volt, 50/60 Hz</b>	700 W Typical operation, 1,300 W Max
<b>UPS</b>		20 – 40 mins of system up-time with intelligent UPS control <sup>**</sup>
<b>Environmental Requirements</b>		Temperature range: 68-74 °F (20-23 °C), max rate change ±2 °F/hr (±1 °C/hr) Relative humidity 20-50% non-condensing
<b>Dimensions (WxDxH)</b>		41.3 x 48.2 x 74.8 in. (1,050 x 1,225 x 1,900 mm)
<b>Weight</b>	<b>Printer</b>	1,323 lb (600 kg)
	<b>Vat (empty)</b>	221 lb (100 kg)
<b>Warranty</b>	<b>System</b>	12 months on-site service and support, as per Stratasys conditions of sale
<b>Regulatory Conformity</b>		    

\* 100µm layer parameters are supplied for Stratasys certified materials. Parameters for alternative thicknesses may be available.

Layer thickness range is material dependant. Contact Stratasys for more details.

† Accuracy & minimum feature size will vary depending on material, parameters, part geometry and size, pre- & post-processing methods and environment.

‡ Based on typical material density 2.47 lb/0.3 gal @ 78.8 °F. (1.12kg/ltr @ 26 °C).

§ Internet connection is required for full or partial functionality.

\*\* When connected to a Stratasys Certified UPS, not sold with the Neo450s 3D printer, please contact Stratasys for further details.

†† Specification can be subject to change without prior notice.



alphacam GmbH  
Erlenwiesen 16  
D-73614 Schorndorf  
Tel.: +49 7181 9222-0  
info@alphacam.de

alphacam austria GmbH  
Handelskai 92, Gate1 / 2. OG / Top A  
A-1200 Wien  
Tel.: +43 1 3619 600-0  
info@alphacam.at

alphacam swiss GmbH  
Zürcherstrasse 14  
CH-8400 Winterthur  
Tel.: +41 52 26207-50  
info@alphacam.ch

  
alphacam.de  
.at  
.ch

[stratasys.com](http://stratasys.com)

ISO 9001:2015  
Certified

**PRODUCT SPEC SHEET**  
SLA

© 2025 Stratasys Ltd. All rights reserved. Stratasys, Stratasys signet, Neo, and Titanium are trademarks or registered trademarks of Stratasys Ltd. and/or its subsidiaries or affiliates and may be registered in certain jurisdictions. All other trademarks belong to their respective owners. Product specifications subject to change without notice. PSS\_SL\_NEO450 series\_0625a

 stratasys