Neo®800 3D Printer

Build large parts with superior surface quality, accuracy and detail.



Build large prototypes, rapid tooling and master patterns with a world-class industrial large-format stereolithography system. The Neo®800 3D printer builds high-quality parts with superior surface quality, accuracy and detail.

Why choose the Neo800 3D printer?

- Exceptional part sidewall quality: Outstanding scanning resolution reduces finishing time by up to 50%.
- Open resin system: Compatible with all commercially available 355nm SLA resins, allowing freedom of material selection.
- Connected services: Stay connected and updated with the built-in camera, emailed progress reports and status updates.
- Customer-driven development: Customer suggestions and feedback are encouraged, driving user-enhanced software updates.
- Large build volume: Measuring 31.5 x 31.5 x 23.6 in. (800 x 800 x 600 mm). Build larger parts without section and bonding.
- 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.
- Accessible support: Remote diagnostics or convenient on-site support from our exceptional service team.
- Quality assurance: The Stratasys Neo800 3D printer is carefully designed and engineered throughout, using premium components, parts and finishes.

3D Printer Specifications**

Laser & Scanning System	**Laser**	2 Watt; 355 nm, solid-state frequency tripled Nd: YV0[4]
	Beam Focus	Dynamic & Variable
	Beam Size	150 to 600 µm
	Scanning Speed	Up to 400 in./s (10 m/s)
Layer Resolution		50 to 200 µm*
Minimum Feature Size		0.008 in. (0.2 mm) in X & Y† 0.016 in. (0.4mm) in Z†
Build Modes		High Detail & Standard Detail (HD & SD)
Accuracy		Dimension <3.94 in. ±0.004 in.; Dimension >3.94 in. ±0.15%† Dimension <100 mm ±0.1 mm; Dimension >100 mm ±0.15%†
Material Compatibility		Open resin system - compatible with commercially available 355 nm stereolithography resins
Capacities	**Build (XYZ)**	Half: 31.50 x 31.50 x 11.81 in. (800 x 800 x 300 mm) Full: 31.50 x 31.50 x 23.62 in. (800 x 800 x 600 mm)
	Vat Fill	Half: 83 US gal (780 lb‡) [316 ltr (354 kg‡)] Full: 147 US gal (1378 lb‡) [558 ltr (625 kg‡)]
Software	**Operating System**	Windows 10 IoT Enterprise LTSC 2021
	Input File Format	SLC
	Control Software	Titanium
	Build Prep Software	GrabCAD or Materialise Magics
	Remote Editor	Titanium Assistant (Optional)

3D Printer Specifications**

Connectivity	**Ethernet**	Fully compliant with IEE 802.3, IEEE 802.3u, IEEE 802.3ab
	USB Port	USB 3.1
Features & Build Options		Build validation / Build time estimator / Material usage estimator / Scheduled start / 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
Advanced Services & Reporting Tools		Industry 4.0 compliant / Full part traceability / Logging of machine utilization; build history; parameters; material usage; formatted data export / System & build status email notification § / Onboard camera / Resin viscosity tracking / User level access control / Scheduled lighting
Support		1-click "snapshot" job diagnostic pack for remote support / Remote diagnostics §
Electrical Requirements	**208 ~ 240 V, 50/60 Hz**	900 W Typical operation, 1900 W Max
UPS		1 – 2 hrs of system up-time with intelligent UPS control***
Environmental Requirements		Temperature range: 68-74 °F (20-23 °C), max rate change ±2 °F/hr (1 °C/hr). Relative humidity 20-50% non-condensing
Dimensions (WxDxH)		53.2 x 64.2 x 90.6 in. (1,350 x 1,630 x 2,300 mm)
Weight	**Printer**	1,764 lb (800 kg)
	Vat (empty)	529 lb (240 kg)
Warranty	**System**	12 months on-site service and support, as per Stratasys conditions of sale
Accessories		Unload Trolley for Neo800 / UV800 oven & hot box
Regulatory Conformity		CE UKCA FC

* 100µm layer parameters are supplied for Stratasys certified materials. Parameters for alternative thicknesses may be available. Layer thickness range is material dependent. 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.

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

*** When connected to a Stratasys Certified UPS, not sold with the Neo800 3D printer, please contact Stratasys for further details.

stratasys

stratasys.com
ISO 9001:2015
Certified

Stratasys Headquarters
7665 Commerce Way,
Eden Prairie, MN 55344
+1 800 801 6491 (US Toll Free)
+1 952 937-3000 (Intl)
+1 952 937-0070 (Fax)

1 Holtzman St., Science Park,
PO Box 2496
Rehovot 76124, Israel
+972 74 745 4000
+972 74 745 5000 (Fax)

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_Neo800_1126a.