

Nanoscribe Photonic Professional GT



The Nanoscribe Photonic Professional GT system utilized two-photon polymerization for 3D micro printing and maskless lithography. Printing of 3D structures can be achieved using conventional direct laser writing (DLW) or Nanoscribe's dip-in laser lithography (DiLL), utilizing either piezo-mode for high resolution arbitrary 3D trajectories, or galvo-mode for fast layer-by-layer printing. Features 200 nm in size up to structures several millimeters large can be printed, with significant reduction of print time by the use of "scaffold and shell printing" and post development UV curing. STLs created using CAD software can easily be converted to GWL code using Describe software, or users may opt to create structures by GWL code directly. Nanowrite software allows for easy operation of tool with AxioVision software allowing for live progress monitoring of the process.

The Photonic Professional GT system can be used for a broad range of applications on the nano-, micro-, and mesoscale including: Optics, plasmonics, microfluidics, sensors, microrobotics, biomimetics, life sciences, and many more.

Technical Specifications:

- Class 3 120 mW, 780 nm, 150 fs, 80MHz fiber laser
- 100 x 100 mm² motorized XY stage range
- 300 x 300 x 300 μm piezo range
- Sample holders: DiLL 1 inch glass slide,
- 63X immersion, 25X immersion, and 20X air objectives available
- Nanoscribe's proprietary photoresists available: IP Dip, IP-L 780, IP-S
- Dymax BlueWave 200 curing system available for curing of structures