

POLOS NanoWriter Advanced

The POLOS NanoWriter Advanced is a versatile UV laser writer with ultra-high precision components, specifically designed to give the user the highest degree of freedom to create micro-structures in photosensitive layers.



The POLOS NanoWriter Advanced system includes a 405 nm optical module capable of writing structures as small as 300 nm in photo resist layers. This user-friendly tool supports up to 4095 levels of gray-scale or pure binary mode and allows for 3D optical structures, surface structures as well as mask projects. Real time laser controlled auto-focus and laser intensity control ensure high quality imaging during the entire exposure process. The control electronics are all mounted within the frame except for the control PC. This Microsoft Windows based desktop PC and all required software is included in the package.

Item	Specifications
Max. writeable size	4 x 4"
Stroke scan & step	Max. 115 mm
Repeatability	< 40 nm
Encoder resolution	2.5 nm
Scan speed	Max. 200 mm/s
Straightness axis	< 0.5 µm over 105 mm
Wafer thickness	0 - 10 mm
Max. substrate size	Min. 5 x 5 mm, max. 110 x 110 mm
Exposable area	Max. 105 x 105 mm (speed dependent)

Benefits

- Highest resolution on the market with 405 nm laser
- 375 nm source available for more demanding applications
- Minimal maintenance costs
- Compact optical module: use a spare optical unit for revolutionary machine downtime reduction
- User-friendly operation

Dimensions

- Width: 600 mm
- Height: 750 mm
- Depth: 600 mm (not including optional air duct)
- Weight: 260 kg
- Compressed air: 57 Bar, Air quality according ISO8573-1:2010 class 3 or better.

