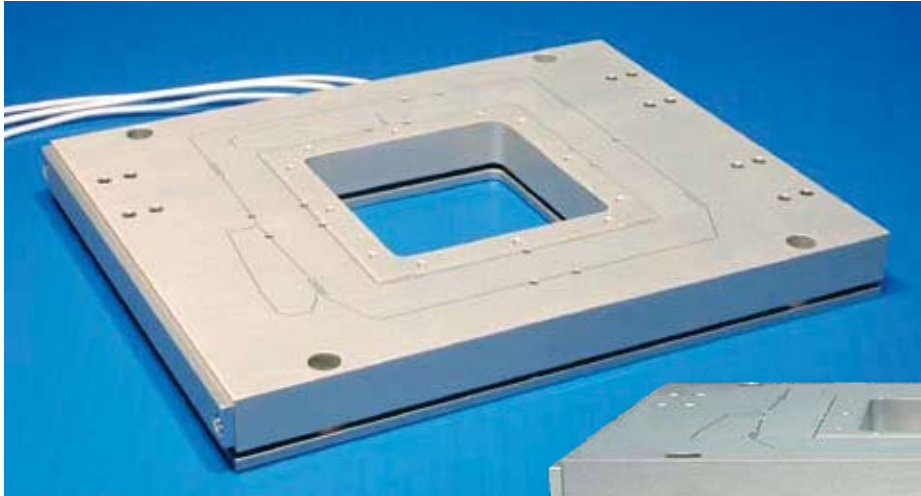


Features

- ▶ Lowest profile 3-axis nanopositioner available
- ▶ Large aperture
- ▶ 100 μm , 200 μm , and 300 μm ranges of motion (XYZ)
- ▶ **pico**™ sensor technology
- ▶ Closed loop control

Typical Applications

- ▶ Optical microscopy, easy to retrofit
- ▶ Optical trapping experiments
- ▶ Fluorescence imaging
- ▶ Alignment
- ▶ Single molecule spectroscopy



Nano-LP100 (3-axis) constructed from aluminum.



Low profile (0.8") of the Nano-LP Series.

Compatible Software Packages



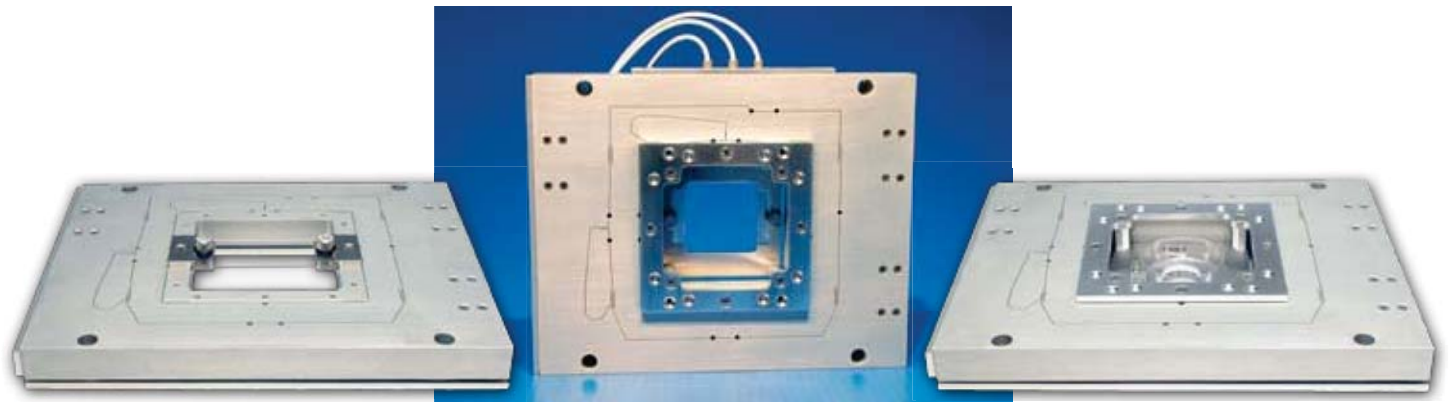
Analog motion control

USB and analog motion control

Examples, tutorial, and Nano-Route™ 3D supplied with Nano-Drive™ USB interfaces.



USB motion control



Nano-LP100 with top surface slide holder (left), re-entrant slide holder (center), and petri dish holder (right).

Product Description

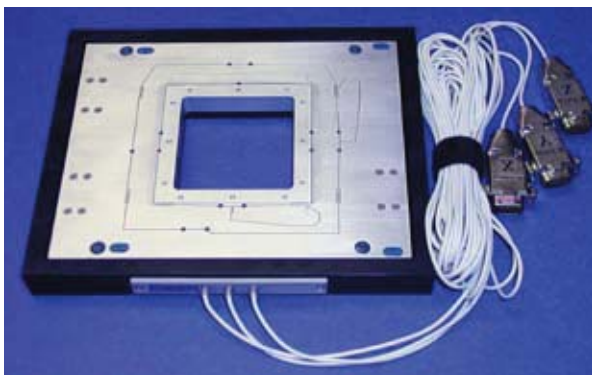
The Nano-LP Series are ultra-low profile, three axis nanopositioning systems with 100, 200, and 300 micron ranges of motion in all three axes. The low height of the Nano-LP Series allows it to be easily integrated into existing inverted optical microscopes. With its extended ranges of motion, the Nano-LP Series is ideal for de-

manding microscopy applications which require long range travel, fast scan rates, and three axes of motion. The Nano-LP Series' internal position sensors utilize proprietary **pico**™ technology to provide absolute, repeatable position measurement with picometer accuracy under closed loop control.

Technical Specifications

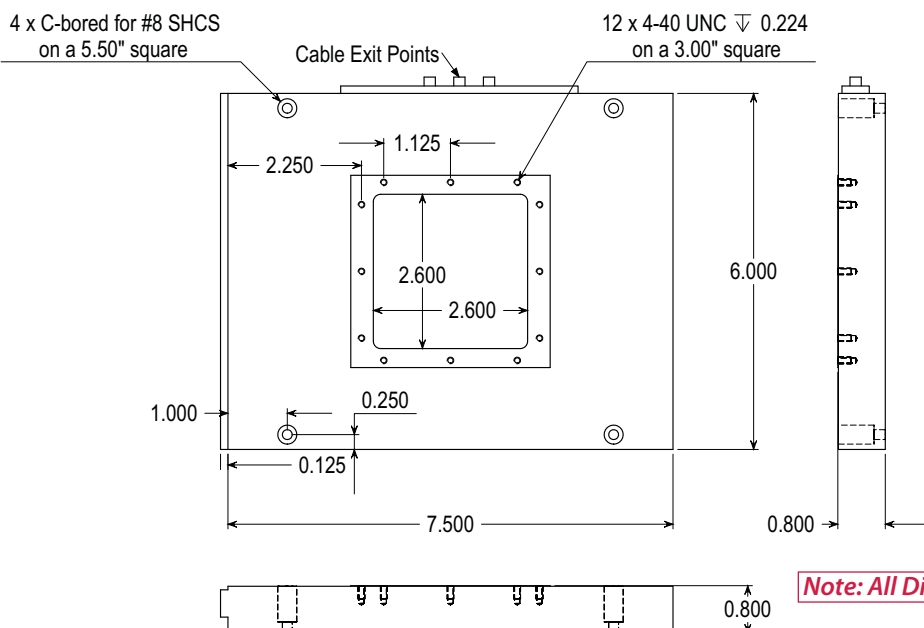
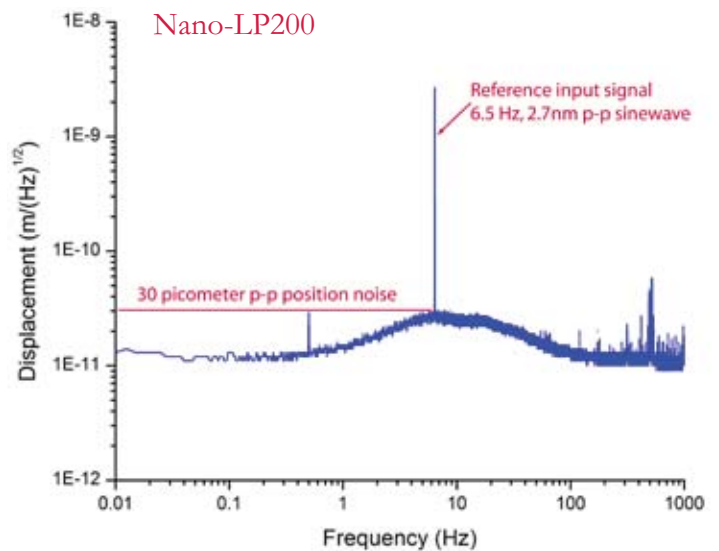
Range of motion (Nano-LP100)	100 x 100 x 100 μm	$\theta_{\text{roll}}, \theta_{\text{pitch}}$ (typical)	$\leq 1 \mu\text{rad}$
Range of motion (Nano-LP200)	200 x 200 x 200 μm	θ_{yaw} (typical)	$\leq 3 \mu\text{rad}$
Range of motion (Nano-LP300)	300 x 300 x 300 μm	Recommended max. load (horizontal)*	0.5 kg
Resolution (100/200/300 μm)	0.2/0.4/0.6 nm	Recommended max. load (vertical)*	0.2 kg
Resonant Frequencies		Body Material	Al, Invar or Titanium
X axis (100/200/300 μm)	450/400/350 Hz $\pm 20\%$	Controller	Nano-Drive™
Y axis (100/200/300 μm)	350/300/250 Hz $\pm 20\%$	* Larger load requirements should be discussed with our engineering staff.	
Z axis (100/200/300 μm)	450/350/250 Hz $\pm 20\%$		
Stiffness	1.0 N/ μm		

Custom Nano-LP Series



Nano-LP100 with custom frame for vertical mounting.

Low Position Noise



Note: All Dimensions in Inches

פז"מ-טק (1991) בע"מ
 מייקל סטורץ | 02.583.2511
 PaZaM-tech@pobox.com
 www.PaZaM-tech.co.il