

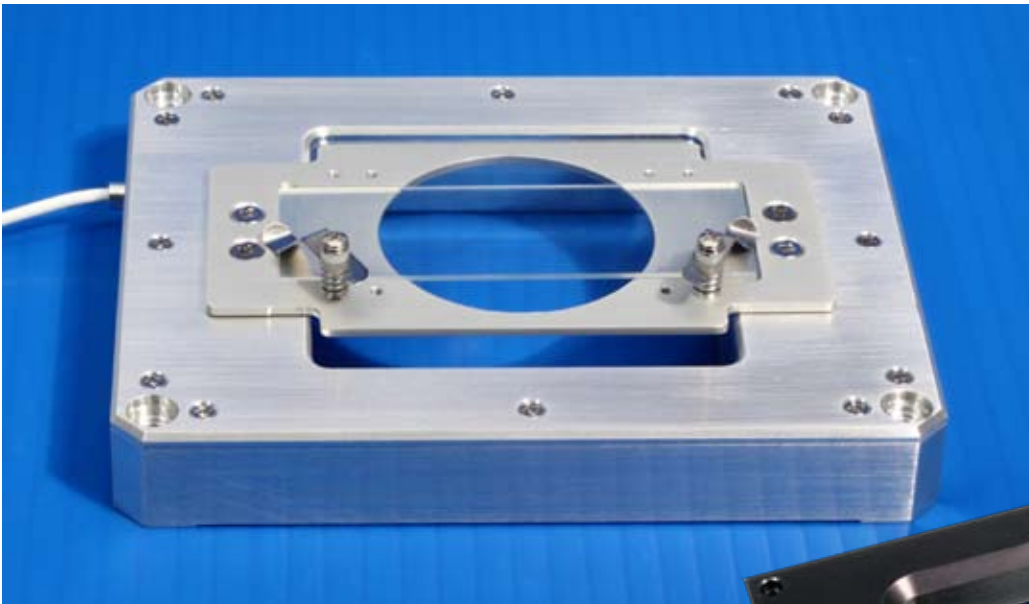
Nano-Z50HS

Features

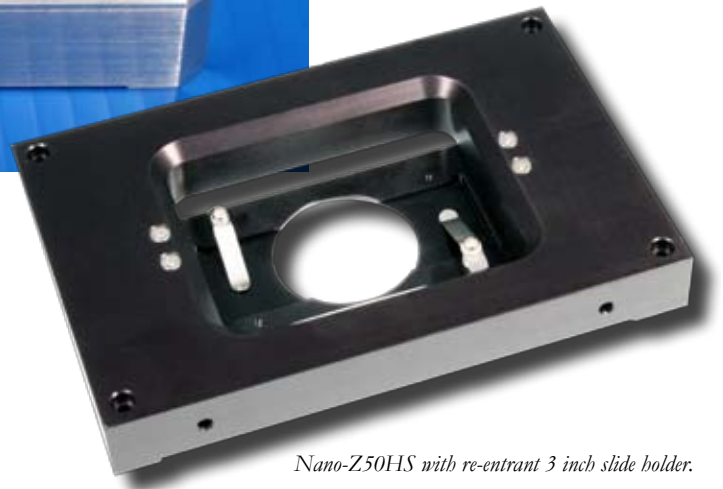
- ▶ High speed Z-axis motion
- ▶ Low profile: 0.77"
- ▶ Integrated sample holder
- ▶ 50 μm motion
- ▶ Closed loop control
- ▶ **pico** sensor technology

Typical Applications

- ▶ Optical microscopy
- ▶ High speed confocal imaging
- ▶ Up to 150Hz ω sinewave motion



Nano-Z50HS constructed from aluminum with integrated 3 inch slide holder.



Nano-Z50HS with re-entrant 3 inch slide holder.

Compatible Software Packages



Image-Pro
AMS

USB and analog motion control

LabVIEW



MetaMorph[®]
USB and analog motion control

µManager
THE OPEN SOURCE MICROSCOPY SOFTWARE

USB motion control



SLIDEBOOK 6.0
Analog motion control, 1 or 2 axes.

Examples, tutorial, and Nano-Route[®] 3D supplied with Nano-Drive[®] USB interfaces.

Product Description

The Nano-Z50HS is a single axis (Z-axis) nanopositioning system designed to move a microscopy sample up to 50 microns at the fastest possible positioning speeds. The Nano-Z50HS is derived from the 3-axis, high speed, Nano-LPQ nanopositioning system but contains only the Z-axis piezo mechanisms. The resulting compact size allows the Nano-Z50HS to easily retrofit onto existing microscopes or fit into custom experimental set-

ups. Since the only moving part is the integrated sample holder, moving mass is minimized. Sample holders for slides, coverslips, and petri dishes are available. Custom sample holders can also be provided. Internal position sensors utilizing proprietary **pico** technology provide absolute, repeatable position measurement with picometer resolution under closed loop control.

Technical Specifications

Range of motion	50 μ m
Resolution	0.1 nm
Resonant Frequency	1000 Hz \pm 20%
Stiffness	1.0 N/ μ m
Recommended max. load (horizontal)*	200 g
Body Material	Aluminum
Controller	Nano-Drive®85

* Larger load requirements should be discussed with our engineering staff.

Nano-Z50HS with top mounted slide holder

