

Nano-HS3M

Features

- ▶ High speed
- ▶ Low noise floor
- ▶ Closed loop control
- ▶ Picometer positioning resolution
- ▶ High stability
- ▶ Compact design
- ▶ **pico** sensor technology

Typical Applications

- ▶ High speed, high resolution positioning
- ▶ Metrology
- ▶ AFM
- ▶ SPM



LabVIEW Compatible USB Interfaces



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

Product Description

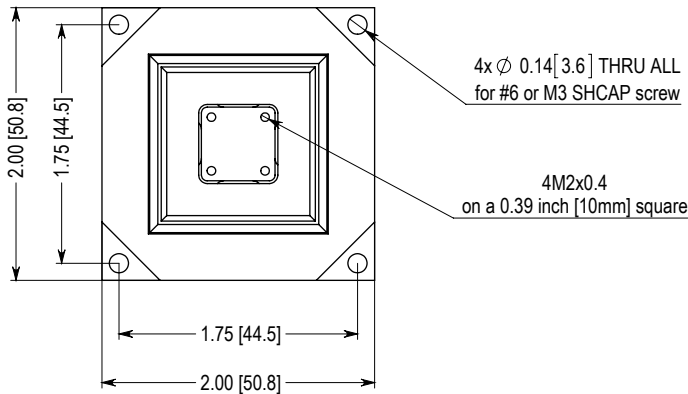
The Nano-HS3M is a high speed, XYZ precision nanostaging system with picometer positioning resolution. Offering maximum versatility, the Nano-HS3M is designed for demanding metrology applications. Internal position sensors utilizing proprietary **pico** technology provide absolute, repeatable position

measurement under closed loop control. The compact footprint, ultra-low noise characteristics, and a Z-axis resonant frequency of 13.5kHz make it ideal for metrology applications that require picometer noise floors and high speed performance.

Technical Specifications

Range of motion (XY).....	10 μ m
Range of motion (Z).....	5 μ m
Resolution.....	0.01 nm
Resonant Frequency (X).....	1.6 kHz
Resonant Frequency (Y).....	1.5 kHz
Resonant Frequency (Z).....	13.5 kHz
Recommended max. load (horizontal)*.....	0.1 kg
Recommended max. load (vertical)*.....	0.1 kg
Body Material.....	Al or Titanium
Controller.....	Nano-Drive [®]

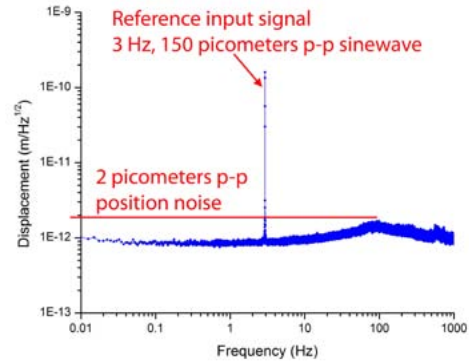
* Larger load requirements should be discussed with our engineering staff.



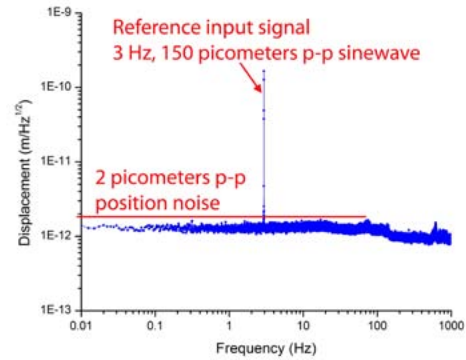
All dimensions in Inches [mm]

Low Position Noise

X Axis



Y Axis



Z Axis

