

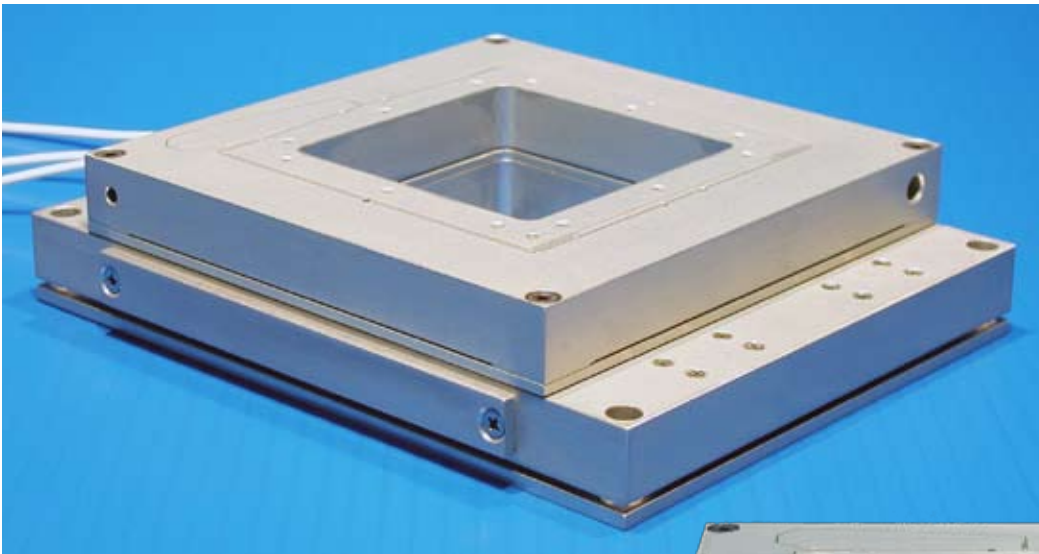
Nano-T Series

Features

- ▶ Economical multi-axis nanopositioner
- ▶ Two or three axis motion
- ▶ 100 μm or 200 μm XY ranges of motion
- ▶ 20 μm or 50 μm Z range of motion
- ▶ Large aperture
- ▶ **pico** sensor technology
- ▶ Closed loop control

Typical Applications

- ▶ Multi-axis alignment
- ▶ Fluorescence imaging
- ▶ Closed-loop AFM scanner
- ▶ Super resolution microscopy



Nano-T115 (3-axis) constructed from aluminum.



Nano-T11 (2-axis) constructed from aluminum.

Compatible Software Packages



Image-Pro
AMS
Analog motion control

μ Manager

THE OPEN SOURCE
MICROSCOPY SOFTWARE
USB motion control

LabVIEW



MetaMorph
USB and analog
motion control



SLIDEBOOK 6.0
Analog motion control,
1 or 2 axes.

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

Product Description

The Nano-T Series are economical, multi-axis nanopositioning systems which are available in a variety of configurations. The Nano-T Series have up to 200 microns range of motion in X and Y, and up to 50 microns in Z. The large center aperture accommodates lenses and probes without compromising performance. Internal position sensors utilizing proprietary **pico** technology provide

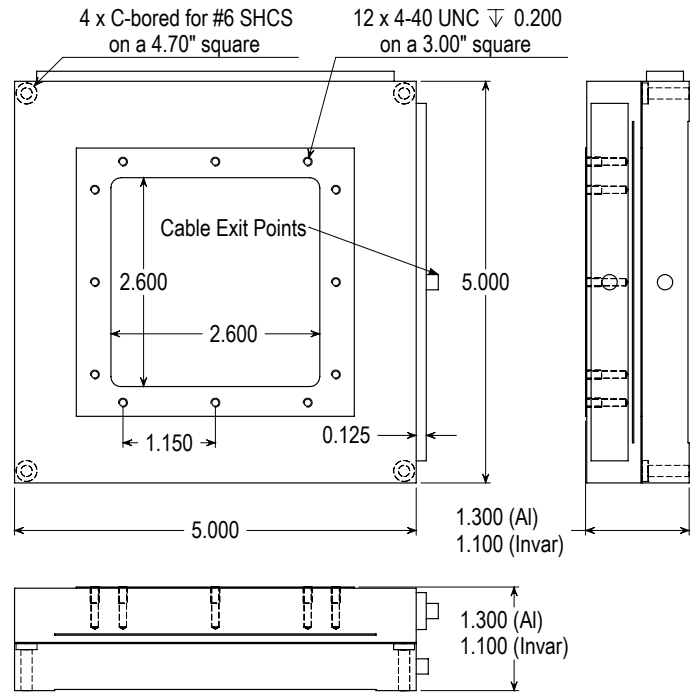
absolute, repeatable position measurement and picometer resolution under closed loop control. The Nano-T Series is well suited to applications in which precise positioning is required but the overall stage height is not critical. If extremely low profile systems are required, the Nano-Bio Series and Nano-BioS Series (XY) or the Nano-LP Series and Nano-LPS Series (XYZ) should be considered.

Technical Specifications

Range of motion (X, Y)	100 μ m/200 μ m
Range of motion (Z)	20 μ m/50 μ m
Resolution XY (100/200 μ m)	0.2/0.4 nm
Resolution Z (20/50 μ m)	0.04/0.1 nm
Resonant Frequencies	
X axis (100/200 μ m)	450/400 Hz \pm 20%
Y axis (100/200 μ m).....	250/200 Hz \pm 20%
Z axis (20/50 μ m)	450/350 Hz \pm 20%
Stiffness	1.0 N/ μ m
θ_{roll} , θ_{pitch} (typical)	\leq 1 μ rad
θ_{yaw} (typical)	\leq 3 μ rad
Recommended max. load (horizontal)*	0.5 kg
Recommended max. load (vertical)*	0.2 kg
Body Material	Al or Invar
Controller	Nano-Drive®

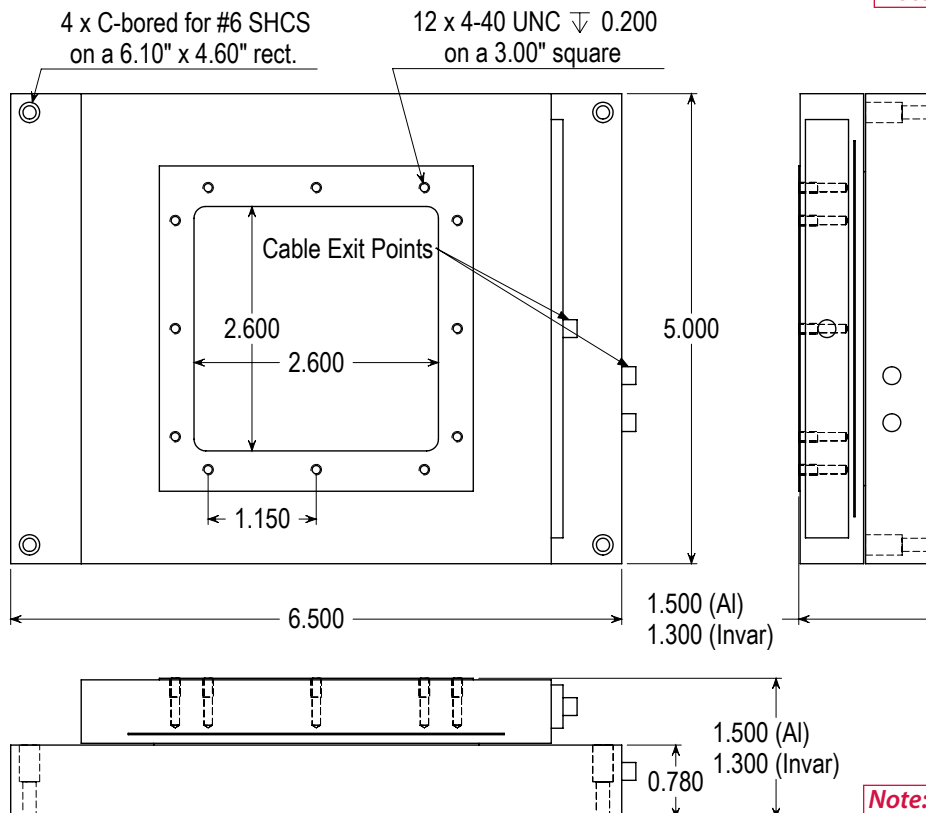
* Larger load requirements should be discussed with our engineering staff.

2-Axis Nano-T11 Nano-T22



Note: All Dimensions in Inches

3-Axis Nano-T112 Nano-T115 Nano-T222 Nano-T225



Note: All Dimensions in Inches