

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

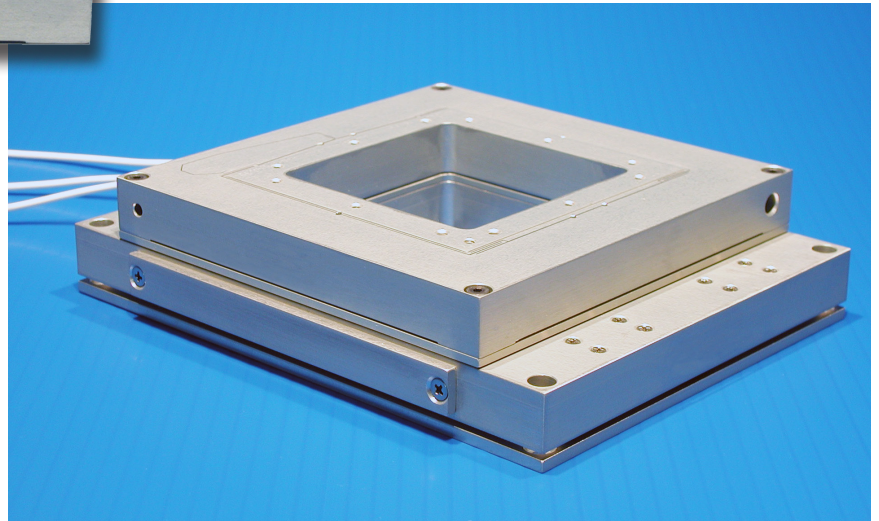


Related products

- Nano-H Series
- Nano-PDQ Series

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

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



Compatible Software Packages



Examples, tutorial,
and Mad City Labs
Nano-Route 3D
motion control software



Product Description

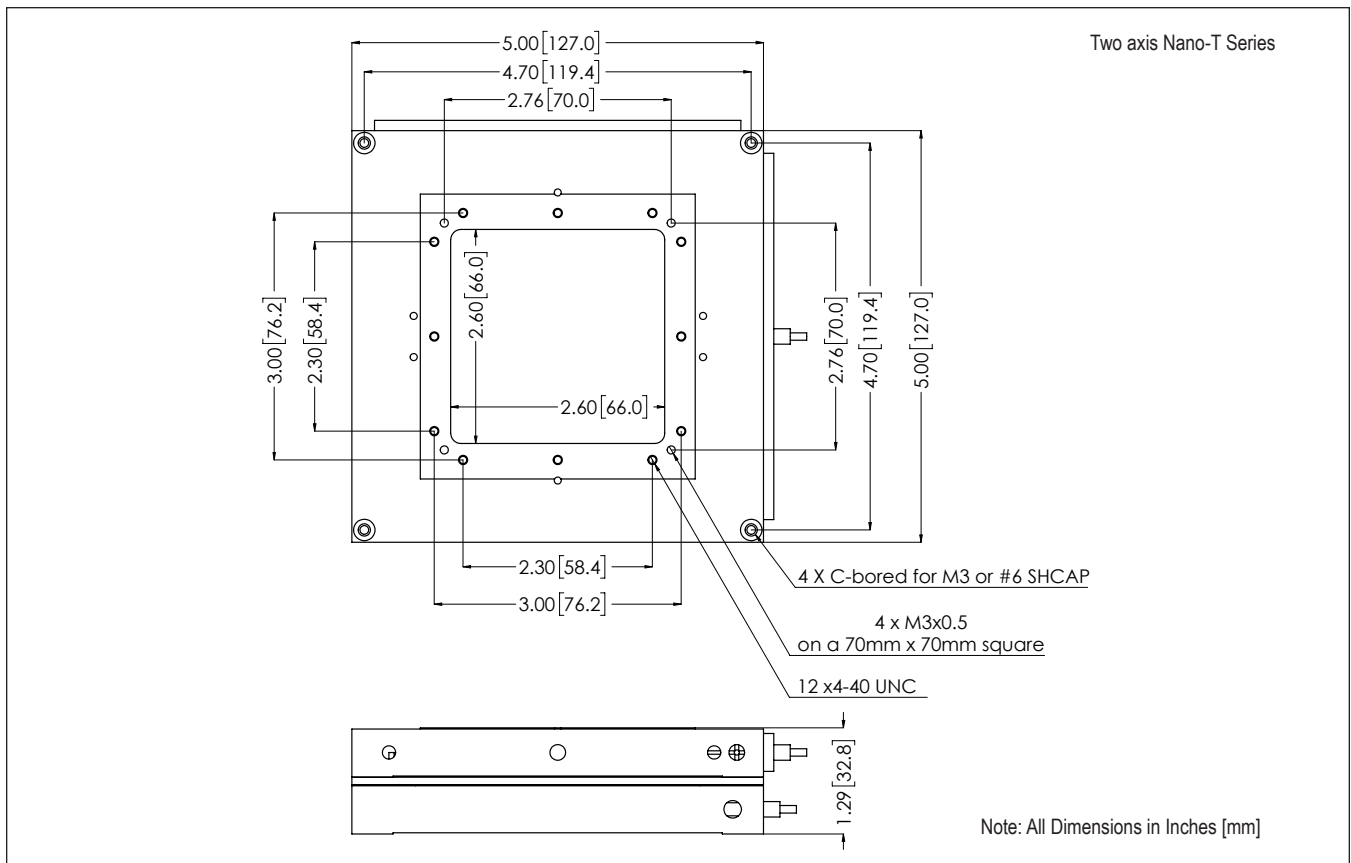
The Nano-T Series are economical, multi-axis piezo nanopositioning systems which are available in XY and XYZ configurations. The Nano-T Series have up to 200 microns range of motion in X and Y, and up to 50 microns in Z. The large center aperture accommodates lenses and probes without compromising performance. Internal position sensors utilizing proprietary PicoQ[®] 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	Models available	Nano-T11
Range of motion (Z)	20 μ m/50 μ m		Nano-T22
Resolution XY (100/200 μ m)	0.2/0.4 nm		Nano-T112
Resolution Z (20/50 μ m)	0.04/0.1 nm		Nano-T115
Resonant Frequencies			Nano-T222
X axis (100/200 μ m)	425/345 Hz \pm 20%		Nano-T225
Y axis (100/200 μ m).....	150/140 Hz \pm 20%		
Z axis	160 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	Aluminum		
Controller	Nano-Drive [®]		

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



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