Nano-M3Z

Features

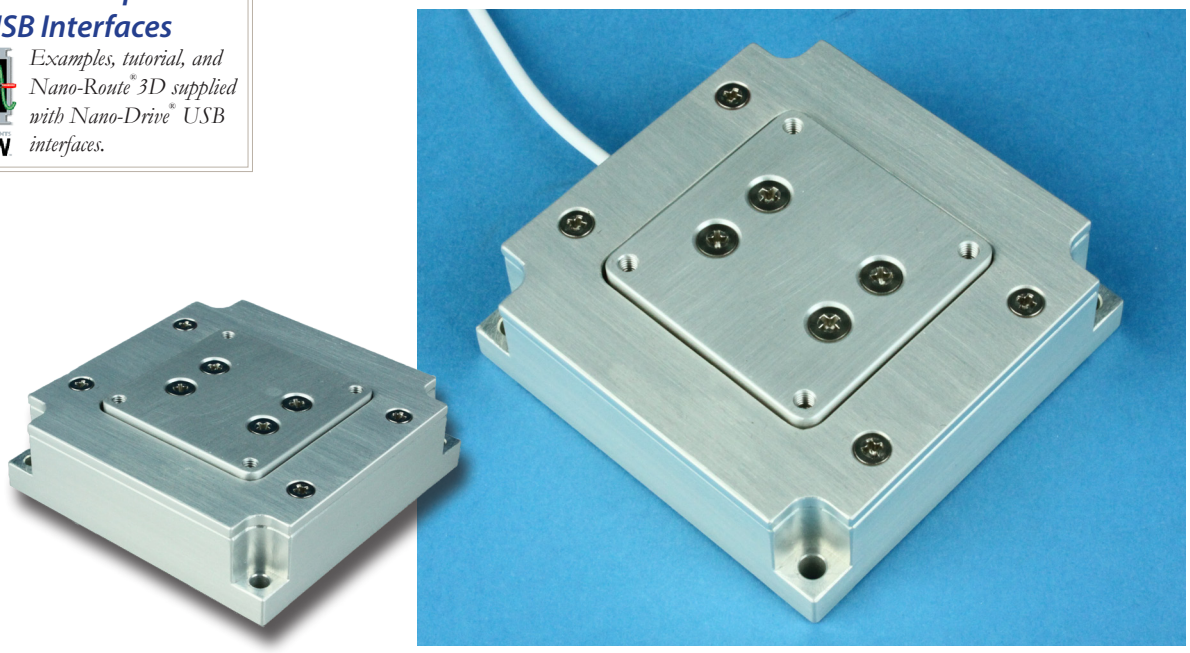
- *Compact design*
- *Three axis motion (Z θ_X θ_Y)*
- *Low profile: 0.76"*
- *pico® sensor technology*
- *Closed loop control*

Typical Applications

- *Z-axis plus tip/tilt alignment*
- *Nanolithography*
- *Metrology*
- *Nano-alignment*

LabVIEW Compatible USB Interfaces

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



Nano-M3Z constructed from aluminum.

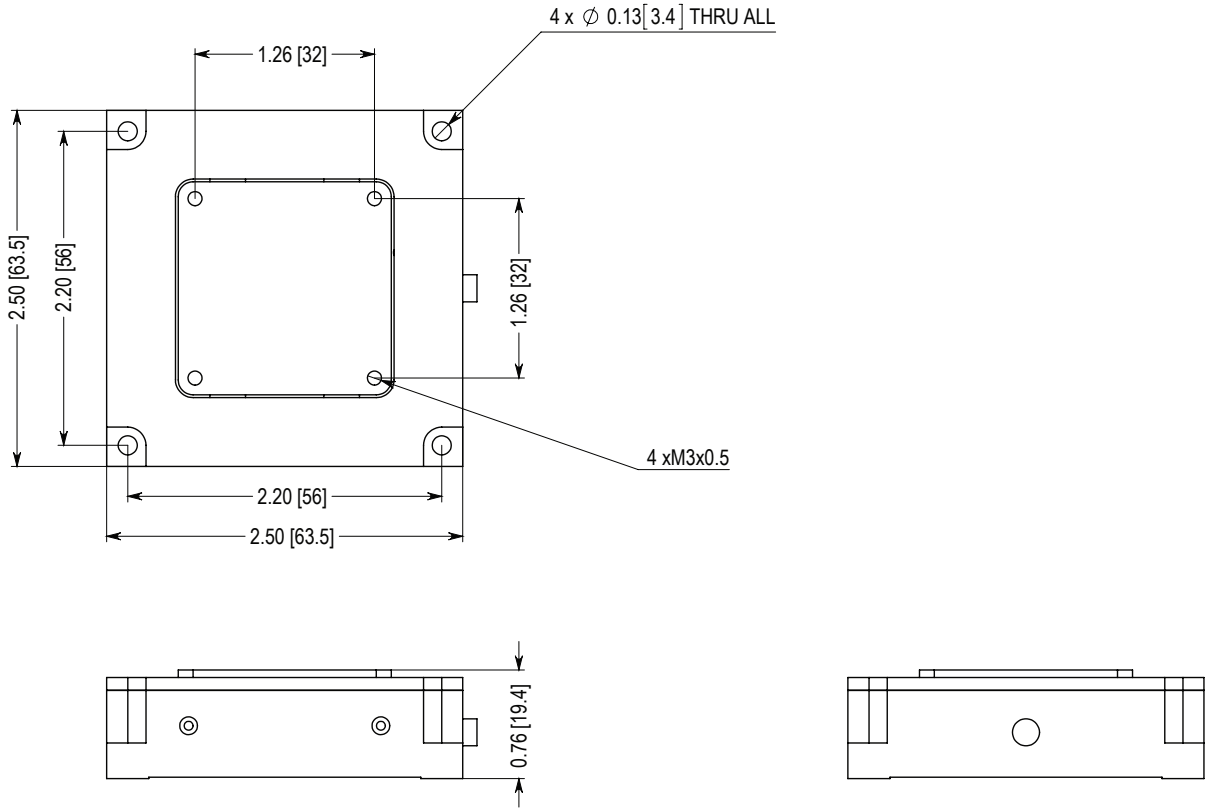
Product Description

The Nano-M3Z is a compact, three axis (Z, θ_X, θ_Y) nanopositioning system constructed from aluminum. The compact design of the Nano-M3Z allows it to be integrated into existing instrumentation where space is restricted. The Nano-M3Z is ideal for demanding applications which require precise alignment capabilities. Internal position sensors utilizing proprietary pico® technology provide absolute, repeatable position measurement with picometer and nanoradian accuracy under closed loop control. A related model, the Nano-Man5, incorporates linear X and Y motion to the the capabilities of the Nano-M3Z.

Technical Specifications

Range of motion (Z) ..... 25 µm
Range of motion (θ_X) ..... 1 mradian
Range of motion (θ_Y) ..... 1 mradian
Resolution (Z) ..... 0.05 nm
Resolution (θ_X) ..... 2 nradian
Resolution (θ_Y) ..... 2 nradian
Resonant Frequency ..... 500 Hz ±20%
Stiffness ..... 1.0 N/µm
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.



Note: All Dimensions in Inches [mm]