

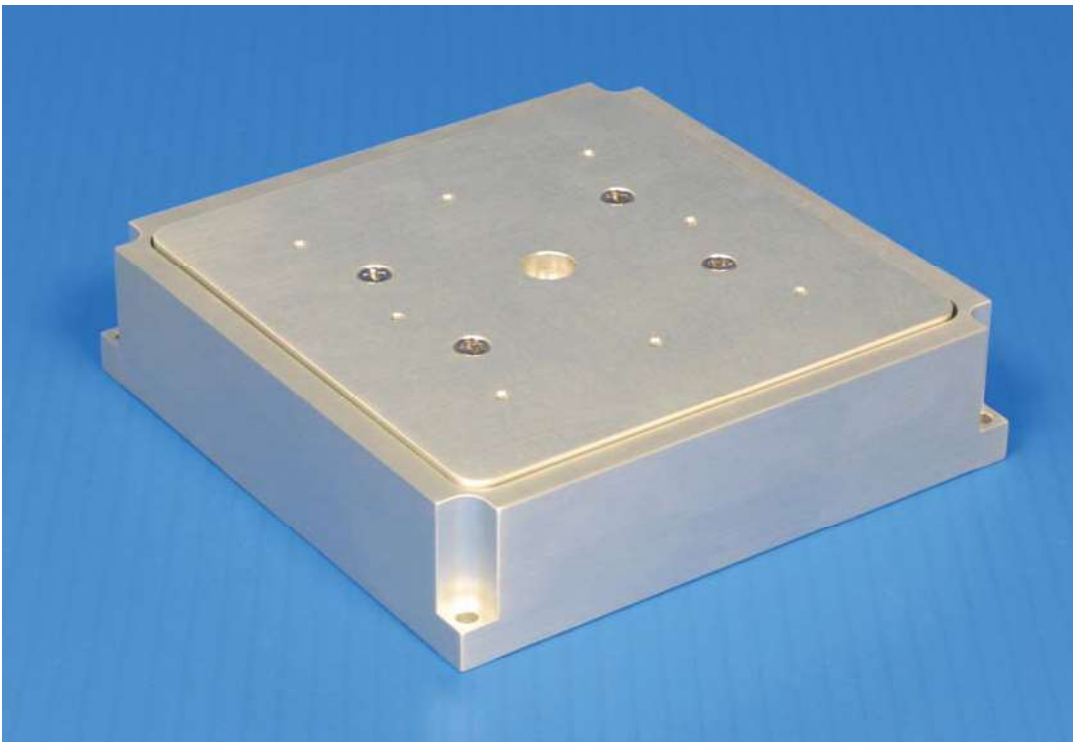
# Nano-CZ500

## Features

- ▶ Single axis (Z) motion
- ▶ Long range motion - 500 $\mu$ m
- ▶ Compact size
- ▶ Closed loop control
- ▶ **pico** sensor technology

## Typical Applications

- ▶ Precision optical alignment and mirror positioning
- ▶ High resolution probe positioning
- ▶ Metrology



*Nano-CZ500 constructed from aluminum.*

### LabVIEW Compatible USB Interfaces



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

## Product Description

The Nano-CZ500 is a compact, long range, single axis (Z-axis) precision nanopositioning system. Internal position sensors utilizing proprietary **pico** technology provide absolute, repeatable position measurement with nanometer resolution under closed loop control. An optional center aperture up to 0.5 inches in diameter

provides an optical pathway through the stage. The Nano-CZ500 can be operated in any orientation and is well suited for static alignment and moderate speed, long range scanning applications.

## Technical Specifications

Range of motion (Z) .....	500 $\mu\text{m}$
Resolution .....	1.0 nm
Resonant Frequency .....	200 Hz $\pm 20\%$
Stiffness .....	1.0 N/ $\mu\text{m}$
Recommended max. load (horizontal)* .....	0.5 kg
Recommended max. load (vertical)* .....	0.1 kg
Body Material .....	Aluminum
Controller .....	Nano-Drive <sup>®</sup>

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

