

# Nano-M250

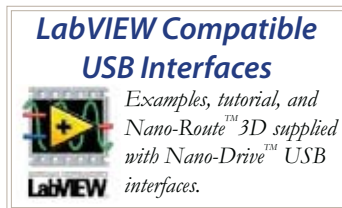
## Features

- ▶ Compact size
- ▶ Two axis motion
- ▶  $50\ \mu\text{m} \times 50\ \mu\text{m}$  ranges of motion
- ▶ 0.5 inch aperture
- ▶ Closed loop control
- ▶ **pico**™ sensor technology

## Typical Applications

- ▶ Alignment
- ▶ Nanolithography
- ▶ Scanning microscopy

02.583.2511 פז"מ-טק (1991) בע"מ  
<Michael.Storch@pazam-tech.co.il>



Nano-M250 (actual size) constructed from titanium.

## Product Description

The Nano-M250 is a compact, two axis nanopositioning system constructed from titanium or invar. The small dimensions of the Nano-M250 allow it to be easily integrated into existing instrumentation for applications such as nanolithography and SEM. The 0.5" center aperture provides a convenient optical pathway or feedthrough for probe assemblies. Internal position sensors utilizing pro-

prietary **pico**™ technology provide absolute, repeatable position measurement with picometer accuracy under closed loop control. The Nano-M250 is also available in high vacuum and ultra high vacuum compatible models.

02.583.2511 פז"מ-טק (1991) בע"מ  
<Michael.Storch@pazam-tech.co.il>

**MCL**

phone: 608-298-0855

fax: 608-298-9525

## Technical Specifications

Range of motion (XY) .....	50 $\mu\text{m}$ x 50 $\mu\text{m}$
Resolution .....	0.1 nm
Resonant Frequency (X) .....	1.0 kHz $\pm$ 20%
Resonant Frequency (Y) .....	700 Hz $\pm$ 20%
Stiffness .....	1.0 N/ $\mu\text{m}$
$\theta_{\text{roll}}$ , $\theta_{\text{pitch}}$ (typical) .....	$\leq 1$ $\mu\text{rad}$
$\theta_{\text{yaw}}$ (typical) .....	$\leq 3$ $\mu\text{rad}$
Recommended max. load (horizontal)* .....	0.5 kg
Recommended max. load (vertical)* .....	0.2 kg
Body Material .....	Invar or Titanium
Controller .....	Nano-Drive™

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

פז"מ-טק (1991) בע"מ

מייקל סטורץ | 02.583.2511

PaZaM-tech@pobox.com

www.PaZaM-tech.co.il

