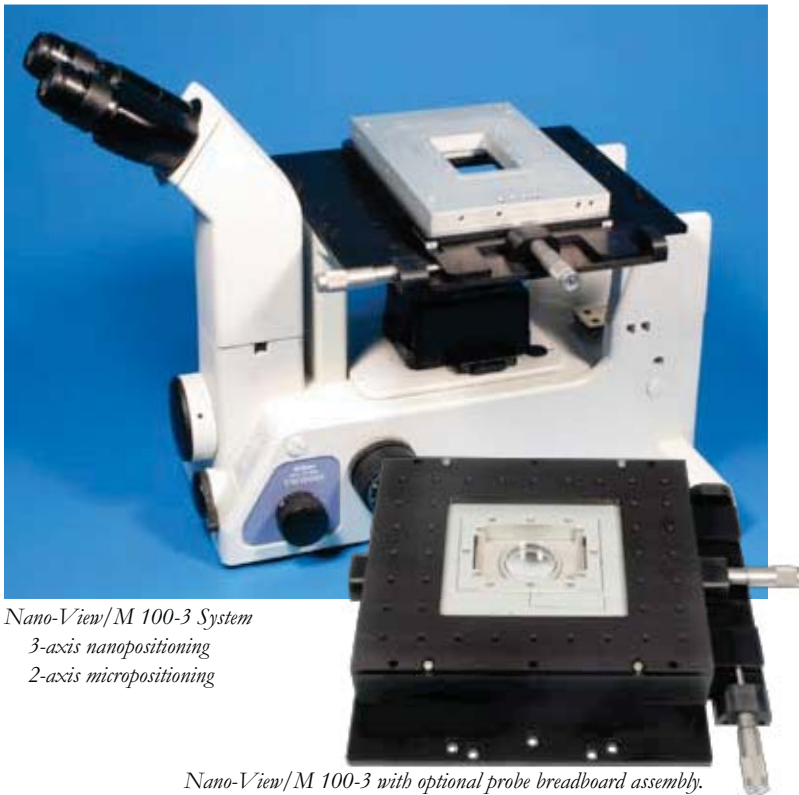


Features

- ▶ Manual micropositioning with nanopositioning
- ▶ 1" (25mm) 2-axis coarse positioning
- ▶ 2-axis or 3-axis nanopositioning
- ▶ Large aperture
- ▶ Retrofit to inverted microscopes
- ▶ **pico**™ sensor technology
- ▶ Closed loop control

Typical Applications

- ▶ Optical microscopy, easy to retrofit
- ▶ Confocal imaging
- ▶ Fluorescence imaging
- ▶ Single molecule spectroscopy
- ▶ Particle tracking
- ▶ Nanomanipulation
- ▶ STORM and PALM imaging



Nano-View/M 100-3 System
3-axis nanopositioning
2-axis micropositioning

Nano-View/M 100-3 with optional probe breadboard assembly.

Compatible Software Packages



Analog motion control

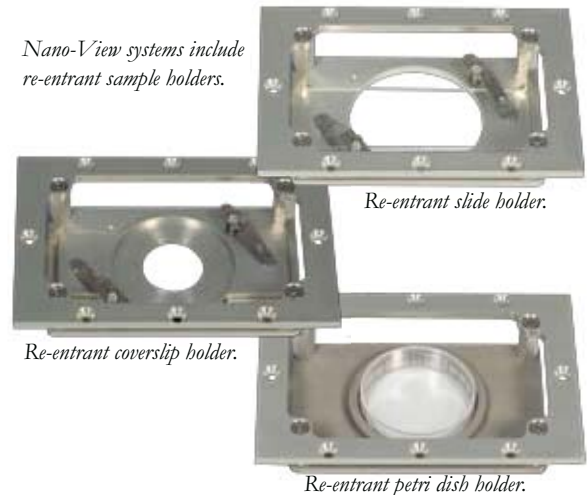
USB and analog motion control

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



USB motion control

Nano-View systems include re-entrant sample holders.



Re-entrant slide holder.

Re-entrant coverslip holder.

Re-entrant petri dish holder.

Product Description

The Nano-View/M™ is a fully integrated positioning system for use with inverted optical microscopes. Easy to operate and affordable, the Nano-View/M™ combines a manual micrometer driven, two axis, linear motion stage with high resolution, long range nanopositioners - either ultra-low profile or ultra-high speed. A stable blocking force of 10 N built into each axis of the coarse positioning stage provides a secure base for precision nanopositioning. The nanopositioning systems built into the Nano-View/M™ have the lowest profiles available and provide sub-nanometer resolution under closed loop con-

trol. The overall height of the Nano-View/M™ with the low profile nanopositioners is only slightly more than standard manual XY stages. An optional breadboard assembly with threaded mounting holes (1/4-20 on a 1 inch pattern or M6 on a 25mm pattern) is a convenient mounting surface for probes. Nanopositioner ranges of motion extend up to 200 microns per axis (X,Y and Z). Internal position sensors utilizing proprietary **pico**™ technology provide absolute, repeatable position measurement. The Nano-View/M™ system includes the Nano-Drive™ controller and is compatible with user written LabVIEW software.

Technical Specifications

Low Profile Nanopositioners

Axes of motion	XY or XYZ
Ranges of motion (XY or XYZ)	100/200/300 μ m
Resolution (100/200/300 μ m)	0.2/0.4/0.6 nm
Resonant Frequencies	
X axis (100/200/300 μ m)	450/400/350 Hz \pm 20%
Y axis (100/200/300 μ m)	350/300/250 Hz \pm 20%
Z axis (100/200/300 μ m)	450/350/250 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
Body Material	Al, Invar or Titanium
Controller	Nano-Drive™

High Speed Nanopositioners

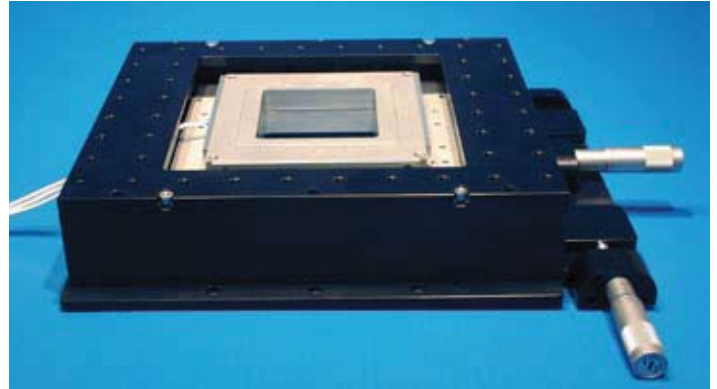
Axes of motion	XY or XYZ
Ranges of motion (XY)	50 μ m or 75 μ m
Range of motion (Z)	50 μ m
Resolution (50/75 μ m)	0.1/0.15 nm
Resonant Frequency (X)	2.5 kHz \pm 20%
Resonant Frequency (Y)	1.5 kHz \pm 20%
Resonant Frequency (Z)	1.0 kHz \pm 20%
Stiffness	3.0 N/ μ m
θ_{roll} , θ_{pitch} (typical)	\leq 1 μ rad
θ_{yaw} (typical)	\leq 3 μ rad
Recommended max. load (horizontal)*	0.5 kg
Body Material	Al, Invar or Titanium
Controller	Nano-Drive™ 85

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

Micropositioning Stage

Axes of motion	XY
Ranges of motion (XY)	25mm
Graduations	10 μ m
Vernier graduations	1 μ m
Body Material	Aluminum

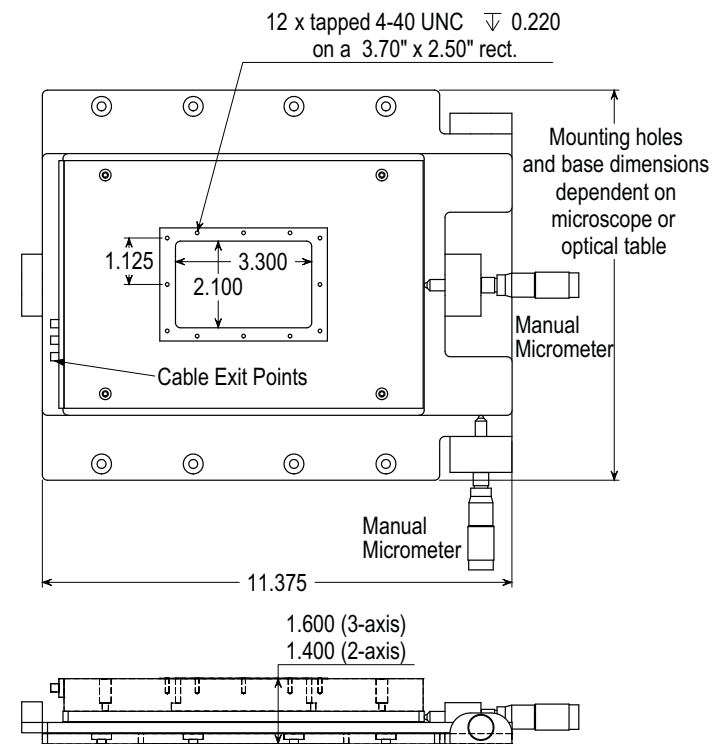
High speed 2-axis and 3-axis Nano-View/M for particle tracking and high speed scanning.



Nano-View/M - PDQ350

High speed 3-axis nanopositioning, 2-axis micropositioning

Note: Additional information regarding the built-in nanopositioning systems can be found on the catalog pages which describe the Nano-LP Series, the Nano-Bio Series, and the Nano-PDQ Series.



Note: All Dimensions in Inches