Nanopositioning Solutions for Microscopy

Nano-LPS & Nano-BioS Series: Slimline nanopositioners



Features

- High stability
- Lowest profile
- 2 or 3 axis nanopositioning
- Up to 300µm per axis
- Low noise
- Closed loop control
- Suitable for 75mm slides

Typical Applications

- Super resolution microscopy
- Fluorescence imaging
- Single molecule imaging
- Optical tweezers
- Fluorescent spectroscopy

Nano-Z Series: Z-axis imaging



Features

- Piezo insert models & large format
- Single axis, up to 500µm motion
- Closed loop control
- Nanometer precision
- High speeds
- Compatible with many microscope stages & accessories

Typical Applications

- Confocal imaging
- Z-stack imaging
- Focus correction
- Fluorescent imaging
- Super resolution microscopy

Nano-MTA Series: Beam steering nanopositioners



Features

- High stability
- Lowest profile
- 1 or 2 axis nanopositioning
- Up to 10mrad per axis
- Low noise
- Closed loop control
- Cage mount versions available

Typical Applications

- Super resolution microscopy
- Fluorescence imaging
- Single molecule imaging
- Optical tweezers
- Interferometry

Nano-F Series: Lens nanopositioning



Features

- Objective lens nanopositioner
- \bullet Up to 200 μm range of motion
- Closed loop control
- Excellent on-axis performance
- Quick mount adapters
- Compatible with all microscopes

Typical Applications

- Super resolution microscopy
- Microscope focussing element
- Autofocus
- Imaging
 - Biophotonics

Also available: Nano-F450



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RM21[™] Microscopes





Above: RM21[™] Versa Microscope

Advantages

- Direct optical access
- Integrated nanopositioning systems
- High stability microscope with precision alignment
- Designed for nanoscopy and light microscopy
- Four models available

Included Features Models	Manual XY	Motorized XY	Automated Obhective	Fixed Objective	TIRF Module	Nanopositioning Axes	Methods Models	Epi-Fluorescence	Super resolution ¹	CoSMoS ²	Dichroic TIRF	Köhler Illumination	Z Drift correction	3D Drift correction
RM21 [™] Versa	•			•		Z	RM21™ Versa	•	•		0	0	0	
RM21™ Classic		•	•			XYZ	RM21™ Classic	•	•		0	0	0	0
RM21 [™] Advanced		•		•	•	XYZ	RM21 [™] Advanced	•	•	•	•	0	0	0
MicroMirror TIRF	•			•		XYZ	MicroMirror TIRF		•	•	0		0	0

The RM21[™] is a versatile microscope suitable for a variety of advanced microscopy and nanoscopy methods. The RM21[™] is available in 4 standard configurations (see table) to satisfy a wide range of applications and budgets.

All RM21[™] microscopes have been engineered for precision alignment and stability, essential elements for advanced microscopy techniques. The targeted microscopy methods routinely employ closed loop nanopositioning systems and all RM21[™] microscopes include Mad City Labs industry leading nanopositioning systems. Unlike conventional optical microscopes, RM21[™] microscopes allow direct access to the optical pathway. This access enables users to employ a variety of microscopy methods using the same central instrument.

RM21[™] microscopes are compatible with 30mm and 60mm cage systems and are designed for use on a standard optical table. This feature makes it convenient to use a variety of off-the-shelf optical components.

The RM21[™] is not only suitable for advanced microscopy methods but also AFM integration and optical tweezers. Please contact our sales engineers to fully explore the possibilities of the RM21[™] microscopes.