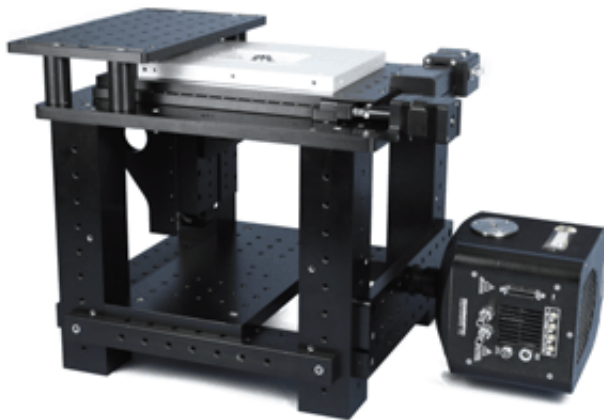




Nano-Cyte[®] Product Update

February 2014



The **Nano-Cyte[®]** Single Molecule Localization Microscope (shown without integrated optics for localization, optional **Cyto-Lite[™]**, or enclosure).

Nano-Cyte[®] Single Molecule Localization Microscope

Mad City Labs offers a completely integrated single molecule localization microscope at an affordable price. The Nano-Cyte[®] Single Molecule Localization Microscope features the patented Nano-Cyte[®] stabilization system with unprecedented 3D stability in the nanometer regime, allowing long term experiments that have not been possible before.

The Nano-Cyte[®] works by using the image of fluorescent fiduciary references, sparsely distributed within the sample, to localize these emitters in all three dimensions. The Nano-Cyte[®] uses this 3D localization information to provide active position adjustments to the sample, thus eliminating drift in the experiment. This method can be applied to fixed or live cell samples with various fluorescence microscopy techniques.

Nano-Cyte[®] is the complete stabilization and image acquisition instrument for advanced fluorescence microscopy. The Single Molecule Localization Microscope package includes the Nano-Cyte[®] integrated nano-positioning and micro-positioning stage; software for stabilization, image acquisition, localization, and rendering; **RM21[™]** microscope platform; integrated optics for localization; optional camera; optional **Cyto-Lite[™]** laser source; and enclosure. Our integrated approach to 3D stabilization yields image stability up to 3nm in X,Y and Z axes. Nano-Cyte[®] has proven stability over days and is a unique offering that promises to revolutionize advanced microscopy methods. Custom versions are available to retrofit to legacy microscope platforms.

* Nano-Cyte[®] Patent Pending

Applications

• Super resolution microscopy • Single molecule imaging • Volumetric imaging & particle tracking • Live cell imaging

NEW Nano-Cyte[®] Features

- exportable DLL
- ability to load pre-existing calibrations
- 3D localization with output to text files
- 3D rendering with output to AVI video
- support for camera binning

Nano-Cyte[®] Advantages

- 3D stabilization up to 3 nanometers
- Active stabilization over days
- Corrects for temperature gradients and drift
- Simultaneous image acquisition and stabilization
- Particle tracking capability
- Integrated hardware and software
- Microscope platform independent

Nano-Cyte[®] Software Update

In response to customer enquiry, Mad City Labs has now made available the Nano-Cyte[®] DLL with all Nano-Cyte[®] instruments.

This DLL allows access to Nano-Cyte[®] technology from Windows user mode applications and provides access to most of the functionality of the Mad City Labs stand-alone Nano-Cyte[®] application. The DLL exposes the localization algorithms, find fiducial algorithms, and control loop adjustments. This allows commercial applications such as LabView[™], µManager or other proprietary OEM software to control image acquisition and hardware while running Nano-Cyte[®] stabilization in the background of the application. The use of the DLL is simple, in that the OEM or customer software acquires the image, and passes that image to the Nano-Cyte[®] DLL for analysis. The Nano-Cyte[®] DLL returns a feedback signal to stabilize the system with the Nano-Cyte[®] hardware.

Nano-Cyte[®] is compatible with

- LabVIEW[™] • µManager • ImageJ & **ImageJVI** • rapidSTORM

In addition, Nano-Cyte[®] has an exportable DLL to allow wider functionality with 3rd party software platforms.

Additional Nano-Cyte[®] Information and Documentation

[Nano-Cyte[®] Brochure](#)



[Nano-Cyte[®] LC Video](#)



[Nano-Cyte[®] Specifications](#)

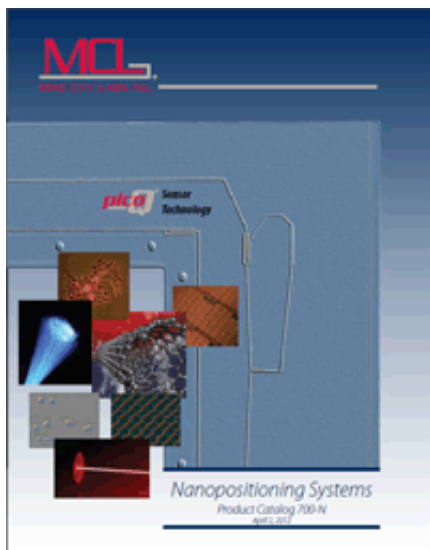


Technical notes on sample preparation and applications are available by request.

Biophysical Society - 58th Annual Meeting: Visit Mad City Labs at Booth 609

February 16-18, Mad City Labs will be showcasing products for advanced fluorescent microscopy as well as micro- and nanopositioning products for precision alignment, optics positioning, mirror tip/tilt, and more. Stop by to see us in Booth 609.

Catalog



Website



Unsubscribe

You are receiving this message because you have expressed interest in Mad City Labs products. If you do not wish to receive future newsletters, please click on the red unsubscribe link above or reply to this message with "Unsubscribe from Nano-Cyte Newsletter" in the subject.

2524 Todd Drive
Madison, WI 53713

USA +1 (608) 298-0855
Europe +41 (0)58 2698017

information@madcitylabs.com
www.madcitylabs.com

© 2014