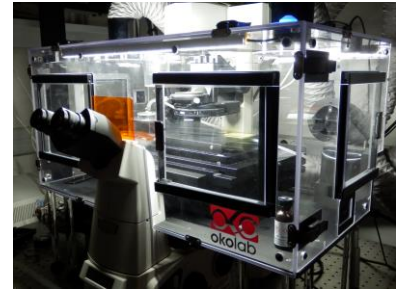
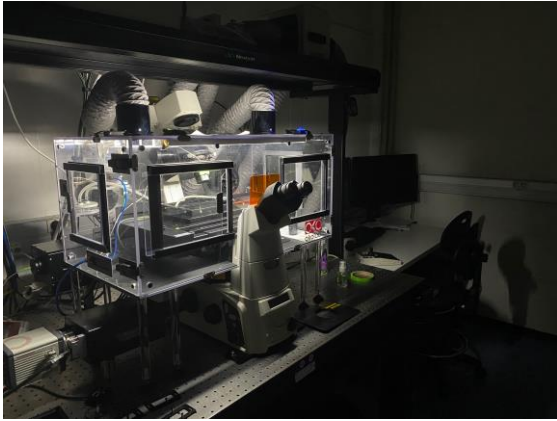


**Manufacturer**  
Nikon

**Model**  
N-STORM Eclipse Ti2-E



## STORM microscope



### Superresolution imaging

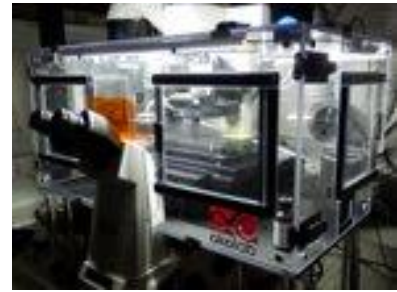
The N-STORM Eclipse Ti2-E is a single molecule localization microscope (SMLM), equipped with 4 different wavelength lasers, a highly speed ORCA Flash 4.0 camera and a *perfect focus system* scanning for super resolution imaging. It has multiple applications in biology, medicine and materials.

It allows:

- Fluorescence imaging
- Stochastic Optical Reconstruction Microscopy (STORM)
- Points Accumulation for Imaging in Nanoscale Topography (PAINT)
- Photo-Activated Localization Microscopy (PALM)
- And multiple possible applications typical from a SMLM microscope, such as for example, *particle tracking*

### Technical specifications:

- Motorized inverted microscope ECLIPSE Ti2-E (with Perfect Focus System)
- LU-NV-E lasers:
  - Diode laser (405 nm, 20 mW); laser class 3B
  - Diode laser (488 nm, 20-70 mW); laser class 3B
  - Diode laser (561 nm, 20- 70 mW); laser class 3B
  - Diode laser (647 nm, 125 mW); laser class 3B
- Fluorescence and STORM filter sets:
  - Filter Block DAPI-1160B ZERO (Semrock)
  - Filter Block FITC (Semrock)
  - Filter Block Texas Red (Semrock)
  - Filter Block Continuous STORM 405/488/561/647 (Chroma)
  - Filter Block Normal STORM
- CFI SR HP Apochromat TIRF 100x Oil (NA 1.49) objective
- Imaging modes:
  - 2D-STORM (normal and continuous mode)
  - 3D-STORM (normal and continuous mode)
- Maximum achievable resolution:
  - 20 nm in XY with STORM
  - 5 nm in XY with DNA-PAINT

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## STORM microscope

### Technical specifications:

- Detector: Camera ORCA-Flash 4.0 sCMOS with:
  - 4 Mega pixels for a 10ms/frame acquisition
  - Acquisition velocity 500 Hz max
  - Minimum exposure per frame: 1 ms
  - Maximum field of view (FOV): 80  $\mu\text{m}$  x 80  $\mu\text{m}$
  - Optimized field of view (FOV): 40.96  $\mu\text{m}$
- Incubation system: for cell culture with optimal temperature conditions and CO<sub>2</sub>/O<sub>2</sub> control system. Heating Inserts (all of them require a #1.5 glass):
  - P GS35- M for:
    - Microscope slides
    - 35 Petry dishes ( $\phi$  35-38 mm) with ring adapter
  - P Labtek-M for:
    - Lab-Tek (Nunc)
    - Chambered slides (BD Falcon)
    - *idibi* slides
- Two-channel syringe pump
  - Rates from 0.0001  $\mu\text{L}/\text{min}$  to 84.7 mL/min
  - Injecting volumes from 0.5 $\mu\text{L}$  to 60mL
- Software acquisition: NIS-Elements AR imaging software

