

Title:

Confocal Microscope

Sub-title:

Leica STELLARIS 5 LIAchroic DMI8 Confocal Microscope: a completely re-imagined core system for confocal microscopy in terms of quality of images and quantity of information generated.

General description:

Stellaris 5 enables fluorescence imaging and optical sectioning of live or fixed cells or/and 3D specimens. The Power HyD-S detectors provides higher photon detection efficiency, extremely low dark noise, and sensitive spectral detection from 410 to 850 nm. A smart user interface guides you through your experiment set up and acquisition in an easy and intuitive manner.

Features:

- 4 solid state laser lines covering the full spectrum: 405, 488, 561, 638 nm
- 3 power hybrid spectral detectors (power HyD-S) that provide higher photon detection efficiency
- 4 objectives: HC PL FLUOTAR 10x/0.30; HC PL APO 10x/0.40 CS2; HC PL APO 20X 0.75 dry; HC PL APO 63X 1,4 oil immersion
- Galvo scanner configuration
- Metal halide bulb lamp for epifluorescence imaging
- Maximum resolution 120 nm with Lightning super-resolution technology
- It permits to distinguish fluorophores very close in the spectrum
- It permits to distinguish a fluorescence emission with different lifetime
- Okolab microincubator with CO₂, temperature and humidity control included
- Fast image acquisition speed: 10fps
- Aivia, LAS X, and ImageCompass analysis software

Applications:

- Characterization of 3D biological constructs
- Live cells time-lapse imaging
- Characterization of small particles loaded with a fluorophore
- Exploration of molecular functions in the cellular context
- Image analysis for hidden insights