

Leica Stellaris Confocal Technical specs

Leica STELLARIS is an inverted point-scanning confocal microscope. It combines a White Light Laser (WLL), spectral detection, and FALCON fluorescence lifetime imaging (FLIM). Its flexible excitation and detection ranges, together with a broad selection of dry and immersion objectives, make it the state-of-the-art system for multiscale fluorescence imaging, live-cell imaging and spectrally complex specimens.

Imaging modalities and features

Brightfield | Epi-Fluorescence
Confocal | Spectral imaging | FLIM (Falcon)
TauSense fluorescence-lifetime contrast
LIGHTNING image restoration / super-resolution

Excitation light / lasers

405 nm laser diode
White Laser: 485–685 nm & NIR up to 790 nm
Cool LED white (Epi)fluorescence)

Scanners

8 kHz Tandem Scanner Galvanometric and Resonant

Detectors

K3C color camera | 6.3 MP | 15 fps | pixel 2.4 μm
3 $\times$ HyD S | 1 $\times$ HyD X spectral detectors
Spectral detection range up to 850 nm

Objectives (DRY, Water, Glycerol, oil)

5 $\times$ /0.15 PL FLUOTAR | 10 $\times$ /0.40 PL APO CS2 | 40 $\times$ /0.95 PL APO
25 $\times$ /0.95 FLUOTAR L W VISIR
20 $\times$ /0.75 HC PL APO IMM CORR | 40 $\times$ /1.25 HC PL APO GLYC CORR
63 $\times$ /1.40 OIL HC PL APO

Sample formats & INCUBATION

Slides & coverslips, glass bottom petri dishes
Okolab incubation chamber, heating&cooling (15C to 37C),
5%CO2 and humidity control

Software Las X & AI Aivia go

