

Leica SP8 confocal microscope



Capabilities:

- High sensitivity point scanning confocal
- High-sensitivity GaAsP HyD detectors with photon counting
- Spectrally tunable emission bands
- Resonant scanner for low photo-toxicity
- inverted configuration
- 3D z-stacks, timelapse, stitching, multi-position timelapse, autofocus.

Detailed specifications:

Microscope:

- Leica based on the DMI8 series inverted research microscope.
- Motorized scanning stage

Lasers:

- 405 nm Diode laser
- Solid state 448 nm (40mW)
- Solid state 488 nm (20mW)
- Solid state 514 nm (20mW)
- Solid state 552 nm (20mW)

Tandem scanners (select at software initialization)

- Conventional scanner – 7fps at 512*512
- Resonant scanner (8 000 Hz) - 28 fps at 512*512

Fluorescence filters for eyepiece vizualization:

- DAPI excitation BP 350/50, emission BP 460/50
- FITC excitation BP 480/40, emission BP 527/30
- Texas Red excitation BP 560/40, emission BP 630/75
- CFP-YFP excitation BP 435/25, BP 500/20, emission BP 470/25, BP 535/20

Objectives:

- PL APO 10x/0.4, working distance (WD) 2.2mm
- PL APO 20x/0.75, working distance (WD) 0.62mm
- PL APO 40x/1.1 water, working distance (WD) 0.65mm
- PL APO 63x/1.2 water, working distance (WD) 0.3mm
- PL APO 63x/1.4 oil, working distance (WD) 0.14mm

Detectors:

- Five channels - two PMTs, three HyDs - high sensitivity Hybrid Detectors - HyD1 | PMT2 | HyD3 | PMT4 | HyD4
- All spectral detectors
- Motorized transmitted light detector