Olympus Fluoview FV3000 Confocal Microscope

The FV3000 confocal microscope is configured with numerous light sources and versatile scanners to enable complex multi-channel imaging, FRET, FRAP and more. Equipped with a live-cell imaging chamber and multiple stage adapters, it's the perfect solution for any confocal imaging experiment.

Technical specifications

Imaging modality:
Confocal, widefield, contrast brightfield
Microscope body:
Olympus IX83, inverted
Light sources:
405 nm (50 mW), 488 nm (20 mW), 561 nm (20 mW), 640 nm (40 mW)
445 nm (75 mW), 514nm (40 mW), 594 nm (20 mW)
Scanners:
FV3000RS (Galvanometer and Resonant scanning mirrors)
Detectors:
High Sensitivity-Spectral Detectors (cooled GaAsP photomultiplier)
Objectives:
10X/NA0.4, 20X/NA0.75, 30X/NA1.05 (Silicon), 40X/NA1.25 (Silicon), 60X/NA1.3 (Silicon), 60X/NA1.35 (Oil)
Carriers:
Glass slides, Attofluor chambers, multi-well plates, chamber slides
Contrast methods:
DIC, Phase
Controlling software:
FluoView FV31S-SW
Other:
Temperature-controlled blackened live-cell imaging chamber

Olympus Fluoview FV4000 Confocal Microscope

The next-generation FV4000 confocal microscope is equipped with highly sensitive SilVIR detectors with enormous dynamic range, unlocking new possibilities in quantitative confocal imaging, including photon counting and confocal pinhole oversampling. The cellSens FV software facilitates automated experiments with complex dimensional XYZT imaging, and image tiling and stitching.

Technical specifications

Imaging modality:
Confocal, widefield, high-dynamic range photon counting
Microscope body:
Olympus IX83, inverted
Light sources:
405 nm, 488 nm, 561 nm, 640 nm
Scanners:
FV4000RS (Galvanometer and Resonant scanning mirrors)
Detectors:
SilVIR detectors with high-dynamic range linear detection and photon counting
Objectives:
20X/NA0.80, 40X/NA0.95 , 60X/NA1.42 (Oil)
Carriers:
Glass slides, Attofluor chambers, multi-well plates, chamber slides
Controlling software:
cellSens FV
Other:
Temperature-controlled blackened live-cell imaging chamber

Abbelight SAFe 180 Super-Resolution Nanoscope

The Abbelight SAFe 180 Super-Resolution nanoscope is equipped for multiple advanced imaging modalities including STORM, TIRF and single particle tracking. The SAFe180 nanoscope's ASTER technology offers homogeneous illumination over a 150 x 150 µm field of view—the largest field of view for STORM imaging on the market. The system achieves STORM localisation precisions of <15nm, perfect for directly quantitative studies of single molecules. 3D STORM imaging is also possible through the equipped astigmatism lens. The system is also equipped with a live-cell imaging chamber to enable live TIRF imaging and single-particle tracking.

Technical specifications

Imaging modality:
SMLM STORM, TIRF, HiLo, single-particle tracking, PAINT, widefield
Microscope body:
Olympus IX83, inverted
Light sources:
405 nm (54 mW), 488 nm (44 mW), 561 nm (360 mW), 640 nm (600 mW)
Camera:
Hamamatsu Orca-Fusion (CMOS), Evolve 512 Delta (EMCCD)
Objectives:
10X/NA0.4, 100X/NA1.45 (Oil)
Carriers:
Glass slides, Attofluor chambers, chamber slides
Controlling software:
Abbelight SAFe NEO, cellSens
Other:
Temperature-controlled blackened live-cell imaging chamber

Nikon ECLIPSE Ti-E Spinning Disk Microscope

The Nikon ECLIPSE Ti-E Spinning Disk microscope is equipped for live-cell imaging with a CrestOptics X-Light V2 spinning disk module, providing a large 25 mm field of view and high-speed fluorescence imaging that is gentle on live-cells. It is perfect for live-imaging of biosensors including Ca2+, cAMP, ATP/ADP, and reactive oxygen species. It is compatible with FRET sensors.

Technical specifications

Imaging modality:
Spinning disk confocal, widefield
Microscope body:
Nikon ECLIPSE Ti-E, inverted
Light sources:
89 North LDI-7
Camera:
Teledyne Prime BSI Express sCMOS
Objectives:
10X/NA0.30, 20X/NA0.75, 60X/NA1.4 (Oil)
Carriers:
Glass slides, Attofluor chambers, multi-well plates, chamber slides
Controlling software:
Oxford Instruments MetaMorph
Other:
CrestOptics X-Light V2,
Temperature-controlled blackened live-cell imaging chamber

Leica TCS SP8 Microscope

The Leica TCS SP8 microscope is a user-friendly and robust upright fully-motorised confocal microscope which is easy to use and reliable for routine imaging applications. The Leica LAS X integrated software solution is intuitive for users with all ranges of imaging experience.

Technical specifications

Imaging modality:
Confocal, widefield
Microscope body:
Leica TCS SP8, upright
Light sources:
405 nm, 488 nm, 561 nm, 633 nm
Scanners:
Leica HyD detectors and Leica PMT
Objectives:
10X/NA0.30, 40X/NA0.70, 63X/NA1.30 (Oil)
Carriers:
Glass slides, chamber slides
Controlling software:
Leica LAS X