

Olympus SpinSR spinning disk

Technical Specifications

- Olympus IX83 inverted microscope with TruFocus drift compensation, motorised stage, piezo Z drive and motorised condenser with DIC
- Olympus IXplore spinning disk system based on Yokogawa CSU-W1 SoRa (50µm and SoRa disks)
- 4 diode lasers – 405nm (50mW), 488 nm (100 mW), 561nm (100mW) and 640nm (100mW).
- 2 Hamamatsu Fusion BT sCMOS cameras
- Blacked-out environmental chamber (PECON) with temperature control and CO2 enrichment
- Olympus CellSens imaging software with 3D deconvolution and super-resolution modules

Filters/dichroics for spinning disc imaging

Example fluorophore	Excitation	Dichroic mirror	Emission filter
DAPI	405	Quad 405/488/561/640	BP 447/60
GFP	488	Quad 405/488/561/640	BP 525/50
CY3	561	Quad 405/488/561/640	BP 617/73
CY5	640	Quad 405/488/561/640	BP 685/40

Lenses

Lens	Numerical aperture	Dry/imm	DIC	Features	Working distance (mm)
4x	0.16	Dry	Yes		13
10x	0.4	Dry	Yes		3.1
20x	0.8	Dry	Yes		0.6
30x	1.05	Silicone	Yes	Correction collar	0.8
60x	1.3	Silicone	Yes	Correction collar	0.3
60x	1.5	Oil	Yes	Correction collar	0.11