

MI-SIM Specifications

System Specifications

Imaging Modes	All 25 modes: Widefield: brightfield, fluorescent widefield, oblique (multi-angle) TIRF: TIRF (multi-angle), TIRF-SIM (multi-angle) 2D SIM: 2D-SIM (multi-angle), 2D-SIM Stack (multi-angle) 3D SIM: 3D-SIM (multi-angle), 3D-SIM Slice (multi-angle)
Resolution	XY : 60 nm † Z : 200 nm †
Imaging Speed*	Max. 49 fps @16 bit/2048 × 2048 (with sCMOS ORCA-Fusion BT) Max. 564 fps @16 bit/144 × 2048 (with sCMOS ORCA-Fusion BT) Max. 330 fps @8 bit/2048 × 2048 (with sCMOS Kinetix) Max. 699 fps @8 bit/1024 × 3320 (with sCMOS Kinetix)
Field of View	Max. 150 × 150 μm @100 × magnification Max. 250 × 250 μm @60 × magnification
Lasers	Compatible multi-color coupled lasers Standard: 405 nm、488 nm、561 nm、640 nm Optional: 445 nm、473 nm、515 nm、532 nm、594 nm、607 nm、647 nm ☆
Objectives	Suitable for 20 ~ 100 × with immersion of oil, silicone oil, water and air
Multi-channel Imaging	High-speed sequence imaging with multi-color wheel Multi-FOV, multi-channel with multi-camera imaging
Post-processing	Computational SR, deep learning, denoise, background removal, co-localization analysis, etc.

† 60 nm and 200 nm correspond to computational SR, 85 nm and 300 nm correspond to optical SR

* The super-resolution reconstruction with Rolling can achieve ultimate speed

☆ Compatible with typical fluorescence excitation wavelengths