

LEICA DMI STED SUPER-RESOLUTION Set Up with FLIM Capability

LASERS:

Tune-able White LIGHT PULSED LASER (470nm-670nm).

Diode 405nm Laser

STED depletion 775nm pulsed Laser (theoretical x,y resolution down to 50nm).

STED depletion 660nm laser

STED depletion 592 laser

Detectors:

2 Photomultipliers (PMT)

3 Hybrid detectors with Gating (HYD-SMD) for sensitivity and single photon counting.

Scanners:

Regular Scanner - Field of view of scanner (1Hz to 1800 Hz)

Resonant scanner - low photo toxicity, can achieve scan speeds to 40fps at 512 by 512 pixels.

Regulated Environment Chamber:

Temperature, CO₂, Humidity - for live cell imaging

FRAP/FRET Capabilities

FALCON- Fluorescence lifetime imaging module (FLIM) Capabilities for FLIM-FRET analysis

Motorized Stage:

Piezoelectric stage

Navigator view

Tiles & Position and timed XYZT acquisition capabilities

Objectives:

Name	Magnification	NA / immersion	WD (mm)	Motorized Collar correction
HC PL APO CS2	10x	0.4 /dry	2.74	no
HC PL APO CS2	20x	0.75 /dry	0.68	no
HC PL APO STED motCORR	93x	1.3 / glycerol	0.3	yes
HC PL APO STED	100x	1.4 / oil	1.4	no

Brightfield / Reflectors:

Transmitted BF/DIC/POL	DAPI
FLUO-DIC	DAPI/FITC/TXRED GFP RHOP_LP

SOFTWARE:

STED / 3D for LASX

Physiology/ Time Series

FALCON module for FLIM analysis