

Zeiss Z.1 Lightsheet

- 405, 488, 515, 561, 638nm lasers
- IR LED for brightfield imaging
- Sample chambers and optics for live or cleared samples (up to 10 x 10 x 20mm)
- Dual PCO edge sCMOS cameras for simultaneous 2 channel detection (1920 x 1920 pixels, 6.5 micron pixel size)
- Detection zoom 0.36 – 2.5x
- Peltier block for heating and cooling sample (10 – 42 deg C)
- CO2 enrichment module

Lenses:

Lens	Lens type	NA	Working distance (in millimeters)	Features
5x EC Plan NeoFluar	Dry	0.16	18.5	
10x W Plan Aplanachromat	Water	0.5	3.7	
20x W Plan Aplanachromat	Water	1.0	2.4	Correction collar for Refractive indexes 1.33 – 1.36
40x W Plan Aplanachromat	Water	1.0	2.5	
20x Clr Plan Neofluar	Clearing	1.0	5.6	Correction collar for refractive indexes 1.45 +/-0.3

Filter set 1 (standard):

Dichroic	Camera 1 emission filter	Camera 2 emission filter	Example Fluorophores
LP 490	BP 420 - 470	BP 505 - 545	DAPI + GFP
LP 510	BP 420 - 470	BP 575 - 615	DAPI + tdTomato
LP 510	BP 460 - 500	BP 525 - 565	CFP + YFP
LP 580	BP 505 - 545	LP 660	GFP + Alexa 647
LP 560	SP 550	LP 585	GFP + mCherry

Filter set 2 (available on request):

Dichroic	Camera 1 emission filter	Camera 2 emission filter	Example Fluorophores
LP 490	SP 490	LP 505	DAPI + GFP
LP 510	BP 460 - 500	BP 525 - 565	CFP + YFP
LP 560	BP 505 - 545	BP 575 - 615	GFP + tdTomato
LP 560	SP 550	LP 585	GFP + mCherry
LP 640	BP 575 - 615	LP660	mCherry + Alexa 647