

INSTRUMENT SPECIFICATION SHEET



Location	Biosciences 2, room 138						
Stand	Upright NI-E						
Illumination	Transmitted			Fluorescence			
	12V /100W Halogen lamp			Intensilight C-HGFI (130W Metal halide)			
Filters	Name	Excitation	Dichroic	Emission			
	DAPI	340-380	400	435-485	MBE41305		
	FITC	465-495	505	515-555	MBE44725		
	TRITC	528-553	565	590-650	MBE45605		
Lasers	Type		Wavelength		Maximum output		
	LD		405		20 mW		
	Diode		445		20 mW		
	LD		488		20 mW		
	Diode		514		20 mW		
	DPSS		561		20 mW		
	LD		640		40 mW		
Stage control	Motorized XY stage, Piezo stage (100 micron travel)						
Objectives Specification	Magnification	Type	NA	Working distance (um)	Coverslip Thickness (um)		Resolution at 550nm (Glycerol mounted) #Water mounted
4x CFI Plan Apochromat lambda MRD00045	4x	Dry	0.2	20000	170	-	Lateral:1100 Axial:2619
10x CFI Plan Apochromat lambda MRD00105	10x	Dry	0.45	4000	170	DIC N1	Lateral: 489 Axial: 1164
20x CFI Plan Apochromat lambda MRD00205	20x	Dry	0.75	1000	170	DIC N2	Lateral: 293 Axial: 655
40x CFI Plan Fluor MRH01401	40x	Oil	1.3	200	170	DIC N2	Lateral: 169 Axial: 403
60x CFI Plan Apochromat lambda MRD71600	60x	Oil	1.4	130	170	DIC N2	Lateral: 157 Axial: 374
*CFI Apo NIR 40x W MRD07420	40x	Water	0.8	3500	0	-	Lateral : 275 Axial:962.5#
* CFI Apo NIR 60x MRD07620	60x	Water	1.0	2800	0	-	Lateral:220 Axial:770#
*CFI Fluor 20x W MRF07220	20x	Water	0.5	2000	0	-	Lateral: 440 Axial:1540#

Detectors	#	Type	Details
DU3	3	PMT	
CB	2	Spectral GaAsP PMT	Dichroic to be installed for simultaneous imaging Spectrum scan mode: 400-720 narrowest 10nm
DIA	1	T-PMT	Transmitted light detector
Software	NIS Elements AR 4.6		
Holder	Slides, multiwell and petri dishes		
Applications	Live and fixed samples		
File Saving	External USB		
Extra features	Deconvolution running on GPU, JOBS conditional acquisition module, General Analysis module, FRET analysis module		

*this objectives are not currently installed in the microscope, users that wish to use them will have to attend a specific training