

## INSTRUMENT SPECIFICATION SHEET



<b>Location</b>	Biosciences 2, room 138						
<b>Stand</b>	Upright NI-E						
<b>Illumination</b>	<b>Transmitted</b>			<b>Fluorescence</b>			
	12V /100W Halogen lamp			Intensilight C-HGFI ( 130W Metal halide)			
<b>Filters</b>	<b>Name</b>	<b>Excitation</b>	<b>Dichroic</b>	<b>Emission</b>			
	DAPI	340-380	400	435-485	MBE41305		
	FITC	465-495	505	515-555	MBE44725		
	TRITC	528-553	565	590-650	MBE45605		
<b>Lasers</b>	<b>Type</b>		<b>Wavelength</b>		<b>Maximum output</b>		
	LD		405		20 mW		
	Diode		445		20 mW		
	LD		488		20 mW		
	Diode		514		20 mW		
	DPSS		561		20 mW		
	LD		640		40 mW		
<b>Stage control</b>	Motorized XY stage, Piezo stage (100 micron travel)						
<b>Objectives Specification</b>	<b>Magnification</b>	<b>Type</b>	<b>NA</b>	<b>Working distance (um)</b>	<b>Coverslip Thickness (um)</b>		<b>Resolution at 550nm (Glycerol mounted) #Water mounted</b>
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 <sup>#</sup>
*CFI Apo NIR 40x W MRD07420	40x	Water	0.8	3500	0	-	Lateral : 275 Axial:962.5 <sup>#</sup>
* CFI Apo NIR 60x MRD07620	60x	Water	1.0	2800	0	-	Lateral:220 Axial:770 <sup>#</sup>
*CFI Fluor 20x W MRF07220	20x	Water	0.5	2000	0	-	Lateral: 440 Axial:1540 <sup>#</sup>

<b>Detectors</b>	<b>#</b>	<b>Type</b>	<b>Details</b>
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
<b>Software</b>	NIS Elements AR 4.6		
<b>Holder</b>	Slides, multiwell and petri dishes		
<b>Applications</b>	Live and fixed samples		
<b>File Saving</b>	External USB		
<b>Extra features</b>	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