

Olympus FV3000 (School of Physics) INSTRUMENT SPECIFICATION SHEET



BIOLOGICAL
OPTICAL
MICROSCOPY
PLATFORM

Location	Room 259, School of Physics (David Caro, Building 192)				
Stand	Olympus IX83				
Illumination	Transmitted		Fluorescence		
	FV31-LETD		U-HGLGPS		
Filters	Name	Excitation	Dichroic	Emission	
	U-FUNA	360-370	410	420-460	DAPI
	U-FBNA	470-495	505	510-550	GFP
	U-FGWA	530-550	570	575-625	RFP/dsRED
	FLIM Cube		505	509-548	GFP
	FLIM Cube		Cold mirror	463-513	CFP
	FLIM Cube		Cold mirror	594-646	mCherry
	FLIM Cube		Cold mirror	661-691	Cy5
FLIM Cube	50/50 polarised beam splitter				
Lasers	Type	Wavelength			
	SSD	405 nm			
	SSD	488 nm			
	SSD	561 nm			
	SSD	640 nm			
	Pulsed	440 nm (20-80 MHz)			
	Pulsed	488 nm (20-80 MHz)			
Pulsed	594 nm (20, 50, 80 MHz)				
Stage control	Olympus ultrasonic motorized stage with z drift compensation (780nm laser)				
Objectives Specification	Magnification	Type	NA	Working distance	Coverslip Thickness
Plan Apo (PLANPOAN1.25X)	1.25x	Air	0.04	5	0.1-2.0 mm
U PLAN S Apo (UPLASAPO10X2)	10x	Air	0.4	3.1	0.17 mm
U PLAN S Apo (UPLASAPO20X)	20x	Air	0.75	0.6	0.17 mm
U Plan S Apo (UPLSAPO40X2)	40x	Air	0.95	0.18	0.11-0.23 mm (Corr. collar)
U Plan S Apo (UPLSAPO60XW)	60x	Water	1.2	0.28	0.13 – 0.21 mm (Corr. collar)
PlanApo N (PLANAPON60XO)	60x	Oil	1.42	0.15	0.17 mm
Detectors	#	Type	Details		
	2	GaAsP	GaAsP PMT with Tru Spectral detection. QE = 45%		
	1	Trans	Transmitted light PMT (FV31-LETD)		
	2	PMT	Hamamatsu (H7422P)		
Software	Olympus FV31S, VistaVision (ISS FLIM & FFS modules), SimFCS software				
Holder	Slide, dish and microtiter plate holders. Tokai hit stage top incubator				