

# Olympus FV3000 (Biochemistry & Molecular Biology)



BIOLOGICAL  
OPTICAL  
MICROSCOPY  
PLATFORM

## INSTRUMENT SPECIFICATION SHEET

<b>Location</b>	Room 120, Bio21 Institute				
<b>Stand</b>	Olympus IX83				
<b>Illumination</b>	<b>Transmitted</b>			<b>Fluorescence</b>	
	FV31-LETD			U-HGLGPS	
<b>Filters</b>	<b>Name</b>	<b>Excitation</b>	<b>Dichroic</b>	<b>Emission</b>	
	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
<b>Lasers</b>	<b>Type</b>		<b>Wavelength</b>		
	SSD		405 nm		
	SSD		488 nm		
	SSD		561 nm		
	SSD		640 nm		
	Pulsed		488 nm (80-400 MHz)		
	Pulsed		594 nm (20, 50, 80 MHz)		
<b>Stage control</b>	Olympus ultrasonic motorized stage with z drift compensation (780nm laser)				
<b>Objectives Specification</b>	<b>Magnification</b>	<b>Type</b>	<b>NA</b>	<b>Working distance (mm)</b>	<b>Coverslip Thickness</b>
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 (UPLSAPO20X)	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
<b>Detectors</b>	<b>#</b>	<b>Type</b>	<b>Details</b>		
	2	GaAsP	GaAsP PMT with Tru Spectral detection. QE = 45%		
	1	Trans	Transmitted light PMT (FV31-LETD)		
	2	PMT	ISS PMT		
<b>Software</b>	Olympus FV31S, VistaVision (ISS FLIM & FFS modules), SimFCS software				
<b>Holder</b>	Slide, dish and microtiter plate holders. Tokai hit stage top incubator				