Evident FV4000 (Peter Doherty Institute)

INSTRUMENT SPECIFICATION SHEET

Location	Room 8023, Dept of Microbiology & Immunology, Peter Doherty Institute				
Stand	Evident IX83 (Inverted microscope)				
Illumination	**Transmitted**			**Fluorescence**	
	IX3-LHLEDC-1-3 LED			U-LGPS LED AND LDP	
Filters	**Name**	**Excitation**	**Dichroic**	**Emission**	Part Number
	U-FUNA	BP 360-370	DM 410	420-460	N2712100
	U-FBNA	BP 470-495	DM 505	510-550	N2712800
	U-FGWA	BP 530-550	DM570	575-625	N2713000
Laser Scanner	Galvano scanner (Scanning resolution up to 4096 x 4096)				
	Resonant scanner (Scanning resolution up to 1024 x 1024)				
Lasers	**Type**		**Wavelength**		**Maximum output**
	Direct Diode		405nm		50mW
	Direct Diode		445nm		75mW
	Optically Pumped Semiconductor Laser		488nm		20mW
	Optically Pumped Semiconductor Laser		561nm		20mW
	Optically Pumped Semiconductor Laser		594nm		20mW
	Direct Diode		640nm		40mW
	Direct Diode		685nm		40mW
	Direct Diode		730nm		30mW
	Direct Diode		785nm		100mW
Stage control	Motorsied xyz stage control with z-stack, tile scan and point visiting functions. Zero drift compensator (ZDC) for automated z-drift correction.				

Objectives Specification	**Magnification**	**Type**	**NA**	**Working distance**	**Coverslip Thickness**	**Resolution at 550nm**
PLAPON 1.25X	1.25x	Air	0.04	5mm	0.17 (#1.5)	5610um(xy) 19250um(z)
UPLXAPO 10X	10x	Air	0.4	3.1mm	0.17 (#1.5)	550um (xy) 1925um (z)
UPLXAPO 20X	20x	Air	0.8	0.6mm	0.17 (#1.5)	275um (xy) 963um (z)
UPLXAPO 40X	40x	Air	0.95	0.18mm	0.11 - 0.23	232um (xy) 811um (z)
UPLSAPO 30XSIR	30x	Sil	1.05	0.8mm	0.13 - 0.19	210um (xy) 522um(z)
UPLSAPO 60XS2	60x	Sil	1.3	0.03mm	0.15 - 0.19	169um (xy) 421um (z)

Detectors	**#**	**Type**	**Details**
	2	SilVIR	Cooled silicon PMT Broadband SilVIR detector (BSD)
	4	SilVIR	Cooled silicon PMT Red-shifted SilVIR detector (RSD)
	Detectable wavelength range 400nm-900nm, Selectable wavelength bandwidth: 1–100 nm, Minimum lambda step 1 nm, Wavelength resolution: 2 nm		
Software	CellSens		
Holder	Slide holder		
Applications	Fixed cells and tissue imaging. Optimized for tissue and spectral unmixing imaging experiments, with NIR dyes.		
File Saving	.OIR		
Extra features	Normaski Differential Interference Contrast (DIC), AI Denoising, Super Resolution (SR)		