

Zeiss LSM880 Airyscan Fast (Anatomy & Neuroscience) INSTRUMENT SPECIFICATION SHEET



BIOLOGICAL
OPTICAL
MICROSCOPY
PLATFORM

Location	W505, Cell Signaling Centre, Medical Building						
Stand	AxioImager Z2 (Upright microscope)						
Illumination	Transmitted				Fluorescence		
	Halogen 100W				HXP120V		
Eyepiece filters	Name	Excitation	Dichroic	Emission			
	DAPI	G365	FT395	BP445/50	488049-9901-000		
	GFP	BP470/40	FT495	BP525/50	000000-1031-346		
	Cy 3	BP545/25	FT570	BP605/70	000000-1114-101		
Lasers	Type		Wavelength			Maximum output	
	Diode		405 nm			30 mW	
	Argon		458, 488, 514 nm			25 mW	
	DPSS		561 nm			20 mW	
	HeNe		594 nm			2 mW	
	HeNe		633 nm			5 mW	
Stage control	Motorised stage with Z piezo, capable of tile scan, multi-point and z stack						
Objectives Specification	Magnification	Type	NA	Working distance	Coverslip Thickness	Resolution at 550nm (Glycerol mounted)	
Fluar (420130-9900-000)	5x	Air	0.25	12.5 mm	0.17 mm (#1.5)	Lateral 880, Axial 2095	
Plan-Apochromat (420640-9900-000)	10x	Air	0.45	2.1 mm	0.17 mm (#1.5)	Lateral 489, Axial 1164	
Plan-Apochromat (420650-9901-000)	20x	Air	0.8	0.55 mm	0.17 mm (#1.5)	Lateral 275, Axial 655	
Plan-Apochromat (420762-9800-799)	40x	Oil	1.3	0.2 mm	0.17 mm (#1.5)	Lateral 169, Axial 403	
Plan-Apochromat (420782-9900-799)	63x	Oil	1.4	0.19 mm	0.17 mm (#1.5)	Lateral 157, Axial 374	
Detectors	#	Type	Details				
	2	MA PMT	Standard fluorescence detectors (Multi Alkali PMT)				
	1	QUASAR	32 GaAsP PMT array for spectral detection				
	1	Airyscan	32 GaAsP PMT array for super-resolution, virtual pinhole, airyscan fast				
	1	T-PMT	Transmitted light detector				
Airyscan filters & fluorophores applications (not limited to)	BP420-480 + BP495-550				DAPI, GFP		
	BP420-480 + BP495-620				DAPI, GFP, RFP		
	BP420-480 + LP605				DAPI, Texas Red, CY5		
	BP465-505 + LP525				CFP, YFP		
	BP495-550 + LP570				GFP, RFP		
	BP570-620 + LP645				RFP, CY5		
Software	Zen 2.3						
Holder	Slide holder						
Applications	Fixed Tissue, Fixed cells, super-resolution, fast super-resolution, spectral separation						
File Saving	\\unimelb.edu.au\MDHS-Research\Platforms\BOMP\Data-mirror\LSM880						
Extra features							