

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



BIOLOGICAL  
OPTICAL  
MICROSCOPY  
PLATFORM

<b>Location</b>	N617/618, Medical Building					
<b>Stand</b>	AxioImager Z2 (Upright microscope)					
<b>Illumination</b>	<b>Transmitted</b>			<b>Fluorescence</b>		
	Halogen 100W			HXP120V		
<b>Eyepiece filters</b>	<b>Name</b>	<b>Excitation</b>	<b>Dichroic</b>	<b>Emission</b>		
	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	
<b>Lasers</b>	<b>Type</b>		<b>Wavelength</b>		<b>Maximum output</b>	
	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	
<b>Stage control</b>	Motorised stage with Z piezo, capable of tile scan, multi-point and z stack					
<b>Objectives Specification</b>	<b>Magnification</b>	<b>Type</b>	<b>NA</b>	<b>Working distance</b>	<b>Coverslip Thickness</b>	<b>Resolution at 550nm (Glycerol mounted)</b>
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
W Plan-Apochromat 421462-9900-799	40x	Water	1.0	2.5 mm	0 (no coverslip)	Lateral 220, Axial 577
Plan-Apochromat (420782-9900-799)	63x	Oil	1.4	0.19 mm	0.17 mm (#1.5)	Lateral 157, Axial 374
<b>Detectors</b>	<b>#</b>	<b>Type</b>	<b>Details</b>			
	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			
<b>Airyscan filters &amp; fluorophores applications (not limited to)</b>	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	
<b>Software</b>	Zen 2.3					
<b>Holder</b>	Slide holder					
<b>Applications</b>	Fixed Tissue, Fixed cells, super-resolution, fast super-resolution, spectral separation					
<b>File Saving</b>	\\unimelb.edu.au\MDHS-Research\Platforms\BOMP\Data-mirror\LSM880					
<b>Extra features</b>						