

INSTRUMENT SPECIFICATION SHEET

Location	N814, Level 8, Medical Building, University of Melbourne					
Stand	Axioscan 7 System					
Illumination	Transmitted			Fluorescence		
	WL-LED			Zeiss Colibri 7 LED System		
Filters	Dyes	Excitation	Dichroic (BS)*		Emission[†]	
			PBS	QBS	Single BP	QBP
	DAPI, Hoechst 33258	385/30 nm	405	405	425/30	425/30
	Alexa 488, GFP, FITC	469/38 nm	493	493	514/30	524/51
	Alexa 555, DsRed, Cy3	555/30 nm	575	-	592/25	-
	Alexa 594, mCherry, TxRed	590/27 nm	-	611	-	634/38
	Alexa 633, Cy5	631/33 nm	654	-	681/45	-
	Alexa 750, Cy7	735/40 nm	761	762	-	785/38
*Beam splitter: PBS 405+493+575+654+761, QBS 405+493+611+762						
†Emission filter: BP 425/30, BP 514/30, BP 592/25, BP 681/45, QBP 425/30+524/51+634/38+785/38						
Light source	Type		Wavelength		Maximum output	
	UV-LED (Ultra-violet)		385 nm		Linearized 1-100 %	
	V-LED (Violet)		430 nm		Linearized 1-100 %	
	B-LED (Blue)		475 nm		Linearized 1-100 %	
	G-LED (Green)		555 nm		Linearized 1-100 %	
	Y-LED (Yellow)		590 nm		Linearized 1-100 %	
	R-LED (Red)		630 nm		Linearized 1-100 %	
FR-LED (Far-red)		735 nm		Linearized 1-100 %		
Stage control	Motorised XY stage control with Z-drive for z-stack imaging and auto-focus.					
Objectives Specification	Magnification	Type	NA	Working Distance	Coverslip\ Thickness	Resolution at 550nm
Fluar 420130-9900-000	5x	Air	0.25	12.50mm	0.17mm	xy: 1342 nm / z: 3080 nm
Plan-Apochromat 420640-9900-000	10x	Air	0.45	2.10mm	0.17mm	xy: 745 nm / z: 1711 nm
EC Plan-Neofluar 420350-9900-000	20x	Air	0.50	2.00mm	0.17mm	xy: 671 nm / z: 1540 nm
Plan-Apochromat 420650-9903-000	20x	Air	0.80	0.55mm	0.17mm	xy: 419 nm / z: 963 nm
Plan-Apochromat 420660-9970-000	40x	Air	0.95	0.25mm	0.17mm	xy: 353 nm / z: 811 nm
Detectors	#	Type		Details		
	1	Axiocam 712 mono		12-megapixel CMOS for fluorescence imaging		
	2	Axiocam 705 color		5-megapixel CMOS for colour and brightfield		
Software	ZEN 3.5 Slidescan (Blue), ZEN 3.5 Desk & ZEN Connect					
Holder	High precision mounting frame for up to four slides with the following specifications: Length 73.5-76.5mm, width 24.0 – 26.25mm, thickness 0.8-1.3mm.					
Applications	Fixed imaging of tissue and cells mounted on slides with fluorescent or histological stains.					
Computer	Hewlett Packard Z6 G4, Windows 10, RAM 32 GB, Graphic card 24 GB NVIDIA Quadro RTX 6000, Hard Drive 12TB					
File Saving	Save as .czi to local disk. Export from PC using MediaFlux DataMover or Zen Software Data Storage Server Database. Option for online visualization through ZEN Connect.					
Extra features	Twenty-five mounting frames available for up to 100 slides to be loaded in a single run					