

Widefield 5 (September 2022)

Technical Specifications

- Leica LASX live cell imaging workstation with two cameras:
 - Leica DFC365FX monochrome digital camera (1392x1040 6.45µm pixels, 8 or 12 bit, 21 fps full frame).
 - Leica DFC420C colour camera (2592 x 1944 2.78µm pixels, uses a 0.7x C mount adaptor)
- Leica DMI6000 inverted epifluorescence microscope with phase-contrast and DIC available for most lenses.
- Adaptive Focus Control (AFC) to ensure that the specimen is actively kept in focus during a timecourse.
- Motorized stage - enables multi-position image acquisition.
- Leica LAS-X acquisition software. Automated multi-channel, multi-focus and multi-site image acquisition.
- Shuttering of incident light allows integrated fluorescence and transmitted light time-lapse imaging.
- Live data mode available on request
- Currently there is no incubation chamber around the system

Lenses

Lens	Dry/ Oil	Phase contrast	DIC	Working distance (mm)	NA	Features	AFC	Serial number	DFC365FX Pixel width at 1x binning in microns	DFC420C Pixel width at 1x binning in microns
5x HCX PL Fluotar	Dry	No	Yes	13.7	0.15		No	506224	1.84	0.79
10x HC PL Fluotar	Dry	Yes	Yes	11	0.3		Yes	506522	0.92	0.4
20x HCX PL Fluotar	Dry	Yes	Yes	6.9	0.4	Coverglass thickness correction	Yes	506243	0.46	0.2
40x HCX PL Fluotar	Dry	Yes	Yes	1.9 – 3.3	0.6	Coverglass thickness correction	Yes	506203	0.23	0.1
40x HCX PL APO CS	Oil	Yes	No	0.1	1.25		No	506181	0.23	0.1
100x HCX PL APO CS	Oil	Yes	Yes	0.09	1.4		Yes	506211	0.092	0.04

Other lenses available on request

2.5x PL Fluotar	Dry	No	No	9.2	0.07		No	567010	3.68	1.58
63x HC PL APO CORR	GLYC	No	Yes	0.3	1.3	Coverglass thickness correction	Yes		0.146	0.06

Filter carousel

Position	Fluorophore (examples)	Excitation filter	Dichroic mirror	Emission filter
1	DAPI	360/40	400	BP 470/40
2	GFP	470/40	495	BP 525/50
3	CY3	545/26	565	BP 605/70
4	CY5	620/60	660	BP 700/76
5	Analyser	Used for DIC		