



# Olympus Upright Widefield Imaging System Specifications

## Monochromatic Camera (Fluorescence/Transmitted light)

- Andor Luca-R EM-CCD 1000 x 1000 pixels
- Note: this camera replaced the Q-Imaging camera and the pixel size has changed slightly. The new sizes are in the Andor.CAL file in the Metamorph software.

## Color Camera (Transmitted light)

- Motic MP3. Pixel number variable. Not recommended for fluorescence.

## Objective Specifications

Name	Magnification	NA	Immersion	Working Distance (WD)	Uses
U PLAN APO	4x	0.16	Air/Dry	13 mm	Fluor/DIC
U PLAN APO	10x	0.4	Air/Dry	3.1 mm	Fluor/DIC
U PLAN APO	20x	0.7	Air/Dry	0.65 mm	Fluor/DIC
LMPlanFI	20x	0.4	Air/Dry	15 mm	Fluor/DIC
LMPlanFI	50x	0.5	Air/Dry	15 mm	Fluor/DIC
U PLAN APO	40x	0.5-1.0	Oil	120 um	Fluor/DIC
PLAN APO	60x	1.4	Oil	100 um	Fluor/DIC
PLAN APO	100x	0.5-1.35	Oil	100 um	Fluor/DIC
U PLAN APO	40x	1.15	Water	260 um	Fluor/DIC
PLAN N Ph1	10x	0.25	Air/Dry	-	Ph Contrast
LCPlanFI Ph1	20x	0.4	Air/Dry	-	Ph Contrast
U PLAN APO Ph3	40x	0.5-1.35	Oil	120 um	Ph Contrast
U PLAN APO Ph3	100x	0.5-1.35	Oil	100 um	Ph Contrast

## Filters in Turret (Default)

Position	Name	Dyes	Type	Wavelength	Cat. No.
1	BF	Brightfield Reflected light		All	U-MBF3 Olympus
2	DAPI	DAPI Hoechst	Excitation Dichroic Emission	360/40 400 DCLP 460/50	31000 Chroma orig
3	GFP	FITC Alexa Fluor 488 GFP	Excitation Dichroic Emission	470/40 495pxr 525/50	49002 Chroma new 11'11
4	Red	TRITC mCherry Texas Red	Excitation Dichroic Emission	ET560/40 585pxr 630/75	49008 Chroma new 11'11
5	Far Red	Cy5 Alexa FI 633 Alexa FI 647	Excitation Dichroic Emission	620/60 600 700/75	41008 Chroma original
6	Green / Red	GFP / FITC	Excitation Emission	490 – 505 515 – 545	51006 Chroma (NBTC)
		TRITC / mCherry	Excitation Emission	560 – 585 600 – 650	

## Additional Filters (large cubes, in drawer)

Name	Dyes	Type	Wavelength	Cat. No.
CFP	Cyan Fluorescent Protein	Excitation Dichroic Emission	436/20 455 DCLP 480/40	31044v2 Chroma orig
YFP	Yellow Fluorescent Protein	Excitation Dichroic Emission	500/20 515 DCLP 535/30	41028 Chroma orig
C-Y	CFP-YFP FRET	Excitation Dichroic Emission	436/20 455 DCLP 535/30	31052 Chroma orig