




SOTLA500 – Research Inverted Fluorescence Microscope

Binocular




Monochrome camera
 Type 6.4 megapixel or more, monochromatic camera
 Sensor Monochromatic CMOS with backlight
 Sensor size 1/1.8 inch (7.41mm x 4.98mm) or larger
 Resolution 3088x2076 pixels (photography only)
 Pixel size 2.4 × 2.4µm
 Binning option 2 x 2
 Exposure range 13µs – 25s
 Live frame rate in the range of minimum 45fps (for minimum resolution 3088x2076) up to 60 fps (for a minimum resolution of 1920-1080) better
 Passive cooling
 Data transfer cable USB 3.1,
 Camera mounting: C-mount type
 Camera adapter: 0.5x magnification, C-mount type.

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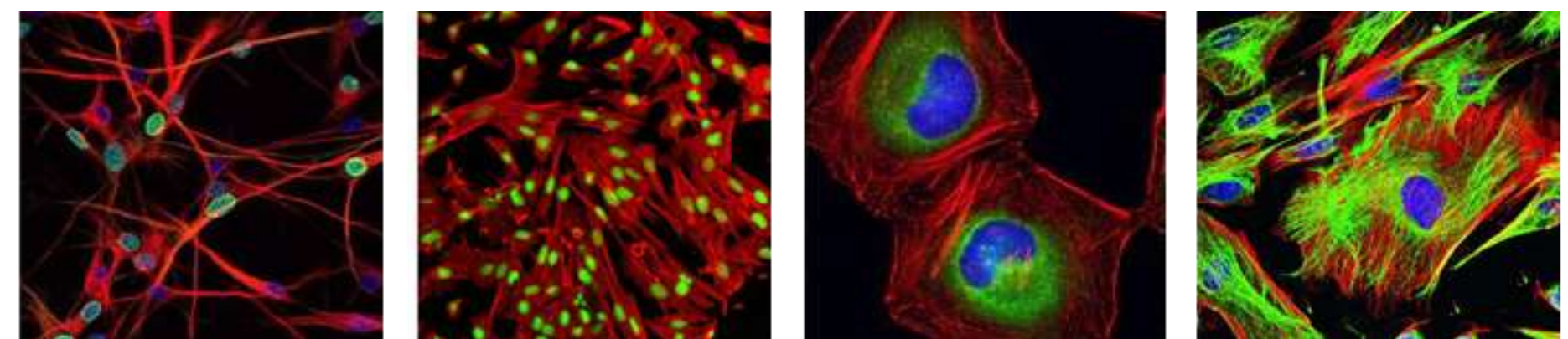
 **Best choice for best results**
0.5X/0.65X/1X C-mount adapters, focus adjustable; Electric control box; PC and monitor; Centering eyepiece; Professional software

 **Nosepiece**
Revolving and reversed nosepiece for 6 objectives coded

 **Objectives**
Infinity correction plan APO objectives

 **Light source**
10W LED light box (cold color temperature), optional 12V100W halogen light box with presetting filament centre; Optional 12V100W halogen lamp. Customer choice

Software
 Image overlay, manual object counting, movie playback, side-by-side image comparison, snap/movie acquisition, 3D orthogonal plane section, time-lapse at specific intervals, automatic merging of photos from multiple fluorescent channels, Z-axis photo joining, panoramic sample photography, image processing - geometry/combination/filter processing, area and line measurement, live photo blur, 2D deconvolution, 3D deconvolution, confluency check, object tracking.



TYPE	SOTLA500
Optical system	Infinitive Optics
Light path	100/0 – 50/50 – 0/100
Camera attachment	Left side 1x magnification
Focus shift range	Upper side: 6.5mm or more from the starting position Bottom side: 3mm or more from the starting position Initial position: 1mm or more above the surface of the table
Head lighting source support	With a lamp housing on top, which can be tilted 30°
Condenser	Up-and-down movement range of condenser support: 88mm or more, with condenser centering mechanism
Illumination:	Halogen bulb 100W
Eyepieces	Magnification 10x, one with diopter adjustment, field of view FN22
Binocular Head	Binocular head, with tilting adjustment 20-45 ° , interpupillary distance 50-76mm. The eyepiece diopter is -5 to +5 range
Table	Manual Table size is 300mm(X) x 240mm (Y). moving range: 135mm(X) x 85mm(Y). table thickness: 30mm. Right universal handle. X/Y axis limitable and lockable. Moving range: 50x50mm. with 110mm replaceable disc
Condenser	NA 0.55, working distance 27mm, dome with minimum 5 holes for adding optical elements. Optical elements for phase contrast corresponding to the offered lenses
Nosepiece	Manual lens mount with 6 positions, coded
Objectives with phase contrast lenses	Long working distance semi-apochromaitc 10X, NA=0.30, WD=8.8mm. Long working distance semi-apochromaitc 20X, NA=0.45, WD=6.5-7.6mm, coverslip thickness: 0-2mm. Long working distance semi-apochromaitc 40X, NA=0.60, WD=2.85-4.05mm, coverslip thickness: 0-2mm. Long working distance semi-apochromaitc 60X, NA=0.70, WD=1.42-2.10mm, coverslip thickness: 0-1.3mm.
Fluorescent illuminator	With motorized filter cube holder with a capacity of at least 8 filter cubes. Simple installation of filter cubes without the use of tools. The motorization is controlled via a computer and a manual steering wheel or joystick
Filter cubes for fluorescence	Excitation filter 360-370nm, emission filter 420-460nm or wider ranges Excitation filter 460-495nm, emission filter 510-550nm or wider ranges Excitation filter 590-650nm, emission filter 663-738 or wider ranges Light source for fluorescence: LED, emission spectrum 400 - 645 nm, cooling with an internal fan,
Light intensity control	0-100% in steps of 1%, working life more than 25,000 hours, control via manual
Motorized fine focus	(Z axis), PC and joystick control.