

Live Cell Imaging in Your Incubator



LS620 with phase

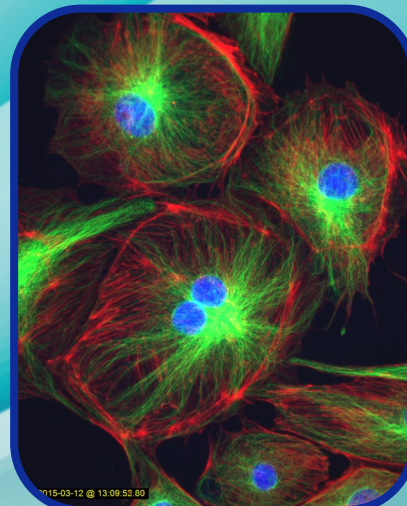
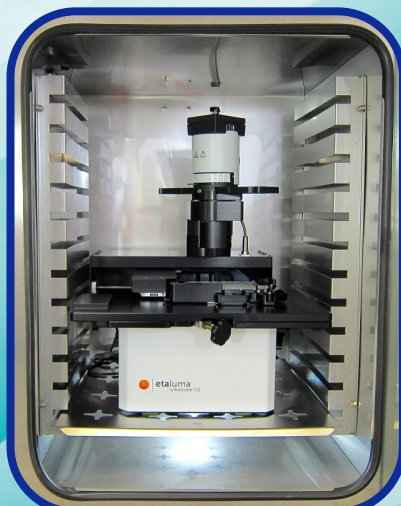
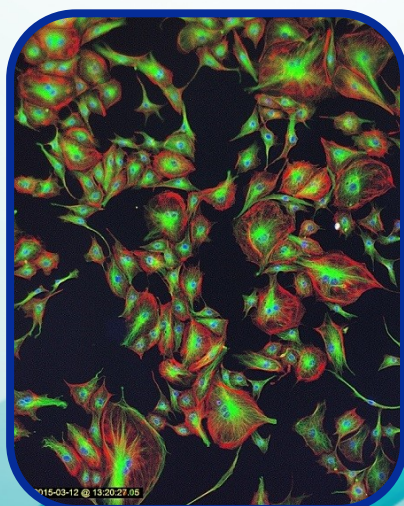


LS520 with phase



LS720 with phase

- High resolution, compact, affordable
 - Near diffraction-limited, zero pixel shift
 - Fluorescence, brightfield, phase contrast
 - Microplates, flasks, microfluidic chips
- 2.5x to 100x(oil)
 - Time-lapse, live video
 - Image in your incubator
 - No AC power, uses USB
 - Large 1900 x 1900 pixel sensor



Blue, Green and Red Fluorescence, Brightfield, Optional Phase Contrast

Comparison of Lumascope Models			
Features	Lumascope 520	Lumascope 620	Lumascope 720
Optics	Green fluorescence; brightfield	Blue, green & red fluorescence; brightfield	Blue, green & red fluorescence; brightfield
Phase Contrast	Phase contrast optional (Olympus)	Phase contrast optional (Olympus)	Phase contrast optional (Olympus)
Objective Options	1.25x, 2.5x, 4x, 10x, 20x, 40x, 60x, and 100x(oil) magnification	1.25x, 2.5x, 4x, 10x, 20x, 40x, 60x, and 100x(oil) magnification	1.25x, 2.5x, 4x, 10x, 20x, 40x, 60x, and 100x(oil) magnification
Objective Compatibilities	RMS-threaded, infinity corrected, 45 mm parfocal distance	RMS-threaded, infinity corrected, 45 mm parfocal distance	RMS-threaded, infinity corrected, 45 mm parfocal distance
Fluorescence Filters	Green: Ex 457-493, Em 508-552 nm	Blue: Ex 370-410, Em 429-462 nm Green: Ex 473-491, Em 502-561 nm Red: Ex 580-598, Em 612-680 nm	Blue: Ex 370-410, Em 429-462 nm Green: Ex 473-491, Em 502-561 nm Red: Ex 580-598, Em 612-680 nm
Camera	High Sensitivity CMOS Sensor	High Sensitivity Monochrome CMOS Sensor, 5 megapixel, C-mount	High Sensitivity Monochrome CMOS Sensor, 5 megapixel, C-mount
Image Formats	JPG, BMP, TIF, or PNG	JPG, BMP, TIF, or PNG	JPG, BMP, TIF, or PNG
Image Size	1280 x 800 pixels	100 x 100 to 1900 x 1900 pixels	100 x 100 to 1900 x 1900 pixels
Field of View	1.3 x 0.8 mm with 20x objective	Up to 0.78 x 0.78 mm at 20x	Up to 0.78 x 0.78 mm at 20x
Video Rates	Up to 8 fps	Up to 10 fps; up to 30 fps with reduced frame size	Up to 10 fps; up to 30 fps with reduced frame size
Stage	Manual XY	Manual XY	Automated XYZ, SBS nest, 6- to 1536 -well microplates; microfluidic chambers (contact Etaluma)
Subdeck	NA	NA	No automation; most flasks, dishes, other
Well-to-well time (seconds)	NA	NA	Image 96 wells: a) 1 color focus & image: 13 min; b) 3 color focus & image: 34 min
Computer Requirements	Windows 7, 8, 8.1, 10; Core i5, SSD	Windows 7, 8, 8.1, 10; Core i5, SSD	Windows 7, 8, 8.1, 10; Core i5, SSD
Automation Friendly	SDK available	SDK available	SDK available
Power Requirements	USB	USB	USB for Lumascope; 100-240 V, 50-60 Hz for autostage
Dimensions	23 W x 13 D x 13.5 H cm (9.1 W x 5.1 D x 5.3 H inches)	24 W x 14 D x 16.5 H cm (9.4 W x 5.5 D x 6.5 H inches)	37.4 W x 43.8 D x 23.9 H cm (14.7 W x 17.3 D x 9.4 H inches)
Weight	2.3 kg (5 lb)	3.2 kg (7.1 lb)	11 kg (25 lb)
Operating Conditions	0°C - 42°C 5% - 95% RH non-condensing	0°C - 42°C 5% - 95% RH non-condensing	0°C - 42°C 5% - 95% RH non-condensing