

# Live Cell Imaging in Your Incubator



etaluma™  
microscopy simplified™



LS620 with phase



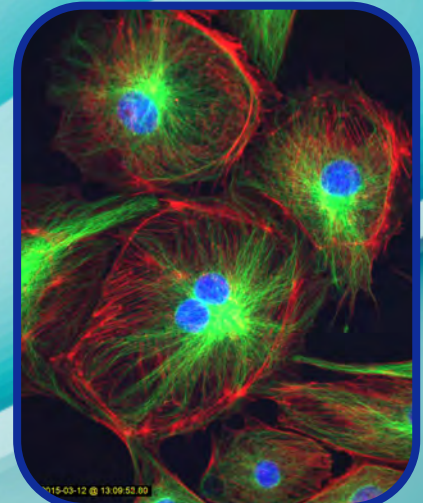
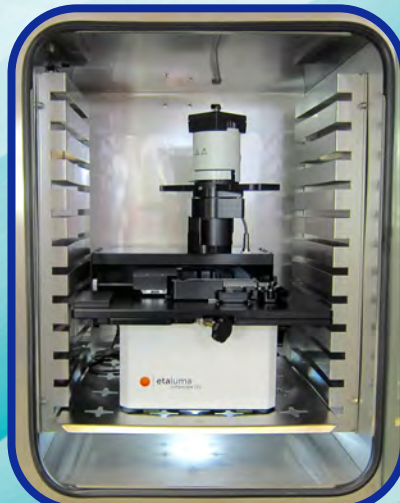
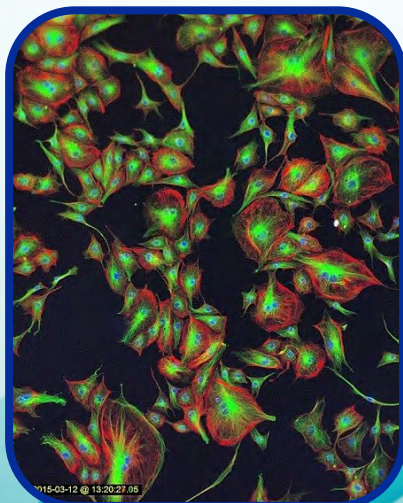
LS520 with phase



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

[www.etaluma.com](http://www.etaluma.com)

## Comparison of Lumascope Models

Features	Lumascope 520	Lumascope 620	Lumascope 720
<b>Optics</b>	Green fluorescence; brightfield	Blue, green & red fluorescence; brightfield	Blue, green & red fluorescence; brightfield
<b>Phase Contrast</b>	Phase contrast optional (Olympus)	Phase contrast optional (Olympus)	Phase contrast optional (Olympus)
<b>Objective Options</b>	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
<b>Objective Compatibilities</b>	RMS-threaded, infinity corrected, 45 mm parfocal distance	RMS-threaded, infinity corrected, 45 mm parfocal distance	RMS-threaded, infinity corrected, 45 mm parfocal distance
<b>Fluorescence Filters</b>	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
<b>Camera</b>	High Sensitivity CMOS Sensor	High Sensitivity Monochrome CMOS Sensor, 5 megapixel, C-mount	High Sensitivity Monochrome CMOS Sensor, 5 megapixel, C-mount
<b>Image Formats</b>	JPG, BMP, TIF, or PNG	JPG, BMP, TIF, or PNG	JPG, BMP, TIF, or PNG
<b>Image Size</b>	1280 x 800 pixels	100 x 100 to 1900 x 1900 pixels	100 x 100 to 1900 x 1900 pixels
<b>Field of View</b>	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
<b>Video Rates</b>	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
<b>Stage</b>	Manual XY	Manual XY	Automated XYZ, SBS nest, 6- to 1536 -well microplates; microfluidic chambers (contact Etaluma)
<b>Subdeck</b>	NA	NA	No automation; most flasks, dishes, other
<b>Well-to-well time (seconds)</b>	NA	NA	Image 96 wells: a) 1 color focus & image: 13 min; b) 3 color focus & image: 34 min
<b>Computer Requirements</b>	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
<b>Automation Friendly</b>	SDK available	SDK available	SDK available
<b>Power Requirements</b>	USB	USB	USB for Lumascope; 100-240 V, 50-60 Hz for autostage
<b>Dimensions</b>	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)
<b>Weight</b>	2.3 kg (5 lb)	3.2 kg (7.1 lb)	11 kg (25 lb)
<b>Operating Conditions</b>	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