

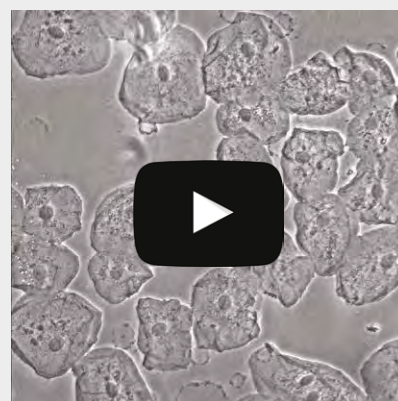
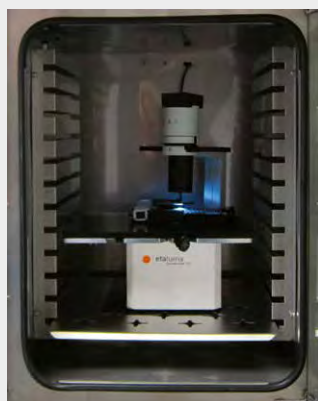
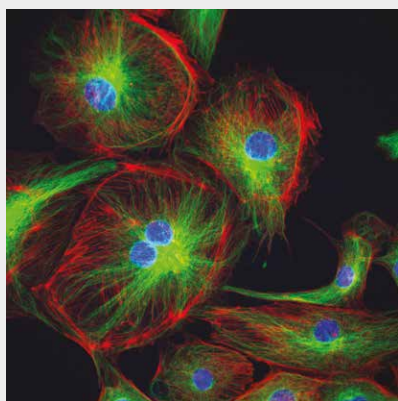


# Lumascope 720

Fully automated microscopy

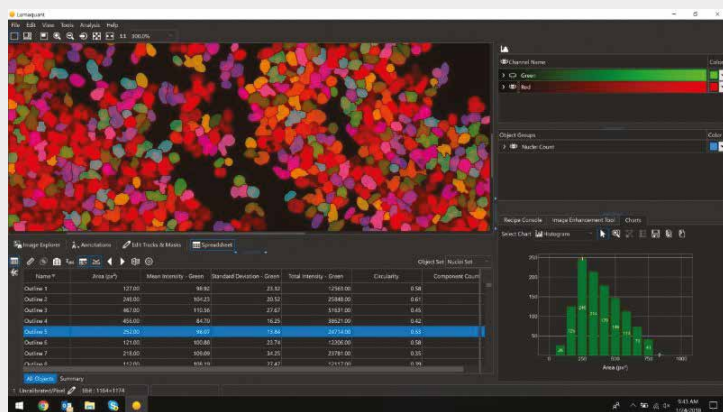


- High resolution 3-color fluorescence
- Blue, green and red excitation
- Brightfield and phase contrast
- Automated XY stage & auto-Z-focus
- Walk-away automation
- Real-time deconvolution
- Live cell imaging in your incubator



*Accelerate your biomedical research*

# Lumaquant, quantitative image analysis software



Nuclei count on Lumaquant

Lumaquant, quantitative image analysis software, comes with a number of powerful software modules:

- Cell count
- Cell proliferation
- Colony analyzer
- Single cell tracking
- Nuclei count
- Scratch assay
- Neuro-tracking
- Angiogenesis
- Exocytosis detection
- Calcium oscillation

## Features and benefits

- Automated XY stage with autofocus in Z
- Time-lapse series, and videos recorded directly to your computer
- Visualize cells from up to 1536-well microplates, flasks, slides or custom labware
- Modern LED and advanced optical design provide near diffraction-limited resolution
- Robust software allows set-up and control across many locations, including microplates, ROI and custom arrays
- Compact design enables use inside cell culture incubators and hoods
- Detects blue, green and red fluorophores, including BFP, DAPI, FITC, Fluo-4, GFP & mCherry
- Flip-up deck allows easy objective access
- Used manually, but also robot compatible

LS720 technical specifications	
Optics	Blue, green & red fluorescence; brightfield. Phase contrast optional
Objective options	2.5x, 4x, 10x, 20x, 40x, 60x, and 100x (oil) magnification
Objective compatibilities	RMS-threaded, infinity corrected, 45 mm parfocal distance
Fluorescence filters	Blue: Excitation 370 - 410 nm, Emission 429 - 462 nm Green: Excitation 473 - 491 nm, Emission 502 - 561 nm Red: Excitation 580 - 598 nm, Emission 612 - 680 nm
Camera	High Sensitivity Monochrome CMOS Sensor; C-mount
Image formats	JPG, BMP, TIF, GIF, or PNG
Image size	100 x 100 to 1 900 x 1 900 pixels
Field of view	0,9 x 0,9 mm with 20x objective
Video rates	Up to 10 frames per second (fps); with reduced frame size, up to 30 fps
Automated XY stage	SBS nest, 6- to 1 536-well microplates; microfluidic chambers (contact Etaluma)
Subdeck	No automation; most flasks, dishes, other
Stage travel range	110 x 74 mm
Stage move speed	25 mm/sec
Well-to-well time (seconds)	Image 96 wells: a) 1 color focus & image: 13 min, b) 3 color focus & image: 34 min
Computer requirements	Windows 7, 8, 8.1; 2 monitors recommended
Automation friendly	SDK available
Power requirements	USB for Lumascope; 100 - 240 V, 50 - 60 Hz for AutoStage
Dimensions	37,2 cm W x 40,5 cm D x 22,4 cm H (14,6 in W x 15,9 in D x 8,82 in H) Weight 11 kg (25 lb)
Operating conditions	0 °C - 42 °C, 5% - 95% RH non-condensing



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