

Microscopy Simplified

High resolution, versatile and compact
3-color fluorescence and live cell imaging

 **etaluma**[™]
lumascope 620



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

www.etaluma.com

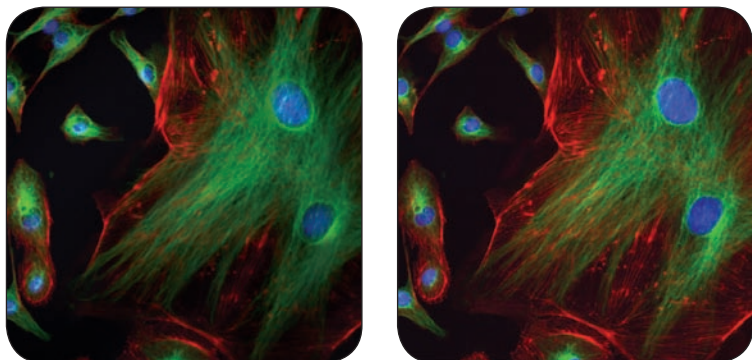
Lumascope™ 620

Blue, Green, and Red Fluorescence and Brightfield (New Improved Model!)

Use the Lumascope 620 to visualize and capture high resolution images comparable to those from traditional, high-cost microscopes. Lumascope utilizes LED light sources, Semrock filters, advanced optical engineering, and CMOS sensors to provide near diffraction-limited (theoretical maximum) resolution. Powered only by its USB connection, the Lumascope 620 easily records your photos, time-lapse series, and videos directly to your computer. And its compact size enables working in challenging locations, including inside incubators, biological safety cabinets, and environmental control workstations. The new Lumascope 620 offers sharper image quality, brighter LEDs, and easier focus!

The Lumascope 620 provides blue, green and red fluorescence imaging at low cost for a wide variety of applications.

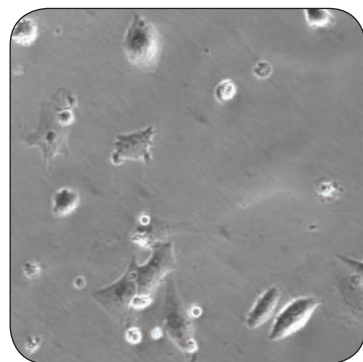
The Lumascope 620's inverted, versatile design accommodates microplates, flasks and dishes in addition to slides that you can adjust by the X-Y stage (sold separately). The included Lumaview software sends images directly to your computer via USB cable, eliminating the need for on-board image storage and processing and contributing to the Lumascope 620's compact size. Etaluma Lumascope allows you to use your own objectives or choose new objectives (2.5x to 100x(oil)), providing true magnification and not just "digital zoom." The Lumascope 620 can record time-lapse over days or live videos at up to 30 frames per second. Furthermore, you can fit your Lumascope 620 with an optional Phase Contrast Accessory for enhanced transmitted light imaging.



High Resolution

The Lumascope 620 provides high resolution images comparable to expensive, traditional fluorescent microscopes. Left, Proview Microscope at customer site; Right, Lumascope 600-series.

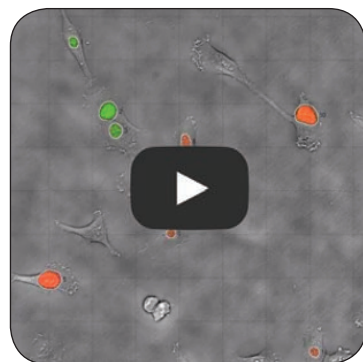
Features and Benefits



Versatile

The Lumascope 620 sets up in minutes, requires virtually no maintenance, and powers on instantly. The Phase Contrast Accessory widens the range of imaging applications.

- Fully functioning microscope empowers users to visualize cells from slides, microplates, flasks, or dishes
- Versatile and compact design permits use inside cell culture incubators, tissue culture hoods, and environmental workstations
- Robust software enables time-lapse studies over seconds, minutes, hours, or days
- Modern LED and optical design lowers cost and eliminates cumbersome, difficult to maintain laser-driven and arc lamp systems
- Power and control via USB connection facilitates rapid set up and easy use
- High quality filter set detects blue, green and red fluorophores, including BFP, DAPI, FITC, Fluo-4, GFP, and mCherry
- Advanced optics provide excellent resolution under range of lighting conditions
- Objective compatibility with standard lenses allows use of your own objectives
- Optional Phase Contrast Accessory enhances visualization of unstained samples



Powerful

The Lumascope 620 easily records photos, time-lapse series, and videos directly to your computer. Etaluma designed the Lumascope from scratch using recent advances in optical engineering, LEDs, CMOS sensors and software. Microscopy simplified.

Lumascope 620 Specifications

Objectives Compatibility	2.5x, 4x, 10x, 20x, 40x, 60x, or 100x(oil); interchangeable, LWD also available RMS-threaded, infinity corrected, 45 mm parfocal distance
Field of View	0.9 mm using 20x objective
Light Sources	White (brightfield); 405 nm, 488 nm, and 589 nm (fluorescence)
Fluorescence Filters	Channel 1: Excitation 370-410 nm; Emission 429-462 nm Channel 2: Excitation 473-491 nm; Emission 502-561 nm Channel 3: Excitation 580-598 nm; Emission 612-680 nm
Camera	High Sensitivity Monochrome CMOS Sensor; C-mount
Image Formats	JPG, BMP, TIF, GIF, PNG; 100-1900 pixel image
Video Rates	10 frames per second (up to 30 fps with reduced frame size)
XY Stage	Holds SBS microplates or Labware Inserts; removable (sold separately)
Labware Inserts	Hold microscope slides, 3 sizes of petri dishes, or Terasaki plates
Computer Requirements	Windows OS (DLL available)
Power Requirements	USB or 100-240 VAC, 50-60 Hz
Dimensions	24 cm W x 14 cm D x 16.5 cm H (9.4 in W x 5.5 in D x 6.5 in H)
Weight	3.2 kg (7.1 lb) (without accessories)
Operating Conditions	0°C - 42°C, 5% - 99% RH non-condensing
Warranty	1 year parts