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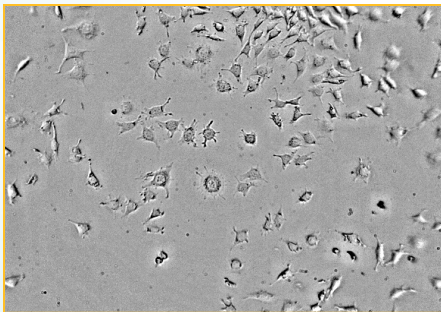
# lumanette

Live Cell Imaging in the Incubator



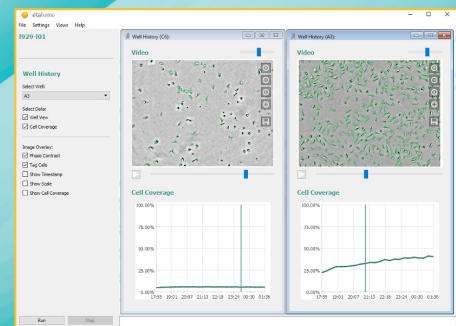
Live cell imaging with the lumanette enables the simple automation of routine cell culture time lapse applications.

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lumanette



- 24 miniature imagers
- Compact & easy-to-use
- Compatible with many standard culture vessels
- 24/7 real-time data capture

- Menu of common image analysis applications:
  - Cell Counting
  - Cell Growth
  - Confluence
  - Migration
- Long term remote monitoring under the environmental stability of a cell culture incubator



**Simple. Compact. Automated Focus. 6 and 24 wells.**

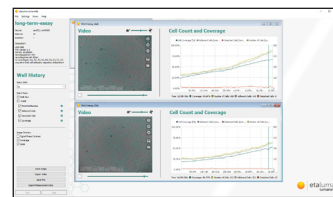
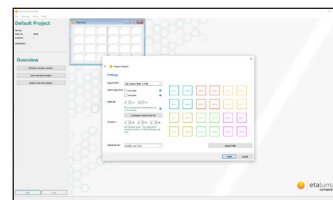
[www.etaluma.com](http://www.etaluma.com)

# lumanette Live Cell Imaging in the Incubator

The lumanette is a real-time live cell imaging device that goes inside of your incubator. It has 24 individual mini-imagers that allows multiple position viewing, time lapse movies, and live cell assay data to be generated. Use your own incubator and your own laboratory computer to take control of your live cell imaging needs without the need for expensive microscopes or the Core facility. Install the free software, connect the lumanette via the USB cable and it is ready for use. There is no need for an additional power supply, the USB cable provides power and data transfer.

Load your labware into the lumanette and monitor them from your computer screen. Create a new Project where you define the microplate or flask and the interval and duration of the time lapse experiment. The lumanette acquires transmitted light images of your cells and analyzes them for cell coverage and cell number. Different transmitted light modes are available by adjusting the pattern of overhead LEDs. Brightfield, darkfield and even digital phase contrast are available. You can sort and graph your acquired dataset in the lumanette's software or export the images, videos and assay results.

With a footprint not much larger than a standard cell culture plate, the lumanette leaves you enough space in the incubator for your other cell culture ware or even more lumanettes. Constructed to be completely sealed and sterilizable with common lab disinfectants like 70% ethanol and 10% hypochlorite, the lumanette maintains sterility.



## APPLICATION EXAMPLES:

- Documentation and analysis of cell growth
- Comparison and analysis of extracellular conditions (e.g. glucose concentration, pH value or different mediums)
- Continuously determine cell confluence in 24 spots
- Analyze effects of component on cell cultures (e.g. cytotoxicity or biocompatibility)
- Migration or Scratch assays
- Stem cell observation

General technical data	
Optics	Brightfield, Oblique, Digital Phase Contrast
Labware	6 and 24 well microplates, T25 flasks
System Requirements	Windows® 10 (32/64 Bit, 2.5 GHz, 4 cores, 8 GB RAM typical)
Power Requirements	USB 3.0
Magnification	10x, Field of view 1.2 mm x 0.9 mm
Image Resolution	5 MP
Display resolution per imager	2592 x 1944
Software Algorithms	Cell coverage Cell number
Recording interval and duration	5 min. to 24 h interval, 9 days maximum duration
Image capture throughput	30s for 24 wells
Export Image Formats	PNG, BMP, JPG
Dataset output format	CSV
Light Source	LED
Camera	5 MP CMOS
Optical Filters	No filters, transmitted light modes only
Operating Conditions	20°C - 45°C, 20% - 95% RH
Disinfection	70% isopropanol, 70% ethanol, 10% hypochlorite
Dimensions (H x W x D)	4 in X 7 in X 7 in (105 mm x 180 mm x 180 mm)
Weight	2.3 lbs (1050 g)
Warranty	1 year