# Live Cell Microscopy



# LS820

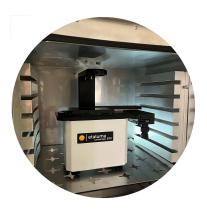
#### Microscope with Automated Focus

< High Resolution 3-Color Fluorescence

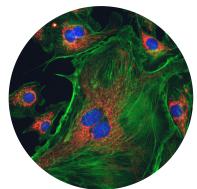
< Automated Focus and Z-Stacking

< Live Cell Imaging in Your Incubator

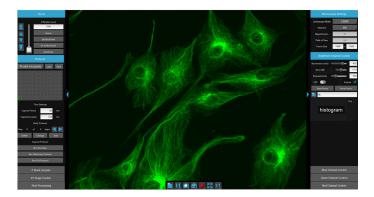
The LS820 offers walk-away automation for single FOV time-lapse with the highest quality wide field microscopy images for your research.



Live cell imaging is our specialty



Diffraction limit resolution



LumaviewPro application runs on Windows, Mac, and Linux



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## Lumascope model 820

The **Lumascope model 820** is a multi-channel automated inverted microscope which offers the latest advances in optics, cameras, and user flexibility. The LS820 in your incubator allows you to have a live cell imaging system that offers minimum photo toxicity and the most stable environment for long term imaging.







Optional manual stage

Uses commercial microscope objectives

Multi-mode transmitted illumination technology

### Features

### Specifications

LED Excitation:	405 nm, 488 nm, and 589 nm
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
Transmitted Modes:	Bright Field, Phase Contrast
Objectives:	1.25x, 2.5x, 4x, 10x, 20x, 40x, 60x, and 100x(oil)
Camera:	High Sensitivity Monochrome CMOS BSI Sensor; 5 MP, 12-Bit
Image Formats:	JPG, BMP, TIF, or PNG
Image Size:	Adjustable up to 2100 x 2100 pixels
Video Rates:	25 FPS (exposure limited)
Motorized Z:	14mm travel, 100 nm step, image-based autofocus, Z-stacks
Control Software:	LumaviewPro, multi operating system application
Computer Requirements:	Windows 10, 11; Core i7, 512GB SSD, 8GB RAM MacOS with M1; 512GB SSD, 8GB RAM
	Linux Debian Distributions; 512GB SSD, 8GB RAM
Power Requirements:	80-264 V, 50-60 Hz <10W typical, 40W Max.
Integration:	Python source under the MIT Open Source License
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 lbs)
Operating Conditions:	0°C - 42°C, 5% - 95% RH non-condensing



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#### - High performance optics

- Long range motorized Z for autofocus and Z-stacks
- LumaviewPro application runs on Windows, Mac, or Linux
- Bright field and phase contrast illumination
- Accommodates microplates microfluidic chips, slides, dishes, flasks, and deck-top chambers
- Use in hoods, incubators, hypoxic chambers, gloveboxes