



etaluma™
microscopy simplified™

LS560

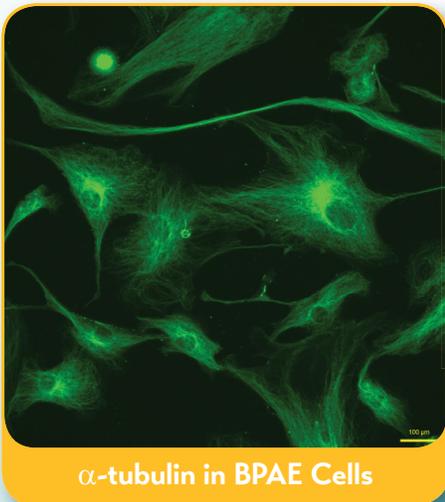
Digital Inverted Microscope



Live Cell Imaging in Your Incubator



LS560 with optional Phase Contrast Accessory and Manual XY Stage



α -tubulin in BPAE Cells

- High Resolution Green Fluorescence ●
- Images, Time-Lapse & Live Video ●
- Live Cell Imaging in Your Incubator ●

Green Fluorescence, Brightfield (Monochrome), Optional Phase Contrast

LS560 MICROSCOPE

Green Fluorescence and Brightfield, (optional) Phase Contrast

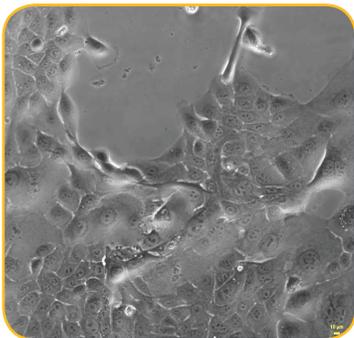


LS560 Microscope for fluorescence and ambient light brightfield

Use the LS560 Microscope to visualize and capture high resolution widefield images comparable to those from traditional, high-cost microscopes. The LS560 utilizes an LED light source, Semrock filters, advanced optical engineering, and a CMOS sensor to provide near diffraction-limited (theoretical maximum) resolution. Powered only by a direct USB computer connection, the LS560 uses the same USB cable to send your photos, time-lapse series, and videos directly to your computer. And its compact size enables working inside challenging locations, including incubators, hoods, and environmental chambers.

The LS560 provides green fluorescence and monochrome brightfield imaging at an affordable price for a wide variety of applications. The versatile inverted design accommodates microplates, slides, flasks, dishes, and custom labware that are easily positioned using the (optional) Manual XY stage. The LS560 allows you to use your own objectives or choose new ones (1.25x - 100x(oil)), providing true magnification and not just "digital zoom." Using the included Lumaview software, the LS560 can do time-lapse over minutes-weeks or live video recording at up to 30 frames per second. An optional Phase Contrast Accessory is available for enhanced transmitted light imaging.

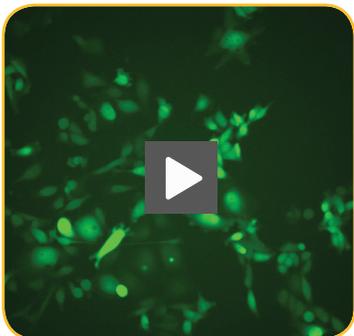
The new LS560 has an improved camera and optics plus a C-mount compared to the previous LS520 model, and the accessible deck and improved phase contrast (optional) introduced in the LS520.



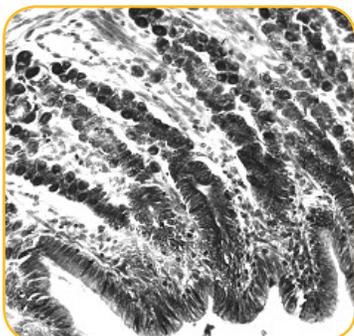
Mammalian epithelial cells studied for proliferation rate

FEATURES AND BENEFITS

- Digital inverted microscope compatible with microplates, slides, flasks, dishes, microfluidic chips, custom labware
- Compact design and environmentally rugged; use in incubators, hoods, and environmental chambers over months
- Comes with Lumaview software for capture of images, time-lapse series, and live videos
- Simple USB connection to your computer provides power and control
- Excellent resolution in ambient lighting conditions or with Phase Contrast Accessory
- Detects green fluorophores, including FITC, Fluo-4 and GFP
- Includes accessible deck for easy exchange of objectives
- Optional Phase Contrast Accessory (Olympus condenser) for imaging of unstained samples



GFP-transfected human epithelial cells (time-lapse study)



Section of dog esophagus tissue, stained with H&E

LS560 Microscope Specifications	
Optics	Green fluorescence; brightfield (transmitted light)
Phase Contrast	Phase Contrast Accessory (optional)
Objective Options	1.25x, 2.5x, 4x, 10x, 20x, 40x, 60x, and 100x(oil) magnification
Objective Compatibilities	RMS-threaded, infinity corrected, 45 mm parfocal distance
Fluorescence Filters	Green: Excitation 457-493 nm, Emission 508-552 nm
Camera	High Sensitivity Monochrome CMOS Sensor; C-mount
Image Formats	BMP, JPG, PNG or TIF
Image Size	100 x 100 to 1700 x 1700 pixels
Field of View	Up to 1.06 x 1.06 mm with 20x objective
Video Rates	Up to 10 frames per second (fps); up to 30 fps with reduced frame size
Stage	Manual XY Stage (optional)
Computer Requirements	Windows 10; Minimum Core i5, SSD; 2 monitors recommended
Automation Friendly	SDK available
Power Requirements	USB
Dimensions	24 W x 17.5 D x 16.5 H cm [9.4 W x 6.9 D x 6.5 H inches] Incl phase: 24 W x 23 D x 37.8 H cm [9.4 W x 9.1 D x 14.9 H inches]
Weight	3.2 kg (7.1 lb) without phase; 4.5 kg (10 lb) incl phase
Operating Conditions	0 C - 42 C, 5% - 95% RH non-condensing