









LS460 Microscope

Monochrome Brightfield and (optional) Phase Contrast

Use the LS460 Microscope (Lumascope) to visualize and capture high resolution widefield images comparable to those from traditional, high-cost microscopes. The LS460 utilizes advanced optical engineering and a CMOS sensor to provide near diffraction-limited (theoretical maximum) resolution. Powered only by a direct USB computer connection, the LS460 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 LS460 provides monochrome brightfield imaging at an affordable price for a wide variety of applications. The versatile inverted design accommodates microplates, flasks, dishes, slides and custom labware that are easily positioned using the (optional) Manual XY stage. The LS460 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 LS460 can do time-lapse over minutes to weeks or live video recording at up to 10 frames per second. An optional Phase Contrast Accessory is available for enhanced transmitted light imaging.

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 video
- Simple USB connection to your computer provides power and control
- Excellent resolution in ambient lighting conditions or with Phase Contrast Accessory
- Includes accessible deck for easy exchange of objectives
- Optional Phase Contrast Accessory with Olympus condenser for imaging of unstained samples

LS460 Microscope Specifications	
Optics	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
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 7, 8, 8.1, 10; Minimum Core i5, SSD
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	4.5 kg (10 lb) without phase
Operating Conditions	0 C - 42 C, 5% - 95% RH non-condensing

