

# Lionheart™ LX

## Automated Microscope

GENERAL	
Microplate types	6- to 1536-well plates
Other labware	Microscope slides, Petri and cell culture dishes, cell culture flasks (T25, T75), counting chambers (hemocytometers), chamber slides Support for labware up to 1.5" tall
Stage control	High resolution lead screw driven stage with open access
Software	Gen5™ 3.0 Microplate Reader and Imager Software included Gen5 Image Prime and Image+ Software available for advanced image analysis (option)
IMAGING	
Imaging modes	Fluorescence, high contrast brightfield, color brightfield
Imaging methods	Single color, multi-color, montage, time lapse, z-stack, z-stack montage, burst mode
Light source	High power LEDs (available wavelengths: 365 nm, 390 nm, 465 nm, 505 nm, 523 nm, 590 nm, 623 nm, 655 nm, 740 nm)
Image processing	Z-projection, digital phase contrast, stitching
Camera	16-bit gray scale, Sony CMOS, 1.25 megapixel
Camera binning	Optional 2x2 binning for focus and/or image capture
Camera exposure range	5 milliseconds to 4 seconds
Image outputs available	Raw Images: 16-bit TIFF Saved Images: TIF, JPG, BMP, PNG, EMF, GIF Movies: MP4, WMV
Objective capacity	6 onboard, user-replaceable objectives
Objectives available	Air: 1.25x, 0.04 NA; 2.5x (2.25x eff), 0.07 NA; 2.5x (2.75x eff), 0.12 NA; 4x, 0.13 NA; 10x, 0.30 NA; 20x, 0.45 NA; 40x, 0.60 NA; 60x, 0.70 NA Oil: 60x, 1.42 NA; 60x, 1.25 NA; 100x, 1.4 NA; 100x, 1.3 NA High NA: 20x, 0.75 NA; 40x, 0.95 NA
Filter cube capacity	Up to 4 onboard, user-replaceable cubes
Filter cubes available	DAPI, CFP, GFP, YFP, RFP, Texas Red, CY5, CY7, Acridine Orange, CFP-YFP FRET, Chlorophyll, Phycoerythrin (PE), Propidium Iodide, CY5.5, TagBFP, GFP (Ex)-CY5 (Em), RFP (Ex)-CY5 (Em), CFP FRET, 377 (EX)-647(EM), Oxidized roGFP2, 400 (EX)-647(EM)
Automated functions	Autofocus, user-trained autofocus, auto exposure, auto-LED intensity
Autofocus method	Image-based autofocus Laser autofocus option

Image collection rate	Single Well Fastest Frame Rate Capture: -Full Resolution: up to 10 frames per second for single color images -2x2 Binning: up to 20 frames per second for single color images
Microscope stage control	Gen5 Software Control Optional joystick controller
<b>PHYSICAL CHARACTERISTICS</b>	
Power	60 Watts max.
Dimensions	18.3" D, 17.9" W, 14.1" H (46.5 cm x 45.5 cm x 35.8 cm)
Weight	51 lbs (23.1 kg)
<b>REGULATORY</b>	
Regulatory	CE and TUV marked. RoHS compliant. Models for In Vitro Diagnostic use are available.

*Specifications are subject to change. Performance specification values represent the average observed factory test values.*