

Agilent BioTek Lionheart LX (LLXW) Automated Microscope

Technical details

General	
Microplate Types	6- to 1536-well plates
Other Labware Supported	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
Software	Agilent BioTek Gen5 microplate reader and imager software included
Optional Software	<ul style="list-style-type: none"> - Gen5 Image+: Image analysis - Gen5 Image Prime: Advanced image analysis - Gen5 Secure, Gen5 Secure Image+, Gen5 Secure Image Prime: Enable 21 CFR Part 11 compliance <u>Optional software modules and apps:</u> Neurite outgrowth, autoROI, spot counting, object tracking, Scratch Assay app
Imaging-Widefield Microscope	
Imaging Modes	Fluorescence, brightfield, high-contrast brightfield, color brightfield, and phase contrast
Imaging Methods	Single color, multicolor, montage, time lapse, z-stacking, z-stack montage
Light Source	User-replaceable LEDs (available wavelengths: 365, 390, 405, 465, 505, 523, 590, 623, 655, and 740 nm)
Image Processing	Z-projection, digital phase contrast, stitching
Camera	16-bit grayscale Sony CMOS
Image Outputs Available	Raw images: 16-bit TIFF Saved images: TIF, JPG, BMP, PNG, EMF, GIF, color TIFF Movies: MP4, WMV
Objective Capacity	Six-position automated turret for user-replaceable objectives
Filter Cube Capacity	4 user-replaceable fluorescence cubes
Objectives Available	Air: 1.25x, 2.5x (2.75x eff), 4x, 10x, 20x, 40x, 60x Oil: 60x, 100x
Phase Objectives Available	4x, 10x, 20x, 40x
Imaging Filter Cube Capacity	4 user-replaceable fluorescence cubes plus brightfield channel
Imaging 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)-CY6 (Em), RFP (Ex)-CY5 (Em), Alexa 568, Ex377/Em647
Automated Functions	Autofocus, user-trained autofocus, auto-exposure, autoLED 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 *2 x 2 binning: up to 20 frames per second for single-color images
Microscope Stage Control	Gen5 microplate reader and imager software control Optional joystick controller

Physical Characteristics	
Power	External 250 W (minimum), 24 VDC power supply, compatible with 100–240 VAC at 50–60 Hz.
Dimensions	With cover closed or without cover: 18.3" D x 17.9" W x 14.1" H (46.5 x 45.5 x 35.8 cm) With cover fully open: 18.3" D x 17.9" W x 27.5" H (46.5 x 45.5 x 69.8 cm)
Weight	With top cover: 58 lb (26.3 kg) Without top cover: 51 lb (23.1 kg)

Configurations

The Lionheart LX automated microscope base configuration includes: fluorescence, brightfield, phase contrast, high-contrast brightfield, and color brightfield imaging. Includes standard Gen5 software and two-position slide holder. The imaging controller, objectives, filter/LED cubes, accessories, and software upgrades are sold separately.

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DE89975081

This information is subject to change without notice.

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Published in the USA, April 1, 2024
5994-4849EN