LABTRON

BIOLOGICAL MICROSCOPE
LBM-E20

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BIOLOGICAL MICROSCOPE LBM-E20

Biological Microscope LBM-E20 is advance research grade biological microscope with infinite corrected optical system. It offers five-field magnification power ranges from 40X to 1000X. Designed with gemel trinocular head with wide field eyepiece with diopter adjustment, Infinity Plan Semi-Apochromatic Fluorescent Objectives, DIC slide, a double layer mechanical stage, coaxial coarse and fine focusing system, N.A. 0.9 swing-out type achromatic condenser, and illumination with halogen lamp of 12 V, 100 W. Incorporated with 8.03 MP USB3.0 digital camera with advance software to capture images and videos. The camera is compatible with Windows XP/Vista/7/8/10, Mac OS X and Linux Operating System.

FEATURES

- Adopting color corrected infinity optical system
- Bright Field Sextuple Nosepiece, With DIC Slot for 10X, 20X, 40X objectives
- N.A.0.9 swing-out type achromatic condenser
- High-Eye point Plan Eyepiece PL10X/25 mm, Diopter Adjustable
- Infinity Plan Semi-Apochromatic Fluorescent Objectives
- Coaxial coarse and fine focusing mechanism
- Low position working stage with adjusting hand wheel

APPLICATIONS

This research grade biological microscope finds application in scientific research and testing across research units and laboratories of Medicine, Pharmacy, Life Science and other fields.

MICROSCOPE SPECIFICATIONS

Model no.	LBM-E20
Optical system	Color corrected infinity optical system
Viewing head	Gemel trinocular head, 30° inclined, Inverted Image, Interpupillary Distance 50 to 76 mm, Three Split Ratio 0:100, 20:80, 100:0
Eyepiece	High-Eye point Plan Eyepiece PL10X/25 mm, Diopter Adjustable
Nosepiece	Bright Field Sextuple Nosepiece, With DIC Slot
Objective	Infinity Plan Semi-Apochromatic Fluorescent Objectives
	4X/0.13, W.D.= 18.5 mm
	10X/0.3, W.D.= 10.6 mm
	20X/0.5, W.D.= 2.33 mm
	40X0.75, W.D.= 0.6 mm
	100X/1.3, W.D.= 0.21 mm
Working Stage	Double Layer Mechanical Stage, 187×166 mm, Moving Range 80×55 mm, Precision 0.1 mm, Double Direction Transmission, Left And Right Position Handle For Option. Tension of the Torque Adjustable.
Focusing	Coaxial Focus System With Upper Limited And Tension Adjustment, Coarse Adjustment Range: 25 mm, Fine Adjustment Precision: 0.001 mm
Condenser	N.A.0.9 swing-out type achromatic condenser, with iris diaphragm, and aperture scale, provides sufficient and uniform light for full-field observation in different magnifications.
Illumination	12 V, 100 W, Halogen lamp, center adjusted
Power supply	110 V to 240 V, 50 Hz/60Hz

CAMERA SPECIFICATIONS

Sensor	**Sony IMX334 (Colour)**
Sensor size	1/1.8 inches (7.68×4.32)
Resolution	3840×2160 (8.3 MP)
Pixel size	2.0×2.0 µm
G Sensitivity	505mv with 1/30s
Dark Signal	0.15 mv with 1/30 s
Frames rate	35@3840×2160 fps, 65@1920×1080 fps
Binning	1×1, 2×2
Exposure	0.02 ms to 15 s
Spectral Range	380-650 nm (with IR-filter)
White Balance	ROI White Balance/ Manual Temp-Tint Adjustment
Color RenderingTechnique	Ultra Fine Color Engine
Capture/Control API	Native C/C++, C#, Directshow, Twain, Labview
Recording System	Still Picture and Movie
Cooling System	Natural
Operating Environment	
Operating Temperature	-10°C to 50°C
Storage Temperature	-20°C to 60°C
Operating Humidity	30 to 80%RH
Storage Humidity	10 to 60%RH
Power Supply	DC 5V over PC USB Port
Software Environment	
Operating System	Support Microsoft Windows XP / Vista / 7 /8 / 10(32 & 64 bit), OS X (Mac OS X), Linux
PC Requirement	CPU: Equal to Intel Core 2 2.8 GHz or Higher
	2GB or More Memory
	USB2.0 High-speed Port
	17 inches or Larger Display
	CD-ROM