



Polarizing Microscope LD-LPM-B10

Labodam Equipment Ltd.

info@labodam.com | www.labodam.com

Polarizing Microscope LD-LPM-B10

Overview

Polarizing Microscope LD-LPM-B10 is an upright microscope with trinocular viewing head inclined at 30°. The 5.1 MP CMOS sensor is mounted on top for capturing still images and video. It offers dual illumination system, i.e. Transmitted and reflected illumination for carrying observation. The focusing system offers, coaxial coarse fine focusing system with adjustable tension and up stop, 2 µm minimum fine focusing division. It comes with sliding in/out of optical path polarizer, located on the top of collector. The 0°-90° gradation rotatable analyzer is used to observe single polarization. High quality and contrast images are produced using this microscope.

Features:

- Trinocular viewing head, 30° inclined
- 5.1 MP CMOS sensor to be mounted on top
- Equipped with polarizer and analyzer for polarizing effect
- Revolving round stage Diameter 150 mm, 360° graduated
- Optical compensator: 1/4 Slip (first class red), 1/4 Slip, quartz wedge
- Polarizer and Analyzer attachment with Bertrand lens
- Dual illumination system, i.e. Transmitted and Reflected

Applications:

Polarizing Microscope used in electronics, geology, metallurgy, mining, medicine, and pharmaceutical studies to analyze depth and details of the specimen under observation.

Specifications:

Weight	12 kg
Exposure	0.294 ms to 2000 ms
Eyepiece	Eyepiece WF10X/18 with Division eyepiece 10X/18 mm 0.10 mm/div
Focusing	Coaxial coarse/fine focus system, with tension adjustable and limit stopper, minimum division of fine focusing: 0.002 mm
Condenser	Abbe condenser NA 1.25 with rack and pinion adjustable mechanism
Dimension	400×280×530 mm
Nosepiece	Quadruple (Frontward ball bearing inner locating)
Objectives	Strain-free plan achromatic objective (no cover glass) PL 5X/0.12, PL L 10X/0.25, PL L40X/0.60 (spring), PL L 60X/0.75 (spring)

Pixel Size	2.2 × 2.2 μm
Sensitivity	0.53 V / lux-sec
Viewing head	Trinocular viewing head, 30° inclined
Camera Sensor	1 / 2.5 inch (H×V) (5.7 mm × 4.28 mm)
Dynamic Range	66.5 dB
Optical System	Finite optical system
Spectral Range	380 to 650 nm (IR Fitter)
Camera Sensor Type	CMOS (Micron) APTINA MT9P001
Frame Size and Rate	5 fps @2592×1944, 18 fps @1280×960, 60 fps @640×480
Polarizing Attachment	Polarizer: Sliding in/out of optical path, located on the top of collector Analyzer: Rotatable analyzer with gradation 0°-90° Bertrand lens: Bertrand lens, sliding in/out of optical path Optical Compensator: ? Slip (first class red), 1/4? Slip, Quartz wedge
Revolving round stage	Rotatable stage, Diameter ?150 mm, 360° graduated (in 1degree increments), minimum retardation resolution 6 inch center adjustable and with tightened
Reflected Illumination	Rotatable Polarizer 6V, 20 W, halogen lamp, adjustable brightness
Transmitted Illumination	Polarizer 360° rotatable, have 0, 90, 180, 270 four scale, Collector for halogen lamp illumination, Illumination 6V, 20W, halogen lamp, adjustable brightness
Camera Maximum Resolution	2592 × 1944 (5.1 MP)
Signal To Noise Ratio (SNR)	40.5 dB