



www.labomed.com  
spectro@labomed.com

## LB-617 Trinocular Automatic Metallurgical Digital Microscope with Infinite Plan Optical System, 3.2MP Digital Camera and Software, Extra Wide Field, Reflected and Kohler Illumination

### Features

Four motor drive, objective nosepiece, stage and coarse & fine focus adjustment can be controlled manually or motorized.  
Brightness of halogen lamp is divided in to 100 steps(0-99), which can be controlled by the digital controller.  
3.2MP digital camera system, USB2.0 plug and play, real-time preview can be up to 30 frames/sec.  
Built-in dynamic focusing system, auto-focus without computer.  
High precision positioning leading screw stage, quickly find the clearest images by auto-focus.  
Auto slide scanning and recognizing are controlled by the computer.  
Network remote control system for real-time teaching, sharing, communication and etc.

### Applications

LB-617 Trinocular Automatic Metallurgical Digital Microscope with Infinite Plan Optical System, 3.2MP Digital Camera and Software, Extra Wide Field, Reflected and Kohler Illumination can be used in institutes and laboratories to observe and identify the structure of various metal and alloy, they also can be used in electronics, chemical and instrumentation industry to observe the opaque material and transparent material, such as metal, ceramics, integrated circuits, electronic chips, printed circuit boards, LCD panels, film, powder, toner, wire, fibers, plated coatings, and other non-metallic materials and so on.

### Technical Specifications

Optical System:	Infinite optical system
Viewing Head:	Siedentopf trinocular viewing head, inclined at 30°, interpupillary distance 48mm-75mm
Eyepiece:	Extra wide field eyepiece EW10×/22, eyepiece tube Ø30mm
Camera System:	Colorful 3.2 Mega Pixel CMOS Sensor
Resolution:	2048×1536
Pixel Size:	3.2μm × 3.2μm
Maximum frame rate:	2048×1536 12f/s, 1600×1200 20f/s, 1280×1024 27f/s, 1024×768 43f/s
Sensitivity:	1.0V/lux-sec(550nm)
Exposure:	Manual / auto exposure, time adjustable
SNR:	>43dB
Nosepiece:	Motorized backward quintuple nosepiece
Infinite Plan	
Achromatic Objectives:	5×/ 0.12/∞/ - (BF/DF) WD 12mm, 10×/ 0.25/∞/ - (BF/DF) WD 10.0mm, 20×/ 0.4/∞/ 0 (BF/DF) WD 4.3mm, 50×/ 0.75/∞/ 0 (BF/DF) WD 0.32mm, 100×/ 0.8/∞/ 0 (BF/DF) WD 2mm
Maximum Sample Height:	30mm
Reflected Light:	24V/100W Halogen light, Brightness adjustable Kohler illumination and aspherical condenser Blue, Green, Yellow and Frosted filter
Transmitted Light:	24V/100W Halogen light and aspherical condenser Blue filter
Focusing:	Auto focus, fine focus < 1μm
Stage:	Leading screw stage, precision < 1μm
Specimen holder:	Specimen preparation plate
Hardware:	Motorized auto-focus controller, USB2.0 cable, 9-PIN Control cable, 15-PIN Control cable, 25-PIN Control cable 9-PIN Serial Port cable, 3.5mm auto-focus signal cable Power adapter Motorized Auto-Focus Microscope Controlling Software
Filter:	ND25, ND6 (optional)

