Rev 0



Model:

## **B-150DMR**

Typology:

## **EDUCATIONAL DIGITAL MICROSCOPE**

## **Description:**

Educational digital microscope for routine applications, with rechargeable battery. Dye-cast frame, with high stability and ergonomy, for transmitted light observation.

Model	Monocular with double layer stage; objectives 4x, 10x, 40x
Illumination	Light source type: white LED; light intensity control using a knob on left side of the frame. LED power: 1W. Color temperature: 6300K LED average lifetime approx.: 50.000h External power supply 100/240Vac, 50/60Hz, output: 5Vdc 500mA.
Observation Modes	Brightfield
Focusing	Coaxial coarse and fine focusing mechanism (graduated, 0.002mm) with upper stop, to prevent the contact between objective and specimen.  Adjustable tension of coarse focusing knob.
Stage	Double layer with mechanical sliding stage, size 125x116mm, X-Y movement range 76x30. Specimen holder for one slide.  Vernier scale on the two axes, accuracy 0,1 mm.
Nosepiece	Quadruple revolving nosepiece, rotation on ball bearings.
Head	Monocular digital observation head, inclined 45° and rotatable 360°.
Eyepieces	Widefield eyepieces WF10X/18 with field number 18mm.
Objectives	Achromatic objectives with mechanical tube lenght 160 mm, made by following objectives:  -) Achromatic DIN 4X, A.N. 0.10, W.D. 18 mm  -) Achromatic DIN 10X, A.N. 0.25, W.D. 7 mm  -) Achromatic DIN 40X, A.N. 0.65, W.D. 0,53 mm  All objectives are treated with an anti-fungus treatment.
Condenser	Abbe condenser, N.A. 1.2 precentered
Image format	1280X1024 pixel.
Pixel size	2.8X2.8um
Sensor	1/3.2"CMOS
Image format	5/4
Output	USB port
Frame rate	15 FPS (1280x1024) 30 FPS (640x480)
S/N RATIO	42.3dB
Dynamic Range	71dB
Exposure Time	20s - 1/1000s
Effective digits	10bit - on chip
Sensitivity	1.0 V/lux-sec (550nm)
Calibration slide	No
System requirements	Windows XP, Vista, Win7, Win8, 32/64bit., USB 2.0
Software	OPTIKA Vision Lite
Driver	H1C: Microsoft driver, Twain
Control parameters	Brightness, tonality, contrast, saturation, gamma, EV exposure
Dimensions	HEIGHT: 350 mm WIDTH: 170 mm DEPTH: 210 mm WEIGHT: 4 kg
Battery	4x AA Internal NiMH rechargeable battery (up to 15 hours of use from a single charge, led at medium intensity).
Accessories	User manual, dust cover, 1,8m USB cable, CD-ROM