



Model:  
**B-150DBR**

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.*

<b>Illumination</b>	Light source type: X-LED <sup>1</sup> ; light intensity control using a knob on left side of the frame. LED power: 1 W. Color temperature: 6,300 K. LED average lifetime approx.: 50,000 h. External power supply 100/240 Vac, 50/60 Hz, output: 5 Vdc 500 mA. Internal Lithium rechargeable battery (up to 15 hours of use from a single charge, LED at medium intensity, recharging time: approx. 6 hours).
<b>Observation Modes</b>	Brightfield.
<b>Focusing</b>	Coaxial coarse and fine focusing mechanism (graduated, 0.004 mm) with upper stop, to prevent the contact between objective and specimen. Adjustable tension of coarse focusing knob.
<b>Stage</b>	Double layer with mechanical sliding stage, size 125x116 mm, X-Y movement range 76x30 mm. Specimen holder for one slide. Vernier scale on the two axes, accuracy 0.1 mm.
<b>Nosepiece</b>	Quadruple revolving nosepiece, rotation on ball bearings.
<b>Head</b>	Binocular digital observation head, inclined 30° and rotatable 360°. Diopter adjustment on left eyepiece. Interpupillary adjustment 48-75 mm.
<b>Eyepieces</b>	Wide Field, WF 10x/18.
<b>Objectives</b>	HC (high contrast) objectives with mechanical tube length 160 mm, made by following objectives: - HC (high contrast) 4x/0.10, W.D. 18 mm - HC (high contrast) 10x/0.25, W.D. 7 mm - HC (high contrast) 40x/0.65, W.D. 0.53 mm - HC (high contrast) 100x/1.25 (oil), W.D. 0.13 mm (oil immersion) All objectives are treated with an anti-fungus treatment.
<b>Condenser</b>	Abbe condenser, N.A. 1.2 precentered.
<b>Image format</b>	2048x1536 pixel.
<b>Pixel size</b>	2.2x2.2 µm.
<b>Sensor</b>	1/2.5" CMOS.
<b>Image format</b>	4/3.
<b>Output</b>	USB port.
<b>Frame Rate</b>	4 fps (2048x1536), 8 fps (1280x1024), 30 fps (640x480).
<b>S/N RATIO</b>	40 dB.
<b>Dynamic Range</b>	66.5 dB.
<b>Exposure Time</b>	15 s - 1/1500 s.
<b>Effective digits</b>	12 bit - on chips.
<b>Sensitivity</b>	0.53 V/lux-sec (550 nm).
<b>Calibration Slide</b>	No.
<b>System requirements</b>	Win XP / Win Vista / Win 7 / Win 8 / Win 10 (32 o 64 bit) USB 2.0.
<b>Software</b>	OPTIKA Vision Lite.
<b>Driver</b>	Camera-X3: microsoft driver, Twain.
<b>Control parameters</b>	Brightness, tonality, contrast, saturation, gamma, EV exposure.
<b>Dimensions</b>	HEIGHT: 350 mm WIDTH: 170 mm DEPTH: 210 mm WEIGHT: 4 kg
<b>Accessories</b>	User manual, dust cover, 1.8 m USB cable, CD-ROM.