



Model:

B-190TB

Typology:

ROUTINE DIGITAL MICROSCOPE WITH TABLET

Description:

Educational and laboratory microscope for routine applications, with integrated camera and removable 10.1" full HD tablet.

Dye-cast frame, with high stability and ergonomics, for transmitted light observation.

Tablet PC with OPTIKA detachable system.

TABLET SPECIFICATION

Model	Tablet 10.1"
Operating System	Windows 10 32-bit
Language	Multilanguages already installed
CPU	Intel® Atom™ Z3735F, Quad core
CPU speed	1,83 GHz
Graphics Card	Intel® HD Graphics 3D Accelerator
Memory	Ram 2,048 GB DDR3L
LCD display	LED 10.1" IPS Multi Touch Screen
LCD resolution	1280x800, 16/10 (WXGA)
Storage	Hdd 32GB
Network	Wireless Bluetooth 4.0
Input/output ports	Micro USB-B, USB Microphone Micro SD card reader Mini HDMI Head-phone
Control Buttons	Auto rotate off, volume control
Battery Technology	Lithium-ion battery, 2x cell
Battery capacity	6000 mAh
Max load	18 W
Connection to the Load	Power supply 7,5V 2A
Dimensions	Thickness 10,5 mm, Height 17,4 cm, Width 25,7 cm
Weight	600 g
Cables included	OTG cable (Micro USB-B to USB-A)
Also included	Instruction manual, Keyboard with touchpad, touch pen.

MICROSCOPE SPECIFICATIONS

Model	Binocular with double layer stage, objectives 4x 10x 40x 100x
Head	Binocular Digital observation head, inclined 30° and rotatable 360°. Diopter adjustment on left eyepieces. Interpupillary adjustment 48-75 mm.
Observation Modes	Brightfield
Eyepieces	Widefield eyepieces WF10X/18 with field number 18mm.
Nosepiece	Quadruple revolving nosepiece, rotation on ball bearings.
Objectives	Achromatic objectives with mechanical tube length 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 -) Achromatic DIN 100X, A.N. 1,25, W.D. 0,13 mm (oil immersion) All objectives are treated with an anti-fungus treatment.
Stage	Double layer with mechanical sliding stage, size 125x115mm, X-Y movement range 70x30, specimen holder for one slide. Vernier scale on the two axes, accuracy 0,1 mm.

Focusing System	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.
illumination	Light source type X-LED ² with white LED; light intensity control using a knob on left side of the frame. LED power 3W, comparable to an halogen bulb 30-35W. Color temperature: 6300K LED average life time approx. 50.000h. Voltage: external power supply 100/240Vac, 50/60Hz, output: 6 V Max power required: 7W
Condenser	Abbe condenser, N.A. 1,25 precentered
Dimensions	HEIGHT: 400 mm WIDHT: 235 mm DEPTH: 290 mm WEIGHT: 7,0 kg

CAMERA SPECIFICATIONS

Digital camera resolution	3.14 MegaPixels
Analog camera resolution	NO
Signal output	USB 2.0
Audio Signal	NO
Sensor Size	1/2.5"
Sensor technology	CMOS
Image format	4\3
Full Image size	2048 x 1536
Pixel size	2,2 x 2,2 micron
Frame rate full resolution	5 frames\sec
Frame rate other resolutions	8 FPS (1280x1024), 30FPS (640x480)
Sensitivity	0,53 V/Lux-second (550 nm)
Signal / noise ratio	40 dB
Dynamic range	66.5 dB
Max Exposure time	1,5 sec
ADC conversion	12 BIT
Color Depth	8 BIT
On camera IR Filter	680 nm
Automatic White Balance	Auto - Man
Automatic Gain Control	Auto - Man
Automatic Back light control	Auto - Man
Exposure control	Auto - Man

ACCESSORIES

Calibration Slide	YES
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SOFTWARE SPECIFICATIONS

Supplied Software	Optika Vision Lite (full view function is also included for a wider Live Camera view)
Driver type	No driver (microsoft driver)
Capture features	Continuous auto exposure, image size, image capture, compressed video capture
Control parameters	Brightness, gain, exposur time, colors, color enhancement.

GENERAL SPECIFICATIONS

Working temperature	+0 up to +60°C
Storage temperature	-20 up to +70°C
Relative Humidity	45% up to 85%