



Model:

B-190TB

Typology:

ROUTINE DIGITAL MICROSCOPE WITH TABLET

Description:

Educational and laboratory microscope for routine applications, with integrated camera and removable 8" tablet.

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

TABLET SPECIFICATION

Model	Acer Iconia W4
Operating System	Windows 8.1 32-bit, Microsoft Office Home & Student 2013
Language	Multilanguages already installed
CPU	Intel® Atom™ Z3740, Quad core (4 Core)
CPU speed	1,33 GHz
Graphics Card	Intel® HD Graphics, LPDDR3 controller
Memory	Ram 2,048 GB, LPDDR3
LCD display	LED 8" IPS Multi Touch Screen
LCD resolution	1280 x 800, 16/10 (WXGA) , Active Matrix TFT Colour LCD
Storage	Hdd 32GB
Network	Wireless IEEE 802.11 a/g/n Bluetooth 4.0
Input/output ports	Micro USB-B - Microphone Micro SD card reader - Micro HDMI Head-phone
Control Buttons	Auto rotate off, volume control
Battery Technology	Lithium-ion battery, 2x cell
Battery capacity	4960 mAh
Battery Life	Up to 8 hours, up to 4,5 hours in continuous Camera Live View mode.
Max load	10 W
Connection to the Load	Power supply 5,35 V 2A with, EuroPlug connection for 100-240 VAC, USB port with USB cable
Dimensions	Thickness 11,5 mm Height 13,5 cm Width 21,9 cm
Weight	415 g
Cables included	OTG cable (Micro-B to USB-A) 10cm, 26 cm USB camera cable (Micro-B to USB-B)
Also included	Instruction manual, Recovery CD

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 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 -) 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 76x30, specimen holder for one slide. Vernier scale on the two axes, accuracy 0,1 mm.

B-190TB	EN	OPTIKA
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 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	
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%	
OPTIKA MICROSCOPES ITALY		