



Model:

B-290TB

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 ergonomics, for transmitted light observation.

TABLET SPECIFICATION

Model	Acer Iconia W4
Operating System	Windows 8.1 32-bit
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
Max load	10 W
Battery Life	Up to 8 hours, up to 4,5 hours in continuous Camera Live View mode.
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, E-PLAN 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/20 with field number 20.
Nosepiece	Quadruple revolving nosepiece, rotation on ball bearings.
Objectives	E-Plan objectives with mechanical tube length 160mm: -) E-Plan 4X, N.A. 0.10, W.D. 15.2 mm -) E-Plan 10X, N.A. 0.25, W.D. 5.5 mm -) E-Plan 40X, N.A. 0.65, W.D. 0.45 mm -) E-Plan 100X, N.A. 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 150x133mm, X-Y movement range 75x50mm, specimen holder for one slide. Belt drive in X direction. Vernier scale on X-Y axes, accuracy 0,1mm.

B-290TB	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 X-LED³ type with white LED; light intensity control using a knob on left side of the frame. LED power 3.6W, comparable to a 50W halogen bulb. Color temperature: 6300K. LED average lifetime approx.: 50.000h. Voltage: external power supply 100/240Vac, 50/60Hz, output: 6Vdc 1A. Max. required power: 7W.	
Condenser	NA1.25 Abbe condenser, sliding-in, centrable, up-down adjustment by rack&pinion	
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		