



Model:

B-290TB

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 64-bit
Language	Multilanguages already installed
CPU	Intel® Atom™ Z830, Quad core
CPU speed	1.92 GHz
Graphics Card	Intel® HD Graphics GEN8-LP 10/12 EU
Memory	Ram 4 GB LPDDR3
LCD display	LED 10.1" IPS Multi Touch Screen
LCD resolution	1920x1080, 16/9 Full HD
Storage	Hdd 64 GB
Network	Wireless - Bluetooth 4.0
Input/output ports	USB - Microphone - Micro SD card reader - Micro HDMI - Headphone
Control Buttons	Auto rotate off, volume control
Battery Technology	Lithium-ion battery
Battery capacity	6500 mAh
Max load	18 W
Connection to the Load	Power supply 5 V 3 A
Dimensions	Thickness 8.5 mm, Height 16.7 cm, Width 26.1 cm
Weight	560 g
Cables included	OTG cable (Micro USB-B to USB-A)
Also included	Instruction manual, Keyboard with touchpad, touch pen.
Others connections	5 V USB charger (2.5 A suggested)

MICROSCOPE SPECIFICATIONS

Model	Binocular with double layer stage, N-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	Wide Field, WF 10x/20, High Eyepoint.
Nosepiece	Quadruple revolving nosepiece, rotation on ball bearings.
Objectives	Objectives with mechanical tube length 160 mm: - N-PLAN 4x/0.10, W.D. 15.2 mm - N-PLAN 10x/0.25, W.D. 5.5 mm - N-PLAN 40x/0.65, W.D. 0.45 mm - N-PLAN 100x/1.25, W.D. 0.13 mm (OIL/WATER immersion) All objectives are treated with an anti-fungus treatment.
Stage	Double layer with mechanical sliding stage, size 150x139 mm, X-Y movement range 75x33 mm, specimen holder for one slide. X-axis rackless. Vernier scale on X-Y axes, accuracy 0.1 mm.

Focusing System	Coaxial coarse and fine focusing mechanism (graduated, 0.002 mm) with upper stop, to prevent the contact between objective and specimen. Adjustable tension of coarse focusing knob.	
illumination	<p>Light source X-LED³ type with white LED; light intensity control using a knob on left side of the frame.</p> <p>LED power 3.6 W, comparable to a 50 W halogen bulb.</p> <p>Color temperature: 6,300 K.</p> <p>LED lifetime: > 65,000 hours.</p> <p>Voltage: external power supply 100/240 Vac, 50/60 Hz, output: 6 Vdc 1 A.</p> <p>Max. required power: 6 W.</p>	
Condenser	Abbe condenser, sliding-in, N.A. 1.25 with centering system.	
Dimensions	<p>Microscope without tablet</p> <p>HEIGHT: 430 mm</p> <p>WIDHT: 235 mm</p> <p>DEPTH: 290 mm</p> <p>WEIGHT: 7.0 kg</p>	<p>Microscope with tablet</p> <p>HEIGHT: 525 mm</p> <p>WIDHT: 260 mm</p> <p>DEPTH: 290 mm</p> <p>WEIGHT: 7.4 kg</p>

CAMERA SPECIFICATIONS

Digital camera resolution	3 MP
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 μm
Frame rate full resolution	5 fps
Frame rate other resolutions	8 fps (1280x1024), 30 fps (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%