



B-190 Digital binocular microscope with digital imaging unit, X-OEF, 1000x, PLAN, EU

Observation Method - Transmitted Light	Brightfield	Yes
	Simple polarized light	As optional
Main Body	Type	Upright
	Construction material	Aluminum die-cast
	Trasportation handle	Yes
Head	Type	Binocular (Siedentopf)
	Inclination	30°
	360° rotating	Yes
	Interpupillary distance (mm)	48-75
	Diopter adjustment	On left tube
	Fixing screw for eyepieces	Yes
	Tube inner diameter (mm)	23
Eyepieces	Field number (mm)	18
	Magnification	10x
	Pointer	As optional
	Micrometric scale	As optional
	Diameter of micrometer glass (mm)	20
	High eyepoint (for glass wearers)	Yes
Nosepiece	Positions	Quadruple
	Reversed	Yes
	Bi-directional	Yes
	Rotation on ball bearings	Yes
	Objective thread	RMS
Objectives	Optical system	160
	Anti-fungus treatment	Yes
	Parfocal distance (mm)	45
	Standard magnifications	40x-1000x
	Type	N-PLAN
		4x/0.10, W.D. 15.2 mm
		10x/0.25, W.D. 5.5 mm
		40x/0.65, W.D. 0.45 mm
	100x/1.25 (Oil/Water), W.D. 0.13 mm	

Stage	Type	Double layer
	Dimensions (mm)	125x115
	Moving mechanism	Rack and pinion
	Right / Left hand	Right
	Moving range (mm)	70x30
	Material	Anti-scratch painting
	Specimen holder	Yes
	Slide number	1
	X-Y movement	Yes
	X-Y Vernier scale	Yes
	Vernier scale accuracy (mm)	0.1

Condenser - Single Position	Type	Abbe
	Numerical aperture (N.A.)	0.9 / 1.25
	Diaphragm	Iris
	Centerable	Pre-centered
	Focusable	By rotation

Focusing System	Type	3 step motorized
	Focus modes	Coarse, semi-fine and fine
	Focus mode LED indicator	Yes
	Coarse total travel (mm)	18
	Coarse total travel (per single rotation) (mm)	7,5
	Coarse resolution (μm)	250
	Semi-fine total travel (per single rotation) (mm)	0,24
	Semi-fine resolution (μm)	8
	Fine total travel (per single rotation) (mm)	0,03
	Fine resolution (μm)	1
	Upper stop to prevent contact	Yes
	Motorized	Yes

Transmitted Illumination	Type	X-LED
	X-LED type	X-LED2
	Light source power (W)	3
	Brightness control	Manual
	Lifetime (hours)	> 65,000
	Color Temperature (K)	6,300
	Max. required power (W)	6

Power Supply for Transmitted Illumination	Type	External
	Microscope connector	Jack, 2.1 mm
	Power plug type	Multi-plug (EU, UK, US)
	Input voltage	100/240 Vac, 50/60 Hz
	Output voltage	6 Vdc 2.5 A

Accessories Included	Dust cover	Yes
	Immersion oil (10ml)	Yes
	Tension adjustment tool	Yes
	User Manual	Digital version (downloadable)
	Calibration slide	Yes
	Touch pen	Yes
	USB cable (m)	0,5

Additional Information	External rechargeable battery pack (as optional).
-------------------------------	---

Product Dimensions (footprint)	Height (mm)	525
	Width (mm)	260
	Depth (mm)	320
Product Weight	(kg)	7.4
Camera General specifications	USB output	Yes
	Dimensions (mm)	Included in the microscope head
	Weight (kg)	Included in the microscope head
Sensor	Camera resolution (n° of pixels: W x H)	2592x1944
	Color / Monochrome	Color
	Sensor Size	1/2.5"
	Sensor Technology	CMOS
	Sensor Type	APTINA CMOS
	Image Format	4/3
	Pixel Size (mm)	2.2x2.2
	Acquisition technology	Rolling shutter
	Sensitivity	18.8ke/lus
	Signal/Noise Ratio (DB)	40
	Dynamic range (DB)	73
	ADC conversion	12 Bit
	Color Depth	8 Bit
	Exposure time	0.1 msec - 1 sec
	Binning	1x1
IR filter	Yes	
IR filter range (nm)	380-650 (IR CUT)	
USB	Camera resolution (MP)	5.1
	USB standard	USB2.0
	Frame rate full resolution (fps)	30@2592x1944
	Frame rate other resolution (fps)	30@1280x960 30@640x480
Environment	Working Temperature	-10°C up to +50°C
	Storage Temperature	-20°C up to +60°C
	Relative Humidity	30% to 80%
	Storage Humidity	10% to 60%
Operating System	OS	Windows 11
Available Software	PC SW	PROVIEW
Digital Imaging Unit	Operating system	Windows 11
	CPU	Intel® Core M3-8100Y
	CPU speed	3.4GHz
	Graphic card	Intel® UHD Graphics 615
	RAM	DDR3 12GB
	Display size	10.1" Incell 16:10
	Display resolution	1280x800
	Storage	Hdd 128 GB (SATA)
	Network	2.4G/5G 802.11a/b/g/n/ac + BT5.0 (6221C)
	Input ports	USB-A 3.0 (1x), Type C (2x)
	Output ports	Headphone - Micro HDMI
	Battery Type	Pure Cobalt
	Battery capacity	3400 mAh
	Power consumption	25,84W
Power supply	12V2A Type-C	

OPTIKA MICROSCOPES ITALY

www.optikamicroscopes.com - info@optikamicroscopes.com

	Plug	European
	Dimensions (mm)	245.5*164.2*10
	Weight (Kg)	0.57
	Language	English
Digital Imaging Unit accessories	USB cable USB-B to USB-A (0.5m)	Yes