



*B-510 4K ULTRA HD DIGITAL BF
MICROSCOPE, 1000x, IOS PLAN*

Observation Method - Transmitted Light	Brightfield	Yes
Main Body	Type	Upright
	Construction material	Aluminum die-cast
	Transportation handle	Yes
Nosepiece	Positions	Quintuple
	Reversed	Yes
	Bi-directional	Yes
	Rotation on ball bearings	Yes
	Objective thread	RMS
Objectives	Optical system	∞
	Anti-fungus treatment	Yes
	Parfocal distance (mm)	45
	Standard magnifications	40x-1000x
	Type	IOS W-PLAN
		4x/0.10, W.D. 17.3 mm
		10x/0.25, W.D. 10 mm
		40x/0.65, W.D. 0.54 mm
		100x/1.25 (Oil), W.D. 0.13 mm
Stage	Type	Double layer
	Dimensions (mm)	233x147
	Moving mechanism	Rackless
	Moving range (mm)	78x54
	Material	Anti-scratch painting
	Specimen holder	Yes
	Slide number	2
	X-Y Vernier scale	Yes
	Vernier scale accuracy (mm)	0.1

Condenser - Single Position	Type	Swing-out
	Removable	Yes
	Numerical aperture (N.A.)	0.2 / 0.9
	Numerical aperture scale	Yes
	Diaphragm	Iris
	Centrable	Yes
	Focusable	By rack and pinion
Focusing System	Type	Coaxial coarse & fine
	Coarse total travel (mm)	25
	Fine total travel (per single rotation) (mm)	0,2
	Fine graduations	100
	Fine resolution (µm)	2
	Upper stop to prevent contact	Yes
	Adjustable tension	Yes
	Flat knob for ergonomy	Yes
Transmitted Illumination	Kohler illumination	Full
	Type	X-LED
	X-LED type	X-LED3
	Light source power (W)	3.6
	Brightness control	Manual
	Lifetime (hours)	> 65,000
	Temperature (K)	5,500-5,700
	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
	Allen wrench	Yes
	User Manual	Digital version (downloadable)
Additional Information		Heating stage (as optional). External rechargeable battery pack (as optional).
Product Dimensions	Height (mm)	570
	Width (mm)	360
	Depth (mm)	390
Product Weight	(kg)	10,5

Camera general specifications	SD Card Still image capture	Yes
	SD Card Video recording	Yes
	USB output	Yes
	HDMI output	Yes
	C-Mount	Yes
	Dimensions (mm)	65 x 78 x 88
	Weight (kg)	0.5

Sensor	Camera resolution (n° of pixels: W x H)	3840 x 2160
	Color / Monochrome	Color
	Sensor Size	1/1.8"
	Sensor Technology	CMOS
	Sensor Type	SONY
	Image Format	16/9
	Pixel Size (mm)	2.0x2.0
	Acquisition technology	Rolling shutter
	Dynamic range (DB)	66
	G sensitivity	505mV at 1/30s
	Dark Signal	0.13mV at 1/30s
	ADC conversion	8 Bit - 12Bit
	Color Depth	1, 4, 8, 24 Bit
	Exposure time	0.04 msec- 2 sec
	Binning	1x1
	IR filter	Yes
	IR filter range (nm)	380-650 (IR CUT)

USB	Camera resolution (MP)	8
	USB standard	USB2.0
	Frame rate full resolution (fps)	20@3840x2160

HDMI	HDMI resolution (MP)	8
	Frame rate full resolution (fps)	30@3840x2160
	Live HDMI measurement	Yes
	Exposure	Auto / Manual
	White Balance	Auto / Manual / ROI

Camera Power Supply	Type	External
	Connector	Jack, 2.1 mm
	Power plug type	Multiplug (EU, UK, US)
	Input voltage	100/240 Vac, 50/60Hz
	Output voltage	12 Vdc, 1000 mA
	LED indicator	Yes

Camera accessories	Calibration slide	Yes
	USB cable (1.8m)	Yes
	HDMI cable (1.5m)	Yes
	Wireless Mouse	Yes
	SD card	16GB

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%

Available Software	Camera SW	HDMIPRO (built-in)
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HDMI Monitor	Display size	15.6"
	Display resolution	3840x2160
	Contrast ratio	1000:1
	Luminous flux (lumen)	350
	Power plug type	European
	Input voltage	110/240 Vac, 50/60 Hz
	Output voltage	5 Vdc 4 A

General	Built-in SW Specifications	
	Archiving	Yes
	Multi-language menu	Yes
	Available languages	
	Chinese	Yes
	English	Yes
	French	Yes
	German	Yes
	Italian	Yes
	Japanese	Yes
	Korean	Yes
	Russian	Yes
	Thai	Yes

Image Acquisition	Still image mutiple format saving	Yes
	Video recording multiple format saving	Yes
	Continuous automatic exposure	Yes
	Manual exposure	Yes
	Color acquisition	Yes
	Gray-scale acquisition	Yes
	Numerical Focus Indicator	Yes
	White Balance	Auto/Manual/ROI
	Image enhancement	Yes
	Zoom in	Yes
	Zoom out	Yes
	Image Comparison	Yes
	Browse of Images and Video	Yes
	Picture in Picture (PIP)	Yes
	Freeze image	Yes
	Horizontal Flip	Yes
	Verical Flip	Yes

Image Processing	HDR (High Dynamic Range)	Yes
	Text Overlay	Yes
	Ruler Overlay	Yes
	Arrow Overlay	Yes
	Measurement Overlay	Yes
	Grids	Yes

Measurements	Live measurement	Yes
	Still image measurement	Yes
	Select measurement unit	Yes
	Available measurements	
	Point	Yes
	Line	Yes
	3 Points Line	Yes
	3 Points Vertical Line	Yes
	Angle	Yes

	4 Points Angle	Yes
	Parallel lines	Yes
	Rectangle	Yes
	3 Points Rectangle	Yes
	Ellipse	Yes
	5 Points Ellipse	Yes
	Circle (Center + Radius)	Yes
	Circle (3 Points)	Yes
	2 Circle (Center + Radius)	Yes
	2 Circle (3 Points)	Yes
	Annulus	Yes
	Annulus (3 Points)	Yes
	Curve	Yes
	Arc	Yes
	Polygon	Yes
	Export to Excel	Yes