



Inverted trinocular brightfield/phase contrast microscope, IOS, 6MP camera with 15.6" 4K monitor

Observation Method - Transmitted Light	Brightfield	Yes
	Phase contrast (Positive type)	Yes
	Simple polarized light	As optional
Main Body	Type	Inverted
	Construction material	Aluminum die-cast
Head	Type	Trinocular (Siedentopf)
	Split ratio	100/0 - 50/50
	Inclination	45°
	Interpupillary distance (mm)	50-75
	Diopter adjustment	On left tube
	Tube inner diameter (mm)	30
Eyepieces	Field number (mm)	22
	Magnification	10x
	Planar type	Yes
	Micrometric scale	As optional
	Diameter of micrometer glass (mm)	26
	High eyepoint (for glass wearers)	Yes
	Rubber cup	Yes
	Retractable protections	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	100x-400x
	Type	IOS LWD W-PLAN PH
		IOS LWD W-PLAN PH 10x/0.25, W.D. 7.3 mm
		IOS LWD W-PLAN PH 20x/0.40, W.D. 6.8 mm
		IOS LWD W-PLAN PH 40x/0.65, W.D. 3.0 mm

Stage	Type	Fixed
	Dimensions (mm)	250x160
	Material	Anti-scratch painting
	Glass round insert	Yes
	Metal round insert	Yes
	Holder for Petri dish (mm)	As optional
	Holder for Terasaki plate	96 well
	Holder for 2 slides	As optional
	Holder for Utermöhl chamber	As optional

Condenser - Single Position	Type	Abbe
	Removable	Yes
	Numerical aperture (N.A.)	0.30
	Diaphragm	Iris
	Slider for phase contrast	BF, 4x/10x, 20x/40x positions
	Slider for color filters	Yes
	Long working distance	Yes
	Working distance (for LWD) (mm)	72
	Extendable working distance (for LWD) (mm)	up to 135

Focusing System	Type	Coaxial coarse & fine
	Focus modes	Coarse & fine
	Fine graduations	100
	Fine total travel (per single rotation) (mm)	0,2
	Fine resolution (µm)	2
	Adjustable tension	Yes

Transmitted Illumination	Type	X-LED
	X-LED type	X-LED8
	Light source power (W)	8
	Brightness control	Manual
	Lifetime (hours)	> 65,000
	Temperature (K)	6,300
	Max. required power (W)	13

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
	Allen wrench	Yes
	Centering telescope	Yes
	Green filter	Yes (IF550)
	User Manual	Digital version (downloadable)
	Calibration slide	Yes

Additional Information		Mechanical stage dimension 250x230 mm, X-Y translation range 120x80 mm (as optional). Metallic interchangeable inserts for slides, Petri dishes, Terasaki, multi-Well plates (as optional).
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Product Dimensions	Height (mm)	495
	Width (mm)	230
	Depth (mm)	540
Product Weight	(kg)	9
Camera General specifications	USB output	Yes
	C-Mount	Yes
	Dimensions (mm)	68 x 68 x 46
	Weight (kg)	0.265
Sensor	Camera resolution (n° of pixels: W x H)	3072x2048
	Color / Monochrome	Color
	Sensor Size	1/1.8"
	Sensor Technology	CMOS
	Sensor Type	SONY EXMOR
	Image Format	3/2
	Pixel Size (mm)	2.4x2.4
	Acquisition technology	Rolling shutter
	Signal/Noise Ratio (DB)	41.74
	Dynamic range (DB)	66.8
	G sensitivity	425mV at 1/30s
	Dark Signal	0.15mV at 1/30s
	ADC conversion	8 Bit - 12Bit
	Color Depth	1, 4, 8, 24 Bit
	Exposure time	0.1 msec - 15 sec
	Binning	1x1; 2x2
IR filter	Yes	
IR filter range (nm)	380-650 (IR CUT)	
USB	Camera resolution (MP)	6.3
	USB standard	USB3.0
	Frame rate full resolution (fps)	30@3072x2048
	Frame rate other resolution (fps)	38@1536x1024
Camera Power Supply	Connector	USB
	Output voltage	PC USB
Camera accessories	Calibration slide	Yes
	USB cable (1.8m)	Yes
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
HDMI Monitor	Touch Screen	Yes
	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
	Dimensions (mm)	356 x 225 x 12

	Weight (Kg)	0.8
PC	Operating system	Windows 11
	CPU	IntelCore or AMD Ryzen
	Graphic card	Embedded, max resolution 4K
	RAM	16GB
	Power plug type	Multiplug
	Storage	SSD min 256GB
	WiFi	Yes
	Ports	USB3.0 (3x), USB2.0 (1x), USB-C (1x), Ethernet (2x), HDMI (1x), Display Port (1x)