

ESAW

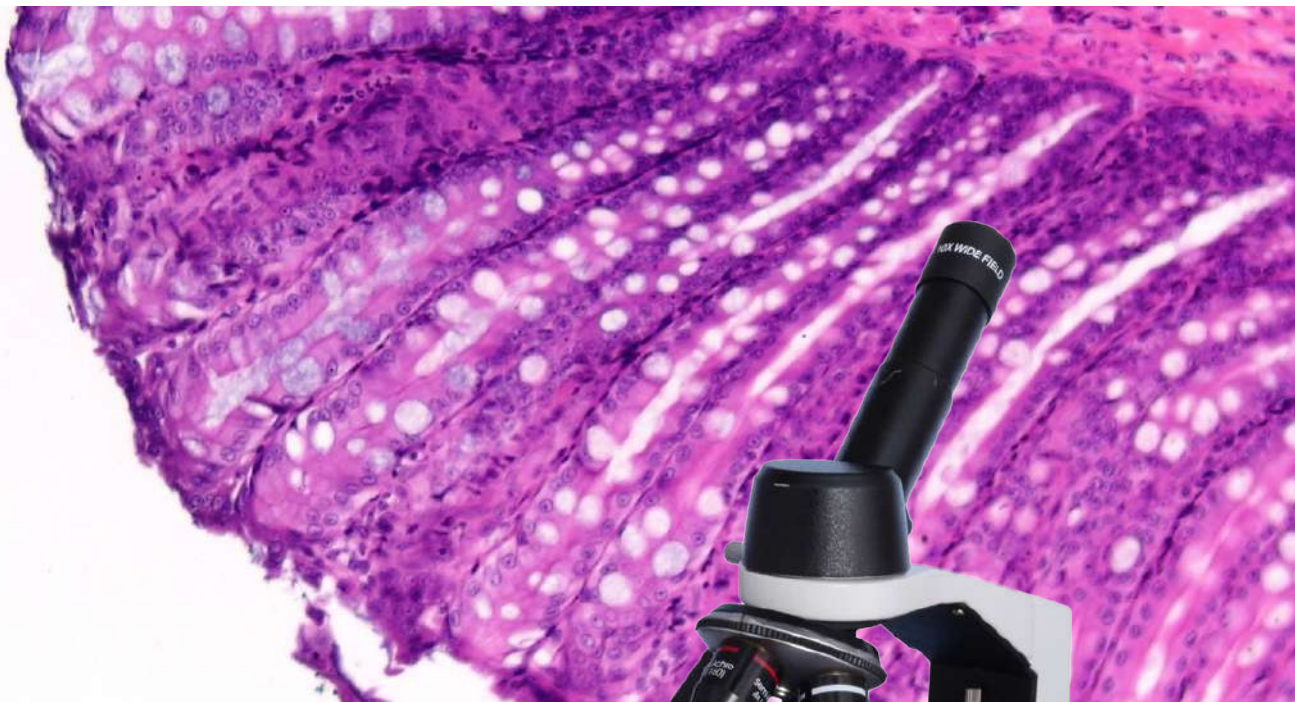
MICROSCOPE



Making Science Easier

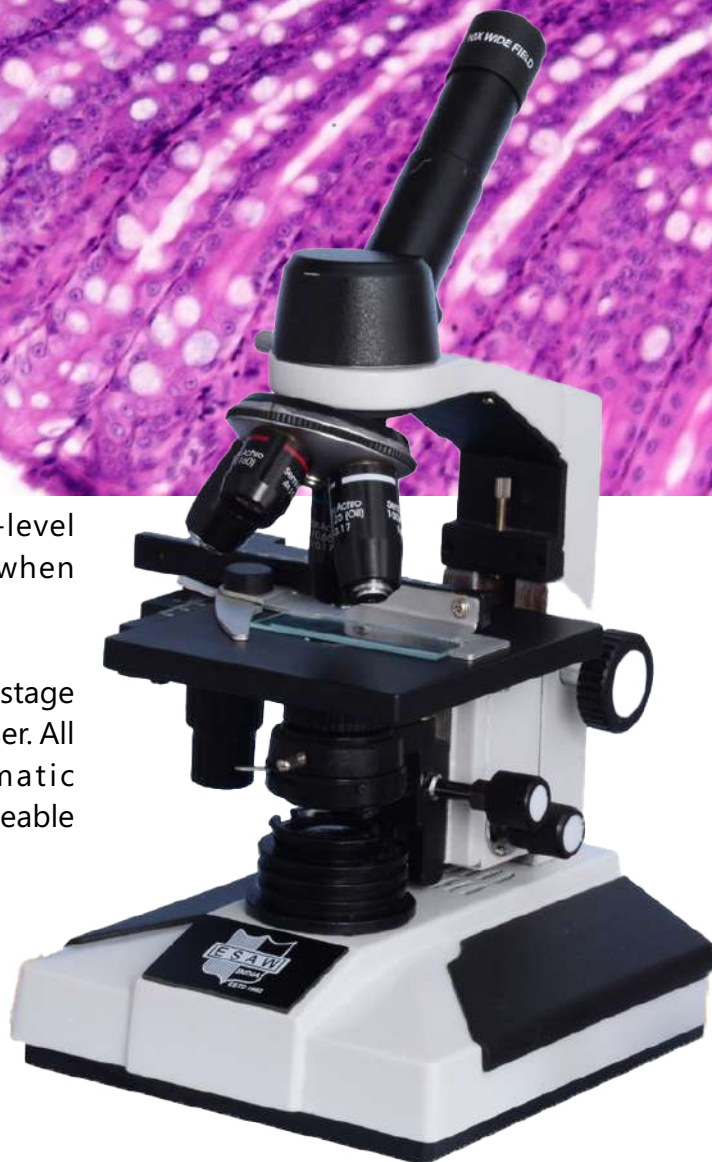
www.esawlabs.com

INCLINED MICROSCOPES



The Inclined Microscope is an entry-level microscope, especially appreciated when budgets are limited.

All models with an integrated mechanical stage are supplied with adjustable ABBE condenser. All models are equipped with achromatic objectives. They are supplied with rechargeable battery LED Light.



Monocular model **IM-01**



Ergonomically and
Aesthetically Designed



Wide Range of Eye-
Pieces 10x WF and 25x WF



Semi Plan Achromatic
Objectives



Quadruple Brass
Nose Piece

- Entry-level microscopes
- Mono, bino, trino and digital models
- Revolving nosepiece
- Integrated X-Y mechanical stage
- LED Illumination with Battery Backup
- Ergonomic carrying grip



Trinocular head **TM-01**



Binocular head **BM-01**



Stable Clipped
Slide Holder



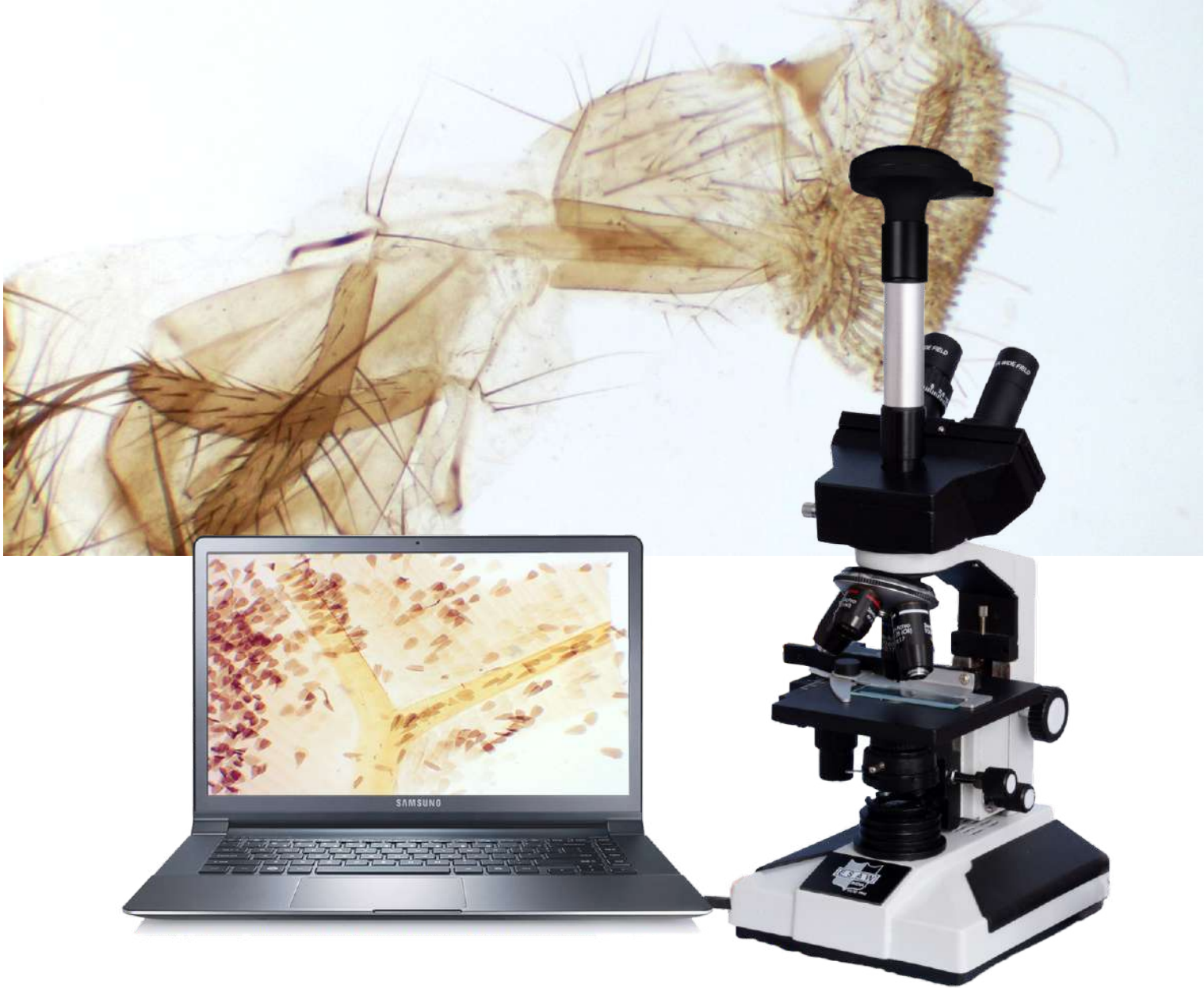
Battery Backup for
LED Light

VIEWING	360° ROTATABLE & 45° INCLINED HEAD HAVING HARD COATED PRISM & GRADUATED DIOPTRER SETTING FOR EYE-PIECE. IM SERIES - MONOCULAR; BM SERIES -BINOCULAR; TM SERIES-TRINOCULAR
MAIN BODY	ESAW ERGONOMICALLY DESIGNED, ALUMINIUM DIA CASTED STURDY BODY.
OBJECTIVE	ANTI-FUNGAL & ANTI REFLECTION COATED 4X, 10X 40X & 100X OIL IMMERSION SEMI-PLAN ACHRO DIN OBJECTIVE, WITH GREAT DESIGN.
FOCUSING	SEPARATE COARSE & HIGHLY SENSITIVE GRADUATED FINE FOCUSING KNOBS.
LIGHT SOURCE	HIGH QUALITY LED ILLUMINATION & SMPS BASED 100V-220V WIDE VOLTAGE RANGE.
EYE-PIECES	ANTI-FUNGAL & ANTI -REFLECTION COATED 10X WIDE-FIELD & 25X WIDE-FIELD EYE-PIECES PAIRS. ECONOMICAL KIT ONLY INCLUDES 10X HUYGENIAN EYEPIECE PAIR
STAGE	GRADUATED RECTANGULAR MADE MECHANICAL STAGE WITH CO-AXIAL MOVEMENT.
NOSEPIECE	OUTWARD QUADRUPLE BRASS MADE NOSEPIECE WITH POSITIVE CLICKS.
MAGNIFICATION SETTING	6 MAGNIFICATION SETTING: 40X, 100X, 250X, 400X, 1000X & 2500X
CONDENSER	ALUMINIUM MADE ABBE 1.25 NA TYPE CONDENSER WITH COPPER IRIS DIAPHRAGM & SWING IN-SWING OUT FILTER HOLDER.
PACKING & ACCESSORIES	IN BOX CONTENT-MAIN BODY, VIEWING HEAD, 4 OBJECTIVES, 4 EYE-PIECES, DUST COVER, CLEANING CLOTH, IMMERSION OIL, POWER CABLE WITH 50 BLANK SLIDES & COVER-SLIPS. PACKED IN STYROFOAM BOX & CARD BOARD BOX WITH INSTRUCTION MANUAL.

ORDERING INFORMATION

Description	Model Number
Monocular Inclined Microscope	IM-01
Binocular Inclined Microscope	BM-01
Trinocular Inclined Microscope	TM-01

DIGITAL TRINOCULAR MICROSCOPE WITH MD SERIES CAMERA



Inclined Microscope with MD Series Camera Setup



ORDERING INFORMATION

Description	Model Number
Trinocular Microscope with MD-130 (1.3MP CMOS Camera)	TM-1.3
Trinocular Microscope with MD-300 (3MP CMOS Camera)	TM-3.0
Trinocular Microscope with MD-500 (5MP CMOS Camera)	TM-5.0

MD Series Camera

MD130

Digital imaging module: Wider dynamic range 1.3MP imaging module; Imaging software: Future Win Joe microscopic imaging program; Optical matching: Built-in relay lens and field lens; Camera house: compact and light-weight round-shaped shell.

MD300

Digital imaging module: YUY2 and MJPG of image format 2048*1536 USB imaging module; Imaging software: Future Win Joe microscopic imaging program; Optical matching: Built-in relay lens and field lens; Camera house: compact and light-weight round-shaped shell.

MD500

Digital imaging module: YUY2 and MJPG of image format 2592*1944 USB imaging module; Imaging software: Future Win Joe microscopic imaging program; Optical matching: Built-in relay lens and field lens; Camera house: compact and light-weight round-shaped shell.



MD-130

MD-300

MD-500

MODEL	MD130	MD300	MD500
CAPTURE MODE	PICTURE AND VIDEO	PICTURE AND VIDEO	PICTURE AND VIDEO
SENSOR PARAMETER	1/3 1.3MP	1/2 3.0MP	1/2.5" 5.0MP
MAX. RESOLUTION	1280*1024	2048*1536	2592*1944
PIXEL SIZE	2.2μm*2.2μm	2.2μm*2.2μm	2.2μm*2.2μm
RESPONSIVITY	1.0V/ lux-sec	1.4V/lux-sec	1.4V/lux-sec
DYNAMIC RANGE	71dB	70.1dB	70.1dB
S/N RATIO	44dB	38.1dB	38.1dB
SPECTRAL RANGE	400-650nm(with IR-filter)	400-650nm(with IR-filter)	400-650nm(with IR-filter)
FRAME RATE	17fps@1280*1024	15fps@2048*1536	10fps@2592*1944
PREVIEW MODEL	1280x1024,1280x800, 1024x768,800x600, 640x480, 352x288,320x240, 320x240,640x480,352x288	2048x1536,1600x1200, 1280x1024,800x600, 640x480, 352x288,320x240	2592x1944,2048x1536, 1600x1200,1280x1024, 800x600, 640x480, 352x288,320x240
EXPOSURE	ERS OR MANUAL	ERS OR MANUAL	ERS OR MANUAL
POWER CONSUMPTION.	190mW	381mW	381mW
WHITE BALANCE	AUTO	AUTO AND MANUAL	AUTO AND MANUAL
POWER SUPPLY	USB POWERED	USB POWERED	USB POWERED
DEVICE WEIGHT	0.09kg	0.09kg	0.09kg
DEVICE SIZE	Φ74.00mm*97.00mm	97mm*Φ74mm	97mm*Φ74mm
CABLE LENGTH	1.5m	1.5m	1.5m
FUNCTION OF SOFTWARE	IMAGE & VIDEO CAPTURE, EDIT AND MANAGEMENT	IMAGE & VIDEO CAPTURE, EDIT AND MANAGEMENT	IMAGE & VIDEO CAPTURE, EDIT AND MANAGEMENT

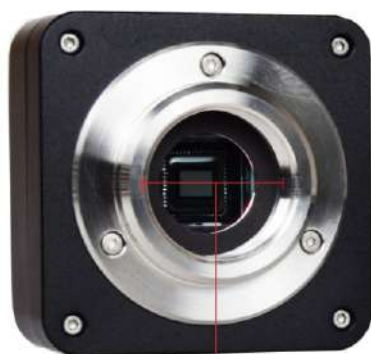
TRINOCULAR MICROSCOPE WITH TEACHING CAMERA

Digital Cameras with Next Generation CMOS Sensor

The plug and play ESAW IS Series Cameras produce high quality images making it a great choice for education, pathology and research applications. Available in 5,12,18,20 & 45 Megapixels. All ESAW IS Series cameras supplied with a copy of ESAW image analysis, an advanced Image processing and documentation software.



Inclined Microscope with IS Series Camera Setup



Infitted C-Mount Adapter



C-Mount to 23.2mm Adapter



23.2 to 30mm
Conversion Adapter



23.2 to 30.5mm
Conversion Adapter

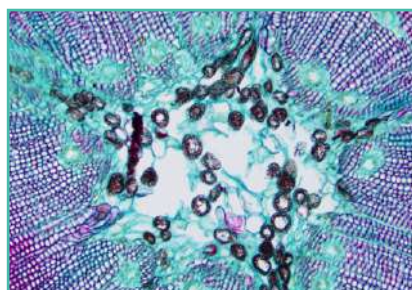


Powerful, user-friendly IS Series software comes with tools for:

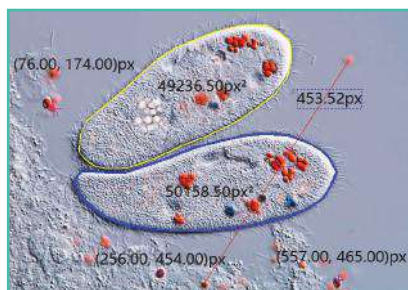
- Image Enhancement (hue, saturation, contrast, etc)
- 2D Measurement including calibration
- Auto-exposure and single click white balance
- Capture Images, High Quality Videos
- Compatible with Windows, Mac OS and Linux
- C/C++, C#, DirectShow, Twain Control API

ORDERING INFORMATION

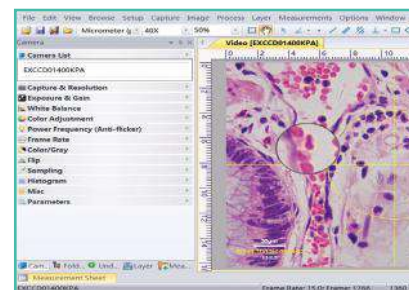
Description	Model Number
Trinocular Microscope with IS-500 (5MP CMOS Camera)	TMIS-5.0
Trinocular Microscope with IS-1200 (12MP CMOS Camera)	TMIS-12.0
Trinocular Microscope with IS-1800 (18MP CMOS Camera)	TMIS-18.0
Trinocular Microscope with IS-2000 (20MP CMOS Camera)	TMIS-20.0
Trinocular Microscope with IS-4500 (45MP CMOS Camera)	TMIS-45.0



Ideal for routine brightfield applications



Measurement



Advanced image processing software esaw image Analysis

MODEL NO	IS-500	IS-1200	IS-1800	IS-2000	IS-4500
SENSOR & SIZE(MM)	5.1M/AR0521(C) 1/2.5" (5.70x4.28)	12M/IMX577(C) 1/2.3" (5.95x4.71)	18WAR1820(C) 1/2.3"(6.14x4.61)	20M/IMX183(C) 1"(13.06x8.76)	45M/IMX492(C) 1.4" (18.93x13.00)
PIXEL(PM)	2.2x2.2	1.55x1.55	1.25x1.25	2.4 x2.4	2.315x2.315
G SENSITIVITY	18.8ke-/lus	250LSB	0.62 V/lux-sec	462mv with 1/30s	108mv with 1/30s
DARK SIGNAL	73dB 40dB	70dB 43dB	65.8dB 36.3dB	0.21mv with 1/30s	0.03mv with 1/30s
FPS/RESOLUTION	30@2592x1944 30@1280x960 30@640x480	20@3840x3040 20@1920x1520 20@960x760	13.1@4912x3684" 34.3 @2456x1842 54.4 @1228x922	15@5440x3648 50@2736x1824 60@1824x1216	10.4@8176x4320© 34.7@4096x2160(M) 62.5@2048x1080(M) 86.5@1344x720(M)
BINNING	1 X 1 1 X 1 1 X 1	1 X 1 1 X 1 1 X 1	1 X 1 2 X 2 4 X 4	1 X 1 2 X 2 3 X 3	1 X 1 (17 : 9) 2 X 2 (17 : 9) 3 X 3 (17 : 9) 4 X 4 (17 : 9)
EXPOSURE	0.1-1000ms	0.1-2000ms	0.1ms~2s	0.1ms~15s	0.1ms~15s
SPECTRAL RANGE	380-650nm (with IR-filter), for Monochromatic Camera, AR Is Used				
WHITE BALANCE	ROI White Balance/ Manual Temp-Tint Adjustment				
COLOR RENDERING TECHNIQUE	Ultra Fine Color Engine				
CAPTURE/CONTROL SDK	Windows/Linux/macOS/Android Multiple Platform SDK(Native C/C++, C#/VB.NET, Python, Java, Direct Show, Twain, etc);				
ADC	8 Bit / 14 Bit				
RECORDING SYSTEM	Still Picture and Movie				
COOLING SYSTEM*	Natural				
OPERATING TEMPERATURE	-10°C- 50°C				
STORAGE TEMPERATURE	-20°C- 60°C				
OPERATING HUMIDITY	30-80%RH				
STORAGE HUMIDITY	10-60%RH				
POWER SUPPLY	DC 5V over PC USB Port				