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A13.1095

Metallurgical Microscope, Full Auto, Reflect, Transmit/Reflect, Semi-APO, BF+DF+DIC+PL

A13.1093, A13.1095 Series Microscope

A13.1093
Metallurgical Microscope, Semi-Auto Reflect, Transmit/Reflect, Semi-APO, BF/DF, DIC, PL

A13.1095
Metallurgical Microscope, Full Auto, Reflect, Transmit/Reflect, Semi-APO, BF+DF+DIC+PL

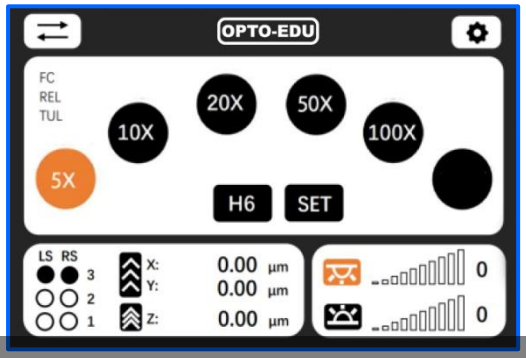
A13.1095 Details

Ergo Tilting Trinocular Head

Eye tube can be adjustable from 0 ° to 35 °, Trinocular Head having a 3-postion beam splitter (0:100, 100:0, 80:20)

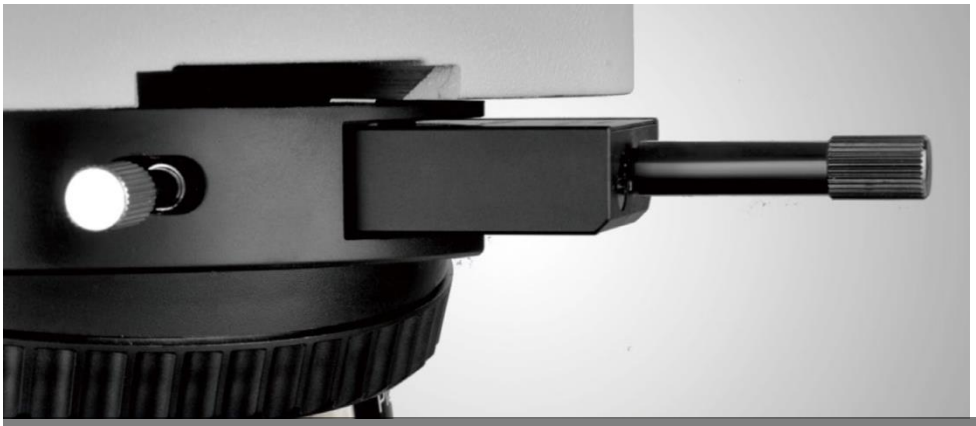
A5M.1091, A5M1092 Series Infinity Plan BF/DF Semi-APO Objectives

By using carefully selected high- transparent glass and advanced coating technology, A5M.1091 objective lens can provide high resolution image and accurately reproduce the natural color of the specimen . For special applications, a variety of objectives is available, including polarizing and long working distance.



Auto Coded Nosepiece

Sextuple, Backward, With Slot For Polarizing Compensator Slider Or DIC Slider; One click can realize the electric conversion of the objective lens, and memorize the appropriate light intensity of each objective lens



Nomarski DIC

With newly designed DIC module, the height difference of a specimen which can not be detected with brightfield becomes a relief-like or 3D image. It is ideal for the observation of LCD conducting particles and the surface scratches of hard-disk etc.

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Speed Control & Objective Convert Button

The hand wheel buttons on both sides work independently, and different focusing speeds can be set respectively
Quickly switch objectives during binocular observation

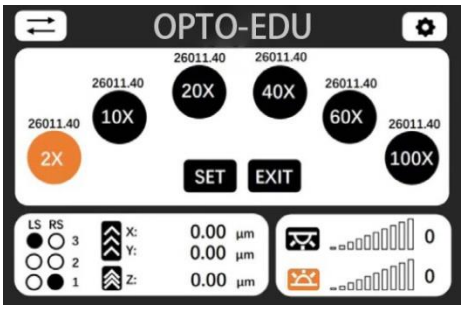
ESC: Relative coordinate zero point
LIMIT: Temporary upper limit

Touch Screen

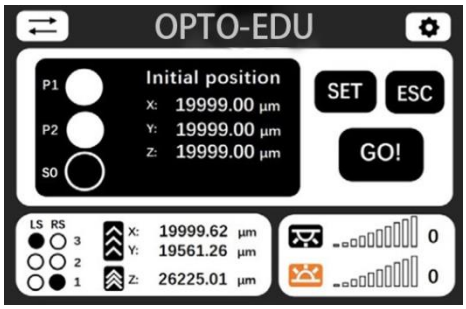
which can be used for focusing, adjusting light intensity, setting limit and converting objective lens

Touch Control Screen, Saving Space, Flexible Control

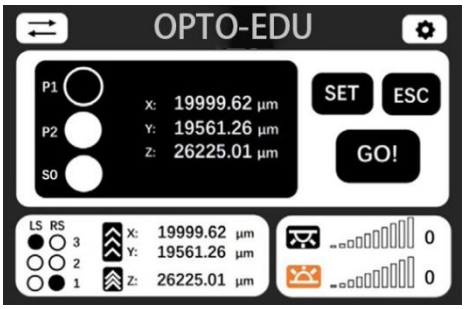
The front touch control screen integrated with the microscope does not occupy the desktop position. The interface is simple and easy to operate, and the programmable control simplifies the repeated observation and imaging process. Powerful functions: three axis coordinate display, speed gear display, objective electric switch, objective double hole directional switch, position memory and return, relative coordinate display, objective focus compensation, temporary upper limit setting, platform escape and recovery, display day / night mode, etc.



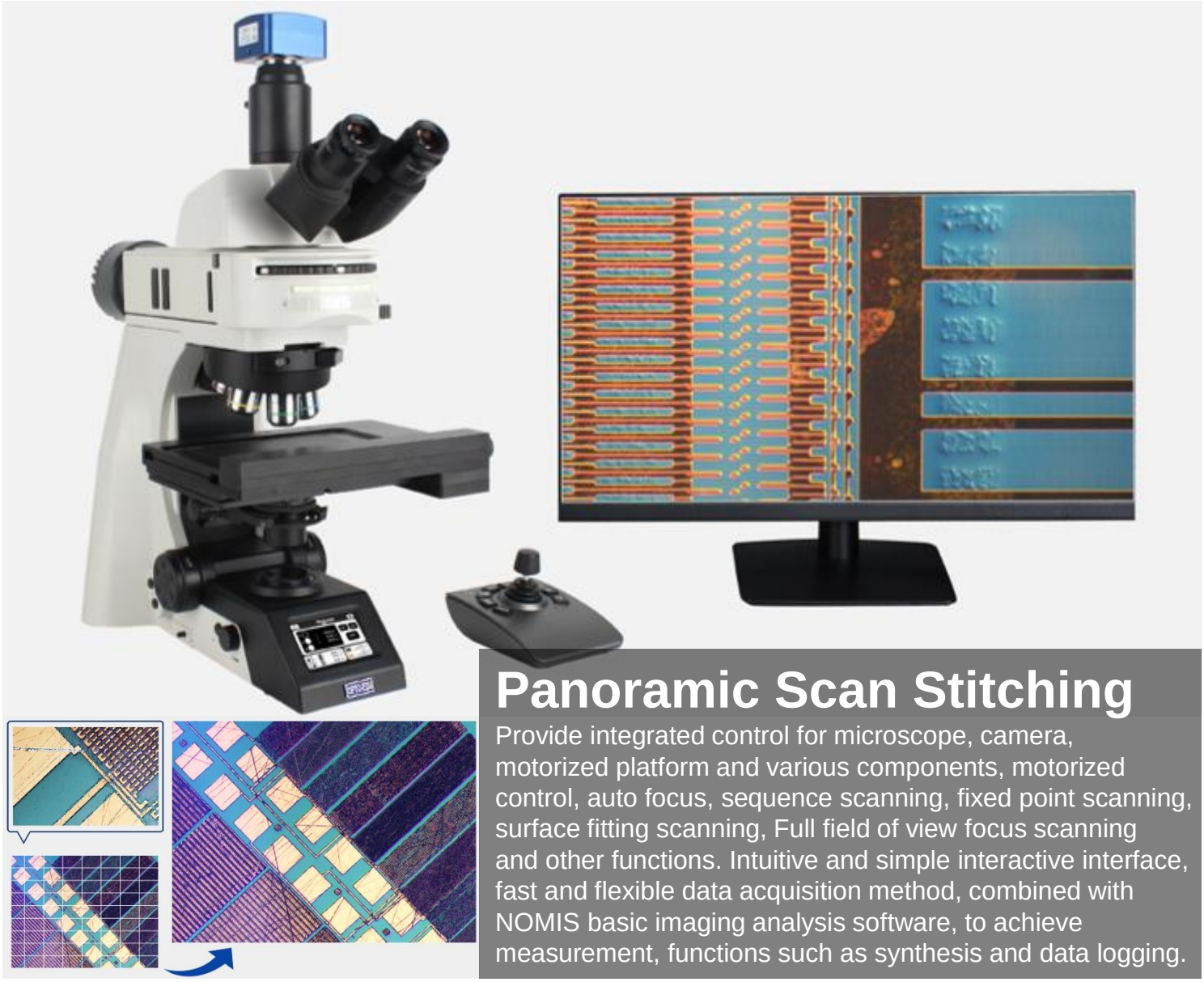
Objective Confocal Compensation: Each objectives focus distance will be memorized, when switch objectives, Z axie control will automatically restore to correct focus distance to get clear image



Location memory and return: 2 location memory points and 1 location memory point can be set. The initial position point is used to mark the key observation position.



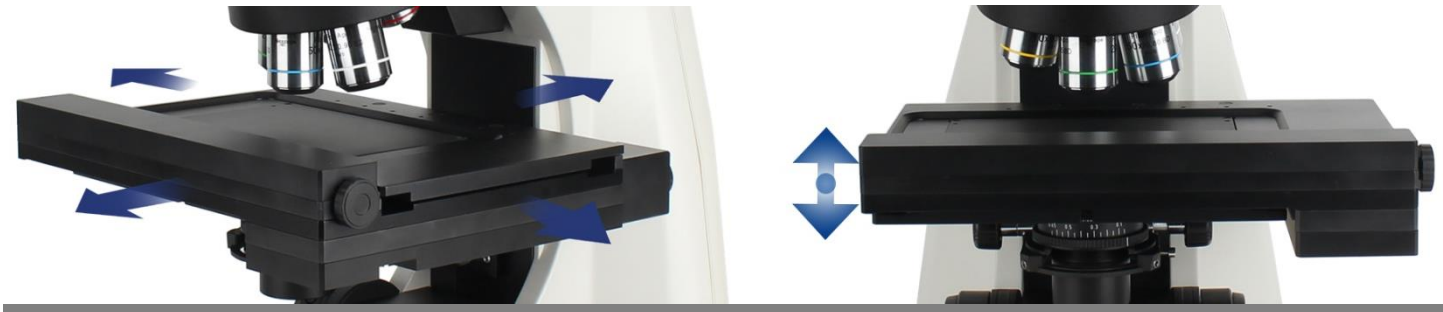
Platform escape and return: One Key Return can be seted between current position and zero point of coordinate, enable switch slide more convenient and easy



Panoramic Scan Stitching

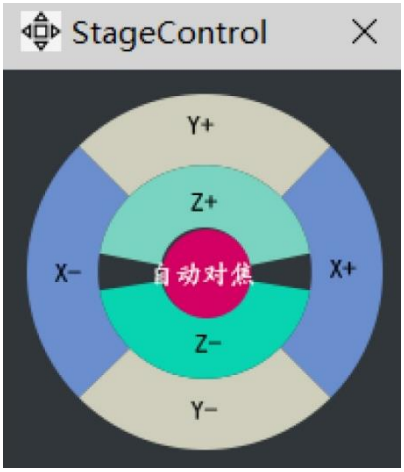
Provide integrated control for microscope, camera, motorized platform and various components, motorized control, auto focus, sequence scanning, fixed point scanning, surface fitting scanning, Full field of view focus scanning and other functions. Intuitive and simple interactive interface, fast and flexible data acquisition method, combined with NOMIS basic imaging analysis software, to achieve measurement, functions such as synthesis and data logging.

A13.1095 Details



Motorized X/Y/Z Working Stage

A54.1095 micro electric control platform provides control movement in three directions of X/Y/Z. The stepper motor and screw rod mode is adopted to ensure the flatness and accuracy of the X/Y axis movement, and the maximum scanning speed can reach 25mm/s. Through software control, it can process microscopic shooting automation and process pictures, such as image stitching, depth-of-field fusion (need to match the electric Z-axis), perforated plate scanning, etc.



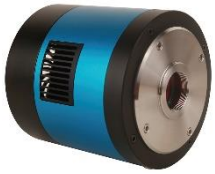
Control Stick

The joy stick is the controllers of the X/Y/Z motorized stage, suitable for electric microscopes that require accuracy and reliability, and can finely control the X/Y/Z axis.
X/Y/Z motorized stage can be controlled by virtual joy stick of software.

A13.1095 Packing

A13.1095 Software Function

A59.2225

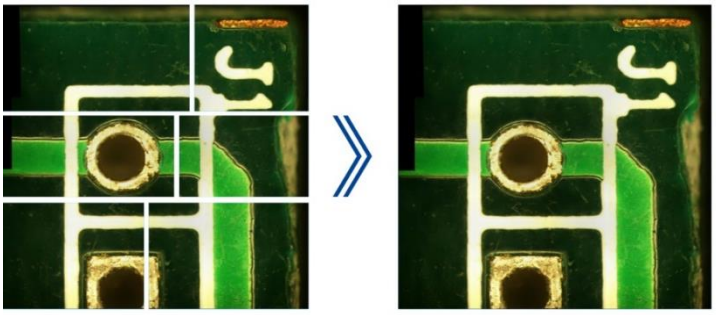


A59.2226

With high speed USB3.0 digital camera and professional image processing software, Opto-Edu microscope can work with computer to get various advanced function done easily. Real Time / Static Measure, 2D Image Scan & Stitching, 3D Depth of Field Fusion, Fluorescent Image Synthesis, Cell Counting and etc.

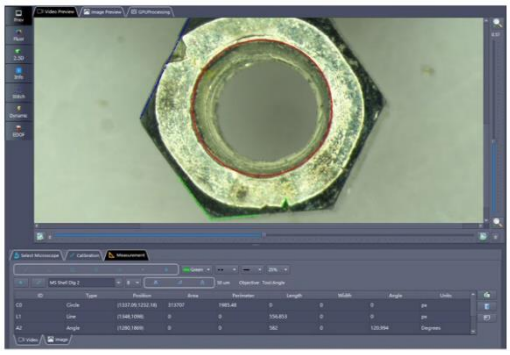
◆ 2D Image Scan & Stitching

Imaging software for high-quality image acquisition, processing and analysis. By collecting images in real time or importing images, small images can be spliced quickly to form a large-size, high-resolution image.



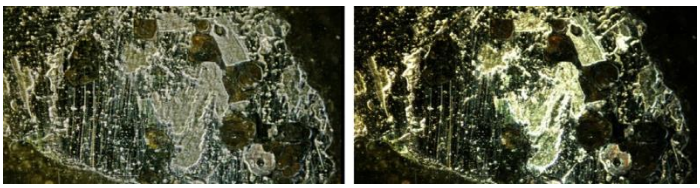
◆ Real-time / static measurement

Typical observation and quality control require interactive measurement functions such as distance, angle, rectangle, circle and ellipse.



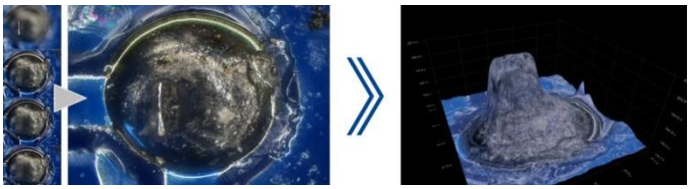
◆ High-definition real-time HDR image/video

When observing different samples, the surface of the sample will show areas of high contrast. HDR allows users to complete the generation of perfect exposure images between clicks



◆ 3D Depth Of Field Fusion

Provides depth fusion and 3D reconstruction functions



A13.1095 Specification

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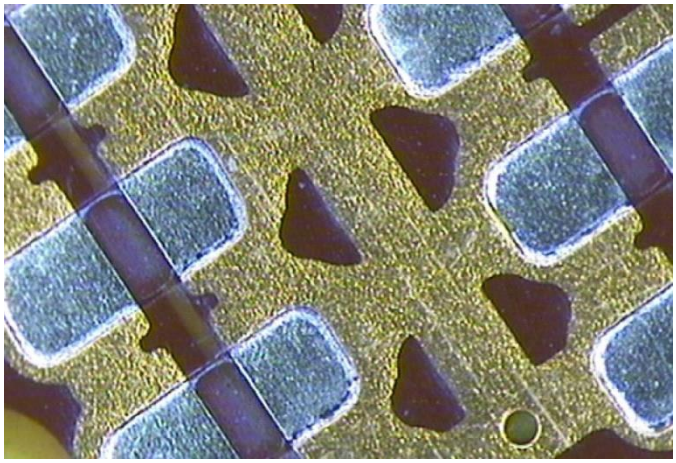
A13.1095 Metallurgical Microscope, Full Auto, Reflect, Transmit/Reflect, Semi-APO, BF+DF+DIC+PL		A13.1095		Cata.No.
		-R	-TR	
Optical System	NIS45 Infinite Optical System	●	●	
Observation Method	Bright Field	●	●	
	Dark Field	●	●	
	Polarizing	●	●	
	DIC	●	●	
Main Body	BH Manual Body + Halogen Illumination.			A54.1090-BH
	BL Manual Body + LED Illumination.			A54.1090-BL
	ATH Semi-Auto Body + Halogen Illumination. Auto Nosepiece + Auto Condenser + Auto Brightness Adjust	●	●	A54.1090-ATH
	ATL Semi-Auto Body + LED Illumination. Auto Nosepiece + Auto Condenser + Auto Brightness Adjust	○	○	A54.1090-ATL
Head	Seidentopf Binocular Head, Inclined 30°, Interpupillary Distance 47-78mm	○	○	A53.1090-B
	Seidentopf Trinocular Head, Inclined 30°, Interpupillary Distance 47-78mm, 3 Level Ligth Split Switch E100:P0/E20:P80/E0:P100	○	○	A53.1090-T
	Ergo Tilting Trinocular Head, Inclination 0°~35°, Interpupillary Distance 47-78mm, 3 Level Ligth Split Switch E100:P0/E20:P80/E0:P100	●	●	A53.1090-TT
Eyepiece	SW10x/25mm, High Eyepoint, Diopter Adjustable, Dia.30mm	●●	●●	A51.1090-1025
	SW10x/22mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	A51.1090-1022
	EW12.5x/16mm, High Eyepoint	○	○	A51.1090-12516
	WF15x/16mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	A51.1090-1516
	WF20x/12mm, High Eyepoint, Diopter Adjustable, Dia.30mm	○	○	A51.1090-2012
Nosepiece	Manual Nosepiece, Sextuple, Backward			A54.1091-6M
	Coded Nosepiece, Sextuple, Backward, For Auto Brightness Adjust			A54.1091-6C
	Auto Coded Nosepiece, Sextuple, Backward, Motorized Switch Objectives, Controlled By: 1. Shortcut Button On Right Side Of Base, Can Switch 2 Presented Objectives Quickly 2. Remote Control Pad In Front Of Base, Press Each Button To Switch Objectives And Adjust The Light Intensity Automatically. 2 Buttons Can Be Self-Defined For Most Commonly Used Objectives, Press Green Button Can Swap Between Them	●	●	A54.1091-6A
	With Slot For Polarizing Compensator Slider Or DIC Slider	●	●	
	Protect Cover For Nosepiece Holes	●	●	A54.1091-C
NIS45 N-MPFN Infinity Plan BF/DF Semi-APO Metallurgical Objective	BD 5x/0.15, W.D.20mm, No Cover Glass	●	●	A5M.1091-5
	BD 10x/0.3, W.D.11mm, No Cover Glass	●	●	A5M.1091-10
	BD 20x/0.45, W.D.3mm, No Cover Glass	○	○	A5M.1091-20A
	BD LWD 20x/0.4, W.D.12mm, No Cover Glass	●	●	A5M.1091-20
	BD LWD 50x/0.5, W.D.10.6mm, No Cover Glass	●	●	A5M.1091-50
	LWD 100x/0.8, W.D.3.5mm, No Cover Glass	●	●	A5M.1091-100
NIS45 BF/DF APO	BD 50x/0.8, W.D.1mm, No Cover Glass	○	○	A5M.1092-50
	BD 100x/0.9, W.D.1mm, No Cover Glass	○	○	A5M.1092-100

A13.1095 Metallurgical Microscope, Full Auto, Reflect, Transmit/Reflect, Semi-APO, BF+DF+DIC+PL		A13.1095 -R	A13.1095 -TR	Cata.No.
Working Stage For Metallurgical Microscope	Motorized X/Y/Z Working Stage, Size 275x239x44.5mm, Move Range 125x75mm, Minimum step length 0.1um, repeat positioning accuracy ±1.5um, maximum speed 20nm/s, soft limit + mechanical limit + photoelectric switch limit, Z axis repeat positioning accuracy average: ±1.5um, near focus ±0.1um, Z Maximum axis speed 10r/s, three-dimensional controllable remote sensing, four-speed speed, USB2.0 & RS232 communication interface, communication speed 9600, Including Control Stick, Controller Box	●	●	A54.1095
Condenser	LWD Condenser, N.A.0.65, W.D.10.2mm, Center Adjustable, Dual Condenser Lifting Handle	●	●	A5M.1095
Focusing	Coaxial Coarse & Fine Focusing, Fine Division 0.001mm, Focusing Range 35mm, Coarse Stroke 37.7mm, Fine Stroke 0.1mm,Can Exchange Hand Wheel Between Left/Right,	●	●	
	Max Sample Space 76mm	●		
	Max Sample Space 56mm		●	
Reflect Light Source	Reflect Epi Metallurgical Illuminator, Turret Disc With 6 Positions For Filter Block, Kohler Illumination	●	●	A5M.1090
	12V100W Halogen Lamp Housing	●	●	A5M.1090-100W
	BF/DF View Block	●	●	A5M.1090-BD
	BF1 View Block	●	●	A5M.1090-B1
	BF2 View Block	●	●	A5M.1090-B2
Filter For Reflect Light Source	Filter Blue	●	●	A56.1093-B
	Filter Green	●	●	A56.1093-G
	Filter Yellow	●	●	A56.1093-Y
	Filter Forested	●	●	A56.1093-F
Polarizing	Polarizer For Reflect Light Source	●	●	A5P.1090-RP
	Analyzer For Reflect Light Source	●	●	A5P.1090-RA
DIC	Blank Slider	●	●	A5P.1090-E
	Nomarski DIC Slider For Reflect Light Source	●	●	A5M.1090-DIC
Transmit Light Source	Transmit Kohler Illumination, Brightness Adjustable, 12V100W Halogen, External Lamp House		●	A56.1090-12V100W
	Transmit Kohler Illumination, Brightness Adjustable, 3W S-LED, Built-in Main Body		○	A56.1090-3WLED
	ECO Function Support Auto Power Off After 30 Mins From Operator Leave To Save Energy		●	A56.1090-ECO
	Auto Brightness Adjust, Brightness For Each Objective Can Be Memorized And Restored When Objective Is Selected A13.1095 Upgradeable To Auto Brightness Adjust, Must Upgrade To A54.1091-6C Coded Nosepiece At Same Time		●	A56.1090-AB
Filter For Transmit Light Source	Filter Holder On Base, Can Hold 3 Filters		●	A56.1092-H
	Filter LBD		●	A56.1092-LBD
	Filter Green		●	A56.1092-G
	Filter Yellow		●	A56.1092-Y
	Filter ND6		●	A56.1092-ND6
	Filter ND25		●	A56.1092-ND25
Adapter	Eyepiece Adapter Dia.23.2mm	○	○	A55.1090-E
	C-Mount 1.0x	○	○	A55.1090-1.0x
	C-Mount 0.5x	○	○	A55.1090-0.5x
Software	NOMIS Basic Image Processiing Software	○	○	A30.1090
Other Accessories	Working Stage Holder Bracket	●	●	A54.1096
	Adapter To Adjust Eye Position	○	○	A54.1096-A1
	Adapter To Lower The Stage Position 1"	○	○	A54.1096-A2
	Immersion Oil	○	○	A50.1090-01
	Allen Wrench	●	●	A50.1090-02
	Power Cord	●	●	A50.1090-03
	Short Eye Cover, For Eyepiece	○	○	A50.1090-04
	Long Eye Cover, For Eyepiece	○	○	A50.1090-05
	Eyepiece Micrometer, Cross	○	○	A50.1090-06
	Adapter Ring To Install Eyepiece Micrometer	○	○	A50.1090-07
	USB Cable	○	○	A50.1090-08
Note:"●"In Table Is Standard Outfits,"○" Is Optional Accessories "-" Is Unavailable				

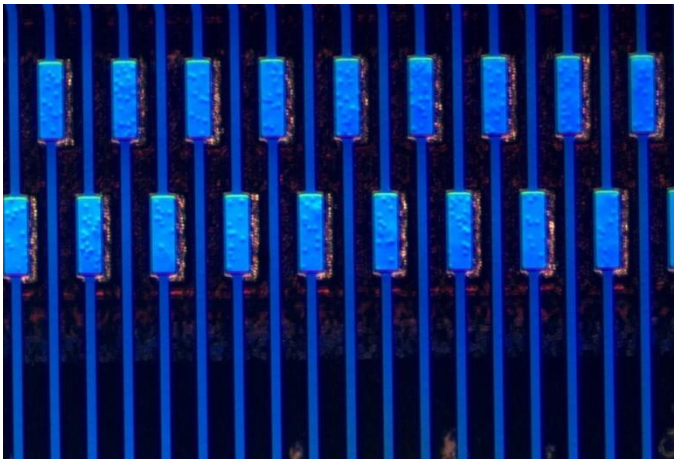
A13.1095 Various Observation Methods

With excellent optical system, A13.1091 series microscope provides high resolution and chromatic aberration corrected images both in the eyepieces and on the monitor.
A13.1091 series has been designed with modularity to meet various industrial and materials science applications. It gives users flexibility to build a system for specific needs.



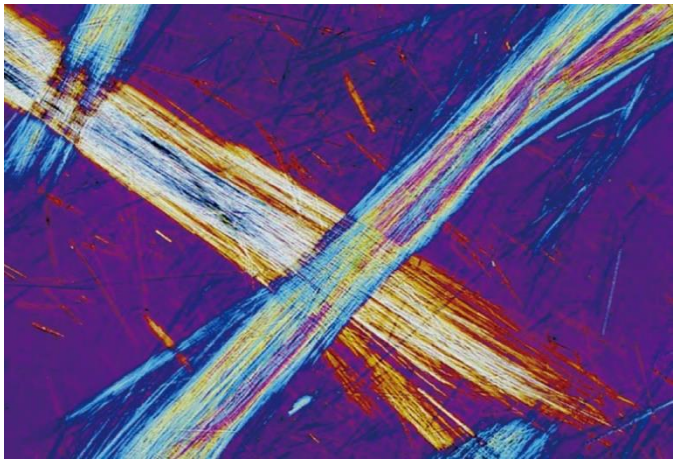
Wafer, Darkfield

Darkfield enables the observation of scattered or diffracted light from the specimen. Anything that is not flat reflects this light while anything that is flat appears dark so imperfections clearly stand out. The user can identify the existence of even a minute scratch or flaw down to the 8nm level-smaller than the resolving power limit of an optical microscope. Darkfield is ideal for detecting minute scratches or flaws on a specimen and examining mirror surface specimens, including wafers.



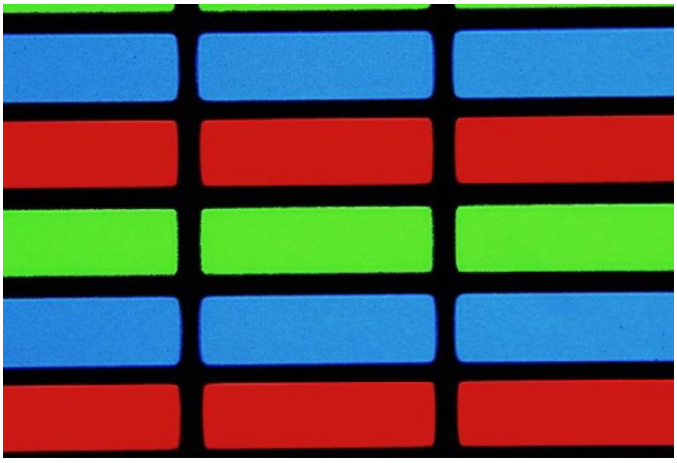
Conducting Particles, DIC

DIC is a microscopic observation technique in which the height difference of a specimen not detectable with brightfield becomes a relief-like or three- dimensional image with improved contrast. This technique utilizes polarized light and can be customized with a choice of three specially designed prisms. It is ideal for examining specimens with very minute height differences, including metallurgical structures, minerals, magnetic heads, hard-disk media, and polished wafer surfaces.



Asbestos, Polarized Light

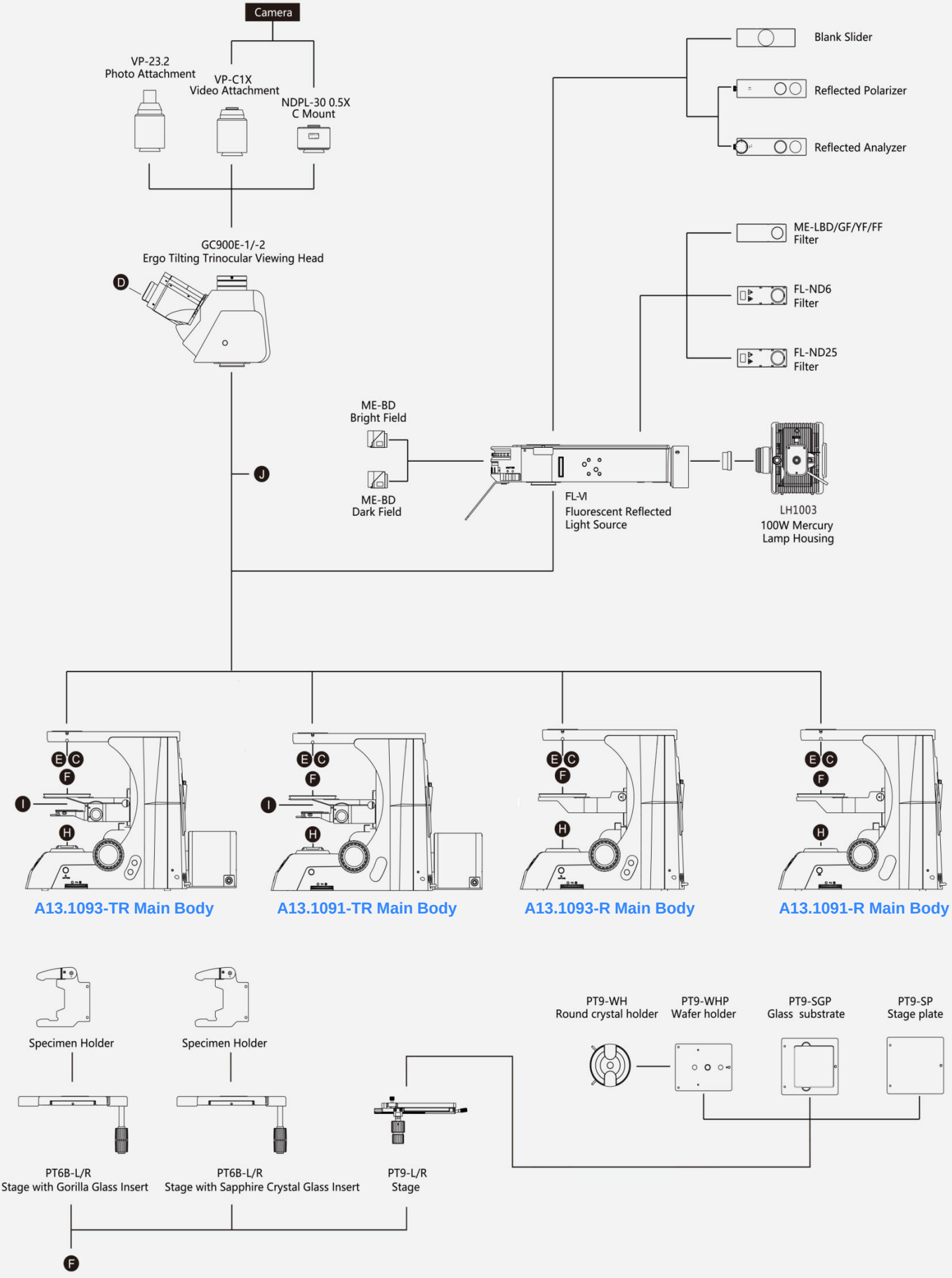
Polarizing Light generated by a set of filters (analyzer and polarizer). The characteristics of the sample directly affect the intensity of the light reflected through the system. It is suitable for metallurgical structures (i.e., growth pattern of graphite on nodular casting iron), minerals, LCDs and, semiconductor materials.

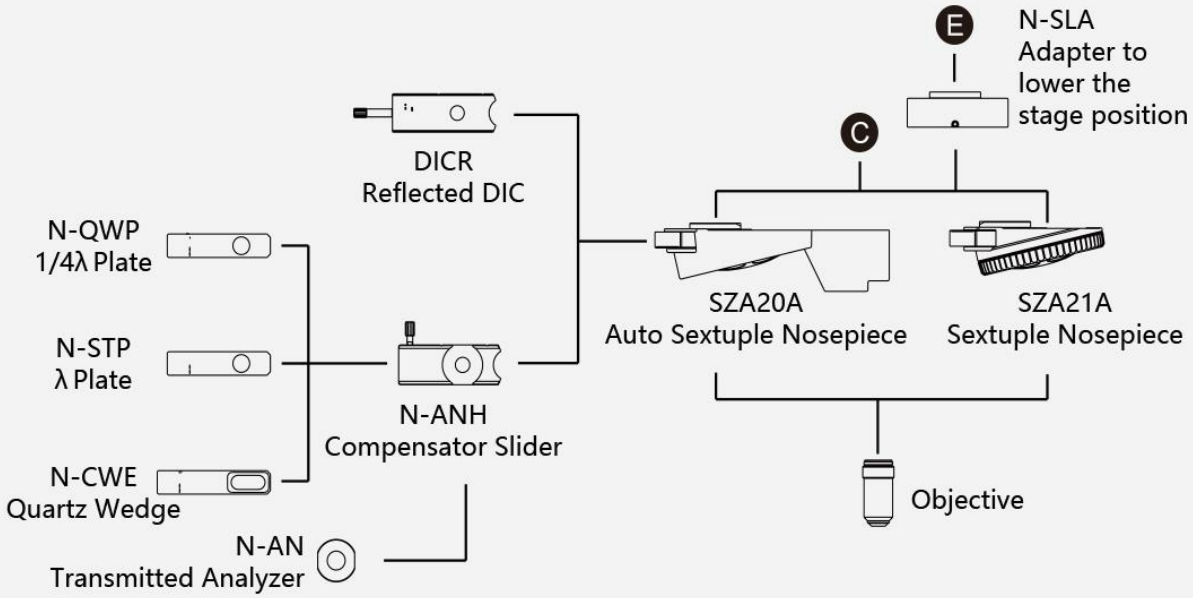


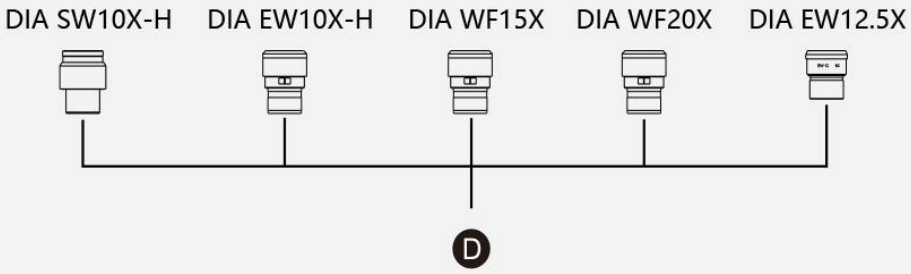
LCD, Transmitted Light Observation

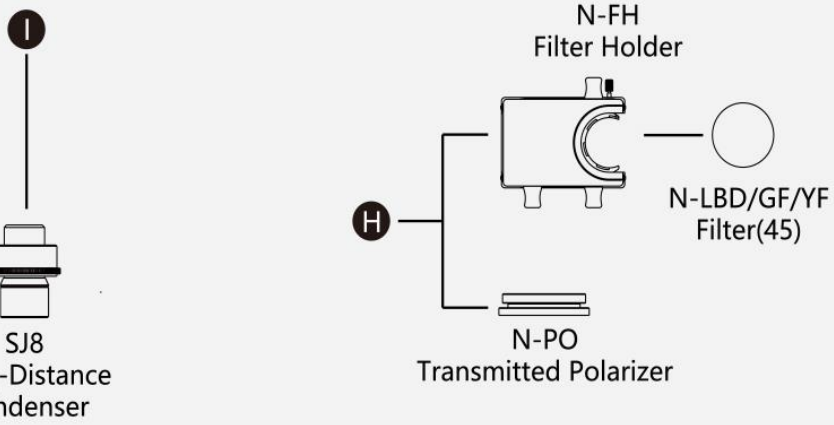
Bright Field Transmit & Reflect View. For transparent specimen such as LCDs, plastics, and glass materials, true transmitted light observation is available by using a variety of condensers. Examining specimen in transmitted brightfield and polarized light can be accomplished all in one convenient system.

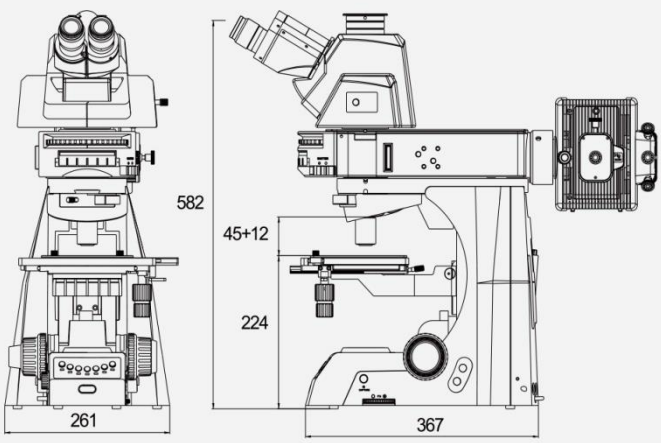
A13.1095 System Diagram & Size(mm)

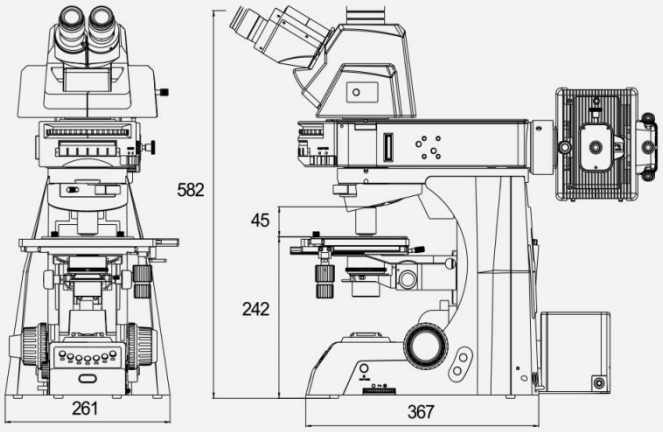



E
N-SLA
Adapter to
lower the
stage position
C
DICR
Reflected DIC
N-QWP
1/4λ Plate
N-STP
λ Plate
N-CWE
Quartz Wedge
N-ANH
Compensator Slider
N-AN
Transmitted Analyzer
SZA20A
Auto Sextuple Nosepiece
SZA21A
Sextuple Nosepiece
Objective


DIA SW10X-H
DIA EW10X-H
DIA WF15X
DIA WF20X
DIA EW12.5X
D

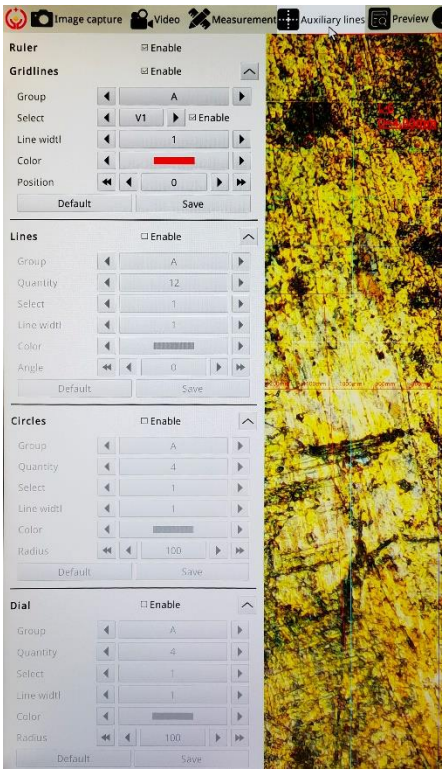

I
SJ8
Long-Distance
Condenser
N-FH
Filter Holder
H
N-LBD/GF/YF
Filter(45)
N-PO
Transmitted Polarizer

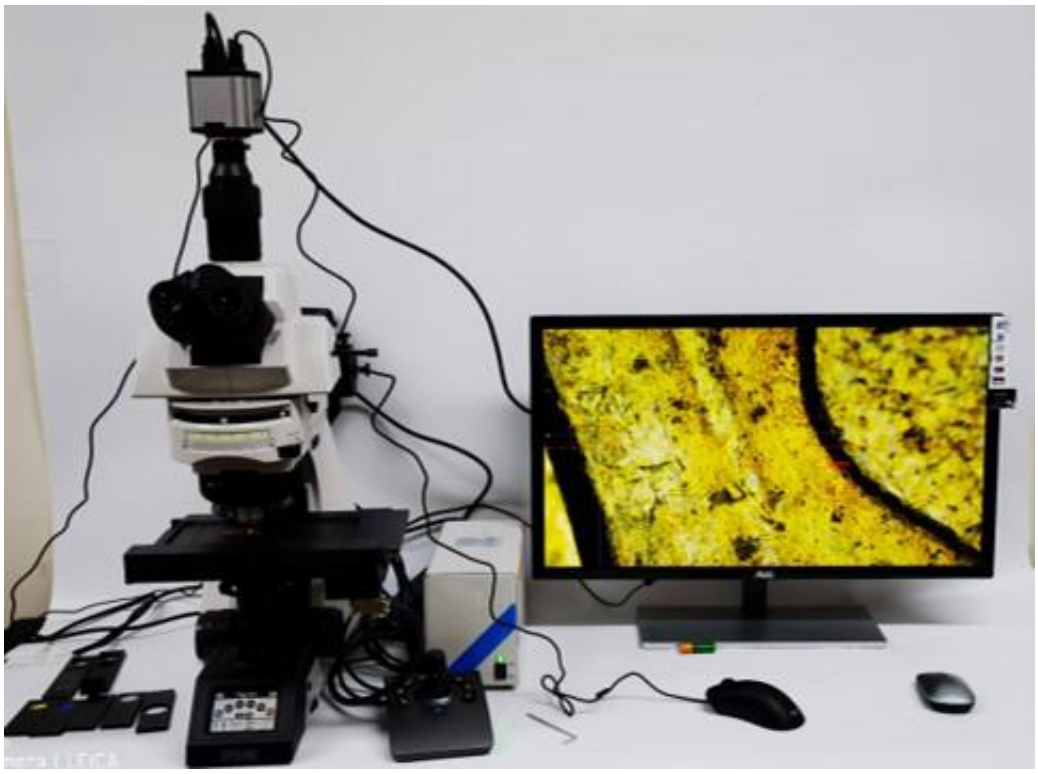

582
45+12
224
261
367

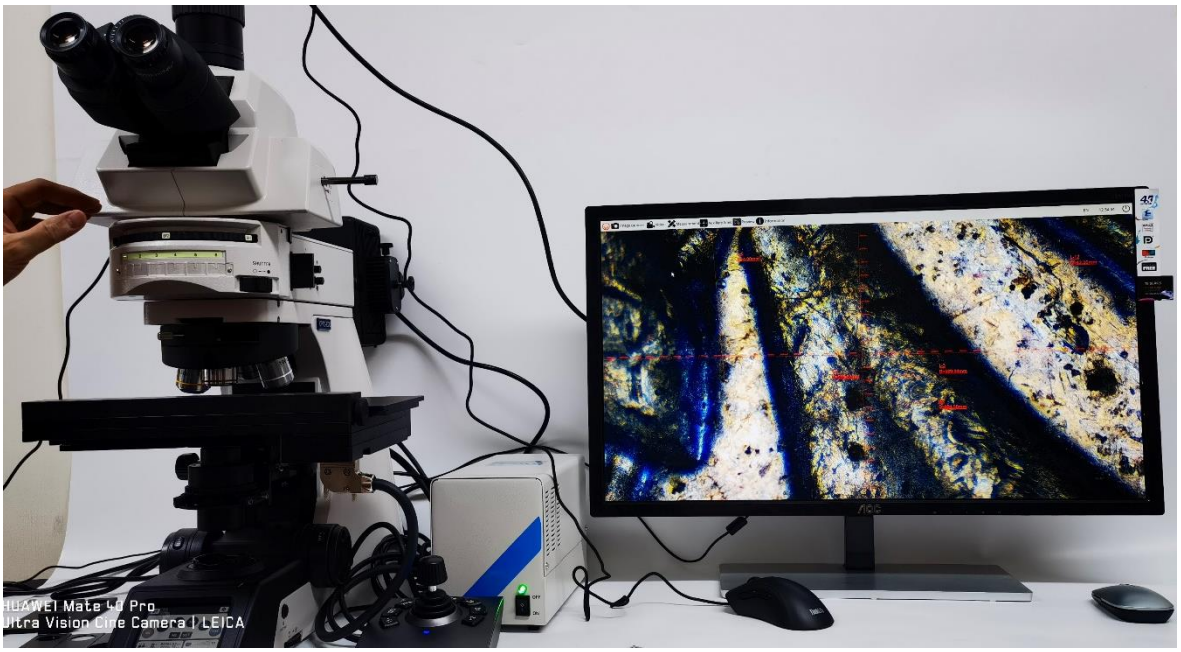

582
45
242
261
367

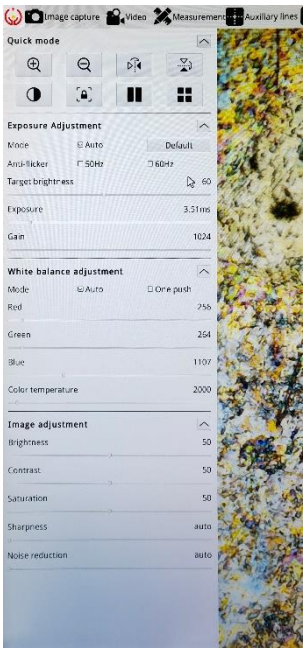
A13.1095 More Pictures

A13.1095 More Pictures









OPTO-EDU

THE KEY TO MICRO WORLD

MICROSCOPE IS OUR FOCUS

The Key To Micro World

Opto-Edu is one of the most professional supplier for microscope & educational instruments from China. We have been focusing in this field for more than 25 years, has a professional sales team who can assist our customer to find the BEST SELECTED microscope with competitive price and 3 YEARS Warranty.

25+ Year professional experience we know Microscopes the best!
150+ Microscope & accessory manufacturers supply all models from China
200+ Hot sale microscopes & Newest Models Updated Every Month
750+ Customer from all over the world & keep rising every day
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