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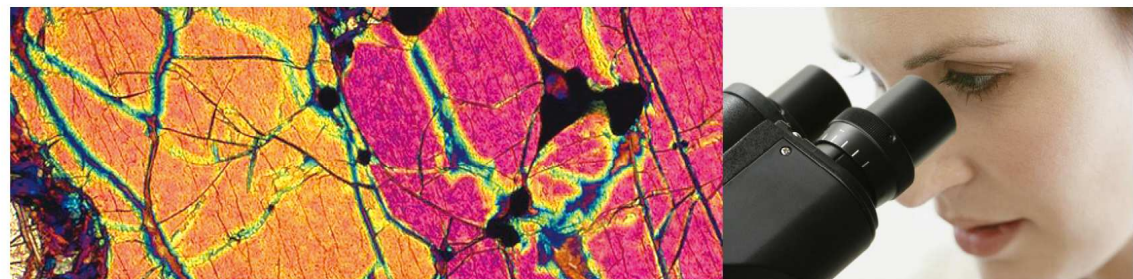
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Polarizing Microscope

Provide high quality optical system, stable operation structure, clear image and simple operation, widely used in component analysis and identification on various mineral specimens and saple slices under polarized light



XY Series
BH Series



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XY Series Polarizing Microscope



XY-PRT (Transmission and reflection)

XY-P (Transmission)

XY-PR (Reflection)

Specification

Optical system	Color corrected infinity optical system
Objective	Transmission: Infinity plan destressing objective 4X,10X,40XS, 60XS Optional: 20X, 100XS (oil) Reflection - transmission & reflection: Long working distance infinity plan destressing objective 5X,10X,20X, 50XS(Semi Apochromatic) Optional: Long working distance infinity plan destressing objective 100XS(Semi Apochromatic)
Eyepiece	PL10X/22mm high point plan eyepiece, PL10X/22mm plan eyepiece with reticle Optional: High point plan eyepiece with adjustable diopter PL10X/22T, plan gridding eyepiece PL10X/22G, plan eyepiece PL15X/16, plan eyepiece PL16X/15
Viewing head	Infinity gemel binocular Head, 30° inclined, 360° rotatable, diopter adjustment of range(±5mm), inter-pupillary range:54mm to 75mm Optional: Infinity gemel trinocular Head, 30° inclined, 360° rotatable, diopter adjustment of range(±5mm), inter-pupillary range:54mm to 75mm
Illuminator	Transmission: Built-in Koehler illuminator systems, wide-range voltage 90-240V, 6V/30W halogen lamp precentered and prefocused, with continuous intensity control Reflection: Reflection illuminator (with blue filter group), with polarizer, field diaphragm and aperture diaphragm, 12V/50W halogen light house Transmission & reflection: Built-in Koehler illuminator systems, wide-range voltage 90-240V, 12V/50W halogen light house(T); Reflection illuminator (with blue filter group), with polarizer, field diaphragm and aperture diaphragm, 12V/50W halogen light house(R)
Focus	Coaxial focus system with tension adjustable, coarse:28mm per rotation, Minimum reading 0.002mm
Nosepiece	Reversed quadruple nosepiece(The center can be adjusted)
Stage:	Dia.160mm circular stage, 360° rotatable; 1° increments, a does value of vernier 6'; With locking devices Optional: Dia.160mm circular stage, 360° rotatable; 1° increments, a does value of vernier 6'; With locking devices and positioning device at per 45° Special metal composing, particularly craftwork, wear-resistant and resisting corrode, with micrometer 0.01mm increments.
Condenser	N.A.1.2/0.22 swing achromatic condenser
Polarizer	360° rotary, and can shift out the optical way
Intermediate tube	Built-in analyser, 90° rotary and can shift out the optical way; Bertrand lens
Compensator	Gyps1A, Mica1/4λ, Quartz Wedge
Accessories	Stage mobile ruler 30*40mm, filters(yellow/blue/green/neutral), video & photo accessories

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Characteristics

- This series microscope is a laboratorial polarizing microscope, for research and teaching
- Long working distance infinity plan destressing objectives provide excellent image and high definition
- Professional metal rotary stage, particularly craftwork, wear-resistant and resisting corrode
- Smooth rotating, comfortable operation, with locking device, very easy to use
- Shapely configuration, the inverted "Y" shape ensure the stability and rigidity

Eyepiece

- High eyepoint plan eyepiece PL10X/22, field of view is 22mm, wider field, search more quickly and observe more easily
- High eyepoint plan eyepiece with reticle PL10X/22R, field of view is 22mm, precentered.
- The eyepiece with two-double rubber eyecap, preventing the outside optical interference effectively, while protecting the eyepiece
- You can mount a variety of micrometer or pointer when necessary.



Eyepiece parameter table

Eyepiece	PL 10X/22	PL 10X/22R	PL10X/22T	PL10X/22G	PL15X/16	PL16X/15
Field Of View	22mm	22mm	22mm	22mm	16mm	15mm
Remarks	Standard	Standard	Optional	Optional	Optional	Optional

Objective

- Professional polarizing destressing objective, high resolution and excellent image
- Infinity plan objective and long working distance infinity plan objective
- All objectives are ANTI-FUNGUS, to extend the service life and maintain a clear image in long-term

Objective parameter table

Item	Magnification	N.A.	Working distance	Coverslip thickness	Conjugate distance
Transmission	4X	0.10	7.80 mm	0.17	∞
	10X	0.25	4.70 mm	0.17	∞
	20X	0.50	1.75 mm	0.17	∞
	40XS	0.65	0.72 mm	0.17	∞
	60XS	0.85	0.48mm	0.17	∞
Reflection and transmission & reflection	100XS	1.25	0.15 mm	0.17	∞
	5X	0.14	20.5mm	0	∞
	10X	0.25	16mm	0	∞
	20X	0.40	7.8mm	0	∞
	50XS (Semi Apochromatic)	0.55	8.0mm	0	∞
	100XS (Semi Apochromatic)	0.80	3.0mm	0	∞



Intermediate Tube



- Analyser: 90° rotary, a does value of vernier 6' and can shift out the optical way,
- Bertrand lens, adjustable center and focal length
- Can mount Gyps1A, Mica1/4λ, Quartz Wedge(---)

Rotatable Stage



- Special metal composing, particularly craftwork, wear-resistant and resisting corrode
- Dia.160mm circular stage, 360° rotatable, 1° increments, a does value of vernier 6'; with locking devices
- Dia.160mm circular stage, 360° rotatable, 1° increments, a does value of vernier 6'; with locking devices and positioning device at per 45° (For option)

Illuminator & Condensor



- Built-in Koehler illuminator systems, wide-range voltage 90-240V, 6V/30W halogen lamp precentered and prefocused, with continuous intensity control (Transmission)
- N.A.1.2/0.22 swing achromatic condenser (Transmission and transmission & reflection)
- The aperture diaphragm with scale marker
- Supply enough and well distributed light for any objectives
- Polarizer: 360° rotatable, 0°, 90°, 180°, 270° four type graduations

Transmission & reflection light house



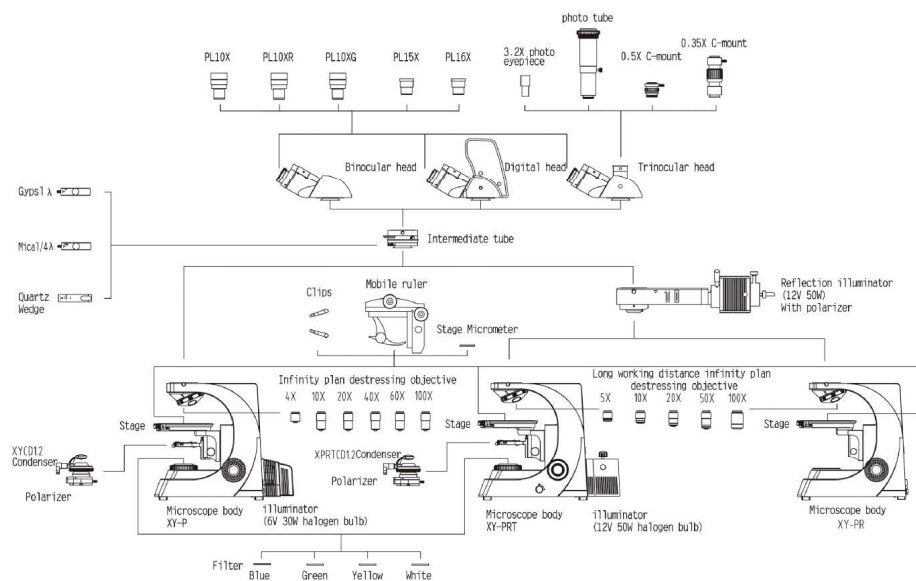
- Koehler illuminator systems, wide-range voltage 90-240V, 12V/50W halogen bulb

Reflection light house



- Reflection illuminator (with blue filter group), with polarizer, field diaphragm and aperture diaphragm Wide-range voltage 90-240V, 12V/50W halogen bulb

XY Series Polarizing Microscopes Configuration Chart



XY Series Polarizing Microscopes Specification

Specification		Model		
Part	Description	XY-P	XY-PR	XY-PRT
Eyepiece	PL10×/22	●	●	●
	PL10×/22R with reticle	●	●	●
	PL10X/22G with gridding	○	○	○
	PL10X/22T with adjustable diopter	○○	○○	○○
	PL15×/16mm	○○	○○	○○
Objectives	PL16×/15mm	○○	○○	○○
	Infinity plan destressing objective 4X	●	/	/
	Infinity plan destressing objective 10X	●	/	/
	Infinity plan destressing objective 20X	○	/	/
	Infinity plan destressing objective 40XS	●	/	/
	Infinity plan destressing objective 60XS	●	/	/
	Infinity plan destressing objective 100XS (oil)	○	/	/
	Long working distance infinity plan destressing objective 5X	○	●	●
	Long working distance infinity plan destressing objective 10X	/	●	●
	Long working distance infinity plan destressing objective 20X	/	●	●
	Long working distance infinity plan destressing objective 50XS	/	●	●
Head	Long working distance infinity plan destressing objective 100XS	/	○	○
	Infinity gemel binocular head, 30° inclined, 360° rotatable	●	●	●
	Infinity gemel trinocular head, 30° inclined, 360° rotatable	○	○	○
Intermediate tube	Infinity gemel digital head, 30° inclined	○	○	○
	Built-in analyser, 90° rotary and can shift out the optical way; Bertrand lens	●	●	●
Compensator	Gyps1A (±18mm, optical path difference 551nm)	●	●	●
	Mica1/4A (±18mm, optical path difference 147.3nm)	●	●	●
	Quartz Wedge (12X28mm, □-□)	●	●	●
Nosepiece	Reversed quadruple nosepiece	●	●	●
Body	Transmission type:	●	/	/
	Reflection type:	/	●	/
	Transmission & reflection type	/	/	●
Stage	Dia. 160mm circular stage, 360° rotatable; 1° increments, a does value of vernier 6; With locking devices	●	●	●
	Dia. 160mm circular stage, 360° rotatable; 1° increments, a does value of vernier 6; With locking devices and positioning device at per 45°	/	/	/
	Mobile ruler	○	○	○
Condenser	Moving range: 40X30mm	○	○	○
	N.A.1.2/0.22 swing achromatic condenser (Transmission)	●	/	/
Polarizer	N.A.1.2/0.22 swing achromatic condenser (Transmission & reflection)	/	/	●
	360° rotatable, 0°, 90°, 180°, 270° four type graduations, with locking device, and can shift out the optical way	●	/	●
Micrometer	Stage micrometer, 0.01mm increments	●	●	●
Filter	Blue filter	●	●	●
	Yellow/green/neutral filter	○	○	○
Illuminator	Koehler illuminator, wide-range voltage 90-240V, 6V/30W transmission light house	●	/	/
	Koehler illuminator, wide-range voltage 90-240V, 12V/50W transmission light house	/	/	●
	Reflection illuminator (with blue filter group), with polarizer, field diaphragm and aperture diaphragm, 12V/50W reflection light house	/	●	●
Photo device	Photo tube (with PK mount) 3.2× photo eyepiece	○	○	○
Digital camera device	C-mount and relay mirror	○	○	○
C-mount adapter	1/2, 1/3 C-mount adapter	○	○	○
Others	Center adjustment wrench and Hexagon and wrench	●	●	●
	Pressing machine	○	○	○

● Standard specification ○ Optional parts

BH Series Polarizing Microscope



Specification

Optical system	Color corrected infinity optical system
Objective	Plan destressing objective 4X, 10X, 40XS Optional: Plan destressing objective 20X, 60XS Achromatic objective 4X, 10X, 20X, 40XS, 60XS
Eyeiece	PL10X/18 high eyepoint plan eyepiece, PL10X/18R plan eyepiece with reticle. view of field is 18mm Optional: High eyepoint plan eyepiece PL10X20; plan gridding eyepiece PL10X/18G; High point wild field eyepiece WF10X/18, WF15X/13, WF16X/14, WF20X/10
Viewing head	Gemel binocular head. 30°inclined, 360° rotatable, diopter adjustment of range(±5mm) ,inter-pupillary range:54mm to 75mm Optional: Pull and push binocular head. 30°inclined, 360° rotatable, diopter adjustment of range(±5mm) , inter-pupillary range:54mm to 75mm Gemel trinocular head. 30°inclined, 360° rotatable,diopter adjustment of range(±5mm) ,inter-pupillary range:54mm to 75mm Monocular head. 45°inclined, 360° rotatable
Illuminator	Transmission: Built-in Koehler illuminator systems, wide-range voltage 90-240V, 6V/30W halogen lamp precentered and with continuous intensity control Optional: Built-in Koehler illuminator systems, wide-range voltage 90-240V, 3W single LED bulb, precentered and with continuous intensity control
Focus	Coaxial focus system with tension adjustable, coarse:28mm per rotation, Minimum reading 0.002mm
Nosepiece	Reversed quadruple nosepiece
Stage:	Dia.160mm circular stage, 360°rotatable;1° increments . a does value of vernier 6'; With locking devices Special metal composing, particularly craftwork,wear-resistant and resisting corrode, with micrometer.0.01mm increments.
Condenser	Koehler illuminator , destressing Abbe condenser N.A.1.25. adjustable center
Intermediate tube	Built-in analyser, 90° rotary and can shift out the optical way, Bertrand lens
Polarizer	360°rotatable. 0, 90, 180, 270 four type graduations
Analyser	360°rotatable. 2° increments . a does value of vernier 6'
Compensator	Gyps1λ (φ18mm, optical path difference 551nm)
	Mica1/4λ(φ18mm, optical path difference 147.3nm)
	Quartz Wedge(12X28mm, ---)
Accessories	Stage mobile ruler 30*40mm, filters(yellow/blue/green/neutral), video & photo accessories

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Characteristics

- This series microscope is a universal-type polarizing microscope, designed for teaching and conventional using
- Plan destressing objectives provide excellent image and high definition
- Professional metal rotary stage, particularly craftwork, wear-resistant and resisting corrode
- Smooth rotating, comfortable operation, with locking device, very easy to use
- Koehler illuminator systems, wide-range voltage, effectively protect and extend the life of bulbs

Eyeiece

- High eyepoint plan eyepiece PL10X/18, field of view is 18mm, PL10X/20, field of view is 20mm
- High eyepoint plan eyepiece with reticle PL10X/18R, field of view is 22mm, precentered.
- You can mount a variety of micrometer or pointer when necessary.
- High eyepoint eyepiece WF10X/18、WF15X/13、WF16X/14、WF20X/10 for option



Eyeiece parameter table

Eyeiece	Field of view	Remarks
PL 10X/18	18mm	Standard
PL 10X/18R	18mm	Standard
PL 10X/18G	18mm	Optional
PL 10X/20	20mm	Optional
WF10X/18	16mm	Optional
WF15X/13	13mm	Optional
WF16X/14	14mm	Optional
WF20X/10	10mm	Optional

Objective

- Universal-type polarizing destressing objective or achromatic objective
- All objectives are ANTI-FUNGUS, to extend the service life and maintain a clear image in long-term

Objective parameter table

Item	Magnification	N.A.	Working distance	Coverslip thickness	Conjugate distance	
Plan destressing objective	4X	0.10	15.09mm	0.17	195mm	
	10X	0.25	1.52mm	0.17	195mm	
	20X	0.40	1.70mm	0.17	195mm	
	40XS	0.65	0.38mm	0.17	195mm	
	60XS	0.85	0.23mm	0.17	195mm	
Achromatic objective	4X	0.10	21.50mm	0.17	195mm	
	10X	0.25	6.30 mm	0.17	195mm	
	20X	0.40	2.13 mm	0.17	195mm	
	40XS	0.65	0.48 mm	0.17	195mm	
	60XS	0.85	0.09 mm	0.17	195mm	

Intermediate Tube



- Pull and push analyser flashboard setting position
Bertrand lens, adjustable center and focal length

Analysr flashboard



- 360°rotatable. 0, 90, 180, 270 four type graduations

Illuminator & Condensor



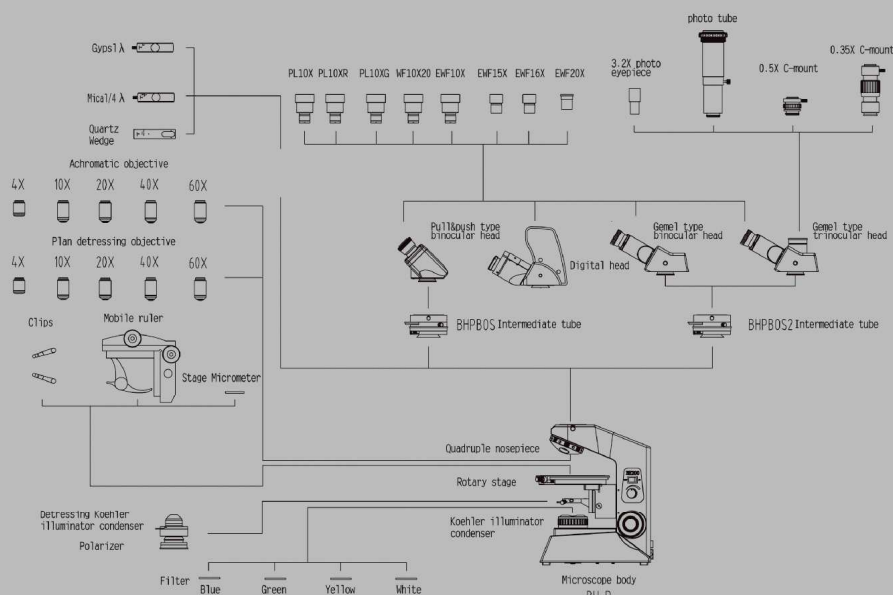
- Koehler illuminator systems, wide-range voltage 90-240V, 6V/20W halogen lamp precentered and prefocused, with continuous intensity control
- Koehler illuminator systems, wide-range voltage 90-240V, 3W single LED bulb, precentered and with continuous intensity control
- N.A.1.25 destressing Abbe condenser. Supply enough and well distributed light for any objectives
- Polarizer: 360° rotatable

Compensator



- Gyps1λ (ϕ18mm, optical path difference 551nm)
- Mica1/4λ (ϕ18mm, optical path difference 147.3nm)
- Quartz Wedge (12X28mm, □-□)

BH Series Polarizing Microscopes Configuration Chart



BH Series Polarizing Microscopes Specification

Specification		Model
Part	Description	BH-P
Eyepiece	High eyepoint plan eyepiece PL10×/18	●
	High eyepoint plan eyepiece with reticle PL10×/18R	●
	High eyepoint plan eyepiece with gridding PL10×/18G	○
	High eyepoint plan eyepiece PL10×/20	○○
	High eyepoint wide field eyepiece WF10×/18	○○
	High eyepoint wide field eyepiece WF15×/13	○○
	High eyepoint wide field eyepiece WF16×/14	○○
	High eyepoint wide field eyepiece WF20×/10	○○
Objectives	Achromatic objective 4X/0.10	○
	Achromatic objective 10X/0.25	○
	Achromatic objective 20X/0.40	○
	Achromatic objective 40X/0.65	○
	Achromatic objective 60X/0.85	○
	Plan destressing objective 4X/0.10	●
	Plan destressing objective 10X/0.25	●
	Plan destressing objective 20X/0.40	○
	Plan destressing objective 40X/0.65	●
	Plan destressing objective 60X/0.85	○
Head	Pull and push binocular head, 45° inclined, 360° rotatable	○
	Gemel binocular head, 30° inclined, 360° rotatable	●
	Gemel trinocular head, 30° inclined, 360° rotatable	○
	Gemel digital head, 30° inclined	○
Intermediate tube	Built-in pull and push type analyser, 360° rotatable and can shift out the optical way; Bertrand lens	●
Compensator	Gyps1λ (ϕ18mm, optical path difference 551nm)	●
	Mica1/4λ (ϕ18mm, optical path difference 147.3nm)	●
	Quartz Wedge (12X28mm, □-□)	●
Nosepiece	Reversed quadruple nosepiece	●
Body	Coaxial focus system with tension adjustable, coarse: 28mm per rotation, Minimum reading 0.002mm	●
	Dia. 160mm circular stage, 360° rotatable; 1° increments, a does value of vernier 6'; With locking devices	●
Stage		●
Mobile ruler	Moving range: 40X30mm	○
Condenser	Koehler illuminator, destressing Abbe condenser N.A.1.25, adjustable center	●
Polarizer	360° rotatable, 0°, 90°, 180°, 270° four type graduations	●
Analyser	Analyser flashboard, 360° rotatable, 2° increments, a does value of vernier 6'	●
Micrometer	Stage micrometer, 0.01mm increments	●
Filter	Blue filter	●
	Yellow/green/neutral filter	○
Illuminator	Koehler illuminator, wide-range voltage 90-240V, 6V/20W, precentered	●
	Koehler illuminator, wide-range voltage 90-240V, 3W single LED bulb, precentered	○
Photo device	Photo tube (with PK mount) 3.2x photo eyepiece	○
Digital camera device	C-mount and relay mirror	○
C-mount adapter	1/2, 1/3 C-mount adapter	○
Others	Center adjustment wrench and Hexagon and wrench	●
	Pressing machine	○

● Standard specification ○ Optional parts

Video & Photo Accessories

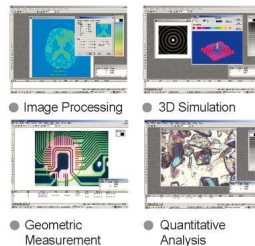
Using trinocular head or digital head

- Connect with special C-mount, let the images output by digital video signal to the computer and projector.
- Through special C-mount, mount the digital camera on the microscope to get many image record and analysis
- Through digital head, let the images output by digital video signal to the computer



Software — Sunny Photolib

Function	<ol style="list-style-type: none"> 1.Support TWAIN standard scanners and digital cameras and a variety of image acquisition card 2.The up to date programming tools, Chinese or English menu 3.Including: color adjustment, image deformation, digital form processing, image enhancement texture analysis, identification, such as more than hundred kinds of professional image processing and analysis function 4.Support 24 bit true color image acquisition, processing and analysis for RGB, CMYK, HSV, YUV color model. 5.Advanced particle automatic identification system, particles' automatic segmentation function 6.Geometric measurement, automatic quantitative analysis, with a variety of parameters
Operation systems	Support WIN95, Win98, WIN2000 and WINXP

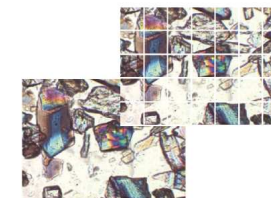


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Professional automatically puzzle software - Micropec

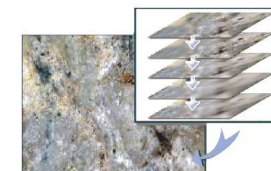
When using high magnification objective lens to observe the slices, only can acquire the local images, at this time you can use this software to splice various parts of sections to get the complete image

- Splicing fast and accurately
- Support manual and automatic splicing function

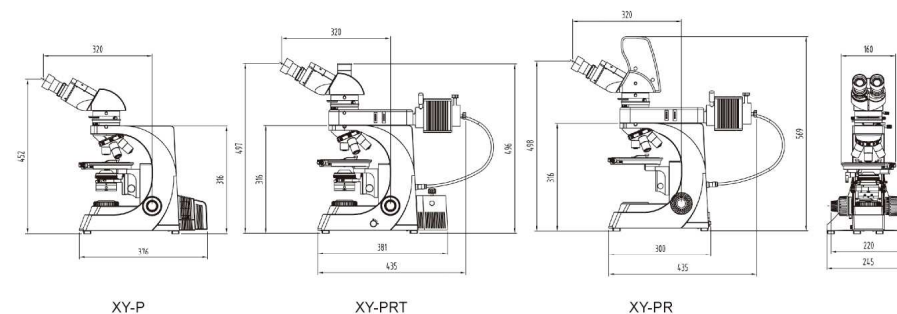


Synthesis of multiple focal plane image software modules — Microspec

When using high magnification objective to observe uneven slices, due to the restrictions of high magnification objective lens' depth of field, only can observe the part of image clear, using the software can automatic synthesize the images which record on different focal plane, to get a clear image and increase high magnification objective lens' depth of field.



XY Series Polarizing Microscope Dimension Chart



BH Series Polarizing Microscope Dimension Chart

