



POLO900 – Polarizing Microscope

Binocular / Trinocular

Download
Catalogue



Polarized light microscopy can mean any of a number of optical microscopy techniques involving polarized light. Simple techniques include illumination of the sample with polarized light. Directly transmitted light can, optionally, be blocked with a polariser orientated at 90 degrees to the illumination. More complex microscopy techniques which take advantage of polarized light include differential interference contrast microscopy and interference reflection microscopy. Scientists will often use a device called a polarizing plate to convert natural light into polarized light.

These illumination techniques are most commonly used on birefringent samples where the polarized light interacts strongly with the sample and so generating contrast with the background. Polarized light microscopy is used extensively in optical mineralogy.



Upright Microscope



Koehler Illumination



Nosepiece

Revolving and reversed nosepiece for 5 objectives



Objectives

Infinity Plan Achromatic Objectives



Light source

3 W adjustable LED illumination or 20/30W tungsten-halogen* lamp

TECHNICAL SPECIFICATIONS

- Binocular and trinocular models
- Revolving quadruple nosepiece
- Built-in polarizing system with polarizer and analyser
- Eyepiece with 0.1mm micrometre and cross hair included
- Fully coated optical system with high resolution
- 30 degree inclined 360 degree rotatable trinocular Siedentopf head
- Co-axial coarse & fine focusing system
- All metal mechanical parts
- Focusing tension control mechanism

EYEPIECES

- Extended EWF 10x/20 mm eyepieces, Ø 30 mm tubes
- Eyepieces can be secured to the tubes

HEADS

- Trinocular Siedentopf type heads are with 30° inclined tubes, interpupillary distance from 52 to 75 mm, equipped with diopter adjustment(s).
- The trinocular head comes with a Ø 30 mm photo port.
- An optional ergonomic titling head (0:100 50:50) are also available (Optional)

NOSEPIECE

- Revolving and reversed nosepiece for 5 objectives

OBJECTIVES

- All optics are anti-fungus treated and anti-reflection coated for maximum light throughput
- Infinity polarizing achromatic objectives 4x/0.13 10x/0.30 20x/0.45 S40x/0.70 S60x/0.80 (optional)
- Infinity LWD metallurgical objectives 5x/0.10 10x/0.25 20x/0.40 S50x/0.70 (S80x/ 0.80 S100X /1.25 dry optional)

STAGE

- Round Stage F120mm, 360° Rotatable, Graduation 1° Increment, Minimum Resolution 6', When Using Venire Scale Centre Adjustable

CONDENSER

- Abbe NA 1.25, F 2-30mm Iris Diaphragm, with Filter.

FOCUSING

- Coaxial coarse and fine adjustments, 100 graduations, 1 µm per graduation, 100 µm per rotation, total travel approximately 20 mm
- Supplied with an adjustable rack stop to prevent damage to sample and objectives.
- The coarse adjustments are equipped with friction control

ILLUMINATION

3 W adjustable LED or 6V 20W illumination for transmitted light, 12V 50W for reflected light with internal 100-240 V power supply

PACKAGING

- Supplied with power cord, dust cover, a spare fuse, user manual.
- All packed in good quality foam and carton.

Please note

If this Microscope does not match the specific needs of your application, or some options are not listed for sale, please feel free to contact us. Our manufacturing engineers will come up with technical solutions to meet your needs. We reserve the right to change technical specifications at any time.

Item POLO	900BT	900TT	900BR	900TR	900BTR	900TTR
Price						
Body with Co-axial Coarse and Fine Focus Mechanism	●	●	●	●	●	●
Head Polarizing Binocular, Interpupillary dist. 52-75mm, inclined 30°	●				●	
Head Polarizing Trinocular, Interpupillary dist. 52-75mm, inclined 30°				●		
Head Binocular, Interpupillary distance 52-75mm, inclined 30°			●			
Head Trinocular, Interpupillary distance 52-75mm, inclined 30°		●				●
High eye-point plan eyepiece WF10X/20	●●	●●	●●	●●	●●	●●
High eye-point plan eyepiece WF10X/22	○○	○○	○○	○○	○○	○○
Plan Eyepiece 16X/13mm	○○	○○	○○	○○	○○	○○
Plan Reticule Eyepiece, Cross 10X/20mm	●	●	●	●	●	●
Infinity Plan Achromatic Objective 2X (need Swing Out Condenser)	○	○	○	○	○	○
Infinity Plan Achromatic Objective 4X	○	○	○	○	○	○
Infinity Plan Achromatic Objective 5X	○	○	○	○	○	○
Infinity Plan Achromatic Objective 10X	○	○	○	○	○	○
Infinity Plan Achromatic Objective 20x (S)	○	○	○	○	○	○
Infinity Plan Achromatic Objective 40x (S)	○	○	○	○	○	○
Infinity Plan Achromatic Objective 60x (S)	○	○	○	○	○	○
Infinity Plan Achromatic Objective 100x (S) oil	○	○	○	○	○	○
Infinity Achromatic Polarizing Objective 4X	●	●	○	○	○	○
Infinity Achromatic Polarizing Objective 10X	●	●	○	○	○	○
Infinity Achromatic Polarizing Objective 20X (S)	○	○	○	○	○	○
Infinity Achromatic Polarizing Objective 40X (S)	●	●	○	○	○	○
Infinity Achromatic Polarizing Objective 60X (S)	●	●	○	○	○	○
Infinity Achromatic Polarizing Objective 100X (S) oil	○	○	○	○	○	○
Infinity Plan Achromatic Objective 5X			●	●	●	●
Infinity LWD Plan Achromatic Objective 10X			●	●	●	●
Infinity LWD Plan Achromatic Objective 20X(S)			●	●	●	●
Infinity LWD Plan Achromatic Objective 50X(S)			●	●	●	●
Infinity LWD Plan Achromatic Objective 80X(S)			○	○	○	○
Infinity Plan Achromatic Objective 100X(S) Oil			○	○	○	○
Polarizing Condenser	●	●			●	●
360°Rotating Stage (φ140mm)	●	●	●	●	●	●
360°Rotating Stage (φ160mm)	○	○	○	○	○	○
Specimen Clip	●●	●●	●●	●●	●●	●●
Specimen Clip for ZT7A	○	○	○	○	○	○
Moving ruler	○	○	○	○	○	○
Specimen Holder			●	●	●	●
Quadruple Nosepiece	●	●	●	●	●	●

Polarizer	●	●	●	●	●	●
1/4λ Retardation Plate Compensator	●	●	●	●	●	●
λ Tint Plate Compensator	●	●	●	●	●	●
Quartz Wedge Compensator	●	●	●	●	●	●
12V 100W Halogen Lamp House			●	●	●	●
12V 50W Halogen Lamp Power House					●	●
12V 100W Halogen Lamp Power House			○	○	○	○
Reflected Light Illuminator (Single Module)			●	●	●	●
Reflected Light Illuminator (Multi-Module)			○	○	○	○
Polarizer (Reflected)			●	●	●	●
Kohler Illumination (with Field Diaphragm)	●	●			●	●
6V 20W Halogen Lamps dimmer for light intensity	●	●			●	●
6V 30W Halogen Lamps dimmer for light intensity	○	○			○	○
12V 50W Halogen Lamps dimmer for light intensity			●	●		
0.5X C-Mount		○		○		○
0.65X C-Mount		●		●		●
1X C-Mount		○		○		○
0.25X C-Mount for 1/3 CCD		○		○		○
C-Mount		○		○		○
2.5X Digital Camera		○		○		○
Blue Filter (φ38) (LED Lamp without Filter)	●	●			●	●
Green Filter (φ38)	○	○			○	○
Yellow Filter (φ38)	○	○			○	○
Ground Glass (φ38)	○	●			○	●
6V 20W Halogen Lamp	●●●	●●●			●●●	●●●
6V 30W Halogen Lamp	○	○			○	○
250V/5A Φ5X20 fuse	●●●	●●●	●●●	●●●	●●●	●●●
12V 50W Halogen Lamp			●	●	●	●
12V 100W Halogen Lamp			○	○	○	○
Immersion Oil	○	○	○	○	○	○
Dust Cover	●	●				
Dust Cover			●	●	●	●
UP200i Specification	●	●				
UPT200i Specification			●	●	●	●
φ2.5mm Allen screw driver	●	●	●	●	●	●
Φ1.5mm Allen screw driver	●●	●●	●●	●●	●●	●●
Φ3mm Allen screw driver			●	●	●	●
Power Cord	●	●	●	●	●●	●●
User's Manual	●	●	●	●	●	●