

# iScope® polarization

## HIGHLIGHTS

- EWF 10x/22 mm eyepieces
- Binocular and trinocular models
- Reversed quintuple revolving nosepiece
- Infinity corrected IOS objectives for polarization
- Ø 160 mm rotatable round stage for polarization models
- Diascopic 3 W NeoLED™ Köhler illumination
- Epi-illumination 50 W for polarization models
- iCare sensor for energy saving
- CSS - Cable Storage System
- 10 years warranty



IS.1053-PLPOLRI

## TECHNICAL SPECIFICATIONS

### EYEPIECE(S)

- Polarization models are supplied with a pair of EWF 10x/22 mm (Ø 30 mm tube) eyepieces, one eyepiece with cross hair and one eyepiece with a cross hair and micrometer reticle

### HEAD

- Binocular and trinocular Siedentopf type heads with 30° inclined tubes. Interpupillary distance from 48 to 76 mm
- Two ± 5 diopter adjustments
- A unique rotating system allows the ergonomic positioning of both tubes in a high (431 mm) and in a low position (397 mm)
- The trinocular head 23.2 mm tube fits optional photo C-mount adapters with built-in 0.33x or 0.5x objective

### NOSEPIECE

- Revolving quintuple reversed nosepiece on ball bearings

### OBJECTIVES

- Plan PLPOLi strain free infinity corrected objectives for polarisation
- All optics are anti-fungus treated and anti-reflection coated for maximum light throughput

Plan PLPOLi IOS	4x/0.10	10x/0.25	20x/0.40	S40x/0.65	S60x/0.85	S100x/1.25 <sup>(1)</sup>
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(1) Optional objectives

### STAGES

- An optional 30 x 40 mm X-Y mechanical stage is available

### CONDENSER

- Height adjustable Abbe N.A. 1.25 condenser with iris diaphragm and 360° rotatable polarizer

### FOCUSING

- Coaxial coarse and fine adjustments, 200 graduations, 1 µm per graduation, 200 µm per rotation, total travel approximately 24 mm and is supplied with an adjustable rack stop to prevent damage to sample and objectives.
- The coarse adjustment is equipped with friction control

### DIASCOPIIC ILLUMINATION

- Intensity adjustable 3 W Köhler NeoLED™ illumination with internal 100-240 V power supply
- The larger aperture of NeoLED™ allows the optical systems of the iScope® microscope to produce images at higher resolutions, very close to the theoretical diffraction limit of the optics. Other benefits for choosing the NeoLED™ are the low energy consumption, no heating and a long operating lifetime
- The Köhler setting provides homogeneous illumination and high contrast

### REFLECTED ILLUMINATION

- Polarization models are equipped with a 50 W 12 V halogen epi-illumination and external 100-240 V power supply
- Supplied with 360° rotatable polarization filter, analyzer, Bertrand lens, 1 λ first red plate, 1/4 λ retardation plate, a quartz wedge, sliders with green/blue and whiter/polarizer filter

### ICARE SENSOR

- The unique iCare Sensor is developed to avoid unnecessary loss of energy
- The illumination of the microscope automatically switches off shortly after microscopists step away from their position

### CSS – CABLE STORAGE SYSTEM

- iScope® allows users to easily insert the power cable into the backside of the instrument, which enables easy storage
- The integrated carrying grip at the back of the microscope ensure the safe transportation of the microscope

### PACKAGING

- Supplied with power cord, dust cover, spare fuse where available and user manual
- All packed in polystyrene boxes



IS.1053-PLPOLi

### MODELS

	Binocular	Trinocular	EWF 10x/22 mm	EWF 10x/20 mm with crosshair	EWF 10x/20 mm with crosshair and micrometer retide	Plan PLPOLi 4x/10x/20x/ S40x IOS objectives <sup>(1)</sup>	Ø160 mm stage, 360° rotatable	Polarization condenser with gratuated 360° polarizer	iCare Sensor	Transmitted illumination Köhler LED	50W 12V halogen epi-illumination
IS.1052-PLPOLi	•		•	•	•	•	•	•	•	•	
IS.1053-PLPOLi		•	•	•	•	•	•	•	•	•	
IS.1052-PLPOLRi	•		•	•	•	•	•	•	•	•	•
IS.1053-PLPOLRi		•	•	•	•	•	•	•	•	•	•

(1) Strain free

## ACCESSORIES AND SPARE PARTS

- IS.6210** EWF 10x/22 mm eyepiece, Ø 30 mm tube
- IS.6210-CM** EWF 10x/22 mm eyepiece, Ø 30mm tube with 10/100 micrometer and cross hair
- IS.6215** WF15x/16 mm eyepiece, Ø 30 mm tube
- IS.6220** WF20x/12 mm eyepiece, Ø 30 mm tube
- IS.6299** Pair of eyecups for eyepieces, Ø 30 mm tube for infinity models

### For iScope transmitted polarisation

- IS.7904** Plan strain-free PLPOLi 4x/0.10 IOS objective  
0.17 mm cover glass corrected. Working distance 15.5 mm
- IS.7910** Plan strain-free PLPOLi 10x/0.25 IOS objective,  
0.17 mm cover glass corrected. Working distance 10 mm
- IS.7920** Plan strain-free PLPOLi 20x/0.40 IOS objective,  
0.17 mm cover glass corrected. Working distance 5.1 mm
- IS.7940** Plan strain-free PLPOLi 40x/0.65 IOS objective,  
0.17 mm cover glass corrected. Working distance 0.54 mm
- IS.7960** Plan strain-free PLPOLi 60x/0.85 IOS objective,  
0.17 mm cover glass corrected. Working distance 0.14 mm
- IS.7900** Plan strain-free PLPOLi 100/1,25 IOS objective,  
0.17 mm cover glass corrected. Working distance 0.13 mm

### For iScope reflected polarisation

- IS.7905-R** Plan strain-free PLPOLi 5x/0.10 IOS objective,  
0.17 mm cover glass corrected, no cover glass correction.  
Working distance 15.5 mm
- IS.7910-R** Plan strain-free PLPOLi 10x/0.25 IOS objective,  
0.17 mm cover glass corrected, no cover glass correction.  
Working distance 10 mm
- IS.7920-R** Plan strain-free PLPOLi 20x/0.40 IOS objective,  
0.17 mm cover glass corrected, no cover glass correction.  
Working distance 5.8 mm
- IS.7950-R** Plan strain-free PLPOLi 50x/0.65 IOS objective,  
0.17 mm cover glass corrected, no cover glass correction.  
Working distance 0.52 mm

### For iScope reflected and transmitted polarisation

- IS.7900-R** Plan strain-free PLPOLi S100x/0.80 infinity corrected  
IOS objective. No cover glass correction.  
Working distance 2.0 mm

### For all iScope polarisation models

- IS.9102** Standard Abbe condenser 1.25 NA with slot  
for dark field and phase contrast sliders
- IS.9105** Swing-out 0.9/1.25 NA condenser
- IS.9150** Cardioid dark field condenser  
with integrated 5 W LED light source and  
external 100-240 V mains adapter
- 86.521** Plan PL S100x/1.25 oil immersion objective with iris diaphragm
- IS.9602** Analyzer for reflected illumination attachment
- IS.9604** Quartz wedge in slider for transmitted illumination
- IS.9608** 360° rotatable polarizer in slider for transmitted illumination
- IS.9610** 1λ plate first red 530 nm in slider for transmitted illumination
- IS.9612** λ/4 retardation plate in slider for transmitted illumination
- IS.9618** Bertrand lens for transmitted polarisation attachment
- IS.9600** Polarization filter, 45 mm for lamp house
- IS.9700** Blue opaque filter, 45 mm for lamp house
- IS.9702** Green opaque filter, 45 mm for lamp house
- IS.9704** Yellow opaque filter, 45 mm for lamp house
- IS.9706** White opaque filter, 45 mm for lamp house
- SL.5500** NeoLED™ replacement unit
- IS.9993** NeoLED™ replacement unit
- SL.3679** 50 W 12 V spare bulb for unit (*Ri* type)
- AE.3684** T500 mA 250 V Fuses for iScope
- AE.3685** T2 A 250 V Fuses for units power supply
- AE.5130** Universal Ø 23.2 mm tube adapter with built-in 2x lens  
for SLR photo camera with APS-C sensor. Needs T2 adapter
- AE.5025** T2 ring for Nikon D SLR digital camera
- AE.5040** T2 ring for Canon EOS SLR digital camera
- PB.5155** Microscope slides 76 x 26 mm, ground edges, 50 pieces
- PB.5165** Cover glasses 18 x 18 mm, thickness 0.13-0.17 mm, 100 pieces
- PB.5168** Cover glasses 22 x 22 mm, thickness 0.13-0.17 mm, 100 pieces
- PB.5245** Lens cleaning paper, 100 sheets per pack
- PB.5255** Immersion oil (25 ml). n = 1.482
- PB.5274** Isopropyl alcohol 99% (200 ml)
- PB.5275** Cleaning kit: lens cleaning fluid, lint free lens tissue/paper,  
brush, air blower, cotton swabs