iScope®
polarization

HIGHLIGHTS

- EWF 10x/20 mm and 10x/22 mm eyepieces
- Binocular and trinocular models
- Reversed quadruple revolving nosepiece
- Plan strain free infinity corrected objectives
- Ø 160 mm rotatable round stage
- Diascopic 3 W NeoLED™ Köhler illumination
- Epi-illumination 50 W
- iCare sensor for energy saving
- CSS - Cable Storage System
- 10 years warranty

TECHNICAL SPECIFICATIONS

EYEPIECES

Polarization models are supplied with a pair of EWF 10x/20 mm or 22 mm (Ø 30 mm tube) eyepieces, one eyepiece with crosshairs and one eyepiece with crosshairs 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 ergonomical positioning of both tubes in a high (431 mm) and in a low position (397 mm)
- The trinocular head has a 23.2 mm photo tube. This fits all C-mount adapters supplied with Euromex cameras

NOSEPIECE

Revolving quadruple reversed nosepiece on ball bearings

IS.1053-PLPOLRi ●

OBJECTIVES

Plan PLPOLi IOS[1]	5x/0.12	10x/0.25	20x/0.40	S40x/0.65	60/0.85 [3]	S100x/1.25 [3]
Plan PLPOLRi IOS[2]	5x/0.12	10x/0.25	20x/0.40		50x/0.75	S100x/0.80 [3]

[1] Plan PLPOLi strain free infinity corrected objectives for polarization applications. Objectives 5x without cover glass correction and 10/20/S40/S60/S100x oil with 0.17 mm cover glass correction. For transmitted polarization models

[2] Plan PLPOLRi strain free infinity corrected objectives for polarization applications. No cover glass correction. For models with reflected illumination

[3] Optional objectives

All optics are anti-fungus treated and anti-reflection coated for maximum light throughput

STAGES

- 360° Rotating Ø 160 mm graduated stage with two object clamps
- 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° - swing out - 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

| MATERIALS SCIENCE |

| MATERIALS SCIENCE |

TRANSMITTED 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 diaphragm provides homogeneous illumination and high contrast
- Polarisation models with transmitted light only are supplied with: 360° rotatable polarization filter, 360° rotatable analyzer with 180 increments and nonius for 0.2 degree readout, Bertrand lens (build-in), 1 λ first red and 1/4 λ retardation plate, a quartz wedge, 45 mm green and blue filters for lamp house

REFLECTED ILLUMINATION

(PLPOLRi models only)

- Equipped with a 50 W 12 V halogen epi-illumination and external 100-240 V power supply
- Supplied with 360° rotatable polarization filter, 360° rotatable analyzer with 180 increments and nonius for 0.2 degree readout, Bertrand lens (build-in), 1 λ first red plate, 1/4 λ retardation plate, a quartz wedge, sliders with green/blue and white/neutral densitiy filter. 45 mm green and blue filters for lamp house

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 back of the instrument, which enables easy storage

CARRYING GRIP

The integrated carrying grip at the back of the microscope ensure the safe transportation of the microscope

IS.1053-PLPOLi ●

PACKAGE CONTENT

Supplied with power cord, tension control tool, dust cover, spare fuse and user manual. All packed in polystyrene boxes

MODELS	Bino	Trino	EWF 10x/20 mm	EWF 10x/22 mm	EWF 10x/20 mm with crosshairs	EWF 10x/22 mm with crosshairs	EWF 10x/20 mm with crosshairs and micrometer retide	EWF 10x/22 mm with crosshairs and micrometer retide	Plan PLPOLi 5x/10x/20x/S40x IOS objectives (1)	PLPOLRi 5/10/20/50x IOS objectives (1)	Ø160 mm stage, 360° rotatable	Condenser with graduated 360° polarizer	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
IS.6210-C	EWF10x/22 mm eyepiece with crosshairs
IS.6210-P	EWF10x/22 mm eyepiece with pointer
IS.6210-CM	EWF 10x/22 mm eyepiece with 10/100 micrometer and crosshairs
IS.6310	EWF 10x/20 mm eyepiece 30 mm tube
IS.6310-C	EWF10x/20 mm eyepiece with crosshairs, 30 mm tube
IS.6310-CM	EWF 10x/20 mm eyepiece with 10/100 micrometer and crosshairs, 30 mm tube
IS.6215	WF15x/16 mm eyepiece
IS.6220	WF20x/12 mm eyepiece
IS.6299	Pair of eyecups for iScope infinity models

FOR ISCOPE TRANSMITTED POLARIZATION

IS.7905-T	Plan strain-free PLPOLi 5x/0.12 IOS objective, no cover glass correction. Working distance 15.5 mm
IS.7910-T	Plan strain-free PLPOLi 10x/0.25 IOS objective, 0.17 mm cover glass corrected. Working distance 10 mm
IS.7920-T	Plan strain-free PLPOLi 20x/0.40 IOS objective, 0.17 mm cover glass corrected. Working distance 5.1 mm
IS.7940-T	Plan strain-free PLPOLi 40x/0.65 IOS objective, 0.17 mm cover glass corrected. Working distance 0.54 mm
IS.7960-T	Plan strain-free PLPOLi 60x/0.85 IOS objective, 0.17 mm cover glass corrected. Working distance 0.14 mm
IS.7900-T	Plan strain-free PLPOLi 100/1.25 oil IOS objective, 0.17 mm cover glass corrected. Working distance 0.13 mm
IS.9604	Quartz wedge in slider
IS.9608	Analyzer 0-360° rotatable
IS.9610	Lamda plate first red 530 nm in slider
IS.9612	Lamda/4 retardation plate in slider

FOR ISCOPE REFLECTED POLARIZATION

IS.7905-R	Plan strain-free PLPOLRi 5x/0.12 IOS objective, no cover glass correction. Working distance 15.5 mm
IS.7910-R	Plan strain-free PLPOLRi 10x/0.25 IOS objective, no cover glass correction. Working distance 10 mm
IS.7920-R	Plan strain-free PLPOLRi 20x/0.40 IOS objective, no cover glass correction. Working distance 5.8 mm
IS.7950-R	Plan strain-free PLPOLRi 50x/0.75 IOS objective, no cover glass correction. Working distance 0.52 mm.
IS.7900-R	Plan strain-free PLPOLi S100x/0.80 infinity corrected IOS objective. No cover glass correction. Working distance 2.0 mm.

IS.9602-R	Polarizer
IS.9604-R	Quartz wedge in slider
IS.9608-R	360° rotatable analyzer in slider
IS.9610-R	Lamda plate first red 530 nm
IS.9612-R	Lamda/4 retardation plate in slider

FOR ALL ISCOPE POLARIZATION MODELS

IS.7202	Plan PLi 2x IOS objective for iScope, working distance 18,3 mm. Best to be used together with swing-out condenser
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
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 reflected illumination 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 = 1.515
PB.5274	Isopropyl alcohol 99% (200 ml)
PB.5275	Cleaning kit: lens cleaning fluid, lint free lens tissue/paper, brush, air blower, cotton swabs

| MATERIALS SCIENCE |