

# iScope®

## HIGHLIGHTS

- EWF 10x/22 mm and EWF10x/20 mm eyepieces
- Binocular and trinocular models
- Optional multiheads
- Optional tilting head
- Quintuple reversed nosepiece
- E-plan, plan and plan phase objectives
- E-plan, plan and plan phase infinity corrected IOS objectives
- 140 mm x 160 mm stage
- 216 mm x 150 mm rackless stage
- Optional ceramic stage
- Height adjustable Abbe condenser N.A. 1.25
- Cardioid mirror dark field condenser with 5 W NeoLED™ illumination
- Diascopic intensity adjustable 3 W NeoLED™ Köhler illumination with internal 100-240 V power supply
- iCare sensor for energy saving
- CSS - Cable Storage System
- 10 years warranty



IS.1153-PLi

## TECHNICAL SPECIFICATIONS

### EYEPIECE(S)

- Extended Wide Field EWF plan 10x eyepieces with 20 mm field of view and adjustable diopter on the left eyepiece for finity corrected systems (Ø 23.2 mm tube)
- Extended Wide Field HWF plan 10x eyepieces with 22 mm field of view and adjustable diopter on both eyepieces for infinity corrected IOS plan and plan phase systems and adjustable diopter on the left tube for EPLi systems (Ø 30 mm tube)

### HEADS

- Binocular and trinocular Siedentopf type heads with 30° inclined tubes
- Interpupillary distance from 48 to 76 mm. ± 5 diopter adjustment(s)
- 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 comes with a Ø 23.2 mm photo port

### ERGONOMICAL TILTING HEAD

- Optional ergonomic 5 to 35° tilting head
- Interpupillary distance 48-75 mm
- Optional photo attachment with standard Ø 23.2 mm tube (only infinity corrected models)

(To order an iScope with tilting head use reference IS.1158-xxx.

For example to order an IS.1152-PLi model with ergonomical tilting head order IS.1158-PLi)



Ergonomic tilting head



IS.1153-EPL



IS.1152-EPL



IS.1153-PLi

### MULTIHEAD SYSTEM

- The iScope® can be extended with a unique multihead system for in total 2, 3 or 5 heads allowing simultaneous observation of specimens
  - The central attachment is equipped with a joystick to move a green and red laser pointer across the entire field of views of all heads.
  - Configurations with one, two or four additional viewing binocular heads, 30° inclined tubes and plan 4x, 10x, S40, S100x oil immersion infinity corrected IOS objectives
  - The trinocular head is supplied with extended wide field EWF 10x/22 mm eyepieces
  - Each extra binocular head is supplied with extended wide field plan EWF 10x/22 mm eyepieces
- (Order references: IS.1156-PLi-n, n = total number of heads)



### FACE-TO-FACE DUAL HEAD SYSTEM

- The iScope models can now also be equipped with a face-to-face trinocular head for 2 users allowing simultaneous observation
  - Supplied with 30° inclined tubes and Plan or E-plan 4x, 10x, S40, S100x oil immersion infinity corrected IOS objectives
  - The central attachment is equipped with a joystick to move a green and red laser pointer across the entire field of views of the 2 heads
  - The trinocular head is supplied with extended wide field EWF 10x/22 mm eyepieces
  - The second binocular head is supplied with extended wide field EWF 10x/22 mm eyepieces
- (Order reference: IS.1154-PLi)



### OBJECTIVES

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

E-Plan EPL	4x/0.10	10x/0.25	20x/0.40 <sup>(1)</sup>	S40x/0.65		S100x/1.25 oil
E-Plan EPLi IOS	4x/0.10	10x/0.25	20x/0.40 <sup>(1)</sup>	S40x/0.65		S100x/1.25 oil
Plan PLi IOS	4x/0.10	10x/0.25	20x/0.40 <sup>(1)</sup>	S40x/0.65	S60x/0.85 <sup>(1)</sup>	S100x/1.25 oil
Plan phase PLPH		10x/0.25	20x/0.40	S40x/0.65		S100x/1.25 oil
Plan phase PLPHi IOS		10x/0.25	20x/0.40	S40x/0.65		S100x/1.25 oil

(1) Optional

### NOSEPIECE

- Revolving quintuple reversed nosepiece for max. 5 objectives

### STAGES

- The iScope® can be equipped with three types of stages:
  - 140 x 160 mm stage equipped with integrated 79 x 52 mm X-Y mechanical stage
  - 216 x 150 mm rackless stage equipped with double slide holder and integrated 79 x 52 mm X-Y mechanical stage.
    - The iScope® rackless stage has no protruding parts, enables more smooth movements and is safer
  - 220 x 157 mm ceramic stage with integrated 75 x 50 mm X-Y mechanical stage protects with a very tough ceramic surface against marks and scratches.
    - The surface also ensures stray light not to be reflected from the stage into the objective
- The iScope® can be supplied with a heating stage which can be set up to 50° Celsius by a PID temperature controller
- Only available with new purchased microscopes. Higher temperatures can be achieved on special request

### CONDENSER FOR BRIGHTFIELD

- The standard height adjustable Abbe N.A. 1.25 condenser for brightfield accepts sliders with phase annuli suitable for plan phase 10x/20x or S40x/S100x oil immersion IOS objectives for economical phase contrast.
- With magnification indication
- A slider with a simple dark stop for dark field up to 400x magnification is also available

### CONDENSER FOR ZERNIKE PHASE CONTRAST

- An optional height adjustable Zernike NA. 1.25 phase contrast disc condenser with plan phase 10/20/S40x and S100x oil immersion objectives and dark field stop position for dark field contrast up to 400x magnification

### CONDENSER FOR DARK FIELD

- A state-of-the-art condenser equipped with reflective cardioid mirrors, a high powered 5 W LED and a S100x objective with built-in iris diaphragm enable a real 1000x magnification dark field solution. A cardioid dark field condenser with integrated power supply is only available on following models:

- **IS.1153-EPL/DF** - with S100x objective with built-in iris diaphragm and economical plan EPL objectives
- **IS.1153-PLi/DF** - with S100x objective with built-in iris diaphragm and plan PLi objectives
- **IS.1153-PLi/DFi** - with super contrast plan PLi S100x infinity corrected objective with built-in iris diaphragm and plan PL IOS objectives

*(By adding the IS.9150 (darkfield cardioid mirror condenser with external 100-240 V power supply) and the 86.521 (S100x objective with built-in iris diaphragm) or the IS.7200-I (super contrast S100x infinity corrected IOS objective), an existing iScope brightfield microscope can be upgraded to dark field as well)*

### FOCUSING

- Coaxial coarse and fine adjustments, 200 graduations, 1  $\mu\text{m}$  per graduation, 200  $\mu\text{m}$  per rotation, total travel approximately 24 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 Köhler NeoLED™ diascope illumination with internal 100-240 V power supply
- The innovative NeoLED™ design offer larger apertures, allowing the optical system of the iScope® microscope to produce images at higher resolutions, very close to the theoretical diffraction limit of the optics
- Other benefits of the NeoLED™ is the low energy consumption, no heating and a long operating lifetime
- The Köhler illumination on models with IOS plan and plan phase infinity corrected system provides high contrast and a maximum achievable resolving power of the optics
- Also available for other models as option



### 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 ensures safe transportation of the microscope

### PACKAGING

- Supplied with power cord, dust cover, a spare fuse, user manual and 5 ml immersion oil for models with S100x objective
- All packed in polystyrene boxes

### YOUTUBE

- Check out the product video on YouTube and learn more about this microscope YouTube channel: **Euromex Optics Group B.V.**

## FINITY MODELS

	Binocular	Trinocular	Phase contrast	EWF 10x/20 mm eyepieces	E-plan EPL 4/10/S40/S100x oil objectives	Plan phase PLPH 10x/20x/S40x/S100x objectives	Diopter adjustable (on left side)	Mechanical stage	i-Care Sensor
IS.1152-EPL	•			•	•		•	•	•
IS.1153-EPL		•		•	•		•	•	•
IS.1152-PLPH	•		•	•		•	•	•	•
IS.1153-PLPH		•	•	•		•	•	•	•

## INFINITY MODELS

• With ergonomic tilting head

	Binocular	Photo attachment	Phase contrast	EWF 10x/20 mm eyepieces	EWF 10x/22 mm eyepieces	Diopter adjustable (on left side)	E-plan IOS objective	Plan IOS objectives	Plan phase IOS objectives	Mechanical rackless stage	i-Care Sensor	Köhler LED
IS.1158-EPLi	•			•		•	•			•	•	
IS.1159-EPLi	•	•		•		•	•			•	•	
IS.1158-PLi	•				•	•		•		•	•	•
IS.1159-PLi	•	•			•	•		•		•	•	•
IS.1158-PLPHi	•		•		•	•			•	•	•	•
IS.1159-PLPHi	•	•	•		•	•			•	•	•	•

## INFINITY MODELS

	Binocular	Trinocular	Phase contrast	EWF 10x/22 mm eyepieces	E-plan IOS objective	Plan IOS objectives	Plan phase IOS objectives	Diopter adjustable (both sides)	Mechanical rackless stage	iCare Sensor	Köhler LED
IS.1152-EPLi	•			•	•				•	•	
IS.1153-EPLi		•		•	•				•	•	
IS.1152-PLi	•			•		•		•	•	•	•
IS.1153-PLi		•		•		•		•	•	•	•
IS.1152-PLPHi	•		•	•			•	•	•	•	•
IS.1153-PLPHi		•	•	•			•	•	•	•	•

## MULTIHEAD SYSTEMS

	Total users	Binocular	Trinocular	EWF 10x22 mm eyepieces	Plan IOS objectives	Mechanical rackless stage	Diopter adjustable (on left side)	iCare sensor	Köhler LED
IS.1156-PLi2	2	1x	•	•	•	•	•	•	•
IS.1156-PLi3	3	2x	•	•	•	•	•	•	•
IS.1156-PLi5	5	4x	•	•	•	•	•	•	•
IS.1156-PLi9	9	8x	•	•	•	•	•	•	•

## FACE-TO-FACE DUAL HEAD SYSTEMS

	Total users	Binocular	Trinocular	EWF 10x22 mm eyepieces	Plan IOS objectives	E-plan IOS objectives	Mechanical rackless stage	Diopter adjustable (on left side)	iCare sensor	Köhler LED
IS.1154-PLi	2	1x	•	•	•		•	•	•	•
IS.1154-EPLi	2	1x	•	•		•	•	•	•	•

## DARKFIELD CONTRAST APPLICATIONS\*

	Trinocular	Darkfield	EWF 10x20 mm eyepieces	EWF 10x22 mm eyepieces	E-plan objective	Plan IOS objectives	Diopter adjustable (on left side)	Diopter adjustable (on both sides)	Mechanical rackless stage	iCare sensor	Köhler LED
IS.1153-PLi-DF	•	•		•		•		•	•	•	•
IS.1153-PLi-DFi	•	•		•		•		•	•	•	•
IS.1153-EPL-DF	•	•	•		•		•		•	•	•

\* With cardioid oil-immersion condenser with 5 W LED. The 100x objective with built-in iris diaphragm replaces the standard 100x objective

## ACCESSORIES AND SPARE PARTS

### FINITY MODELS

- IS.6010** EWF 10x/20 mm eyepiece (Ø 23.2 mm tube)  
**IS.6010-C** EWF 10x/20 mm eyepiece with crosshair (Ø 23.2 mm tube)  
**IS.6010-P** EWF 10x/20 mm eyepiece with pointer  
**IS.6010-CM** EWF 10x/20 mm eyepiece with 10/100 micrometer and cross hair (Ø 23.2 mm tube)  
**IS.6015** EWF 15x/16 mm (Ø 23.2 mm tube)  
**IS.6020** EWF 20x/12 mm (Ø 23.2 mm tube)  
**IS.6099** Pair of eyecups for finity models
- IS.7104** E-plan EPL 4x/0.10 objective  
**IS.7110** E-plan EPL 10x/0.25 objective  
**IS.7120** E-plan EPL 20x/0.40 objective  
**IS.7140** E-plan EPL S40x/0.65 objective  
**IS.7160** E-plan EPL S60x/0.85 objective  
**IS.7100** E-plan EPL S100x /1.25 oil immersion objective
- IS.7710** Plan PLPH 10x/0.25 phase contrast objective  
**IS.7720** Plan PLPH 20x/0.40 phase contrast objective  
**IS.7740** Plan PLPH S40x/0.65 phase contrast objective  
**IS.7700** Plan PLPH S100x /1.25 oil immersion objective  
**86.521** Plan PL S100x/1.25 oil immersion objective with iris diaphragm. Working distance 0.33 mm

### INFINITY MODELS

- IS.5700** Ergonomic tilting head IOS series  
**IS.9800** Photo tube for IS.5700 (Ø 23.2 mm tube)
- IS.6011** EWF 10x/22 mm eyepiece  
**IS.6210** EWF 10x/22 mm eyepiece (Ø 30 mm tube)  
**IS.6210-P** EWF 10x/22 mm eyepiece with pointer  
**IS.6210-CM** EWF 10x/22 mm eyepiece with 10/100 micrometer and cross hair (Ø 30 mm tube)  
**IS.6215** EWF 15x/16 mm (Ø 30 mm tube)  
**IS.6220** EWF 20x/12 mm (Ø 30 mm tube)  
**IS.6299** Pair of eyecups (Ø 30 mm tube) for infinity models
- IS.7204** Plan PLi 4x/0.10 IOS infinity corrected objective  
**IS.7210** Plan PLi 10x/0.25 IOS infinity corrected objective  
**IS.7220** Plan PLi 20x/0.40 IOS infinity corrected objective  
**IS.7240** Plan PLi S40x/0.65 IOS infinity corrected objective  
**IS.7260** Plan PLi S60x/0.85 IOS infinity corrected objective  
**IS.7200** Plan PLi S100x/1.25 IOS infinity corrected objective  
**IS.7200-I** Plan PLi S100x/1.25 IOS objective with iris diaphragm
- IS.7410** Plan Fluarex PLFi 10x/0.25 IOS infinity corrected objective  
**IS.7420** Plan Fluarex PLFi 20x/0.40 IOS infinity corrected objective  
**IS.7440** Plan Fluarex PLFi S40x/0.65 IOS infinity corrected objective  
**IS.7400** Plan Fluarex PLFi S100x/1.25 IOS infinity corrected objective
- IS.8804** E-plan EPLi 4x/0.10 IOS infinity corrected objective  
**IS.8810** E-plan EPLi 10x/0.25 IOS infinity corrected objective  
**IS.8820** E-plan EPLi 20x/0.40 IOS infinity corrected objective  
**IS.8840** E-plan EPLi S40x/0.65 IOS infinity corrected objective  
**IS.8800** E-plan EPLi S100x/1.25 IOS infinity corrected objective

- IS.8910** Plan PLPHi 10x/0.25 phase contrast IOS infinity corrected objective  
**IS.8920** Plan PLPHi 20x/0.40 phase contrast IOS infinity corrected objective  
**IS.8940** Plan PLPHi S40x/0.65 phase contrast IOS infinity corrected objective  
**IS.8900** Plan PLPHi S100x/1.25 phase contrast IOS infinity corrected objective

### FINITY AND INFINITY MODELS

- IS.9102** Standard Abbe condenser 1.25 NA with slot for darkfield and phase contrast sliders  
**IS.9105** Swing-out 0.9/1.25 NA condenser  
**IS.9124** Zernike phase contrast set with PLPH 10/20/40/100x objectives and rotating phase contrast condenser with bright and dark field position. With green opaque filter  
**IS.9149** Telescope for alignment of for phase contrast annuli (Ø 23.2 mm tube)  
**IS.9150** Cardioid dark field condenser with integrated 5 W LED light source and external 100-240 V mains adapter
- IS.9160** Phase contrast slider set with PLPH 10/40x objectives and slider (with green opaque filter)  
**IS.9161** Phase contrast slider set with PLPH 20/100x objectives and slider (with green opaque filter)  
**IS.9162** Phase contrast slider set with 10x and S40x PLPHi IOS infinity corrected objectives and annuli for 10x/S40x  
**IS.9170** Slider with darkfield stop
- AE.5168-I** Heating stage for iScope series with controller, Only with new purchased microscopes
- IS.9503** Large ceramic stage 220 x 157 mm. Only with new purchased microscopes (add /C suffix after iScope® model part number)
- IS.9600** Polarization filter for lamp house (45 mm)  
**IS.9700** Blue opaque filter for lamp house (45 mm)  
**IS.9702** Green opaque filter for lamp house (45 mm)  
**IS.9704** Yellow opaque filter for lamp house (45 mm)  
**IS.9710** White opaque filter for lamp house (45 mm)
- IS.9880** Köhler LED attachment  
**SL.5500** NeoLED™ replacement unit for iScope  
**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, n = 1.482 (25 ml)  
**PB.5274** Isopropyl alcohol 99% (200 ml)  
**PB.5275** Cleaning kit: lens cleaning fluid, lint free lens tissue, brush, air blower, cotton swabs