

## 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)

#### 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
  - Each extra viewing binocular head is equipped with extended wide field plan EWF 10x/20 mm eyepieces
- (references: IS.1156-PLi-x, x = total number of heads)

#### NOSEPIECE

- Revolving quintuple reversed nosepiece for max. 5 objectives

## 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

## 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

*(Cardioid dark field condenser with integrated power supply is only available on models IS.1152-PLi/DF and IS.1153-PLi/DF.*

*By using IS.9150 and 86.521 an existing brightfield microscope can be upgraded to dark field.).*

## FOCUSING

- Coaxial coarse and fine adjustments, 200 graduations, 1 µm per graduation, 200 µm 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™ diasopic 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.**



## ACCESSORIES AND SPARE PARTS

- |                |   |                |  |
|----------------|---|----------------|--|
| <b>IS.6099</b> | Pair of eyecups for finity models   | <b>IS.9710</b> | White opaque filter for lamp house   |
| <b>IS.6299</b> | Pair of eyecups for infinity models   | <b>SL.5500</b> | NeoLED™ replacement unit for iScope  |
| <b>IS.9102</b> | Standard Abbe condenser 1.25 NA<br>with slot for dark field and phase contrast sliders                        | <b>AE.3684</b> | T500 mA 250 V Fuses for iScope   |
| <b>IS.9105</b> | Swing-out 0.9/1.25 NA condenser   | <b>PB.5155</b> | Microscope slides 76 x 26 mm, ground edges, 50 pieces  |
| <b>IS.9150</b> | Cardioid dark field condenser with integrated<br>5 W LED light source and external 100-240 V<br>mains adapter | <b>PB.5165</b> | Cover glasses 18 x 18 mm, thickness 0.13-0.17 mm, 100 pieces                                 |
| <b>86.521</b>  | Plan PL S100x/1.25 oil immersion objective<br>with iris diaphragm   | <b>PB.5168</b> | Cover glasses 22 x 22 mm, thickness 0.13-0.17 mm, 100 pieces                                 |
| <b>IS.9600</b> | Polarization filter for lamp house  | <b>PB.5245</b> | Lens cleaning paper, 100 sheets per pack   |
| <b>IS.9700</b> | Blue opaque filter for lamp house   | <b>PB.5255</b> | Immersion oil, n = 1.482 (25 ml)   |
| <b>IS.9702</b> | Green opaque filter for lamp house  | <b>PB.5274</b> | Isopropyl alcohol 99% (200 ml)   |
| <b>IS.9704</b> | Yellow opaque filter for lamp house   | <b>PB.5275</b> | Cleaning kit: lens cleaning fluid, lint free lens<br>tissue, brush, air blower, cotton swabs |

## SPECIFICATIONS (FINITY)

			IS.1152 -EPL	IS.1153 -EPL	IS.1152 -PLPH	IS.1153 -PLPH	Product number
<b>Models</b>	Binocular		•		•		
	Trinocular			•		•	
<b>Eyepieces</b>	EWF 10x/20 mm	Ø 23.2 mm tube	•	•	•	•	<b>IS.6010</b>
	EWF 10x/20 mm	with pointer	O	O	O	O	<b>IS.6010-P</b>
	EWF 10x/20 mm	with 10 / 100 micrometer and cross hair	O	O	O	O	<b>IS.6010- CM</b>
	EWF 15x/16 mm	Ø 23.2 mm tube	O	O	O	O	<b>IS.6015</b>
	EWF 20x/12 mm	Ø 23.2 mm tube	O	O	O	O	<b>IS.6020</b>
	Pair of eyecups		O	O	O	O	<b>IS.6099</b>
<b>Dioptr</b>	Adjustment on left side		•	•	•	•	
<b>Objectives</b>	E- Plan EPL	4x / 0.10	•	•	•	•	<b>IS.7104</b>
	E- Plan EPL	10x / 0.25	•	•			<b>IS.7110</b>
	E- Plan EPL	20x / 0.40	O	O			<b>IS.7120</b>
	E- Plan EPL	S40x / 0.65	•	•			<b>IS.7140</b>
	E- Plan EPL	S60x / 0.85	O	O			<b>IS.7160</b>
	E- Plan EPL	S100x / 1.25	•	•			<b>IS.7100</b>
	Plan phase PLPH	10x / 0.25			•	•	<b>IS.7710</b>
	Plan phase PLPH	20x / 0.40			•	•	<b>IS.7720</b>
	Plan phase PLPH	S40x / 0.65			•	•	<b>IS.7740</b>
	Plan phase PLPH	S100x / 1.25			•	•	<b>IS.7700</b>
<b>Filter</b>	Polarization for lamp house	45 mm	O	O	O	O	<b>IS.9600</b>
	Yellow opaque for lamp house	45 mm	O	O	O	O	<b>IS.9704</b>
	White opaque for lamp house	45 mm	O	O	O	O	<b>IS.9710</b>
<b>Stage</b>	Mechanical stage	140 x 160 mm	•	•	•	•	
	Large ceramic stage	220 x 157 mm <small>Only with new purchased microscopes (add suffix /C)</small>	O	O	O	O	<b>IS.9503</b>
<b>Illumination</b>	3 W NeoLED™		•	•	•	•	
<b>iCare Sensor</b>			•	•	•	•	
<b>Köhler</b>			O	O	O	O	<b>IS.9880</b>
<b>Zernike phase contrast set</b>	With PLPH 10/20/40/100x objectives and rotating phase contrast condenser with bright and dark field position*		O	O	•	•	<b>IS.9124</b>
<b>Telescope for phase contrast</b>	Ø 23.2 mm tube		O	O	•	•	<b>IS.9149</b>
<b>Phase contrast slider set</b>	With PLPH 10/40x objectives and slider*		O	O			<b>IS.9160</b>
	With PLPH 20/100x objectives and slider*		O	O			<b>IS.9161</b>
<b>Slider</b>	With dark field stop		O	O			<b>IS.9170</b>

(• = standard, O = optional, \* With green opaque filter)

## MODELS FOR DARK FIELD

Special models for dark field observation IS.1152-PLi/DF and IS.1153-PLi/DF are supplied with a state-of-the-art condenser equipped with reflective cardioid mirrors and a high powered 5 W LED. Together with a S100x objective with built-in iris diaphragm real 1,000x magnification dark field solution can be achieved. All other specifications are identical to models IS.1152-PLi and IS.1153-PLi

## SPECIFICATIONS (INFINITY)

		IS.1152 -EPLi	IS.1153 -EPLi	IS.1152 -PLi	IS.1153 -PLi	IS.1152 -PLPHi	IS.1153 -PLPHi	Product number
<b>Models</b>	Binocular	•		•		•		
	Trinocular		•		•		•	
<b>Head</b>	Ergonomic tilting head IOS series							<b>IS.5700</b>
<b>Photo tube</b>	for IS.5700 Ø 23.2 mm tube							<b>IS.9800</b>
<b>Eyepieces</b>	EWF 10x/22 mm Ø 30 mm tube	•	•	•	•	•	•	<b>IS.6210</b>
	EWF 10x/22 mm with pointer	O	O	O	O	O	O	<b>IS.6210-P</b>
	EWF 10x/22 mm with 10 / 100 micro- meter and cross hair	O	O	O	O	O	O	<b>IS.6210- CM</b>
	EWF 15x/ 16 mm Ø 30 mm tube	O	O	O	O	O	O	<b>IS.6215</b>
	EWF 20x/ 12mm Ø 30 mm tube	O	O	O	O	O	O	<b>IS.6220</b>
<b>Diopter</b>	Adjustment on left side	•	•					
	Adjustment on both sides			•	•	•	•	
<b>Objectives IOS</b>	E- Plan EPLi 4x / 0.10	•	•					<b>IS.8804</b>
	E- Plan EPLi 10x / 0.25	•	•					<b>IS.8810</b>
	E- Plan EPLi 20x / 0.40	O	O					<b>IS.8820</b>
	E- Plan EPLi S40x / 0.65	•	•					<b>IS.8840</b>
	E- Plan EPLi S100x / 1.25 oil	•	•					<b>IS.8800</b>
	Plan PLi 4x / 0.10			•	•			<b>IS.7204</b>
	Plan PLi 10x / 0.25			•	•			<b>IS.7210</b>
	Plan PLi 20x / 0.25			O	O			<b>IS.7220</b>
	Plan PLi S40x / 0.65			•	•			<b>IS.7240</b>
	Plan PLi S60x / 0.85			O	O			<b>IS.7260</b>
	Plan PLi S100x / 1.25 oil			•	•			<b>IS.7200</b>
	Plan phase PLPHi 10x/ 0.25					•	•	<b>IS.8910</b>
	Plan phase PLPHi 20x/ 0.40					•	•	<b>IS.8920</b>
	Plan phase PLPHi S40x/ 0.65					•	•	<b>IS.8940</b>
Plan phase PLPHi S100x/ 1.25 oil					•	•	<b>IS.8900</b>	
<b>Stage</b>	Mechanical rackless stage 216 x 150 mm	•	•	•	•	•	•	
	Large ceramic stage 220 x 157 mm Only with new purchased microscopes (add suffix /C)	O	O	O	O	O	O	<b>IS.9503</b>
<b>Illumination</b>	3 W NeoLED™	•	•	•	•	•	•	
<b>iCare Sensor</b>		•	•	•	•	•	•	
<b>Köhler</b>		O	O	•	•	•	•	<b>IS.9880</b>
<b>Zernike phase contrast set</b>	With PLPHi 10/20/40/100x IOS objectives and rotating phase contrast condenser with bright and dark field position*	O	O	O	O	•	•	<b>IS.9127</b>
<b>Telescope for phase contrast</b>	Ø 30 mm tube	O	O	O	O	•	•	<b>IS.9148</b>
<b>Phase contrast slider set</b>	With PLPH 10/40x IOS objectives and slider*	O	O	O	O			<b>IS.9162</b>
	With PLPH 20/100x IOS objectives and slider*	O	O	O	O			<b>IS.9163</b>
<b>Slider</b>	With dark field stop	O	O	O	O			<b>IS.9170</b>

(• = standard, O = optional, \* With green opaque filter)