

# **iScope**®

fluorescence

# **HIGHLIGHTS**

- HWF 10x/22 mm eyepieces
- · Binocular and trinocular models
- · Optional ergonomic tilting head
- · Quintuple revolving nosepiece
- · E-Plan, plan and plan Fluarex IOS corrected objectives
- 187/230 x 140 mm rackless stage with integrated X-Y stage
- Diascopic intensity adjustable 3 W NeoLED™ Köhler illumination
- · Epi-fluorescence 100 W HBO mercury vapor
- · iCare sensor for energy saving
- · CSS Cable Storage System
- In vitro medical device class A Regulation (EU) 2017/746
- 10 years warranty



# **EYEPIECES**

Extended plan EWF 10x/22 mm eyepieces, Ø 30 mm tubes. Eyepieces can be secured to the tubes. The trinocular head of the Plan infinity corrected models (PLi and PLFi) has a light path selector (100:0 / 50:50) and  $\pm$  5 diopter adjustments on both tubes.

The trinocular head of the E-Plan infinity corrected models (EPLi) has a fixed built-in light path beamsplitter (50:50) and  $\pm$  5 diopter adjustment on the left tube

### HEAD

- Binocular and trinocular Siedentopf type heads with 30° inclined tubes.
   Interpupillary distance from 48 to 76 mm
- 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

To order an iScope® with tilting head use reference IS.3158-xxx (Epli/Pli/PLFi)
To order an iScope® with tilting trino head use reference IS.3159-xxx (EPLi/Pli/PLFi)



**IS.3153-EPLi / IS.3153-PLI / IS.3153-PLFi** 407 (h) x 210 (w) x 255 mm (d) | 11.3 kg

### NOSEPIECE

Revolving quintuple reversed nosepiece on ball bearings

# STAGE

 $187/230 \times 140 \text{ mm}$  rackless stage equipped with double slide holder and integrated 79 x 52 mm mechanical stage. The iScope® rackless stage has no protruding parts, enabling more smooth movements and is safer

### **CONDENSER FOR BRIGHTFIELD**

The standard height adjustable Abbe N.A. 1.25 condenser for brightfield with magnification indication.

Also accepts sliders with phase annuli suitable for plan phase 10x/20x or S40x/S100x oil immersion IOS objectives for economical phase contrast. A slider with a simple dark stop for darkfield up to 400x magnification is also available for this condensor

# **OBJECTIVES**

The EPLi and PLi objectives are suitable for Blue and Green standard filter sets and other filter sets in the visible spectrum. The plan Fluarex PLFi ™ objectives are suitable for the entire spectrum including Ultra Violet and Violet

E-Plan EPLi IOS	4x/0.10	10x/0.25		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 PLFi IOS	4x/0.13	10x/0.30	20x/0.50 <sup>(1)</sup>	S40x/0.75		S100x/1.30 oil

<sup>&</sup>lt;sup>(1)</sup> optional

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



#### CONDENSER FOR ZERNIKE PHASE CONTRAST

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

### **FOCUSING**

Coaxial coarse and fine adjustments, 200 graduations, 1  $\mu$ m per graduation, 200  $\mu$ m per rotation, total travel range is 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™ diascopic illumination with internal 100-240 V power supply

The innovative NeoLED™ design offers 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 an option

### ILLUMINATION FOR FLUORESCENCE

The 6-position rotating and 3-position slider fluorescence attachments are supplied with:

- a 100 W HBO mercury vapor light source for broad powerful light spectrum. Including an 100-240 V external power supply with indication of the life span of the HBO bulb
- · Standard fluorescence filters sets for
  - blue excitation (EX460- 490 (BP) DM500 EM520 (LP),
  - green excitation (EX510-550 (BP) DM570 EM580 (LP) and a UV protection shield



6 blocks fluorescence attachement

The iScope® fluorescence microscopes equipped with a 100 W mercury vapor light source can be supplied with more specific, optimized and application related fluorescence filters sets

### LED ILLUMINATION FOR FLUORESCENCE

Two LED sources for fluorescence are available for 4 or 9 excitation wavelengths. See our products LE.6400 and LE.6900



#### **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 ensures safe transportation of the microscope

# **PACKAGE CONTENT**

Supplied with power cord, dust cover, a spare fuse, user manual and 5 ml immersion oil for models with S100x objective. Models with 100 W mercury vapor light source have a UV protection shield. All packed in polystyrene boxes



### **3-POSITIONS SLIDER ATTACHMENT**

• With 100 W mercury vapor light source

The 3-positions slider fluorescence attachments are supplied with standard 100 W HBO mercury vapor light source for broad powerful light spectrum. Supplied with standard fluorescence filters sets for blue and green excitation and a UV protection shield

MODELS	Bino	Trino	WF 10x/22 mm	Diopter adjustable on left tube	Diopter adjustable on both tubes	E-plan EPLi 4x/10x/S40x and S100x objectives	Plan PLi 4x/10x/ S40x and S100x objectives	Plan PLFi 4x/10x/ S40x and S100x objectives	100 W HBO light source	Filter sets (blue&green)	NeoLED illumination
IS.3152-EPLi/3	•		•	•		•			•	•	•
IS.3153-EPLi/3		•	•	•		•			•	•	•
IS.3152-PLi/3	•		•		•		•		•	•	•
IS.3153-PLi/3		•	•		•				•	•	
IS.3152-PLFi/3			•		•			•	•		
IS.3153-PLFi/3			•					•	•	•	•

In vitro medical device class A

## 6-POSITIONS ROTATING ATTACHMENT

• With 100 W mercury vapor light source

The 6-positions rotating fluorescence attachments are supplied with a standard 100 W HBO mercury vapor light source for broad powerful light spectrum. Supplied with standard fluorescence filters sets for excitation in the blue and green light spectrum and a UV protection shield

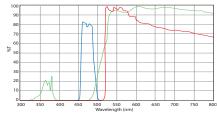
MODELS	Bino	Trino	WF 10x/22 mm	Diopter adjustable on left tube	Diopter adjust- able on both tubes	E-plan EPLi 4x/10x/S40x and S100x objectives	Plan PLi 4x/10x/ S40x and S100x objectives	Plan PLFi 4x/10x/S40 and S100x objectives	100 W HBO light source	Filter sets (blue&green)	NeoLED illumination
IS.3152-EPLi/6	•		•	•		•			•	•	•
IS.3153-EPLi/6			•	•		•			•	•	
IS.3152-PLi/6	•		•		•		•		•	•	•
IS.3153-PLi/6					•		•		•		•
IS.3152-PLFi/6			•					•	•	•	•
IS.3153-PLFi/6			•		•				•	•	

In vitro medical device class A

# STANDARD GENERAL PURPOSE FLUORESCENCE FILTER SETS

IS.9745 -Blue excitation filter set EX: 460-490 nm bandpass DM: 500 nm

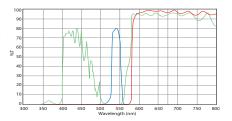
EM: 520 nm longpass



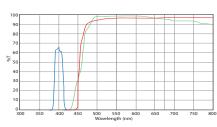
Green excitation filter set EX: 510-550 nm bandpass DM: 570 nm EM: 580 nm longpass

IS.9746 -

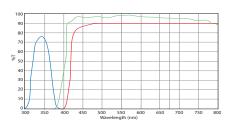
IS.9748 -



IS.9747 -Violet excitation filter set EX 400-410 nm bandpass DM 455 nm EM 455 nm longpass



UV excitation filter set EX: 330-385 nm bandpass DM: 420 nm EM: 400 nm longpass







# ACCESSORIES AND SPARE PARTS

# **OPTIMIZED FLUORESCENCE FILTERS SETS**

 $See \ separate \ data sheet \ (attached \ to \ any \ fluorescence \ microscope \ on \ the \ website)$ 

**IS.9749-6** Empty filter cube for 6-position fluorescence attachment **IS.9749-3** Empty filter cube for 3-position fluorescence attachment

**IS.9753** Filter rail, 3-position

### **EYEPIECES**

IS.6210	EWF 10x/22 mm eyepiece (Ø 30mm tube)
13.0210	LVVI 10X/22 IIIIII EYEDIECE (Ø 30111111 tube)

IS.6210-C EWF 10x/22 mm eyepiece with cross hair (Ø30 mm tube)
IS.6210-P EWF 10x/22 mm eyepiece with pointer (Ø30 mm tube)

**IS.6210-CM** EWF 10x/22 mm eyepiece with 10/100 micrometer and cross hair

(Ø30 mm tube)

 IS.6212
 WF 12.5x/17 mm eyepiece (Ø30 mm tube)

 IS.6215
 WF 15x/16 mm eyepiece (Ø30 mm tube)

 IS.6220
 WF 20x/12 mm eyepiece (Ø30 mm tube)

**IS.6299** Pair of eyecups infinity models

# **OBJECTIVES**

# E-plan EPL, 45 mm parfocal\*

IS.7104	4x/0.10 EPL objective. WD 15.2 mm
IS.7110	10x/0.25 EPL objective. WD 5.5 mm
IS.7120	20x/0.40 EPL objective. WD 3.5 mm
IS.7140	S40x/0.65 EPL objective. WD 0.45 mm
IS.7160	S60x/0.85 EPL objective. WD 0.19 mm
IS.7100	S100x/1.25 EPL objective. WD 0.13 mm

# Plan Phase PLPH, 45 mm parfocal\*

IS.7710 10x/0.25 PLPH objective. WD 12.2 mm
 IS.7720 20x/0.40 PLPH objective. WD 5 mm
 IS.7740 \$40x/0.65 PLPH objective. WD 0.37 mm
 IS.7700 \$100x/1.25 PLPH objective. WD 0.13 mm

# E-plan infinity corrected EPLi, IOS 45 mm parfocal\*

 IS.8804
 4x/0.10 EPLi objective. WD 15.4 mm

 IS.8810
 10x/0.25 EPLi objective. WD 5.8 mm

 IS.8840
 \$40x/0.65 EPLi objective. WD 0.43 mm

 IS.8800
 \$100x/1.25 EPLi objective. WD 0.13 mm

### Plan infinity corrected PLi, IOS 45 mm parfocal\*

IS.7202 2x/0.05 PLi objective, WD 18.3 mm. Best used together with swing-out condenser (no coverglass correction) IS.7204 4x/0.10 PLi objective. WD 15.4 mm (no coverglass correction) IS.7210 10x/0.25 PLi objective. WD 10 mm IS.7220 20x/0.40 PLi objective. WD 5.1 mm S40x/0.65 PLi objective. WD 0.54 mm IS.7240 IS.7260 S60x/0.85 PLi objective. WD 0.14 mm S100x/1.25 PLi objective. WD 0.13 mm IS.7200 IS.7200-I S100x/1.25 PLi super contrast objective with built-in iris diaphragm. WD 0.13 mm

IS.7200-W PLi S100x/1.10 IOS water immersion objective. WD 0.14 mm

\*0.17 mm cover glass correction (except IS.7202 and IS.7204)

WD = Working distance



### Plan Fluarex infinity corrected PLFi, IOS 45 mm parfocal\*

IS.7404	4x/0.13 PLFi objective. WD 16.4 mm
IS.7410	10x/0.30 PLFi objective. WD 2.9 mm
IS.7420	20x/0.50 PLFi objective. WD 1.4 mm
IS.7440	S40x/0.75 PLFi objective. WD 0.34 mm
IS.7400	S100x/1.30 PLFi objective. WD 0.2 mm

## Plan Phase infinity corrected PLPHi, IOS 45 mm parfocal\*

IS.8910	10x/0.25 PLPHi objective. WD 10.2 mm
IS.8920	20x/0.40 PLPHi objective. WD 5.1 mm
IS.8940	S40x/0.65 PLPHi objective. WD 0.5 mm
IS.8900	S100x/1.25 PLPHi objective. WD 0.13 mm

\*0.17 mm cover glass correction

WD = working distance

### **CONDENSERS**

IS.9124	Zernike phase contrast set PLPH 10/20/40/100 brightfield and
	darkfield position
IS.9127	Zernike phase contrast set PLPHi 10/20/40/100 IOS brightfield and
	darkfield position
IS.9102	Standard Abbe condenser 1.25 NA with slot for darkfield and
	phase contrast sliders
IS.9105	Swing-out 0.9/1.25 condenser

### **PHASE CONTRAST**

IS.9148	Telescope for phase contrast diameter 30 mm tube
IS.9149	Telescope for phase contrast diameter 23.2 mm tube
IS.9160	Phase contrast slider set with 10x and S40x PLPH objectives and
	annuli for 10/S40x PLPH objectives. Also suitable for optional 20x
	PLPH objective
IS.9161	Phase contrast slider set with 20x and S100x PLPH objectives and
	annuli for 20x/S100x PLPH objectives
IS.9162	Phase contrast slider set with 10x and S40x PLPHi IOS infinity
	corrected objectives and annuli for 10x/S40x PLPHi IOS infinity
	corrected objectives. Also suitable for optional 20x PLPHi infinity
	corrected objective
IS.9163	Phase contrast slider set with 20x and S100x PLPHi IOS infinity
	corrected objectives and annuli for 20x/S100x PLPHi IOS infinity
	corrected objectives
IS.9194	Slider with phase contrast annuli for S40 phase contrast objective

# **POLARIZATION**

IS.9600	Polarization filter 45 mm for lamphouse
IS.9601	Polarization set: simple rotating polarizer for lamphouse and fix
	polarizer mounted under head
IS.9626	Polarization filter for mounting under the head

### **FILTERS**

IS.9700	Blue filter 45 mm for lamphouse
IS.9702	Green filter 45 mm for lamphouse
IS.9704	Yellow filter 45 mm for lamphouse
IS.9706	White opaque filter 45 mm for lamphouse

### **CAMERA ACCESSORIES**

IS.9800	Single photo tube attachment with one 23.2 mm tube for IS.5700
	ergonomic tilting head of iScope® infinity systems
AE.5130	Universal SLR adapter with built-in 2x lens for standard 23.2 mm
	tube. Needs T2 adapter
AE.5025	T2 ring for Nikon D SLR digital camera
AE.5040	T2 ring for Canon EOS SLR digital camera

## **MISCELLANEOUS**

**IS.9170** Slider with darkfield stop

IS.9501-ADD

Stage with ergonomical low-positionned X-Y adjustments of mechanical stage. Right handed. Add-on price, only with new microscopes

IS.9880 Köhler attachment

AE.5168-I Heating stage series with controller, only with new microscopes

**AE.3684** Glass fuses 500 mA 250 V, 10 pieces **SL.5500** NeoLED™ replacement unit

**PB.5275** Cleaning kit: lens fluid, lint free lens tissue/paper, brush, air blower, cotton swabs

PB.5276 Microscope maintenance and servicing kit, 16pcs: cleaning brush, 6 pcs screwdriver set, air blower, 3 pcs Allen key, 1.5, 2, 2.5 mm, lens cleaning fluid 20 ml, cleaning cloth 140 x 140 mm, 100 pcs Lens tissue sheets, Tube of maintenance grease, 10 ml bottle of oil, packed in a nice toolbox

## **DISPOSABLES**

PB.5155	Microscope slides 76 x 26 mm, ground edges,
	50 pieces per pack
PB.5165	Cover glasses 18 x 18 mm, 0.13-0.17 mm, 100 pieces
PB.5168	Cover glasses 22 x 22 mm, 0.13-0.17 mm, 100 pieces
PB.5245	Lens cleaning paper, 100 sheets per pack
PB.5255	Immersion oil, 25 ml. Refraction index $n = 1.515$
PB.5274	Iso propyl alcohol 99%, 200 ml





