

## 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
- Optional ceramic 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



IS.3153 PLi-3 ●

IS.3153-EPLi / IS.3153-PLi / IS.3153-PLFi

407 (h) x 210 (w) x 255 mm (d) | 11.3 kg

### TECHNICAL SPECIFICATIONS

#### 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 ergonomic 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)

#### 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

#### NOSEPIECE

Revolving quintuple reversed nosepiece on ball bearings

#### STAGE

187/230 x 140 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

Optional: 220 x 157 mm ceramic stage with integrated 75 x 50 mm 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

#### 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 condenser

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>(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  $\mu\text{m}$  per graduation, 200  $\mu\text{m}$  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™ diascope 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) DM520 EM500 (LP),
  - green excitation (EX510-550 (BP) DM580 EM570 (LP)
 and a UV protection shield



● 6 blocks fluorescence attachment

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

## ILLUMINATION FOR LED FLUORESCENCE

Three LED sources for fluorescence are available for 2, 5 or 9 excitation wavelengths. See our products LE.6200, LE.6500 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 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/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

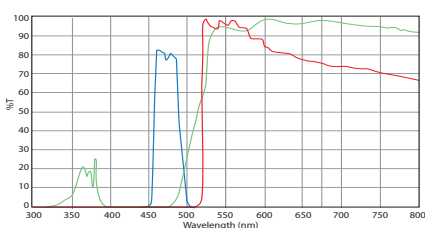
IS.9745 -

Blue excitation filter set

EX: 460-490 nm bandpass

DM: 520 nm

EM: 500 nm longpass



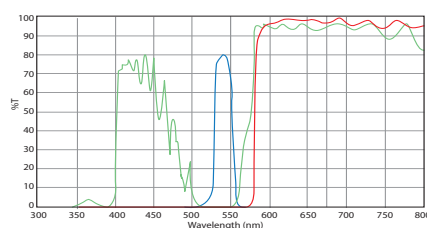
IS.9746 -

Green excitation filter set

EX: 510-550 nm bandpass

DM: 580 nm

EM: 570 nm longpass



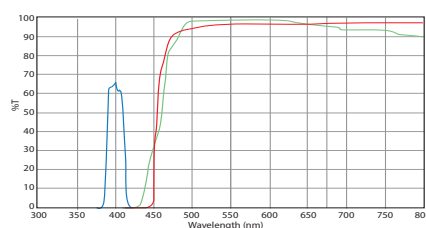
IS.9747 -

Violet excitation filter set

EX 400-410 nm bandpass

DM 455 nm

EM 455 nm longpass



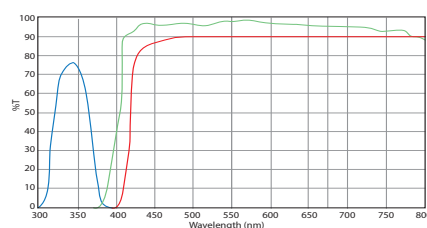
IS.9748 -

UV excitation filter set

EX: 330-385 nm bandpass

DM: 420 nm

EM: 400 nm longpass



## MODELS



● IS.3153 PLFi-6



● IS.3158 PLi-3

## ACCESSORIES AND SPARE PARTS

### OPTIMIZED FLUORESCENCE FILTERS SETS

See separate datasheet (attached to any fluorescence microscope on the website):

Fluorescence\_filter\_sets\_product\_datasheet\_English

**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

**IS.9102** Standard Abbe condenser 1.25 NA condenser with slot for darkfield and phase contrast sliders

**IS.9105** Swing-out 0.9/1.25 NA condenser

**IS.6210** EWF 10x/22 mm eyepiece (Ø 30 mm 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

**IS.7104** E-plan EPL 4x/0.10 objective. WD 15.2 mm

**IS.7110** E-plan EPL 10x/0.25 objective. WD 5.5 mm

**IS.7120** E-plan EPL 20x/0.40 objective. WD 3.5 mm

**IS.7140** E-plan EPL S40x/0.65 objective. WD 0.45 mm

**IS.7160** E-plan EPL S60x/0.85 objective. WD 0.19 mm

**IS.7100** E-plan EPL S100x/1.25 objective. WD 0.13 mm

**IS.7710** Plan PLPH 10x/0.25 phase contrast objective. WD 12.2 mm

**IS.7720** Plan PLPH 20x/0.40 phase contrast objective. WD 5 mm

**IS.7740** Plan PLPH S40x/0.65 phase contrast objective. WD 0.37 mm

**IS.7700** Plan PLPH S100x/1.25 phase contrast objective. WD 0.13 mm

**IS.8804** E-plan EPLi 4x/0.10 IOS objective. WD 15.4 mm

**IS.8810** E-plan EPLi 10x/0.25 IOS objective. WD 5.8 mm

**IS.8840** E-plan EPLi S40x/0.65 IOS objective. WD 0.43 mm

**IS.8800** E-plan EPLi S100x/1.25 IOS objective. WD 0.13 mm

**IS.7202** Plan PLi 2x IOS objective, WD 18.3 mm. Best to be used together with swing-out condenser

**IS.7204** Plan PLi 4x/0.10 IOS objective. WD 15.4 mm

**IS.7210** Plan PLi 10x/0.25 IOS objective. WD 10 mm

**IS.7220** Plan PLi 20x/0.40 IOS objective. WD 5.1 mm

**IS.7240** Plan PLi S40x/0.65 IOS objective. WD 0.54 mm

<b>IS.7260</b>	Plan PLi S60x/0.85 IOS objective. WD 0.14 mm	<b>IS.9700</b>	Blue filter 45 mm for lamphouse
<b>IS.7200</b>	Plan PLi S100x/1.25 IOS objective. WD 0.13 mm	<b>IS.9702</b>	Green filter 45 mm for lamphouse
<b>IS.7200-I</b>	Plan Super Contrast PLi S100x/1.25 IOS objective with built-in iris diaphragm. WD 0.13 mm	<b>IS.9704</b>	Yellow filter 45 mm for lamphouse
<b>IS.7200-W</b>	Plan PLi S100x/1.10 IOS water immersion objective. Working distance 0.14 mm. Cover glass 0.17 mm corrected	<b>IS.9706</b>	White opaque filter 45 mm for lamphouse
<b>IS.7404</b>	Plan Fluarex PLFi 4x/0.15 IOS objective. WD 21.6 mm	<b>IS.9800</b>	Single photo tube attachment with one 23.2 mm tube for IS.5700 ergonomic tilting head of iScope® infinity systems
<b>IS.7410</b>	Plan Fluarex PLFi 10x/0.35 IOS objective. WD 2.9 mm	<b>IS.9880</b>	Köhler attachment
<b>IS.7420</b>	Plan Fluarex PLFi 20x/0.60 IOS objective. WD 1.5 mm	<b>AE.3484</b>	Glass fuses 500 mA 250 V, 10 pieces
<b>IS.7440</b>	Plan Fluarex PLFi S40x/0.75 IOS objective. WD 0.6 mm	<b>AE.3679</b>	Halogen spare bulb 12 V 50 W
<b>IS.7400</b>	Plan Fluarex PLFi S100x/1.30 IOS objective. WD 0.13 mm	<b>AE.5168-I</b>	Heating stage series with controller, only with new microscopes
<b>IS.8910</b>	Plan PLPHi 10x/0.25 phase contrast IOS infinity corrected objective. WD 10.2 mm	<b>SL.5500</b>	NeoLED™ replacement unit
<b>IS.8920</b>	Plan PLPHi 20x/0.40 phase contrast IOS infinity corrected objective. WD 5.1 mm	<b>AE.5130</b>	Universal SLR adapter with built-in 2x lens for standard 23.2 mm tube. Needs T2 adapter
<b>IS.8940</b>	Plan PLPHi S40x/0.65 phase contrast IOS infinity corrected objective. WD 0.5 mm	<b>AE.5025</b>	T2 ring for Nikon D SLR digital camera
<b>IS.8900</b>	Plan PLPHi S100x/1.25 phase contrast IOS infinity corrected objective. WD 0.13 mm	<b>AE.5040</b>	T2 ring for Canon EOS SLR digital camera
<b>IS.9124</b>	Zernike phase contrast set PLPH 10/20/40/100 bright field and darkfield position	<b>PB.5155</b>	Microscope slides 76 x 26 mm, ground edges, 50 pieces per pack
<b>IS.9127</b>	Zernike phase contrast set PLPHi 10/20/40/100 IOS brightfield and darkfield position	<b>PB.5165</b>	Cover glasses 18 x 18 mm, 0.13-0.17 mm, 100 pieces
<b>IS.9148</b>	Telescope for phase contrast diameter 30 mm tube	<b>PB.5168</b>	Cover glasses 22 x 22 mm, 0.13-0.17 mm, 100 pieces
<b>IS.9149</b>	Telescope for phase contrast diameter 23.2 mm tube	<b>PB.5245</b>	Lens cleaning paper, 100 sheets per pack
<b>IS.9102</b>	Standard Abbe condenser 1.25 NA with slot for darkfield and phase contrast sliders	<b>PB.5255</b>	Immersion oil, 25 ml. Refraction index n = 1.515
<b>IS.9105</b>	Swing-out 0.9/1.25 condenser	<b>PB.5274</b>	Iso propyl alcohol 99%, 200 ml
<b>IS.9160</b>	Phase contrast slider set with 10x and S40x PLPH objectives and annuli for 10/S40x PLPH objectives. Also suitable for optional 20x PLPH objective	<b>PB.5275</b>	Cleaning kit: lens fluid, lint free lens tissue/paper, brush, air blower, cotton swabs
<b>IS.9161</b>	Phase contrast slider set with 20x and S100x PLPH objectives and annuli for 20x/S100x PLPH objectives	<b>PB.5276</b>	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
<b>IS.9162</b>	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		
<b>IS.9163</b>	Phase contrast slider set with 20x and S100x PLPHi IOS infinity corrected objectives and annuli for 20x/S100x PLPHi IOS infinity corrected objectives		
<b>IS.9170</b>	Slider with darkfield stop		
<b>IS.9194</b>	Slider with phase contrast annuli for S40 phase contrast objective		
<b>IS.9600</b>	Polarization filter 45 mm for lamphouse		
<b>IS.9601</b>	Polarization set: simple rotating polarizer for lamphouse and fix polarizer mounted under head		

WD = working distance