

iScope®

The iScope® is available in various configurations suitable for Life and Biomedical Sciences, high schools, universities but also for routine medical applications

Besides the brightfield contrast method, configurations for phase contrast, cardioid mirror dark field, basic polarization and several epillumination sources for fluorescence applications can be used. iScope® models with multiheads are also available for teaching purposes



IS.1153-PLi



IS.1152-EPL

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

TECHNICAL SPECIFICATIONS

EYEPIECES

- 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 and 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)

IS.1152-PLi	
Dimensions	Weight
(h) 407 x (w) 210 x (d) 255 mm	9.0 kg



TECHNICAL SPECIFICATIONS

OBJECTIVES

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

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

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

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

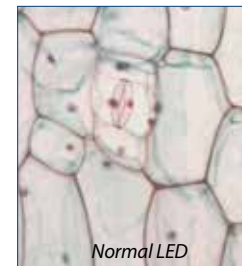
Coaxial coarse and fine adjustments, 200 graduations, 1 µm per graduation, 200 µm per rotation, total travel approximately 24 mm. Supplied with an adjustable rack stop to prevent damage to sample and objectives. The coarse adjustments are equipped with friction control

ILLUMINATION

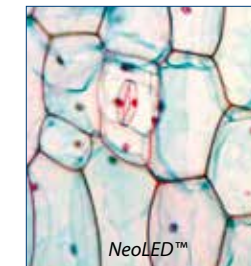
3 W adjustable Köhler NeoLED™ diasopic illumination with internal 100-240 V power supply
The innovative NeoLED™ design offer larger apertures, allowing the optical system of the iScope® microscope to produce images at higher resolutions, very close to the

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



Normal LED



NeoLED™

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

- IS.6099** Pair of eyecups for finity models
- IS.6299** Pair of eyecups for infinity models
- IS.9102** Standard Abbe condenser 1.25 NA with slot for dark field and phase contrast sliders
- IS.9105** Swing-out 0.9/1.25 NA condenser
- IS.9150** Cardioid dark field condenser with integrated 5 W LED light source and external 100-240 V mains adapter
- 86.521** Plan PL S100x/1.25 oil immersion objective with iris diaphragm
- IS.9600** Polarization filter for lamp house
- IS.9700** Blue opaque filter for lamp house
- IS.9702** Green opaque filter for lamp house
- IS.9704** Yellow opaque filter for lamp house
- IS.9710** White opaque filter for lamp house
- SL.5500** NeoLED™ replacement unit for iScope
- 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



IS.1153-EPL

IS.1153-PLi

SPECIFICATIONS (FINITY)

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

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

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