iScope®

for darkfield

PRODUCT DATASHEET (Iscope)

EIS-1153-PLI/DFI

407 (h) x 210 (w) x 255 (d) | 9.0 kg

HIGHLIGHTS

- · Ideal for live blood analysis
- 5W LED Darkfield cardioid condenser, intensity adjustable
- · S100x oil objective with build-in iris
- · Trinocular models
- EWF 10x/22 mm and EWF10x/20 mm eyepieces
- · Optional tilting head
- · Quintuple reversed nosepiece
- · EPL and PLi plan objectives
- 156 x 138 mm stage or 187/230 x 140 mm rackless stage
- · CSS Cable Storage System
- 10 years warranty

TECHNICAL SPECIFICATIONS

EYEPIECES

- The iScope® EIS-1153-EPL/DF with a finite optical system is supplied with 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)
- The iScope® EIS-1153-PLi/DF and EIS-1153-PLi/DFi with a infinite optical system are supplied with 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 one adjustable diopter on the left tube for EPLi systems (Ø 30 mm tube)

HEAD

Trinocular Siedentopf type heads with 30° inclined tubes Interpupillary distance from 48 to 76 mm

The trinocular head for model EIS-1153-EPL/DF has a fixed built-in 50:50 beamsplitter and one \pm 5 diopter adjustment on the Ø 23.2 mm left tube The trinocular head for models EIS-1153-PLi/DF and EIS-1153-PLi/DFi has an optical path selector (100:0 / 50:50) and \pm 5 diopter adjustments on both Ø 30 mm tubes

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 heads come with a Ø 23.2 mm photo port for cameras

ERGONOMIC TILTING HEAD OPTIONAL

(for IOS models only)

- Optional ergonomic 5 to 35° tilting head supplied with EWF 10x/22 mm eyepiece
- Interpupillary distance 48-75 mm
- Optional photo attachment for tiltinghead with standard Ø 23.2 mm tube

(To order an iScope® with tilting head use reference EIS-1158-PLi/DF or EIS-1158-PLi/DFi. To order an iScope® with tilting head and photo attachment use reference EIS-1159-PLi/DF or EIS-1159-PLi/DFi)

NOSEPIECE

Revolving quintuple reversed nosepiece for max. five objectives

OBJECTIVES

E-Plan EPL	4x/0.10	10x/0.25	20x/0.40(1)	S40x/0.65		S100x/1.25 oil(2)
Plan PLi IOS	4x/0.10	10x/0.25	20x/0.40(1)	S40x/0.65	S60x/0.85 ⁽¹⁾	S100x/1.25 oil(3)

⁽¹⁾ Optional.

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



● EIS-1153-PLi/DFi

 \$100x oil objective with built-in iris diaphram

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⁽²⁾ S100x oil objective with built-in iris diaphragm.

⁽³⁾ Super contrast plan PLi S100x oil infinity corrected objective with built-in iris diaphragm



STAGES

The iScope® can be equipped with two types of stages (designed for 2 slides):

- 156 x 138 mm stage equipped with integrated 79 x 52 mm X-Y mechanical stage
- 187/230 x 140 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 and therefore it is safer in use. Furthermore it enables more smooth movement



A state-of-the-art condenser equipped with reflective cardioid mirrors, with an integrated high powered 5 W LED light source. Together with a S100x objective with built-in iris diaphragm this forms a 1000x magnification darkfield solution. The power supply of the 5 W LED light source is built in the microscope. The darkfield condenser can easily be exchanged for a brightfield condenser which is also included

CONDENSER FOR BRIGHTFIELD (INCLUDED)

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

PHASE CONTRAST CONDENSER WITH SLIDER (OPTIONAL)

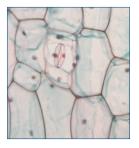
There is a choice of two optional NA. 1.25 phase contrast condenser sets with phase contrast sliders and plan phase contrast objectives. The first version one comes with plan phase 10x and 540x objectives with matching slider, the second version comes with plan phase 20x and 5100x oil immersion objectives. Available for iScope® 160 mm and IOS infinity versions.

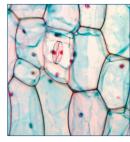
All sets are supplied with a centering telescope and a green opaque filter (Photo: EIS-9162 - Phase contrast set)

FOCUSING

- Coaxial coarse and fine adjustments, 200 graduations, 1 µm per graduation, 200 µm 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

To upgrade an existing iScope® to darkfield a cardioid condenser with integrated high powered 5 W LED illumination and external power supply (EIS-9150) is available. One also has to purchase a 86.521, Plan PL S100x objective with built-in iris diaphragm or a EIS-7200-I super contrast plan PLi S100x infinity corrected objective







Normal LED

NeoLED™



ILLUMINATION FOR DARKFIELD

High powered 5 w led, built-in the cardioid mirror condensor, intensity adjustable

ILLUMINATION FOR BRIGHTFIELD

Standardly supplied with:

- 3 W adjustable 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
- 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 optionally available for other models



 Cardioid darkfield condenser with 5 W LED and integrated power supply



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 height adjustable Abbe N.A. 1.25 condenser for brightfield, power cord, dust cover, a spare fuse, user manual and 5 ml immersion oil
- Packed in a polystyrene box

MODELS	EWF eyepieces	E-plan 4/10/S40x objectives	Plan 4/10/540x IOS objectives	Plan S100x iris objective	Plan S100x iris Super Contrast objective	Stage (156 x 138 mm)	Rackless stage (187/230 x 140 mm)	Köhler diaphragm
EIS-1153-EPL/DF	10x/20 mm	•		٠		•		
EIS-1153-PLi/DF	10x/22 mm		•	•			•	•
EIS-1153-PLi/DFi	10x/22 mm						•	•



EIS-1153-EPL/DF

● EIS-1153-PLi/DF & DFi



ACCESSORIES AND SPARE PARTS

ONLY FOR EIS-1153-EPL/DF:

EIS-6010	EWF10x/20 mm eyepiece					
EIS-6010-P	EWF10x/20 mm micrometer eyepiece with pointer					
EIS-6010-C	EWF10x/20 mm eyepiece with crosshairs					
EIS-6010-CN	EWF 10x/20 mm eyepiece with 10/100 micrometer and					
	crosshairs					
EIS-6015	WF15x/16 mm eyepiece					
EIS-6020	WF20x/12 mm eyepiece					
EIS-6099	Pair of eyecups (finity models)					
EIS-7104	E-plan EPL 4x/0.10 objective					
EIS-7110	E-plan EPL 10x/0.25 objective					
EIS-7120	E-plan EPL 20x/0.40 objective					
EIS-7140	E-plan EPL S40x/0.65 objective					
EIS-7160	E-plan EPL S60x/0.85 objective					
EIS-7100	E-plan EPL S100x/1,25 objective					
E86-521	Plan PL S100x/1.25 oil immersion objective (with iris diaphragm)					
EIS-9124	Zernike phase contrast set PLPH 10/20/40/100 bright field and darkfield position					
EIS-9149	Telescope for phase contrast D23,2mm tube					
EIS-9149 EIS-9160	Telescope for phase contrast D23,2mm tube Phase contrast slider set with 10x and S40x PLPH objectives and					
	• •					
	Phase contrast slider set with 10x and S40x PLPH objectives and					
	Phase contrast slider set with 10x and S40x PLPH objectives and annuli for 10/S40x PLPH objectives. Also suitable for optional 20x					
EIS-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					
EIS-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 Phase contrast slider set with 20x and S100x PLPH objectives and					
EIS-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 Phase contrast slider set with 20x and S100x PLPH objectives and					
EIS-9160 EIS-9161	Phase contrast slider set with 10x and S40x PLPH objectives and annuli for 10/S40x PLPH objectives. Also suitable for optional 20x PLPH objective Phase contrast slider set with 20x and S100x PLPH objectives and annuli for 20x/S100x PLPH objectives					
EIS-9160 EIS-9161 EIS-7710	Phase contrast slider set with 10x and S40x PLPH objectives and annuli for 10/S40x PLPH objectives. Also suitable for optional 20x PLPH objective Phase contrast slider set with 20x and S100x PLPH objectives and annuli for 20x/S100x PLPH objectives Plan PLPH 10x/0.25 phase contrast objective					
EIS-9160 EIS-9161 EIS-7710 EIS-7720	Phase contrast slider set with 10x and S40x PLPH objectives and annuli for 10/S40x PLPH objectives. Also suitable for optional 20x PLPH objective Phase contrast slider set with 20x and S100x PLPH objectives and annuli for 20x/S100x PLPH objectives Plan PLPH 10x/0.25 phase contrast objective Plan PLPH 20x/0.40 phase contrast objective					
EIS-9160 EIS-9161 EIS-7710 EIS-7720 EIS-7740	Phase contrast slider set with 10x and S40x PLPH objectives and annuli for 10/S40x PLPH objectives. Also suitable for optional 20x PLPH objective Phase contrast slider set with 20x and S100x PLPH objectives and annuli for 20x/S100x PLPH objectives Plan PLPH 10x/0.25 phase contrast objective Plan PLPH 20x/0.40 phase contrast objective Plan PLPH S40x/0.65 phase contrast objective					
EIS-9160 EIS-9161 EIS-7710 EIS-7720 EIS-7740 EIS-7700	Phase contrast slider set with 10x and S40x PLPH objectives and annuli for 10/S40x PLPH objectives. Also suitable for optional 20x PLPH objective Phase contrast slider set with 20x and S100x PLPH objectives and annuli for 20x/S100x PLPH objectives Plan PLPH 10x/0.25 phase contrast objective Plan PLPH 20x/0.40 phase contrast objective Plan PLPH S40x/0.65 phase contrast objective Plan PLPH S100x/1.25 phase contrast objective					

ONLY FOR EIS-1153-PLI/DF AND EIS-1153-PLI/DFi:

F	IS-5700	Ergonomic tilting head 5-35°				
	IS-9800	Single photo tube attachment with one 23,2 mm tube for EIS-5700				
	13-3000	ergonomic tilting head of iScope® infinity systems				
F	IS-6210	EWF 10x/22 mm eyepiece				
		EWF10x/22 mm eyepiece with crosshairs				
		EWF10x/22 mm eyepiece with pointer				
	IS-6210					
_	15 02 10 CM	crosshairs				
E	IS-6212	WF12.5x/17 mm eyepiece				
E	IS-6212-W	WF12.5x/17 mm eyepiece with Walton Beckett reticle				
	IS-6215	WF15x/16 mm eyepiece				
E	IS-6220	WF20x/12 mm eyepiece				
E	IS-6215	WF15x/16 mm eyepiece				
E	IS-6220	WF20x/12 mm eyepiece				
E	IS-6299	Pair of eyecups (infinity models)				
E	IS-7202	Plan PLi 2x IOS objective, working distance 18,3 mm.				
		Best to be used together with swing-out condenser				
E	IS-7204	Plan PLi 4x/0.10 IOS objective				
E	IS-7210	Plan PLi 10x/0.25 IOS objective				
E	IS-7220	Plan PLi 20x/0.40 IOS objective				
E	IS-7240	Plan PLi S40x/0.65 IOS objective				
E	IS-7260	Plan PLi S60x/0.85 IOS objective				
E	IS-7200	Plan PLi S100x/1.25 IOS objective				
E	IS-7200-IPI	an PLi S100x/1.25 IOS super contrast objective (with iris diaphragm)				
E	86-521	Plan PL S100x/1.25 oil immersion objective (with iris diaphragm)				
E	IS-9127	Zernike phase contrast set PLPHi 10/20/40/100 IOS bright field and				
		darkfield position				
E	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				
E	IS-9163	Phase contrast slider set with 20x and S100x PLPHi IOS infinity				
		corrected objectives and annuli for 20x/S100x PLPHi IOS infinity				
-	15 04 40	corrected objectives				
E	IS-9148	Telescope for phase contrast D30mm tube				
E	IS-8910	Plan PLPHi 10x/0.25 phase contrast IOS objective				
	IS-8920	Plan PLPHi 20x/0.40 phase contrast IOS objective				
	IS-8940	Plan PLPHi S40x/0.65 phase contrast IOS objective				
	IS-8900	Plan PLPHi S100x/1.25 phase contrast IOS objective				
E	IS-9194	Slider with phase contrast annuli for S40 phase contrast objective				
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FOR ALL MODELS:

EIS-9105	Swing-out 0.9/1.25 condenser	
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EIS-9150 Cardioid darkfield condenser with integrated 5 W LED light source

and external 100-240 V mains adapter

EIS-4300 Aluminium carrying case

EIS-9600 Polarization filter for lamp house (45 mm)

EIS-9626 Polarization filter for mounting under the iScope® head

EIS-9700 Blue filter 45 mm for lamp house EIS-9702 Green filter 45 mm for lamp house EIS-9704 Yellow filter 45 mm for lamp house

EIS-9710 White opaque filter 45 mm for lamp house

EIS-9880 Köhler attachment

SL.5500 NeoLED™ replacement unit

Glass fuses 500 mA 250 V, 10 pieces EAE-3684

EAE-5130 Universal SLR adapter with built-in 2x lens (For standard Ø

23.2 mm trinocular tube. Needs T2 adapter)

EAE-5025 T2 ring for Nikon D SLR digital camera

EAE-5040 T2 ring for Canon EOS SLR digital camera

EPB-5155 Microscope slides 76 x 26 mm, ground edges, 50 pieces EPB-5165 Cover glasses 18 x 18 mm, 0.13-0.17 mm, 100 pieces EPB-5168 Cover glasses 22 x 22 mm, 0.13-0.17 mm, 100 pieces

EPB-5245 Lens cleaning paper, 100 sheets per pack

EPB-5255 Immersion oil, n = 1.515 (25 ml) EPB-5274 Isopropyl alcohol 99% (200 ml)

EPB-5275 Cleaning kit: lens cleaning fluid, lint free lens tissue, brush,

air blower, cotton swabs





