



education life science industry



contents

euromex **MICROSCOPE COLLECTION** 2025-2026

EDUCATION biological microscopes	1
EDUCATION stereo microscopes	2
EDUCATION digital solutions	3
LIFE SCIENCE biological microscopes	4
LIFE SCIENCE fluorescence microscopes	5
LIFE SCIENCE stereo microscopes	6
LIFE SCIENCE digital solutions	7
INDUSTRY stereo microscopes	8
INDUSTRY materials science microscopes	9
INDUSTRY digital solutions	10
ACCESSORIES for microscopy	11





about euromex

MicroBlue • EcoBlue • BioBlue BioBlue.Lab • bScope • iScope

EDUCATION | STEREO MICROSCOPES

EDUCATION | BIOLOGICAL MICROSCOPES

EduBlue • StereoBlue NexiusZoom • AP series

> **EDUCATION | DIGITAL SOLUTIONS** Digital microscopes • MacroZoom • USB cameras • HD cameras • WiFi cameras Cooled cameras • Tablet cameras • Software • Adapters

LIFE SCIENCE | BIOLOGICAL MICROSCOPES iScope • bScope • Delphi-X Observer • Oxion BioBlue.Lab • Delphi-X Inverso • Oxion Inverso

LIFE SCIENCE | FLUORESCENCE MICROSCOPES iScope • bScope • Delphi-X Observer • Oxion • Delphi-X Inverso Oxion Inverso • LED light sources (fluorescence) • Fluorescence filter sets

LIFE SCIENCE | STEREO MICROSCOPES NexiusZoom (EVO) • StereoBlue • DZ series Z series • P series

LIFE SCIENCE | DIGITAL SOLUTIONS Digital microscope • MacroZoom • WiFi camera • USB cameras HD cameras • Cooled cameras • Tablet camera • Software • Adapters

INDUSTRY | STEREO MICROSCOPES NexiusZoom, -EVO and -ESD • NexiusZoom for Gemology StereoBlue • DZ series • Z series • BE-50 series • P series

INDUSTRY | MATERIALS SCIENCE MICROSCOPES iScope (materials & polarization) • bScope • Delphi-X Observer Oxion • Delphi-X Inverso • Oxion Inverso

INDUSTRY | DIGITAL SOLUTIONS MacroZoom • WiFi camera • USB cameras • HD cameras Cooled cameras • Tablet cameras • Software • Adapters

> ACCESSORIES | FOR MICROSCOPY Illumination solutions • Preparation accessories • Dissection kits Microscope prepared slides • Disposables • Stains

OTHER OPTICAL PRODUCTS Magnifiers & measuring microscopes Refractometers • Polarimeters • Spectroscopes

Euromex Microscopes is a leading manufacturer of microscopes and other optical instruments. Founded in 1966, Euromex has become a world-class supplier of biological, stereo and metallurgical microscopes

The corporate office is based in Duiven, The Netherlands. A facility with a logistics warehouse, an opto-mechanical workshop, an R&D department and a high-level quality control department

Around the world, Euromex operates in more than 120 countries through distributors, resellers and agents. A wide variety of customers such as schools and educational institutes, clinical and research laboratories and a broad range of industrial customers are using Euromex microscopes

Explore Euromex's extensive product range in this comprehensive 2025-2026 grand catalog or visit us online at www.euromex.com

Physix Photonics is an affiliated company of Euromex Microscopes and specializes in the

production of optical components and optical assemblies. The offering varies from custom plan and curved optics to uniquely shaped optical elements, provided with optical coatings, covering wavelengths from deep ultraviolet (DUV) to infrared (IR). Euromex draws on the extensive expertise of Physix engineers to meet the stringent requirements for optical components used in microscopy manufacturing. For comprehensive details about Physix Photonics, please visit www.physix.com

Euromex Microscopes and Physix Photonics are both subsidiaries of **GSI Group Holdings**, a collection of leading brands serving the biotech, clinical diagnostics, life sciences, education, and industrial sectors with a broad array of mission-critical laboratory-related consumable supplies, benchtop equipment, and related accessories. GSI Group Holdings is headquartered in Irvine, California, USA. For more details about the brands and activities of the companies under GSI Group Holdings, please visit www.gsigroupholdings.com





Visit our academy for video tutorials and manuals

View the product videos on YouTube

choose the right microscope



We have made a guide to help you find the right microscope for your specific application. A list of recommended models for most common applications in education, life science and industry can simplify your selection

SEE PAGE 446

6

life science

biological microscopes



biological microscopes

Euromex offers a wide range of life science microscopes that are used by researchers and biologists worldwide

On the next pages you will find details about our different models and we will get you introduced to technologies in microscopy such as the iCare sensor, CSS system and LED technology, which brings Euromex users to the next level of microscopy





ISCOPE • 102

BSCOPE • 114

ACHIOS-X OBSERVER • 122

DELPHI-X OBSERVER • 128

OXION • 140

BIOBLUE.LAB • 146

ACHIOS-X INVERSO • 150

DELPHI-X INVERSO • 156

OXION INVERSO • 162



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 darkfield, basic polarization and several epiillumination sources for fluorescence applications can be used. iScope® models with multiheads are also available for teaching purposes

























IS.1153-PLi

iScope® tilting head

SPECIFICATIONS

EYEPIECES

- Extended plan wide field EWF 10x/20 mm eyepieces with 20 mm field of view and adjustable diopter on the left eyepiece for non-infinity corrected systems (Ø 23.2 mm tube. Tube length 160 mm)
- Extended plan wide field EWF 10x/22 mm 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. Tube length 200 mm)

HEAD

Binocular and trinocular Siedentopf type heads with 30° inclined tubes. Interpupillary distance from 48 to 76 mm. The trinocular head of the plan infinity corrected models (IS.1153-PLi) has an optical path selector (100:0 / 50:50) and \pm 5 diopter adjustments on both Ø 30 mm tubes. The trinocular head of the E-plan infinity corrected models (IS.1153-EPLi) has a fixed built-in beam splitter (50:50) and \pm 5 diopter adjustment on the Ø 30 mm left tube. The trinocular head of the E-plan finite models (IS.1153-EPL) has a fixed built-in 50:50 beam splitter and one \pm 5 diopter adjustment on the Ø 23.2 mm left tube. 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

ERGONOMIC TILTING HEAD

HIGHLIGHTS

Optional tilting head

156 x 138 mm stage

EWF 10x/22 mm and EWF 10x/20 mm eyepieces

Smart Light Control (SLC) system available Multihead and face-to-face dual head systems

Binocular and trinocular models

Quintuple reversed nosepiece E-plan, plan and plan phase objectives E-plan, plan and plan phase IOS objectives

187/230 x 140 mm rackless stage

5 W NeoLED™ illumination 3 W NeoLED™ Köhler illumination iCare sensor for energy saving

CSS - Cable Storage System

10 Years warranty

Cardioid mirror darkfield condenser with

Optional ergonomic 5° to 35° tilting head supplied with EWF 10x/22 mm eyepieces, 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 To order an iScope® with tilting head and photo tube attachment use reference IS.1159-xxx

FACE-TO-FACE HEADS

The iScope® can be supplied with two heads in a face-to-face configuration, allowing simultaneous observation by two operators. The Ø 30 mm tubes of the head are equipped with EWF 10x/20 mm eyepieces. Both heads have two diopter adjustments. Only available for the model with plan infinity corrected objectives (IS.1154-PLi/T). The face-to-face head is equipped with a 2-color laser pointer





MULTIHEAD SYSTEM

The iScope® can be extended with a unique multihead system for in total two, three or five 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 view of all heads. Configurations with one, two or four additional viewing binocular heads, 30° inclined tubes and plan 4x, 10x, S40x, S100x oil immersion infinity corrected IOS objectives. All heads are equipped with extended wide field plan EWF 10x/22 mm eyepieces

(references: IS.1156-PLi-x, x = total number of heads)

OBJECTIVES - 45 MM PARFOCAL

E-plan EPL	4x/0.10	10x/0.25	20x/0.40*	S40x/0.65		S100x/1.25 oil
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*	S40x/0.65	S60x/0.85*	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

* optional

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

NOSEPIECE

Revolving guintuple reversed nosepiece for max. 5 objectives

STAGE

The iScope® can be equipped with three types of stages:

- 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, enables more smooth movements and is safer

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 newly 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 darkfield 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 darkfield stop position for darkfield contrast up to 400x magnification. Supplied with alignment telescope and green filter

CONDENSER FOR DARKFIELD

A state-of-the-art condenser equipped with reflective cardioid mirrors, a high powered 5 W LED (adjustable intensity) and a \$100x objective with built-in iris diaphragm enable a real 1000x magnification darkfield solution. By using IS.9150 and IS.7200-I an existing brightfield microscope can be upgraded to darkfield

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

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 life span. 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

SMART LIGHT CONTROL SYSTEM

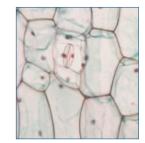
- The Smart Light Control (SLC) automatically memorises the last used illumination intensity brightness for each individual objective. Simply rotate the nosepiece to the next objective and the SLC will instantly adjust the illumination intensity to your desired level
- Light intensity can be locked to stop intensity changing by simply pressing the control button twice
- The LCD screen at the front of the microscope informs the user of the magnification and light intensity settings of the microscope, as well as the sleep and locking modes when activated
- Push the button once to enter/leave sleep mode and push the button twice to enter/leave lock mode

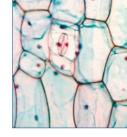
ICARE SENSOR

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. Not available for darkfield models

CSS - CABLE STORAGE SYSTEM

iScope® allows users to easily insert the power cable into the back of the instrument, which enables easy storage. The integrated carrying grip at the back of the microscope ensures safe transportation of the microscope





Normal LED

NeoLED™

PACKAGE CONTENT

Supplied with power cord, dust cover, a spare fuse, user manual and 5 ml immersion oil for models with S100x objective. Phase contrast models are supplied with green filter and alignment telescope. All packed in polystyrene boxes



iScope cable storage system





ISCOPE® FOR LIFE SCIENCE (NON-INFINITY MODELS)

MODELS	Bino	Trino	Phase contrast	EWF 10x20 mm	E-plan 4x/10x/ 40x/100x objectives	Plan phase 10x/20x/ 40x/100x objectives	Mechanical stage
IS.1152-EPL	•			•	•		•
IS.1153-EPL		•			•		•
IS.1152-PLPH			•	•		٠	•
IS.1153-PLPH		•				•	•

ISCOPE® FOR LIFE SCIENCE (INFINITY MODELS)

MODELS	Bino	Trino	Phase contrast	EWF 10x22 mm	E-plan IOS 4x/10x/ 40x/100x objectives	Plan IOS 4x/10x/ 40x/100x objectives	Plan phase IOS 10x/20x/ 40x/100x objectives	Mechanical rackless stage	Smart Light Control	Köhler LED
IS.1152-EPLi	•			•	•			•		
IS.1152-EPLi/SLC	•			•	•			•	•	
IS.1153-EPLi				•	•			•		
IS.1153-EPLi/SLC				•	•			•	•	
IS.1152-PLi	•			• *		•		•		•
IS.1152-PLi/SLC	•			• *		•		•	•	•
IS.1153-PLi		•		• *		•		•		•
IS.1153-PLi/SLC		•		• *		•		•	•	•
IS.1152-PLPHi	•		•	• *			•	•	•	•
IS.1153-PLPHi			•	•*			•	•		•

^{*} Two tubes with diopter adjustments

Some models are also available as in vitro diagnostic medical devices class A - (EU) 2017/746. Contact your Euromex dealer

ISCOPE® FOR LIFE SCIENCE (FACE-TO-FACE DUAL HEAD SYSTEM)

MODELS	Total users	Binocular EWF 10x/20 mm	Trinocular EWF 10x/20 mm	Plan IOS 4x/10x/ 40x/100x objectives	Mechanical rackless stage	iCare sensor	Köhler LED
IS.1154-PLi/T	2	1x	1x	•	•	•	•

Also available as in vitro diagnostic medical devices class A - (EU) 2017/746. Contact your Euromex dealer

ISCOPE® FOR LIFE SCIENCE (INFINITY - MULTIHEAD SYSTEMS)

MODELS	Total users	Binocular	Trinocular	EWF 10x22 mm	Plan IOS 4x/10x/ 40x/100x objectives	Mechanical rackless stage	Köhler LED
IS.1156-PLi2	2	1x	•		•	•	
IS.1156-PLi3	3	2x	•	•	•	•	•
IS.1156-PLi5	5	4x		•	•	•	•

Some models are also available as in vitro diagnostic medical devices class A - (EU) 2017/746. Contact your Euromex dealer

ISCOPE® FOR LIFE SCIENCE (INFINITY - ERGONOMIC TILTING HEAD)

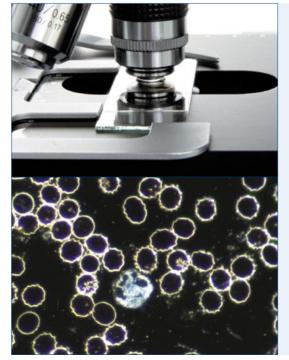
MODELS	Bino	Photo port	Phase contrast	EWF 10x22 mm	E-plan IOS 4x/10x/ 40x/100x objective	Plan IOS 4x/10x/ 40x/100x objectives	Plan phase IOS 10x/20x/ 40x/100x objectives	Mechanical rackless stage	Köhler LED
IS.1158-EPLi	•			•	•			•	
IS.1159-EPLi	•	•		•	•			•	
IS.1158-PLi				•		•		•	•
IS.1159-PLi	•	•		•		•		•	•
IS.1158-PLPHi			•	•			•	•	•
IS.1159-PLPHi	•	•	•	•			•	•	•

Some models are also available as in vitro diagnostic medical devices class A - (EU) 2017/746. Contact your Euromex dealer

ISCOPE® FOR LIFE SCIENCE (DARKFIELD CONTRAST APPLICATION)

MODELS	Trino	Darkfield	EWF 10x20 mm	EWF 10x22 mm	E-plan 4x/10x/ 40x/100x objectives	Plan IOS 4x/10x/ 40x/100x objectives	Mechanical rackless stage	Köhler LED
IS.1153-PLi/DFi	•	•		•		•	•	•
IS.1153-EPL/DF	•	•	•		•			

Models for darkfield observation IS.1152-PLi/DF is supplied with a state-of-the-art condenser equipped with reflective cardioid mirrors and a high powered 5 W LED. Together with a \$100x objective with built-in iris diaphragm real 1000x magnification darkfield solution can be achieved. All other specifications are identical to models IS.1152-PLi and IS.1153-PLi



DARKFIELD

Darkfield contrast is used in particular for unstained samples. The produced image has the appearance of a dark, almost black background with highlighted bright objects on it, producing very recognizable, often even called spectacular images. These objects, because they are unstained, are hard to see with brightfield contrast. The applications are mostly biological samples, smears from tissue culture or water-borne, single-celled organisms

In the past darkfield microscopy was limited due to low light levels. Euromex has overcome this issue by developing very strong illumination methods, without causing damage to the samples. A 5 W build in high power LED is used to power the especially designed cardioidshaped lens condenser system. Combined with a special 100x objective with built-in iris diaphragm for extra contrast this system is unique in its class



ACCESSORIES AND SPARE PARTS

EYEPIECES (23.2 MM)

	(
IS.6010	EWF 10x/20 mm eyepiece
IS.6010-P	EWF 10x/20 mm eyepiece with pointer
IS.6010-C	EWF 10x/20 mm eyepiece with crosshairs
IS.6010-CM	EWF 10x/20 mm eyepiece with 10/100
	micrometer and cross
IS.6015	WF 15x/16 mm eyepiece
IS.6099	Pair of eyecups
EYEPIEC	ES (30 MM)
IS.6210	EWF 10x/22 mm eyepiece

IS.6210-C EWF 10x/22 mm eyepiece with crosshairs

	EYEPIECES	(30 MM))
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IS.6210-P	EWF 10x/22 mm eyepiece with pointer
IS.6210-CM	EWF 10x/22 mm eyepiece with 10/100
	micrometer and crosshairs
IS.6212	WF 12.5x/17 mm eyepiece
IS.6215	WF 15x/16 mm eyepiece
IS.6220	WF 20x/12 mm eyepiece
IS.6310	EWF 10x/20 mm eyepiece
IS.6310-C	EWF 10x/20 mm eyepiece with crosshairs
IS.6310-CM	EWF 10x/20 mm eyepiece with 10/100
	micrometer and crosshairs
IS.6299	Pair of eyecups infinity models (Ø 30 mm tube)

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 oil EPL objective. WD 0.13 mm

Plan phase contrast 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	S40x/0.65 PLPH objective. WD 0.37 mm
IS.7700	S100x/1.25 oil PLPH objective. WD 0.13 mn

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	S40x/0.65 EPLi objective. WD 0.43 mm
IS.8800	S100x/1.25 oil 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 to be
	used together with swing-out condenser
IS.7204	4x/0.10 PLi objective. WD 15.4 mm
IS.7210	10x/0.25 PLi objective. WD 10 mm
IS.7220	20x/0.40 PLi objective. WD 5.1 mm
IS.7240	S40x/0.65 PLi objective. WD 0.54 mm
IS.7260	S60x/0.85 PLi objective. WD 0.14 mm
IS.7200	S100x/1.25 PLi objective. WD 0.13 mm
IS.7200-I	S100x/1.25 oil Super Contrast PLi objective with
	built-in iris diaphragm. WD 0.13 mm. Suitable for
	darkfield contrast
IS.7200-W	S100x/1.10 water immersion PLi objective.
	WD 0.14 mm

Plan Fluarex infinity corrected PLFi, IOS 45 mm parfocal 0.17 mm coverglass correction

IS.7404	4x/0.13 PLFi objective. WD 16.4 mm
IS.7410	10x/0.30 PLFi objective. WD 12 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 oil PLFi objective. WD 0.2 mm

Plan phase contrast infinity corrected PLPHi,

IOS 45 mm parfocal

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

CONDENSERS

IS	.9102	Standard Abbe condenser 1.25 NA with slot for
		darkfield and phase contrast sliders
IS	.9105	Swing-out 0.9/1.25 N.A. condenser
IS	.9150	Cardiod darkfield condenser with integrated 5
		W LED light source and external 100-240 V mains
		adapter.
		To be used with IS.7200-I

PHASE CONTRAST ATTACHMENTS

PHASE	CONTRAST ATTACHMENTS
IS.9124	Zernike phase contrast set including rotating
	disc with PLPH 10/20/40/100, brightfield and
	darkfield position
IS.9127	Zernike phase contrast set including rotating
	disc with PLPH 10/20/40/100, brightfield and
	darkfield position
IS.9148	Alignment telescope for phase contrast,
	Ø 30 mm tube
IS.9149	Alignment telescope for phase contrast,
	Ø 23.2mm 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

corrected objectives

Phase contrast slider set with 20x and S100x PLPHi

IOS infinity corrected objectives and

annuli for 20x/S100x PLPHi IOS infinity

IS.9163

MISCELLANEOUS

	phase contrast objective
IS.9880	Köhler attachment
IS.4300	Aluminum transport case for iScope®
AE.9919	Nylon carry bag for iScope (29 x 53 x 23)
AE.3684	Glass fuses 500 mA 250 V, 10 pieces
AE.5168-I	Heating stage series with controller,
	only with new microscopes
IS.9993	NeoLED™ replacement unit
IS.9994	Halogen-NeoLED™ replacement unit

IS.9170 Slider with darkfield stop, up to 400x **IS.9194** Slider with phase contrast annuli for S40x

POLARIZATION ATTACHMENTS

IS.9600	Polarization filter 45 mm for lamphouse
IS.9601	Polarization set: simple rotating polarizer
	for lamphouse and fixed 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

IS.9800 single photo tube attachment with one

CAMERA ACCESSORIES

	23.2 mm tube for 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 adapter for Nikon D SLR digital camera
AE.5040	T2 adapter for Canon EOS SLR digital camera

DISPOSABLES

PB.5155 Microscope slides 76 x 26 mm, ground edges, 50 pieces per pack

PB.5157-W Microscope slides 76 x 26 mm, ground edges and frosted side white color, 50 pieces per pack

PB.5157-B Microscope slides 76 x 26 mm, ground edges and frosted side blue color, 50 pieces per pack

PB.5160 Microscope slides 76 x 26 mm with cavity, ground edges. 10 pieces per pack

Coverglasses 18 x 18 mm, 0.13 - 0.17 mm, PB.5165 100 pieces

PB.5168 Coverglasses 22 x 22 mm, 0.13 - 0.17 mm,

PB.5245 Lens cleaning paper, 100 sheets per pack

PB.5255 Immersion oil, 25 ml. Refraction index n = 1.515

PB.5274 Isopropyl alcohol 99%, 200 ml

100 pieces

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



■ IS.1152-Pli + IS.DIGI-ADD





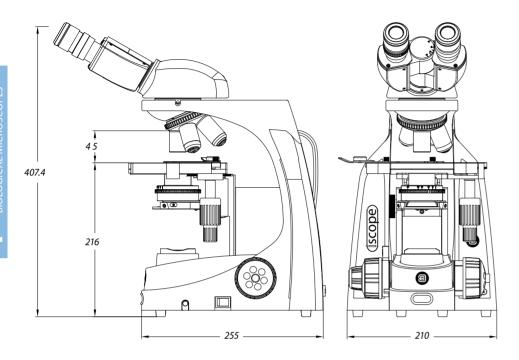








DIMENSIONS

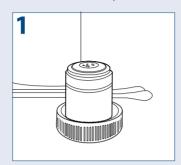


(You) euromex.academy (You)

how to keep the optics clean

PB.5275 cleaning kit

Dust and dirt particles have a negative affect on image quality. Keeping the optical system of your microscope clean is essential for the best image quality and overall lifetime of your microscope. Dust and dirt on optical elements such as lenses, prisms and filters that are left unattended can be become difficult - or even impossible - to remove and may cause mold



Place your objective or eyepiece on a secure location. One can use the objective's cap or eyepieces can be placed in the cut-outs within the storage box. Condensers and collector lenses can remain on the microscope



To prevent scratches on coatings and optical glass, first try to remove dirt and dust that sticks to the optical surface with an air-blower or pressurized dry air (oil-free and under moderate pressure version only)



Use an absorbent lens paper or cotton swap. Damp a swap or towel with a small amount of lens cleaning fluid or cleaning mixture (Either pure isopropanol or a mixture of 7 parts ether and 3 parts alcohol)



Clean the lens by using the tip of the cotton swap or lens paper*. When cleaning a large lens surface, wipe with little pressure from the center towards the periphery in a circular motion, do not use zig-zag motion. Discard each lens paper or cotton swap after a single use



Wait until the cleaning fluid is evaporated, or speed up this process by using pressurized dry air



Check with the help of a magnifying glass if the surface is clean and place the cleaned item back on the nosepiece of the microscope



PLEASE NOTE

that cleaning of the optical surfaces indicated in this instruction only applies to external surfaces of objectives, eyepieces, filters and condensers. Internal surfaces must always be done by your Euromex microscope distributor

Use enough lens paper so that solvents do not dissolve oils from your hands which can make their way through the paper onto the coated surface





versatile and evolutive!

The well-equipped microscopes of the bScope[®] series are intensively used in universities, small and mid-sized laboratories and in veterinary applications

The design of the bScope® is both ergonomic and evolutive. Height adjustable eye tubes and low stage controls minimize fatigue during long working sessions and thus provide more comfort for microscopists. The robust, compact size of the

> bScope® and the Cable Storage System allow more working space, safer operation and enable easy storage























MONO: BS.1151-EPL

BS.1153-EPLi

BINO: BS.1152-EPL / BS.1152-EPLi / BS.1152-PLi 409 (h) x 195 (w) x 235 mm (d) | 6.5 kg TRINO: BS.1153-EPL / BS.1153-EPLi / BS.1153-PLi 459 (h) x 195 (w) x 235 mm (d) | 6.6 kg



BS.1152-PLi

BS.1151-EPL

SPECIFICATIONS

EYEPIECE(S)

High wide field HWF 10x/20 mm secured eyepiece(s) with 20 mm field of view (Ø 23.2 mm tube). The eyepiece of monocular models is supplied with pointer

HEAD

The bScope® is available with a monocular head (45° inclined Ø 23.2 mm tube) or with binocular or trinocular heads equipped with a Siedentopf type head, 360° rotatable and equipped with 30° inclined Ø 23.2 mm tubes. Binocular and trinocular models have a diopter ± 5 adjustment on the left eyepiece. The interpupillary distance is adjustable between 48 to 76 mm. The models equipped with plan infinity corrected PLi objectives have a unique swiveling system of the eyepiece tubes for ergonomic positioning of both tubes in a high (431 mm) and in a low position (377 mm). The trinocular head comes with a Ø 23.2 mm tube, ensuring a maximum of flexibility and has a fixed light path beam splitter (20:80) and generates an erect image. Models with an integrated USB-2.0 camera are supplied with a 5.0 MP 1/2.5" CMOS sensor with a resolution of 2592 x 1944 pixels (see chapter 7)

NOSEPIECE

Revolving and reversed ball-bearing quadruple or quintuple nosepiece

HIGHLIGHTS

- Versatile and evolutive microscopes
- Monocular, binocular and trinocular models
- Digital models available
- HWF 10x/20 mm evepieces
- Reversed ball-bearing quadruple or quintuple nosepiece with slot for polarization filter
- E-plan, E-plan IOS and plan IOS objectives
- Plan phase IOS objectives
- Color coded condenser
- Rackless integrated X-Y mechanical stage
- 3 W NeoLED™ adjustable illumination system
- Darkfield cardioid condenser with 5 W NeoLED™
- Integrated carrying grip
- Cable Storage System and anti-theft system
- 10 Years warranty

OBJECTIVES - 45 MM PARFOCAL

The state-of-the-art production techniques and multi layer coatings used for the manufacturing of the bScope® objectives enable the bScope® to be used for the most demanding applications. World class spherical aberration correction and modern CNC and assembly technology ensure the perfect centering of the objectives

- · Brightfield models: E-plan, E-plan IOS infinity corrected, plan IOS infinity corrected 4x/0.10, 10x/0.25, 20x/0.40, S40x/0.65, S60x/0.85 and S100x/1.25 oil immersion
- Phase contrast models: Plan phase IOS infinity corrected 10x/0.25, 20x/0.40, S40x/0.65 and S100x/1.25 oil immersion objectives
- Darkfield model: E-plan 4x/0.10, 10x/0.25, 20x/0.40, S40x/0.65, S60x/0.85 objectives. The s100x/1.25 oil immersion objective has a built-in iris diaphragm

All S40x, S60x and S100x oil immersion objectives are spring loaded. All optics are anti-fungus treated and anti-reflection coated for maximum light throughput

FOCUSING

Double coaxial, low-positioned coarse and fine adjustments with 180 graduations. Precision 1.1 μm, 200 μm per rotation, total travel range is approximately 19 mm. Supplied with an adjustable rack stop to prevent damage to sample and objectives. The coarse adjustment is equipped with friction control

STAGE

The bScope® is equipped with a scratch resistant 152/197 x 131 mm stage with integrated 75 x 36 mm X-Y rackless mechanical stage, Vernier scale, soft-close removable specimen holder. The rackless stage has no protruding parts, enables more smooth movements and is safer in use. Lowpositioned X-Y control knobs prevent fatigue during long working sessions. The bScope® can be equipped with a heating stage which can be set up to 50° Celsius by a PID temperature controller. Only available with newly purchased microscopes

CONDENSER FOR BRIGHTFIELD

The standard height adjustable Abbe N.A. 1.25 condenser for brightfield comes with an iris diaphragm and swingout filter holder. The condenser is color coded. Optionally available swing-out Abbe condenser (BS.9105)

CONDENSER FOR ZERNIKE PHASE CONTRAST

The height adjustable Zernike NA. 1.25 phase contrast disc condenser comes with phase annuli for 10/20/S40x and S100x phase contrast objectives, an iris diaphragm, a swing-out filter holder and also a BF position for brightfield contrast. Phase contrast objectives exist in PL-PHi phase contrast version. Supplied with alignment telescope and green filter

CONDENSER FOR SIMPLE PHASE CONTRAST

The height adjustable NA. 1.25 simple phase contrast condenser has a free slot for either a slider for 10/S40x phase contrast objectives or a slider for 20/S100x phase contrast objectives. The condenser has an iris diaphragm and filter holder. The condenser includes a BF position for brightfield contrast with an iris diaphragm and filter holder. Phase contrast objectives exist in PL-PHi version. Supplied with alignment telescope and green filter

POLARIZATION

The bScope® has an integrated slot above the nosepiece for an optional polarization filter

NEOLED™ ILLUMINATION

The 3 W adjustable Köhler NeoLED™ diascopic illumination is powered by an internal 100-240 V power supply making it suitable for worldwide use. The innovative NeoLED™ design offers larger apertures, allowing the optical system of the bScope® 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 life span



Swing-out Abbe condenser 0.9/1.25 NA (BS.9105)



Zernike phase contrast condenser with filter holder



Ergonomic carrying grip for easy transportation

DARKFIELD EQUIPMENT

The BS.1153-EPL/DF is equipped with a darkfield oil immersion cardioïd mirror condenser with a integrated 5W LED illumination and a plan PL S100x oil immersion objective with built-in iris



Darkfield cardioïd mirror condenser

PACKAGE CONTENT

Smart polystyrene packaging ensures a low environmental footprint while maintaining maximum safety during transport. Supplied with power cord, dust cover, tools, a spare fuse, white filter, user manual and 5 ml immersion oil

Phase contrast models are supplied with green filter and alignment telescope. An optional aluminum case can be supplied



A Köhler illumination system ensures for all infinity corrected IOS models the highest possible contrast and the maximum achievable resolving power. It generates a uniform illumination of the sample and eliminates all interference from dust on lenses and side glare of the light source The Köhler illumination is optional for non-IOS models

CORDLESS USE

The optional rechargeable AA batteries turn the bScope® into a cordless system

CSS - CABLE STORAGE SYSTEM

Allows users to easily stow away excess cable length into the back of the instrument during operation and to roll up the power cable for easy storage

CARRYING GRIP

The integrated carrying grip at the back of the microscope ensures safe transportation of the microscope

ANTI-THEFT SLOT

At the back of the microscope a Kensington Security Slot is placed, which can be used to secure the instrument from theft



BS.1152-PLi

BSCOPE® FOR BRIGHTFIELD AND DARKFIELD *

MODELS	Bino	Trino	digital **	HWF 10x/20 mm eyepieces	Quadruple nosepiece E-plan 4/10/S40/S100x	Quadruple nosepiece plan IOS 4/10/S40/ S100x	Quintuple nosepiece E-plan IOS 4/10/ S40/S100x	Quintuple nosepiece plan IOS 4/10/S40/ S100x	Köhler NeoLED™	Neo- LED™	2-position swiveling ergo head
BS.1152-EPL				•	•					•	
BS.1153-EPL		•		•	•					•	
BS.1153-EPL/DF*		•			•					•	
BS.1152-EPLi							•		•		•
BS.1153-EPLi		•					•		•		•
BS.1152-PLi	•			•				•	•		•
BS.1153-PLi		•						•	•		•
BS.1152-PLi/4N	•					•			•		•
BS.1153-PLi/4N		•				•			•		•
BS.1157-EPLi			•				•		•		•
BS.1157-PLi								•	•		•

^{*} BS.1153-EPL/DF model is equipped with a dark field oil immersion cardioïd mirror condenser and a S100x oil immersion objective with built-in iris diaphragm

Some models are also available as in vitro diagnostic medical devices class A - (EU) 2017/746. Contact your Euromex dealer

BSCOPE® FOR PHASE CONTRAST*

MODELS	Bino	Trino	HWF 10x/20 mm eyepieces	Quadruple nosepiece E-plan phase 10/20/ S40/S100x	Quintuple nosepiece E-plan phase IOS 10/20/S40/S100x	Quintuple nosepiece plan phase IOS 10/20/S40/S100x	Köhler NeoLED™	NeoLED™	2-position swiveling ergo head
BS.1152-PLPHi			•			•	•		•
BS.1153-PLPHi		•	•			•	•		•

^{*}All models can be supplied with three rechargeable AA batteries

All models are equipped with a 152/197 x 131 mm stage with integrated 75 x 36 mm X-Y rackless mechanical stage These models are also available as in vitro diagnostic medical devices class A - (EU) 2017/746. Contact your Euromex dealer

ACCESSORIES AND SPARE PARTS

EYEPIECES

BS.6010	HWF 10x/20 mm eyepiece, Ø 23.2 mm tube
BS.6010-P	HWF 10x/20 mm with pointer, Ø 23.2 mm tube
BS.6010-C	HWF 10x/20 mm eyepiece with crosshairs,
	Ø 23.2 mm tube
BS.6010-CN	HWF 10x/20 mm eyepiece, Ø 23.2 mm tube
	with 10/100 micrometer and crosshairs
BS.6012	WF 12.5x/14 mm eyepiece, Ø 23.2 mm tube
BS.6015	WF 15x/11 mm eyepiece, Ø 23.2 mm tube
BS.6020	WF 20x/11 mm eyepiece, Ø 23.2 mm tube
BS.6099	Pair of eyecups

OBJECTIVES

E-plan EPL, 45 mm parfocal

BS.7104	4x/0.10 EPL objective. WD 37.0 mm
BS.7110	10x/0.25 EPL objective. WD 6.61 mm
BS.7120	20x/0.40 EPL objective. WD 1.85 mm
BS.7140	S40x/0.65 EPL objective. WD 0.64 mm
BS.7160	S60x/0.85 EPL objective. WD 0.20 mm
BS.7100	S100x/1.25 EPL objective. WD 0.19 mm

Plan PL, 45 mm parfocal

86.521 S100x/1.25 oil immersion PL objective with built-in iris diaphragm. WD 0.33 mm

E-plan infinity corrected EPLi, IOS 45 mm parfocal **BS.8204** 4x/0.10 EPLi objective. WD 18.9 mm

BS.8210	10x/0.25 EPLi objective. WD 5.95 mm
BS.8220	20x/0.40 EPLi objective. WD 2.61 mm
BS.8240	S40x/0.65 EPLi objective. WD 0.78 mm
BS.8200	S100x/1.25 EPLi objective. WD 0.36 mm

Plan infinity corrected PLi, IOS 45 mm parfocal

BS.8404	4x/0.10 PLi objective. WD 21.0 mm
BS.8410	10x/0.25 PLi objective. WD 5.0 mm
BS.8420	20x/0.40 PLi objective. WD 8.8 mm
BS.8440	S40x/0.65 PLi objective. WD 0.66 mm
BS.8400	S100x/1.25 PLi objective. WD 0.36 mm

Plan phase infinity corrected PLPHi, IOS 45 mm parfocal

10x/0.25 PLPHi objective. WD 5.0 mm
20x/0.40 PLPHi objective. WD 8.80 mm
540x/0.65 PLPHi objective. WD 0.66 mm
5100x/1.25 PLPHi objective. WD 0.36 mm

WD = working distance

CONDENSERS

BS.9102	Abbe condenser 1,25 NA with slot for darkfield
	and phase contrast sliders
BS.9170	Darkfield stop for BS.9102 condenser
BS.9105	Swing-out Abbe condenser 0.9/1.25 NA

PHASE CONTRAST ATTACHMENTS

BS.9123	Zernike phase contrast kit with plan PLPH 10/20/
	S40 and S100x oil phase contrast objectives,
	Zernike rotating condenser, telescope and
	green filter
BS.9126	Zernike phase contrast kit with plan PI PHi 10/20

S40 and S100x oil phase contrast IOS infinity corrected objectives, Zernike rotating condenser, telescope and green filter

BS.9164 Phase contrast kit with Abbe condenser with slot for slider. Plan PLPHi phase S40x contrast objectives, slider with 40x annuli only, telescope and green filter

BS.9194 Slider with phase contrast annuli 40x. Needs BS.9102 condenser with slot

BS.9148 Alignment telescope for bScope® IOS version with Ø 30 mm tubes

BS.9149 Alignment telescope for bScope® non IOS version with Ø 23.2 mm tubes

BS.9162 Phase contrast kit with Abbe condenser with slot for slider. Plan PLPH i 10/S40x phase contrast infinity corrected objectives, slider with 10 and 40x annuli, telescope and green filter

BS.9163 Phase contrast kit with Abbe condenser with slot for slider. Plan PLPHi 20/S100x phase contrast infinity corrected objectives, slider with 20 and 100x annuli, telescope and green filter







^{**} For more information, see chapter 7

DIMENSIONS

POLARIZATION ATTACHMENTS Polarization kit: analyzer under head and PB.5245 Lens cleaning paper, 100 sheets per pack polarizer on lamphouse PB.5255 Immersion oil (25 ml). n = 1.515**AE.5152-N** Small rotatable stage to be used with BS.9660 PB.5274 Isopropyl alcohol 99% (200 ml) BS.9647 Polarization polarizer Ø 16 mm for slider under PB.5275 Cleaning kit: lens cleaning fluid, lint free lens bScope® head tissue/paper, brush, air blower, cotton swabs BS.9651 Polarization attachment for lamphouse of PB.5276 Microscope maintenance and servicing kit,

bScope® with 360° scale 16pcs: cleaning brush, 6 pcs screwdriver set,

air blower, 3 pcs Allen key, 1.5, 2, 2.5 mm, **CAMERA ACCESSORIES** 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

AE.5152-N, small rotatable stage

AE.5130	Universal Ø 23.2 mm tube adapter
	with built-in 2x lens for SLR photo camera
	with APS-C sensor. Needs T2 adapter
AE.5025	T2 adapter for Nikon D SLR digital camera
AE.5040	T2 adapter for Canon EOS SLR digital camer

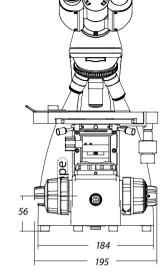
MISCELLANEOUS

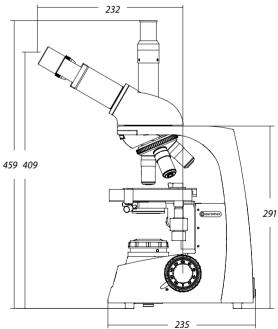
BS.9880	Köhler attachment			
BS.9577-L	Add-on for left handed mechanical stage (o			
	with newly purchased microscope			
BS.9870	Mirror attachment for bScope			
BS.9900	Aluminum transport case			
AE.9919	Nylon bag for bScope. 58(h) x 32(w) x 24(d)			
BS.9993	NeoLED™ replacement unit			
BS.9994	Halogen-NeoLED™ replacement unit			
AE.1370	Set of rechargeable AA batteries, three pieces			
AE.5226	Glass fuses 3A 250V, 10pcs			

DISPOSABLES				
PB.5155	Microscope slides 76 x 26 mm, ground edges,			
	50 pieces per pack			
PB.5157-W	Microscope slides 76 x 26 mm, ground edges			
	and frosted side white color, 50 pieces per pack			
PB.5157-B	Microscope slides 76 x 26 mm, ground edges			
	and frosted side blue color, 50 pieces per pack			
PB.5160	Microscope slides 76 x 26 mm with cavity,			
	ground edges. 10 pieces per pack			
PB.5165	Coverglasses 18 x 18 mm,			
	thickness 0.13-0.17 mm, 100 pieces			
PB.5168	Coverglasses 22 x 22 mm,			
	thickness 0.13-0.17 mm, 100 pieces			

















BIOLOGICAL MICROSCOPES

Achios-X Observer for advanced life science applications

Experience optimal comfort and cuttingedge performance with the Achios-X Observer, an ergonomic masterpiece featuring a state-of-the-art optical system. Tailored to meet the demands of advanced Life Science applications such as cytology and anatomopathology



Achios-X

NeoLED





















AX.1153-PLi 431 (h) x 257 (w) x 354 mm (d) | 11.2 kg AX.1158-PLi 431 (h) x 257 (w) x 354 mm (d) | 11.2 kg

AX.1153-PLi

HIGHLIGHTS

- Versatile and evolutive microscopes
- Extra Wide field WF 10x/22 mm, Ø 30 mm
- Revolving quintuple or sextuple reversed nosepiece
- infinity corrected 60 mm achromatic Plan, Plan Phase or Plan Semi-Apochromatic EIS objectives
- Low positioned stage adjustment knobs
- 3 W NeoLED with adjustable color temperature
- Smart Light Control (SLC)

SPECIFICATIONS

EYEPIECES

- EWF 10x/22 mm eyepiece with diopter adjustment
- EWF 10x/25 mm eyepiece with diopter adjustment (optional)

HEADS

- Standard Siedentopf trinocular with 30° inclined tubes
- Ergonomic tilting head (0° 35°)
- · Face-to-face dual head (optional)
- Multi-head systems with 2, 3 or 5 heads (optional)
- · Head for attaching camera and screen

OBJECTIVES - 60 MM PARFOCAL

- · infinity corrected achromatic Plan EIS objectives*
- · infinity corrected achromatic Plan Phase EIS objectives*
- · infinity corrected achromatic Plan Semi-Apochromatic EIS objectives*

*M25 mounting thread





- Holds two slides
- interchangeable focusknobs







STAGE

The Achios-X Observer comes complete with a generously sized, hard coated, rackless mechanical stage, meticulously designed for enhanced safety

- Free from any sharp edges protruding from the microscope's sides, this stage ensures a secure and worryfree experience
- · Suitable for two slides and allows single handed placement of slides
- Measurements: stage, 230 x 150 mm X-Y and mechanical stage, 78 x 54 mm

CONDENSERS

Depending on the configuration, the Achios-X Observer is supplied with the standard Abbe condenser, Zernike phase condenser (includes telescope and green filter), swing-out Abbe condenser, darkfield condenser (dry or oil immersion)

ILLUMINATION

The Köhler illumination of the Achios-X Observer provides the most uniformly illuminated and bright field of view

NOSEPIECE

Experience the ease of an intuitive quintuple or an optional sixtuple nosepiece on ball-bearings, equipped with gripped ring for effortless and precise rotation

LIGHT AND COLOR TEMPERATURE CONTROL

The Achios-X Observer introduces Smart Light Control. This intelligent function memorizes the last used light intensity level for each objective. The color temperature of the NeoLED light source can be adjusted and stored. This innovation not only heightens comfort but also saves valuable time during routine magnification shifts. The eco-friendly NeoLED light source is both environmentally conscious and built to endure

CSS - CABLE STORAGE SYSTEM

Allows users to easily stow away excess cable length into the back of the instrument during operation and to roll up the power cable for easy storage











CARRYING GRIP

The integrated carrying grip at the back of the microscope ensures safe transportation of the microscope

NEOLED

The innovative NeoLED™ design is a combination of a custom LED and a specially designed thin lens with a short focal length in order to obtain four main benefits:

- More oblique light from the NeoLED™ can be captured, which increases the light output significantly
- · Less energy is required to achieve this level of light intensity
- The larger aperture of NeoLED™ allows the optical system of the microscope to produce images at higher resolutions, very close to the theoretical diffraction limit of the optics
- Super long life span, up to 50.000 hrs nominal, L70 norm

PACKAGING

Supplied with power cord, dust cover, screwdriver, user manual and 5 ml immersion oil for models supplied with a 100x objective



AX.1152-Pli + AX.DIGI-ADD

MODELS	Bino	Trino	Ergo	eyepieces EW 10x/22 mm	Plan objectives 4/10/40 IOS	Plan objective 100x (oil) IOS	Plan Semi-Apo objectives 4/10/40 IOS	Plan Semi-Apo objective 100x (oil) IOS	Plan Phase objectives 10/20/40/100x (oil) IOS
AX.1052-PLi				•	•				
AX.1053-PLi				•	•				
AX.1058-PLi				•	•				
AX.1152-PLi				•	•	•			
AX.1153-PLi		•		•	•	•			
AX.1158-PLi			•	•	•	•			
AX.1052-APLi	•			•			•		
AX.1053-APLi		•		•			•		
AX.1058-APLi			•	•			•		
AX.1152-APLi	•			•			•	•	
AX.1153-APLi		•		•			•	•	
AX.1158-APLi			•	•			•	•	
AX.1152-PLPHi	•			•					•
AX.1153-PLPHi		•		•					•
AX.1158-PLPHi			•	•					•

Sixtuple nosepiece is also available

Some models are also available as in vitro diagnostic medical devices class A - (EU) 2017/746 Contact your Euromex dealer

ACCESSORIES AND SPARE PARTS

EYEPIECE

Ø 30 mm tube

AX.6010 EWF 10x/22 mm eyepiece for Achios-X observer.

With diopter adjustment

AX.6410 EWF 10x/25 mm eyepiece for Achios-X observer.

With diopter adjustment

PLAN OBJECTIVES

Plan infinity corrected PLi, EIS 60 mm parfocal* **AX.7204** 4x/0.10 PLi objective. WD 30 mm

10x/0.25 PLi objective. WD 10.2 mm AX.7220 20x/0.40 PLi objective. WD 10.2 mm S40x/0.65 PLi objective, WD 1.5 mm AX.7240 S50x/0.95 PLi oil objective. WD 0.19 mm DX.7250

S60x/0.80 PLi objective. WD 1.5 mm AX.7260

S100x/1.25 oil-immersion PLi objective.

WD 0.3 mm

Plan Semi-Apochromatic Fluarex infinity corrected PL-SAFi, EIS 60 mm parfocal*

AX.7304 4x/0.15 PL-SAFi objective. WD 0.17 mm 10x/0.3 PL-SAFi objective. WD 15.8 mm AX.7310 AX.7320 20x/0.5 PL-SAFi objective. WD 2.7 mm S40x/0.75 PL-SAFi objective. WD 1.35 AX.7340 AX.7300 S100x/1.25 oil-immersion PL-SAFi objective. WD 0.18 mm

Plan Phase infinity corrected PLPHi, EIS 60 mm parfocal*

AX.7710 10x/0.25 PLPHi objective. WD 10.2 mm 20x/0.40 PLPHi objective. WD 13.4 mm AX.7720 AX.7740 40x/0.65 PLPHi objective. WD 0.7 mm AX.7700 100x/1.25 oil immersion PLPHi objective. WD 0.22 mm

WD = working distance

* M25 mm thread



HEADS

AX.5700-ADD

Ergonomical Siedentopf trinocular head with tilting tubes ADD-ON option for Achios-X observer. Only with the purchase of new microscopes. Add the AX.5700-ADD price to a Achios-X Observer model in order to have the prices of a configuration with ergo tilting head, and order the microscope as AX.1158-xxxx / AX.3158-xxxx

AX.5600-ADD

Face to Face attachment, 2 heads ADD-ON option for Achios-X Observer. Only available with the purchase of a new standard microscope

AX.5600 Face to Face attachment, 2 heads

AX.5602-ADD

Multi head, 2 heads ADD-ON option. Only available with the purchase of a new standard microscope. Add the AX.5602-ADD price to a Achios-X Observer model in order to have the prices of the model with a multihead system with 2 heads and order the microscope as AX.1158-xxx/2 or AX.3158-xxx/2

AX.5602 Multi head 2 heads attachement

AX.5603-ADD

Multi head, 3 heads ADD-ON option. Only available with the purchase of a new standard microscope. Add the AX.5603-ADD price to a Achios-X Observer model in order to have the prices of the model with a multi-head system with 3 heads, and order the microscope as AX.1158-xxx/3 or AX.3158-xxx/3

AX.5603 Multi head 3 heads attachment

AX.5605-ADD

X.5605

Multi head, 5 heads ADD-ON option. Only available with the purchase of a new standard microscope. Add the AX.5605-ADD price to a Achios-X Observer model in order to have the prices of the model with a multi-head system with 5 heads, and order the microscope as AX.1158-xxx/5 or AX.3158-xxx/5

Multi head 5 heads attachment

CONDENSERS

Standard Abbe Condenser AX.9100

AX.9105-ADD

Swing-out Abbe Condenser Add-on option, Only

with new microscopes

AX.9105 Swing-out Abbe Condenser AX.9110 Dark field condenser (Dry) AX.9112 Dark field condenser (Oil)

Zernike phase contrast set. Includes Zernike AX.9126

phase condenser and PLPHi 10/20/S40/S100-oil immersion objectives, telescope and green filter

CAMERA

AX.9850 C-mount adapter 0.5x

MISCELLANEOUS

AX.9896-ADD

Nosepiece with 6 objectives ADD-ON option for Achios-X Observer. Only available with the purchase of a new microscope

DX.9501-R Mechanical stage with Gorilla glass.

Right handed

AX.9702 Green filter AX.9148 Telescope

Simple polarization kit AX.9660



AX.9126 Zernike phase contrast set















Delphi-X Observer

the standard in histopathology, cytology, dermatopathology and forensic pathology









largest field of view. Together with a powerful and stable light spectrum of a high performance LED it meets the ultimate standards. Histopathology is the microscopic examination of tissues, taken either as biopsy

samples or resection specimens. **Cytology** studies diseases on the cellular on samples of free cells or tissue fragments. **Dermatopathology** is a subspecialty of dermatology and pathology that studies cutaneous diseases. Forensic pathology focuses on determining the cause of death by examining a corpse

The Delphi-X Observer enables pathologists to examine their samples with the highest detail and with the



science applications. The outstanding optical performance of the Delphi-X Observer[™] with 25 mm field of view and high numerical aperture of the plan 60 mm parfocal EIS objectives enable perfect observations, color rendering and at high resolving power. This is the perfect microscope for anatomy pathologists



























DX.2153-APLi

HIGHLIGHTS

- Trinocular model
- Sextuple reversed nosepiece with slot for DIC
- Super wide field SWF 10x/25mm eyepieces, Ø 30 mm tubes
- Enhanced infinity corrected EIS optical system
- Ergonomic tilting head
- 60 mm parfocal plan EIS objectives
- 60 mm parfocal plan semi-apochromatic EIS objectives
- M25 objective thread mounting
- 3 W NeoLED™ illumination
- 100 W halogen illumination
- Face-to-face dual head system
- Multihead systems
- Brightfield, darkfield, phase contrast
- Differential Interference Contrast (DIC)

SPECIFICATIONS

EYEPIECES

- Super wide field SWF 10x/25 mm, Ø 30 mm tubes
- Extended wide field EWF 10x/22 mm. Ø 30 mm tubes

STANDARD HEAD

Siedentopf trinocular head with 30° inclined tubes. Interpupillary distance adjustable between 47 and 78 mm. The trinocular standard head has an optical path selector (100:0 / 80:20 / 0:100). Diopter ± 5 adjustments on both eyepieces

ERGONOMIC TILTING HEAD

Optional ergonomic 0° to 35° tilting trinocular head supplied with SWF 10x/25 mm eyepieces, interpupillary distance between 47-78 mm and photo tube, standard with a Ø 23.2 mm tube. The trinocular tilting head has an optical path selector (100:0 / 80:20 / 0:100). Diopter ± 5 adjustments on both eyepieces



FACE-TO-FACE DUAL HEAD SYSTEM

The Delphi-X Observer[™] can be supplied with two binocular heads in a face-to-face configuration, allowing simultaneous observation by two operators. The main binocular head is equipped with super wide field SWF 10x/25 mm eyepieces and the second head with EWF 10x/22 mm eyepieces. A joystick enables the operator to move a green or red laser pointer across the entire field of view of both heads

MULTIHEAD SYSTEM

The Delphi-X-Observer™ can be extended with a multihead system for two, three, five or ten users. The central attachment is equipped with a joystick to move a green and red laser pointer across the entire field of view of all heads. The multihead systems with two, three or five heads and 30° inclined tubes are supplied with super wide field SWF 10x/25 mm eyepieces. The multihead systems with ten heads and 30° inclined tubes have the trinocular main head equipped with super wide field SWF 10x/25 mm eyepieces and the other nine binocular heads with extended wide field EWF 10x/22 mm eyepieces. The Delphi-X Observer™ multihead system with ten heads is supplied without the iCare sensor





NOSEPIECE

Revolving sextuple reversed nosepiece on ball-bearings with M25 objectives mounting threads

MOTORIZED MODEL

The Delphi-X Observer[™] can be supplied with a motorized revolving sextuple reversed nosepiece together with a flipdown condenser. A precise step-motor allows the user to switch from objective by a simple push on a button. Another button allows quick switching between two preselected objectives. The electronics memorize automatically the light intensity levels for each objective after switching. The electronics also automatically flip out the front lens of the flip-down condenser when the 4x objective is used



Motorized nosepiece

OBJECTIVES

Plan (PLi)	2x/0.06*	4x/0.10	10x/0.25	20x/0.40	S40x/0.65	\$50x/ 0.95 oil*	S60x/ 0.80*	S100x/1.25 oil	\$100x/ 1.25 oil iris*
Plan phase (PLPHi)			10x/0.25	20x/0.40	S40x/0.65			S100x/1.25 oil	
Plan semi-apo (PLi Apo)		4x/0.13	10x/0.30	20x/0.50	S40x/0.75			S100x/1.30 oil	

All objectives are 60 mm parfocal and have a M25 mounting thread, all optics are anti-fungus treated and anti-reflection coated for maximum light throughput and all S40x, S50x, S60x and S100x objectives are spring loaded * Optional

ENHANCED INFINITY SYSTEM (EIS)

The enhanced infinity system (EIS) of the Delphi-X Observer™ consists of super wide field SWF 10x25 mm evenieces, high numerical aperture, 60 mm parfocal objectives and a 200 mm focal length tube lens. This focal length tube lens reduces the angle of the light rays passing the optics and as a direct result it improves significantly the chromatic aberration corrections and contrast. The objectives with larger diameter enable much higher numerical apertures improving the overall resolving power of the optical system. For all these reasons the Delphi-X Observer[™] offers superior optical performance for the most demanding applications

PLAN ACHROMATIC EIS OBJECTIVES (CLINICAL ROUTINE APPLICATIONS)

The Delphi-X Observer[™] comes with plan achromatic 4x/0.10, 10x/0.25, 20x/0.40, S40x/0.65 and S100x/1.25 oil immersion infinity corrected EIS objectives

As an option available: 2x/0.06, S50x/0.95 (oil immersion) and S60x/0.80

PLAN SEMI-APOCHROMATIC OBJECTIVES (ANATOMO- AND HISTOPATHOLOGY APPLICATIONS)

The Delphi-X Observer™ can also be supplied with plan semi-apochromatic Fluarex 4x/0.13, 10x/0.30, 20x/0.50, S40x/0.75 and S100x/1.30 (oil immersion) infinity corrected EIS objectives

PLAN PHASE CONTRAST OBJECTIVES

The Delphi-X Observer™ with phase contrast is supplied with Plan phase EIS 10x/0.25, 20x/0.40, s40x/0.65 and s100x/1.25 (oil immersion) infinity corrected EIS objectives

STAGE

The 190 x 152 mm stage has a 78 x 32 mm integrated righthanded mechanical stage. Comes with scratch-resistant Gorilla glass. Sapphire scratch-resistant glass is available on request. Left-handed mechanical stage is also available on request



Sextuple nosepiece

FOCUSING

Coaxial coarse and fine adjustment, 100 graduations, 1 µm precision, 100 µm per rotation, total travel range is approx. 35 mm. Supplied with an adjustable rack stop to prevent damage to sample and objectives. The coarse adjustments are equipped with friction control. The focusing knobs can be switched from left to right according to the user's preference

CONDENSER FOR BRIGHTFIELD

In height adjustable N.A. 0.90/1.25 Abbe swing-out condenser with numerical aperture identification marks. Models with a motorized nosepiece are supplied with a motorized condenser that automatically flips out the front lens of the condenser when the 4x objective is used

CONDENSER FOR PHASE CONTRAST

In height adjustable N.A. 1.25 Zernike phase contrast condenser with phase annuli for 10/20/40x and S100x-oil objectives. To be used with the phase contrast objectives

DIFFERENTIAL INTERFERENCE CONTRAST (DIC)

The Nomarski differential interference contrast technique helps to enhance contrast of samples and lets samples appear as three-dimensional objects. The equipment consist of a specific rotating DIC condenser, two Nomarski modified Wollaston prisms, a DIC slider for insertion into the slot of the sextuple reversed nosepiece and a polarizer

DIASCOPIC ILLUMINATION

Two Köhler illuminations are available for the Delphi-X Observer[™] microscope:

- Diascopic intensity adjustable 3 W NeoLED™ Köhler illumination with internal 100-240 V power supply
- · Diascopic intensity adjustable 100 W halogen Köhler illumination with internal 100-240 V power supply

The diascopic halogen illumination comes with two pushin/push-out neutral density filters for smooth attenuation of the light intensity for all kind of samples and with one Light Balancing Daylight filter (LBD). The diascopic NeoLED™ illumination comes with a frosted difuse filter

LIGHT INTENSITY MEMORY FUNCTION (LIM)

LIM automatically saves preferred brightness while changing magnifications. It eliminates the need for adjusting lamp brightness when changing magnification. This allows maintaining preferred brightness at each magnification, thus improving user efficiency significantly and reducing eye strain. Standard on all models with a motorized nosepiece, for other models see ordering instructions below For ordering Automatic light intensity memory function Example: DX.1153-PLi = DX.1153-PLi/LIM model but with automatic light control

NEOLED™

The innovative NeoLED™ design is a combination of a custom LED and a specially designed thin lens with a short focal length in order to obtain three main benefits:

• More oblique light from the LED light source can be captured, which increases the light output significantly



Nosepiece lowering attachment (DX.9887)

- · Less energy is required to achieve this level of light intensity
- The larger aperture of NeoLED™ allows the optical system to produce images at higher resolutions, very close to the theoretical diffraction limit of the optics

ICARE SENSOR

The unique iCare Sensor is developed to avoid unnecessary loss of energy. The illumination of the microscope automatically switches off shortly after the microscopist steps away from the microscope

CARRYING GRIP

The carrying grip at the back of the microscope ensures safe transportation of the microscope and the integrated tool & holder makes sure the right tool is always available

PACKAGE CONTENT

Supplied with power cord, dust cover, a spare fuse, user manual and 5 ml immersion oil. LED versions come with a white and yellow filter and halogen models come with a blue filter. All packed in a polystyrene box

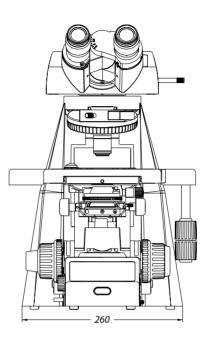


iCare sensor



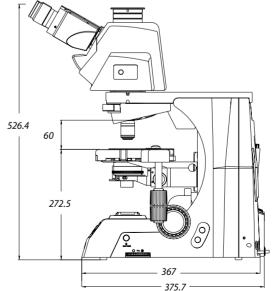
Eye-level riser (DX.9885)

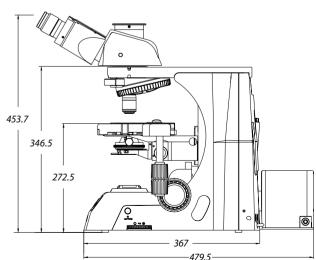
DIMENSIONS





DX.1152-Pli + DX.DIGI-ADD





STANDARD MODELS

	Ergonomic tilting head	SWF 10x/25 mm eyepieces	Sextuple nosepiece	Plan 4/10/20/ S40 EIS objectives	S100x oil EIS objective	Plan semi-apo 4/10/20/540/5100x oil EIS objectives	Plan phase 10/20/ S40/S100x oil EIS objectives	3 W NeoLED™ Köhler	100 W 24 V halogen Köhler
DX.1053-PLi				•				•	
DX.1153-PLi			•	•	•			•	
DX.1158-PLi	•		•	•	•			•	
DX.1153-APLi		•	•			•		•	
DX.1158-APLi	•		•			•		•	
DX.1153-PLPHi		•	•				•	•	
DX.1158-PLPHi	•		•				•	•	
DX.2053-PLi		•	•	•					•
DX.2153-PLi		•	•	•	•				•
DX.2158-PLi	•	•	•	•	•				•
DX.2153-APLi		•	•			•			•
DX.2158-APLi	•	•	•			•			•
DX.2153-PLPHi		•	•				•		•
DX.2158-PLPHi	•	•	•				•		•

Some models are also available as in vitro diagnostic medical devices class A - (EU) 2017/746. Contact your Euromex dealer



MOTORIZED MODELS

MODELS	Ergonomic tilting head	SWF 10x/25 mm eyepieces	Sextuple nosepiece	Plan 4/10/20/ S40/ S100x oil EIS objectives	Plan semi-apo 4/10/20/ S40/S100x oil EIS objectives	3 W NeoLED™ Köhler	100 W 24 V halogen Köhler
DX.1173-PLi		•	•	•		•	
DX.1178-PLi	•	•		•		•	
DX.1173-APLi		•			•	•	
DX.1178-APLi		•			•	•	
DX.2173-PLi		•		•			•
DX.2178-PLi	•	•	•	•			•
DX.2173-APLi		•	•		•		•
DX.2178-APLi					•		

For ordering more motorized models, substitute the third digit 5" of the model reference with the digit 7"
Example: DX.1173-PLi = DX.1153-PLi model but with motorized nosepiece, flip-down condenser and automatic light control
Some models are also available as in vitro diagnostic medical devices class A - (EU) 2017/746. Contact your Euromex dealer

FACE-TO-FACE DUAL HEAD SYSTEMS

MODELS	Total users	Trinocular head SWF 10x/25 mm eyepieces	Binocular head SWF 10x/22 mm eyepieces	Sextuple nosepiece	Plan 4/10/20/ S40/ S100x oil EIS objectives	Plan semi-apo Fluarex 4/10/20/ S40/S100x oil EIS objectives	Plan phase 10/20/S40/ S100x oil EIS objectives	3 W NeoLED™ Köhler	100 W 24 V halogen Köhler
DX.1154-PLi	2	1x	1x						
DX.1154-APLi	2	1x	1x	•		•		•	
DX.1154-PLPHi	2	1x	1x	•			•	•	
DX.2154-PLi	2	1x	1x	•	•				•
DX.2154-APLi	2	1x	1x	•		•			•
DX.2154-PLPHi	2	1x	1x	•			•		•

Some models are also available as in vitro diagnostic medical devices class A - (EU) 2017/746. Contact your Euromex dealer

MULTIHEAD SYSTEMS

MODELS	Total users	Trinocular head SWF 10x/25 mm eyepieces	Number of binocular heads	Binocular head SWF 10x/25 mm eyepieces	Sextuple nose- piece	Plan 4/10/20/ S40/ S100x oil EIS objectives	Plan semi- apo Fluarex 4/10/20/S40/ S100x oil EIS objectives	Plan phase 10/20/S40/ S100x oil EIS objectives	3 W NeoLED™ Köhler	100 W 24 V halogen Köhler
DX.1156-PLi/2	2	1x	1	•	•	•			•	
DX.1156-PLi/3	3	1x	2	•	•	•			•	
DX.1156-PLi/5	5	1x	4	•	•	•			•	
DX.1156-PLi/10	10	1x	9 (1)	•	•	•			•(2)	
DX.1156-APLi/2	2	1x	1	•	•		•		•	
DX.1156-APLi/3	3	1x	2	•	•		•		•	
DX.1156-APLi/5	5	1x	4	•	•		•		•	
DX.1156-APLi/10	10	1x	9 (1)	•	•		•		•(2)	
DX.1156-PLPHi/2	2	1x	1	•	•			•	•	
DX.1156-PLPHi/3	3	1x	2	•	•			•	•	
DX.1156-PLPHi/5	5	1x	4	•	•			•	•	
DX.1156-PLPHi/10	10	1x	9 (1)	•	•			•	•(2)	
DX.2156-PLi/2	2	1x	1	•	•	•				•
DX.2156-PLi/3	3	1x	2	•	•	•				•
DX.2156-PLi/5	5	1x	4	•	•	•				•
DX.2156-PLi/10	10	1x	9 (1)		•	•				•
DX.2156-APLi/2	2	1x	1	•	•		•			•
DX.2156-APLi/3	3	1x	2	•	•		•			•
DX.2156-APLi/5	5	1x	4	•	•		•			•
DX.2156-APLi/10	10	1x	9 (1)		•		•			•
DX.2156-PLPHi/2	2	1x	1	•	•			•		•
DX.2156-PLPHi/3	3	1x	2	•	•			•		•
DX.2156-PLPHi/5	5	1x	4	•	•			•		•
DX.2156-PLPHi/10	10	1x	9 (1)		•			•		•

 $^{^{(1)}}$ The model with 9 binocular heads (10 users) is supplied with EWF 10x/22 mm eyepieces

Some models are also available as in vitro diagnostic medical devices class A - (EU) 2017/746. Contact your Euromex dealer

⁽²⁾ Supplied with 5 W NeoLED™ Köhler, without iCare sensor

ACCESSORIES AND SPARE PARTS

EYEPIECES

DX.6010 Super wide field SWF 10x/25 mm eyepiece **DX.6010-CM** Super wide field SWF 10x/25 mm evepiece with micrometer and crosshairs DX.6210 Super wide field SWF 10x/22 mm eyepiece DX.6210-CM Super wide field SWF 10x/22 mm eyepiece with micrometer and crosshairs DX.6012 Wide field WF 12.5x/17.5 mm eyepiece DX.6015 Wide field WF 15x/16 mm eyepiece DX.6020 Wide field WF 20x/12 mm eyepiece DX.6099-L Eyecups for eyepiece

OBJECTIVES

Plan infinity corrected PLi, EIS 60 mm parfocal*

DX.6099-N Eyeshade for eyepieces

DX.7201	1x/0.04 PLi objective. WD 3.2 mm
DX.7202	2x/0.06 PLi objective. WD 7.5 mm
DX.7204	4x/0.10 PLi objective. WD 30 mm
DX.7210	10x/0.25 PLi objective. WD 10.2 mm
DX.7220	20x/0.40 PLi objective. WD 12 mm
DX.7240	S40x/0.65 PLi objective. WD 0.7 mm
DX.7250	S50x/0.95 PLi oil objective. WD 0.19 mm
DX.7260	S60x/0.80 PLi objectives. WD 0.3 mm
DX.7200	S100x/1.25 oil immersion PLi objective.
	WD 0.2 mm
DX.7200-I	S100x/1.25 oil immersion PLi objective wit
	built-in iris diaphragm. WD 0.2 mm
DX.7200-W	S100x/1.25 water immersion PLi objective*.
	WD 0.2 mm

Plan Semi-Apochromatic infinity corrected PL-SAFi Fluarex, EIS 60 mm parfocal*

DX.7304	4x/0.13 PL-SAFi objective. WD 16.5 mm
DX.7310	10x/0.30 PL-SAFi objective. WD 8.1 mm
DX.7320	20x/0.50 PL-SAFi objective. WD 2.1 mm
DX.7340	S40x/0.75 PL-SAFi objective. WD 0.7 mm
DX.7300	S100x/1.30 oil immersion PL-SAFi objective.
	WD 0.15 mm

Plan Phase infinity corrected PLPHi,

EIS 60 mm parfocal, M25 mm thread

DX.7710 10x/0.25 PLPHi objective, WD 10.2 mm DX.7720 20x/0.40 PLPHi objective. WD 12 mm DX.7740 S40x/0.65 PLPHi objective. WD 0.7 mm DX.7700 S100x/1.25 oil immersion PLPHi objective. WD 0.2 mm

WD = Working distance

*All objectives have an M25 mm thread

STAGES

DX.9501-R Stage with Gorilla glass. Right handed DX.9501-L Stage with Gorilla glass. Left handed DX.9504-R Stage with Sapphire glass. Right handed **DX.9504-L** Stage with Sapphire glass. Left handed DX.9501-LG Option for left handed stage with Gorilla glass* DX.9504-RS Option for right handed stage with Sapphire glass* DX.9504-LS Option for left handed stage with Sapphire glass* **DX.9522** X-Y stranslation 30 x 30 mm stage for round stage * Only with new Delphi-X Observer™ microscopes (resp. DX.xx5x-xxx/LG, DX.xx5x-xxx/RS and DX.xx5x-xxx/LS)

PHASE CONTRAST EQUIPMENT

DX.9126	Phase contrast set with 10	/20/S40 and S100x oil
	objectives, supplied with	rotating disc phase
	contrast condenser with p	hase annuli and
	alignment telescope	
DX.9140	Rotating disc phase contra	ast condenser with
	phase annuli without obje	ectives
DX.9148	Alignment telescope for p	hase contrast,
	Ø 30 mm tube	



CONDENSERS

DX.9105

DX.9697

	3		. 3
DX.9110	Dry darkfield condenser	DX.9960	100 Watt 24 V halogen bulb (revision 1 models)
DX.9112 Oil immersion darkfield condenser		DX.9961	100 Watt 12 V halogen bulb (revision-2 models)
		DX.9993	3 Watt LED replacement
POLARIZ	ZER	AE.5168-D	X Heating stage and temperature controller up
DX.9660	Simple polarization kit		to 50°C. Only supplied with newly purchased
DX.9662	Special polarization kit for gout		microscopes
		AE.5214	500 mA 250 V fuses for LED models, 10 pieces
DIFFERE	NTIAL INTERFERENCE CONTRAST	AE.5216	5 A 250 V fuses for Halogen models, 10 pieces

DX.9887

DISPOSABLES

PB.5155

PB.5160

40 mm nosepiece and stage lowering attachment

Microscope slides 76 x 26 mm, ground edges,

frosted side white color, 50 pieces per pack

frosted side blue color, 50 pieces per pack

Microscope slides 76 x 26 mm with cavity,

PB.5157-W Microscope slides 76 x 26 mm, ground edges and

PB.5157-B Microscope slides 76 x 26 mm, ground edges and

50 pieces per pack

DIFFERENTIAL INTERFERENCE CONTRAST (DIC)

Differential interference contrast set (DIC) for life science models. Includes three DIC prisms for the rotating disc condenser to be used with the 10x, 20x, 40x and 100x objectives, two sliders to be used with the 10/20x and 40x/100x objectives and DIC polairzer for transmitted light. Only supplied with newly purchased microscopes

Abbe condenser with 0.9/1.25 swing-out front lens

CAMEDA ACCECCODIEC

CAME	RA ACCESSORIES		ground edges. 10 pieces per pack
DX.9810	C-mount with 1x magnification	PB.5165	Coverglasses 18 x 18 mm, 0.13-0.17 mm,
	for C-mount camera		100 pieces
DX.9835	C-mount with high resolution relay 0.35x	PB.5168	Coverglasses 22 x 22 mm, 0.13-0.17 mm,
	objective for 1/3 inch C-mount camera		100 pieces
DX.9850	C-mount with high resolution relay 0.50x	PB.5245	Lens cleaning paper, 100 sheets per pack
	objective for 1/2 inch C-mount camera	PB.5255	Immersion oil, 25 ml. Refraction index n = 1.515
DX.9863	C-mount with high resolution relay 0.63x	PB.5274	Isopropyl alcohol 99%, 200 ml
	objective for 2/3 inch C-mount camera	PB.5275	Cleaning kit: lens fluid, lint free lens tissue/pape
AE.5130	Universal SLR adapter with built-in 2x lens for		brush, air blower, cotton swabs
	standard 23.2 mm tube. Needs T2 adapter		

MISCELLANEOUS

DX.0070-ADD

AE.5025

AE.5040

Motorized nosepiece and automatic light intensity control function for Delphi-X Observer (not for Materials Science models). Only available with the purchase of a new microscope)

T2 adapter for Nikon D SLR digital camera

T2 adapter for Canon EOS SLR digital camera

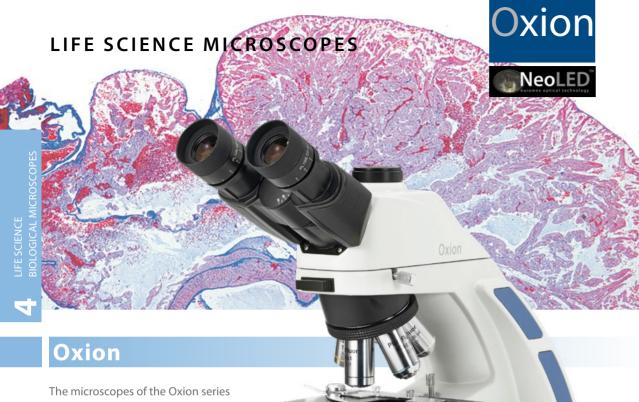
DX.9704 Yellow filter for lamphouse, diameter 45 mm

DX.9885 25.4 mm eye-level riser (1 inch)









are dedicated to professionals in life sciences applications, laboratories of universities or research centers

Thanks to the high resolution optics and state-of-the-art components, these microscopes can be widely used from routine to fundamental research applications



















OX.3035 TO OX.3065

OX.3035

HIGHLIGHTS

- HWF 10x/22 mm eyepieces
- Binocular, trinocular and multihead systems
- Optional tilting head
- Reversed nosepiece for a maximum of five objectives
- Semi plan, plan and plan phase contrast IOS objectives
- 150 x 140 mm stage
- Abbe condenser and Zernike condenser for phase contrast
- 3 W LED illumination for brightfield and phase contrast
- 5 W LED illumination for darkfield applications
- Ergonomic stand and head
- 10 Years warrantv



Ergonomic tilting head

SPECIFICATIONS

EYEPIECES

HWF 10X/22 mm eyepieces with \pm 5° diopter adjustments on both eyepieces. The multihead systems OX.56xx are supplied with WF 10x/20 mm eyepieces and a joystick for the positioning of a pointer in the field of view of the eyepieces. All eyepieces can be secured with an Allen screw

HEAD

Binocular and trinocular Siedentopf type heads with 30° inclined tubes. Interpupillary distance from 50 to 75 mm. A unique rotating system allows an ergonomic positioning of both tubes in an upper (431 mm) and in a lower position (397 mm). An ergonomic tilting head is also available (OX.5700-ADD)

NOSEPIECE

Reversed nosepiece for a maximum of five objectives on ball-bearings

OBJECTIVES

IOS infinity corrected system

- Semi plan 4x/0.10, 10x/0.25, S40x/0.65 and S100x/1.25 oil immersion IOS objectives
- Plan 4x/0.10, 10x/0.25, S40x/0.65 and S100x/1.25 oil immersion IOS objectives

- Plan phase contrast 10x/0.25, 20x/0.45, S40x/0.65 and \$100x/1.25 oil immersion IOS objectives
- Plan semi apochromatic Fluarex 4x/0.10, 10x/0.25, S40x/0.65 and S100x/1.25 oil immersion IOS objectives

All S40x, S60x and S100x oil immersion objectives are spring loaded

All optics have an anti-reflection coating for maximum light throughput and are anti-fungus treated

STAGE

150 x 140 mm stage with integrated 76 x 50 mm X-Y mechanical stage

The Oxion can be supplied with a heating stage which can be set up to 50° Celsius by a PID temperature controller. Only available with new microscopes. Higher temperatures can be achieved on special request

CONDENSER FOR BRIGHTFIELD

Height adjustable Abbe condenser N.A. 1.25 with iris diaphragm. Phase contrast rings mounted in slider can be inserted in the condenser for 10x and S40x or 20x and S100x phase contrast objectives. A darkfield stop in slider for the 10x, 20x and S40x objectives can also be inserted with magnification indication

FOCUSING

Coaxial coarse and fine adjustments, 200 graduations, 1 µm per graduation, 200 µm per rotation, total travel range is approximately 28 mm. Supplied with an adjustable rack stop to prevent damage to sample and objectives. The coarse adjustments are equipped with friction control

PACKAGE CONTENT

Supplied with power cord, dust cover, a spare fuse, user manual and 5 ml immersion oil. All packed in a polystyrene box. An optional aluminum case can be supplied

MODELS	Binocular	Trinocular	Eyepieces HWF 10x/22mm	Plan4x/10x/S40x/S100x IOS objectives	Plan semi apo 4x/10x/ S40x/100x objectives	5 W LED illumination
OX.3030	•		•	•		•
OX.3035		•	•	•		•
OX.3065		•	•		•	•

ACCESSORIES AND SPARE PARTS

EYEPIECES

AE.3210	HWF 10x/22 mm eyepiece
AE.3215	HWF 15x/13 mm eyepiece
AE.3223	HWF 10x/22 mm eyepiece
	with 10 mm/100 micrometer
AE.3225	Pair of eyecups

OBJECTIVES

Semi Plan infinity corrected SMP, IOS 45 mm parfocal

AE.3160	4x/0.10 SMP objective. WD 15 mm
AE.3162	10x/0.25 SMP objective. WD 15 mm
AE.3166	S40x/0.65 SMP objective. WD 0.42 mm
AE.3168	S60x/0.85 IOS objective. WD 0.12 mm
AE.3170	S100x/1.25 oil immersion IOS objective.
	WD 0.19 mm

Plan infinity corrected PLi, IOS 45 mm parfocal

AE.3102	2x/0.06 PLi objective. WD 4.1 mm
AE.3104	4x/0.10 PLi objective. WD 11.9 mm
AE.3106	10x/0.25 PLi objective. WD 12.1 mm
AE.3108	20x/0.40 PLi objective. WD 1.5 mm
AE.3110	S40x/0.65 PLi objective. WD 0.36 mm

AE.3112	S60x/0.85 PLi objective. WD 0.30 mm
AE.3114	S100x/1.25 oil immersion PLi objective. WD 0.18 mm

Plan Semi Apochromatic Fluarex infinity corrected PI-SAFi, IOS 45 mm parfocal

	•
AE.3146	10x/0.30 PI-SAFi objective. WD 10.6 mm
AE.3148	20x/0.50 PI-SAFi objective. WD 2.33 mm
AE.3152	S40x/0.75 PI-SAFi objective. WD 0.6 mm
AE.3156	S100x/1.28 oil immersion PI-SAFi objective.
	WD 0.21 mm

AE.3144 4x/0.13 Pl-SAFi objective. WD 18.5 mm

Plan Phase infinity corrected PLPHI,

IOS 45 mm parfocal

AE.3126	10x/0.25 PLPHi objective. WD 12.1 mm			
AE.3128	20x/0.45 PLPHi objective. WD 1.5 mm			
AE.3130	S40x/0.65 PLPHi objective. WD 0.36 mm			
AE.3134	S100x/1.25 oil immersion PLPHi objective.			
WD 0.18 mm				
WD = Working distance				

PHASE CONTRAST ATTACHMENTS

AE.3180	Telescope for alignment of phase contrast rings		
AE.3187	Slider with phase rings for 10x and S40x plan		
	phase contrast objectives		
AE.3189	Slider with phase rings for 20x and S100x oil plan		
	phase contrast objectives		

POLARIZATION ATTACHMENTS

AE.3190	Polarizer/analyzer set
AE.3192	Polarizer slider for nosepiece
AE.3194	Polarizer for lamphouse

FILTERS

AE.3196	Frosted filter 45 mm, to be mounted		
	on lamphouse		
AE.3198	Blue glass filter 45 mm,		
	to be mounted on lamphouse		
AE.3200	Yellow glass filter 45 mm,		
	to be mounted on lamphouse		
AE.3202	Green glass filter 45 mm,		
	to be mounted on lamphouse		

CAMERA ACCESSORIES

AE.5120	Trinocular 23.2 mm tube for Oxion
	revision 1 photo port
AE.5120-2	Trinocular 23.2 mm tube for Oxion
	revision-2 photo port
AE.5130	Universal SLR camera adapter for 23.2 mm tubes
	with built-in 2x magnification lens.
	Needs T2 adapter and OX.5120
AE.5025	T2 adapter for Nikon D digital SLR cameras
AE.5040	T2 adapter for Canon EOS digital SLR cameras
OX.9810	CS/C mount with 1.0x objective
OX.9833	C-mount adapter with 0.33x objective for Oxion
	microscopes and 1/3" cameras
OX.9850	C-mount adapter with 0.5x objective for Oxion
	and Oxion Inverso microscopes and 1/2" cameras

DISPOSABLES

ı	PB.5155	Microscope slides 76 x 26 mm, ground edges,
		50 pieces
ı	PB.5165	Coverglasses 18 x 18 mm,
		thickness 0.13-0.17 mm, 100 pieces
ı	PB.5168	Coverglasses 22 x 22 mm,
		thickness 0.13-0.17 mm, 100 pieces
ı	PB.5245	Lens cleaning paper, 100 sheets per pack
ı	PB.5255	Immersion oil, $n = 1.515$ (25 ml)
ı	PB.5274	Isopropyl alcohol 99% (200 ml)
ı	PB.5275	Cleaning kit: lens cleaning fluid, lint free lens
		tissue, brush, air blower, cotton swabs
ı	PB.5276	Microscope maintenance and servicing kit, 16

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



AE.3192 Polarizer slider for nosepiece



AE.3194 Polarizer for lamphouse

MISCELLANEOUS

AE.3185 Slider with darkfield stop

(only for objectives 10x, 20x and S40x)

AE.5168-O Heating stage and temperature controller up

to 50°C. Only supplied with newly purchased

microscopes

SL.5510 LED replacement for Oxion

AE.3199 Glass fuses 3.15 A 250 V, 10 pieces

OX.3010 Aluminum transport case with flight case locks

OX.3011 Aluminum transport case with classical locks



OX.3011

OX.3035 Oxion AE.5168-O heating stage

about

field of view

Field of view (FOV) is the visible area when looking through the microscope eyepiece (eyepiece FOV) or camera (camera FOV) and is usually expressed as a diameter

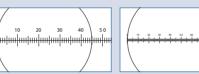
CALCULATING FOV OF AN EYEPIECE

The FOV through an eyepiece is equal to:

Field Number FOV= **Object Magnification**

Field number (FN) is usually engraved on the eyepiece as a figure next to the magnification and expressed in mm, e.g. WF 10x/18. A 10x/18 eyepiece with a 40x objective will have a FOV = 18 mm / 40 = 0.45 mm or 450 nm

450 nm FOV with 10x/18 eyepiece and S40x objective



Micrometer stage 1 mm/100

Micrometer stage 1 mm/100

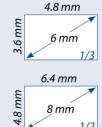
900 nm FOV with 10x/18

eyepiece and S20x objective

FIELD OF VIEW WITH CAMERA

Most commercially available microscope digital cameras use 1/3, 1/2- or 2/3-inch rectangular sensors. A few will use a 1 inch camera sensor

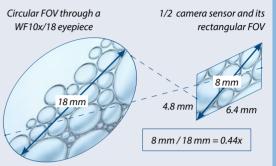
As a consequence, a rectangular camera sensor cannot capture the circular FOV that exits from a eyepiece, microscope third tube or photo port





15.8 mm 36 mm

EYEPIECE VERSUS CAMERA FOV



TECHNICAL FACTS

Furthermore, the circular eyepiece FOV is much larger than the camera FOV and thus the microscope FOV must be reduced" with a so-called relay" lens or photo-adapter" to fit the camera FOV. However - in order to avoid vignetting (dark shadows in the corners of an image), the circular microscope FOV must just be projected outside the image sensor area. Subsequently the camera FOV will always be smaller than the microscope FOV by 50 to 60%

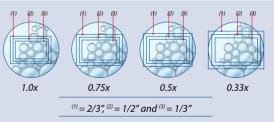


Figure: different camera sensor sizes (2/3, 1/2, 1/3 inch) with different demagnifying" lenses (C-mount photo-adapters) 0.33x, 0.50x, 0,75x and 1.0x

IN ORDER TO OBTAIN THE DESIRED FIELD OF VIEW WITHOUT VIGNETTING USE:

- a 0.33 x photo adapter for cameras with a 1/3 sensor
- a 0.50 x photo adapter for cameras with a 1/2 sensor
- a 0.75 photo adapters for cameras with a 2/3 sensor
- a 1.0x or 1.2x photo adapters for cameras with a 1" or larger camera sensor

BioBlue.Lab

The BlueLine flagship BioBlue.Lab is the ideal laboratory instrument. The steady base and infinity corrected objectives make the BioBLue.Lab a high quality all-round microscope

All models are equipped with NeoLED™ illumination system for high resolution images and are available in binocular, trinocular and digital versions



















BB.1152-PLi

BB.1153-PLi 448 (h) x 205 (w) x 260 mm (d) | 5.6 kg 590 (h) x 280 (w) x 260 mm (d) | 6.3 kg

HIGHLIGHTS

- WF 10x/20 mm eyepieces
- Binocular and trinocular models
- Digital model with 5 MP camera and tablet
- Reversed quadruple nosepiece
- Plan and plan IOS objectives
- infinity and non-infinity optical system
- Integrated rackless mechanical stage
- **3** W NeoLED™ illumination
- Ergonomic carrying grip
- 10 Years warranty

SPECIFICATIONS

These ergonomic easy-to-use microscopes have been designed specifically for laboratory and university applications. The 150 x 140 mm mechanical stage has an integrated rackless X-Y stage with 75 x 30 mm travel range

An important feature of the BioBlue.Lab is the rackless stage, which provides a smooth translation of the specimen and highly precise positioning. This plays an integral part in most demanding cytology and histopathology applications

The BioBlue.Lab microscope models offer great functionality and are equipped with WF 10x/20 mm eyepieces, plan and IOS plan 4x/ 10x/S40x/S100x infinity corrected objectives

This enhancement is suitable for a wide variety of routine applications in laboratories and field microscopy





BioBlue

BioBlue.Lab

EYEPIECES

Wide field WF 10x/20 mm eyepieces

HEAD

Binocular and trinocular models have 30° inclined Ø 30 mm tubes. The interpupillary distance is adjustable between 48 to 75 mm. All models have a ±5 diopter adjustment on left tube. All heads are 360° rotatable and secured with a screw

NOSEPIECE

Reversed quadruple nosepiece on ball bearings. Slot for analyzer (BB.9602)

OBJECTIVES - 45 MM PARFOCAL

BioBlue.Lab microscopes are equipped with plan and plan IOS (infinity corrected) objectives. Optional 20x/0.40 and S60x/0.85 objectives are also available. The S40x, S60x and S100x objectives are spring loaded

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



FOCUSING

Coaxial coarse and fine adjustments with 200 graduations. Precision 1.5 µm per graduation, 0.3 mm per rotation. Total travel range is approximately 28 mm. Supplied with an adjustable rack stop to prevent damage to sample and objectives. The coarse adjustments are equipped with friction control

STAGE

Rackless 150 x 140 mm stage with mechanical 75 x 30 mm X-Y translation stage

CONDENSER

Height adjustable Abbe condenser N.A. 1.25 with iris diaphragm and filter holder. Supplied with white filter

ILLUMINATION

Binocular and trinocular models are supplied with an adjustable 3 W NeoLED™ illumination system for increased light output. Integrated 100-240V power supply

ANTI-THEFT SLOT

At the back of the microscope a Kensington Security slot is placed, which can be used to secure the instrument from theft

PACKAGE CONTENT

Supplied with power cord, dust cover, a spare fuse, user manual and 5 ml immersion oil and white filter. All packed in a polystyrene box

MODELS	Bino	Trino	4x/10x/S40x/S100x plan objectives	4x/10x/S40x/S100x plan IOS objectives	Rackless mechanical stage	Neo LED	Weight (kg)
BB.1152-PL	•		•		•	•	5.4
BB.1153-PL			•		•		5.5
BB.1152-PLi				•	•	•	5.4
BB.1153-PLi		•				•	5.5

ACCESSORIES AND SPARE PARTS

WF 20x/11 mm eyepiece, 30 mm tube

EYEPIECES

BB.6010	WF 10x/20 mm eyepiece, 30 mm tube	BB.9900	Aluminum case
BB.6110	WF 10x/22 mm eyepiece, 30 mm tube	AE.9919	Nylon bag for BioBlue.Lab, 58(h) x 32(w) x 24(d)
	with micrometer reticle		
BB.6015	WF 15x/15 mm evepiece, 30 mm tube	CAMERA	ACCESSORIES

OBJECTIVES

BB.6020

BB.6099

Plan PL, 45 mm parfocal

Pair of eyecups

BB.8804	4x/0.10 PL objective. WD 17.92 mm	DISPOSA	AΒI
BB.8810	10x/0.25 PL objective. WD 2.04 mm	PB.5155	Mi
BB.8820	20x/0.40 PL objective. WD 1.20 mm		50
BB.8840	S40x/0.65 PL objective. WD 0.65 mm	PB.5157-W	Mi
BB.8860	S60x/0.80 PL objective. WD 0.19 mm		Wh
BB.8800	S100x/1.25 oil immersion PL objective. WD 0.18 mm	PB.5157-B	Mi

Plan infinity corrected PLi, IOS 45 mm parfocal **BB.7204** 4x/0.10 PLi objective, WD 7.18 mm

	.,, o., o . 1. o., cea. e 2
BB.7210	10x/0.25 PLi objective. WD 4.80 mm
BB.7220	20x/0.40 PLi objective,. WD 5.27 mm
BB.7240	S40x/0.65 PLi objective. WD 0.68 mm
BB.7260	S60x/0.85 PLi objective. WD 0.50 mm
BB.7200	S100x/1.25 oil immersion PLi objective. WD 0.20 mm

Plan Phase infinity corrected PLPHi, IOS 45 mm parfocal

BB.7710	10x/0.25 PLPHi objective. WD 4.7 mm
BB.7720	20x/0.40 PLPHi objective. WD 1.75 mm
BB.7740	S40x/0.65 PLPHi objective. WD 0.72 mm
BB.7700	S100x/1.25 oil immersion PLPHi objective.
	WD 0.50 mm

WD = working distance

MISCELLANEOUS

BB.9602	Analyzer in slider, Ø 25 mm. Fits in nosepiece
BB.9707	White filter Ø 32 mm. Fits in filter holder
BB.9732	Polarization filter, 32 mm diameter.
	Fits in filter holder
BB.9880	Köhler attachment
BB.9993	3 W NeoLED™ replacement unit
AE.5227	Fuse 1 A 250 V, 10 pieces

AE.5130 Universal SLR camera adapter with 2x projection lens for 23.2 mm tubes. Needs T2 adapter

	iciis ioi 23.2 iiiii tabes. Needs 12 adaptei
AE.5040	T2 adapter for Canon EOS SLR digital camera

ALIJUTU	12 adapter for curion 203 321 digital curio
AF.5025	T2 adapter for Nikon D SLR digital camera

LES

PB.5155	Microscope slides 76 x 26 mm, ground edges,
	50 pieces
PB.5157-W	Microscope slides 76 x 26 mm, ground edges.
	White frosted side, 50 pieces per pack
PB.5157-B	Microscope slides 76 x 26 mm, ground edges.

	Blue frosted side, 50 pieces per pack
PB.5160	Microscope slides 76 x 26 mm with cavity,
	ground edges, 10 pieces per pack

thickness 0.13-0.17 mm, 100 pieces

	3 3 F F
PB.5165	Coverglasses 18 x 18 mm,

PB.5168	Coverglasses 22 x 22 mm,
	thickness 0.13-0.17 mm, 100 pieces

PB.5245	Lens cleaning paper, 100 sheets per pa	ck

PB.5255	immersion oil, $n = 1.482 (25 \text{ ml})$
PB.5274	Isopropyl alcohol 99% (200 ml)

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

Microscope maintenance and servicing kit,
16pcs: cleaning brush, 6 pcs screwdriver set,
air blower, 3 pcs Allen key, 1.5, 2, 2.5 mm,

Microscopo maintonanco and convicing kit

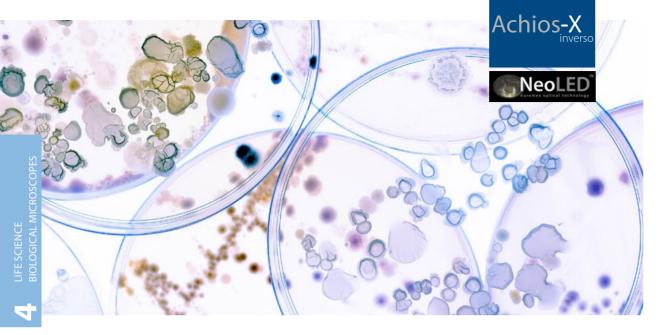
lens cleaning fluid 20 ml, cleaning cloth 140 x 140 mm, 100 pcs lens tissue sheets, tube of maintenance grease, 10 ml bottle of oil, packed

in a nice toolbox









Achios-X Inverso

for advanced life science applications

Experience optimal comfort and cutting-edge performance with the Achios-X Inverso, an ergonomic masterpiece featuring a state-ofthe-art optical system

Tailored to meet the demands of advanced Life Science applications such as life cell imaging and tissue cultures. This microscope stands as an unparalleled choice

















AI.1053-PLPHi 526 (h) x 244 (w) x 543 mm (d) | 14.6 kg AI.4058-PLPHi

HIGHLIGHTS

- Extra Wide field WF 10x/22 mm, Ø 30 mm
- Head with 45° inclined tubes
- Head with ergo tilting 5° 35° tubes and backwards tilting illumination column
- Revolving quintuple nosepiece
- IOS 60 mm Plan and Plan Phase
- Hoffman contrast and 3D relief contrast
- Low positioned stage adjustment knobs
- 3 W NeoLED
- LCD screen for Smart Light Control
- 10 Years warranty



SPECIFICATIONS

EYEPIECES

SWF 10x/22 mm wide field eyepieces with adjustable diopter

HEAD

Binocular head with 45° inclined tubes or binocular ergo head with 5-35° tilting tubes. Interpupillary distance of 48 to 75 mm. Optional side photo port with 100-0/0-100 beamsplitter

NOSEPIECE

Revolving quintuple nosepiece on ball-bearings

OBJECTIVES - 60 MM PARFOCAL

Objectives with 1.2mm coverslip correction

Plan IOS	4x/0.10	10x/0.25	20x/0.40	S40x/0.60
Plan Semi Apo Fluarex IOS	4x/0.13	10x/0.30	20x/0.45	S40x/0.60
Plan Phase IOS		10x/0.30	20x/0.45	S40x/0.60
Plan Semi Apo Phase IOS	4x/0.3	10x/0.30	20x/0.45	S40x/0.60
Plan PLi Hoffman IOS		10x/0.25	20x/0.40	S40x/0.60

Objectives with adjustable coverslip correction

Plan Semi Apo Fluarex IOS	20x/0.45	S40x/0.60	S60x/0.70
Plan Semi Apo Fluarex Phase IOS	20x/0.45	S40x/0.60	S60x/0.70

All M25 thread and with 1.2 mm coverglass correction

STAGE

- 170 x 250 mm stage with 128 x 80 mm mechanical X-Y stage
- Supplied as standard with metal insert for Ø 65 glass plate and universal cell culture dish holder
- Optional metal inserts, Ø 38, 54 and 90 mm cell culture dish and 27x26 mm slides
- · Optional metal insert for Multiwell plates (127.76 x 85.48 mm)

CONDENSER

- WD (Working distance): 75 mm, without condenser: 187 mm
- · The condenser can be removed to increase WD, allowing multilayered culture flasks
- With slot for phase contrast/embossed contrast/Hoffman contrast sliders

For Al.1xxx and Al.3xxx models

· Condenser N.A. 0.30 with iris diaphragm and slot for sliders

For AI.4xxx models

- · Height adjustable Kohler condenser N.A. 0.30 with iris diaphragm and 3 filter holders and shutter function
- Mounted on a backwards tilting illumination column allowing easy access to samples and placement multilayered culture flasks, without removing the condenser



CONDENSER FOR HOFFMAN CONTRAST

• All models can be equipped with a Hoffman condenser and slider with Hoffman slits for 10/20/40 objectives. **Needs Hoffman objectives**

SLIDER FOR 3D RELIEF CONTRAST

• All models can be equipped with a 3D relief contrast slider. Works for standard condenser and Plan or Plan Semi-Apo IOS 10/20/40x objectives

FOCUS ADJUSTMENT

- · Coaxial 37.5 mm coarse and fine adjustments with 200 graduations
- Precision 1 μm, 0.2 mm per rotation
- Fine focus knobs are left/right interchangeable

ILLUMINATION

- Transmitted 3W NeoLED™ illumination with adjustable intensity
- Internal power supply 100-240 V (CE). Fuse 500 mA 250 Vac

SMART LIGHT CONTROL

This intelligent function:

- memorizes the light intensity level for each objective
- · heightens comfort
- saves valuable time during routine magnification shifts

NEOLED

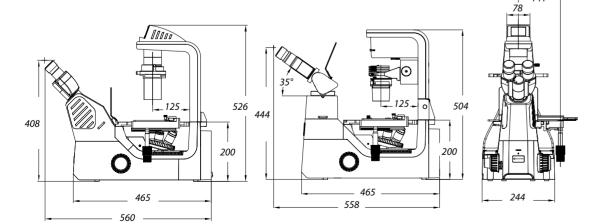
The innovative NeoLED™ design is a combination of a custom LED and a specially designed thin lens with a short focal length. Four main benefits:

- . More oblique light from the NeoLED™ light source, which increases the light output significantly
- Less energy is required to achieve this level of light intensity
- The larger aperture of NeoLED™ allows the optical system of the microscope to produce images at higher resolutions, very close to the theoretical diffraction limit of the optics
- Super long life span, up to 50.000 hrs nominal, L70 norm

PACKAGE CONTENT

- Supplied with Ø 65 glass plate and universal cell culture dish holder. Also a power cord, dust cover, green filter, alignment telescope and user manual
- Optional metal inserts for Ø 38, 54 and 90 mm cell culture dish, metal insert for Multiwell plates (127.76 x 85.48 mm) and 0.5x photo adapter

DIMENSIONS





AI.4058-PLPHi + AI.DIGI-ADD

MODELS	Ergo head	Backwards tilting arm	Plan PLi objective 4x IOS Al.83xx	Plan phase PLPHi objectives 10/20/40 IOS AI.87xx	Plan Semi-Apo Fluarex phase objectives 10/20/40 IOS AI.89xx(I)	Plan Hoffman objectives 10/20/40x Al.88xx	3D Relief contrast	Epi-fluorescence equipment for B, G and UV excitation	Köhler illumination
Al.1053-PLPHi			•	•		0	0		
Al.3053-PLPHFi					•	0	0	•	
Al.4058-PLPHi	•	•	•	•		0	О		•
AI.4058-PLPHFi		•				0	0		•

ACCESSORIES AND SPARE PARTS

EYEPIECES (Ø 30 MM TUBE)

AI.6015 WF 15x/16 mm eyepiece AI.6020 WF 20x/12 mm eyepiece

AI.6099 Pair of eveshades

OBJECTIVES

Plan infinity corrected PLi, IOS 45 mm parfocal

4x/0.10 PLi objective,*. LWD 30 mm 10x/0.25 PLi objective*. LWD 10.2 mm AI.8320 20x/0.40 PLi objective*. LWD 12.0 mm 40x/0.60 PLi objective*. LWD 2.2 mm

Plan Phase infinity corrected PLPHi, IOS 45 mm parfocal

10x/0.25 PLPHi objective*. LWD 10.2 mm AI.8710 20x/0.40 PLPHi objective*. LWD 12.0 mm AI.8720 40x/0.60 PLPHi objective*. LWD 2.2 mm

Plan Hoffman infinity corrected PL-HOFi, IOS 45 mm parfocal

AI.8810 10x/0.25 PL-HOFi objective* LWD 9.5 mm 20x/0.40 PL-HOFi objective* LWD 4.0 mm AI.8820 40x/0.60 PL-HOFi objective* LWD 2.3 mm AI.8840

Plan Phase Semi-Apochromatic Fluarex infinity corrected PLPH-SAFi, IOS 45 mm parfocal

AI.8904 4x/0.13 PLPH-SAFi objective*. LWD 17 mm 10x/0.30 PLPH-SAFi objective*. LWD 7.4 mm 20x/0.45 PLPH-SAFi objective*. LWD 8 mm 40x/0.60 PLPH-SAFi objective*. LWD 3.6 mm

Plan Phase Semi-Apochromatic Fluarex PLPH-SAFi with built-in iris diaphragm, IOS 45 mm parfocal

AI.8920-I 20x/0.45 PLPH-SAFi objective*. LWD 7.5-8.8 mm AI.8940-I 40x/0.60 PLPH-SAFi objective*. LWD 3-4.4mm AI.8960-I 60x/0.70 PLPH-SAFi objective**. LWD 1.8-2.6mm

*corrected for 0-2 mm

**corrected for 0.1-1.3 mm

All M25 thread

LWD = Long working distance

PHASE CONTRAST ACCESSORIES

Telescope for phase/Hoffman contrast alignment, Ø 30 mm AI.9196 Phase contrast slider 10/20/40x Slider 4x/60x phase annuli AI.9190 Green filter for phase contrast AI.9187

HOFFMAN CONTRAST

for Al.1xxx and Al.3xxx models

Al.9148 Telescope for phase/Hoffman contrast alignment, Ø 30 mm

AI.9680 Hoffman condenser

AI.9683 Slider with Hoffman slits 10/20/40x

for AI.4xxx models

Telescope for phase/Hoffman contrast AI.9148 alignment, Ø 30 mm

AI.9685 Hoffman condenser

Slider with Hoffman slits 10/20/40x AI.9688

3D RELIEF CONTRAST

3D relief contrast slider 10/20/40x for condenser 3D relief contrast slider 10/20/40x for head AI.9687

CAMERA ACCESSORIES

For AI.1053 and AI.3153 models

AI.9810-3 C-mount photo adapter 1x AI.9850-3 C-mount photo adapter 0.5x

For AI.4058 and AI.4158 models with Ergo head

AI.9810-4 C-mount photo Adapter 1x AI.9870-4 C-mount photo Adapter 0.7x AI.9850-4 C-mount photo Adapter 0.5x

MISCELLANEOUS

Universal cell culture dish holder, Ø 35-65 mm. Also holds Multiwell plates AI.9508 Metal insert with hole for culture flasks Metal insert for MultiWell plates AI.9517 (127.76 x 85.48 mm) AI.9535 Petri dish insert 35 mm with 27 x 26 mm slide holder AI.9554 Petri dish insert 54 mm with 27 x 26 mm slide holder Al.9590 Petri dish insert 90 mm with 27 x 26 mm slide holder AI.9506 Transparant glass insert ø 112 mm, inner hole ø 30 mm



For 3D emboss: Al.9686, Al.9187 and Al.9687



For Hoffman contrast: Al.9148, Al.9680, Al.9683, Al.8810, Al.8820, and Al.88140



AI.9517 and AI.9535 combined

AI.9550 Stage extension plate



Al.9554 Petri dish insert 54 mm



AI.9517 MultiWell plate holder



AI.9535 Petri dish insert 35 mm



AI.9590 Petri dish insert 90 mm





Delphi-X Inverso[™] is an inverted microscope for the professional with demanding applications of living cell cultures and stained samples.

It is available in two configurations:

- for phase contrast plus DIC (differential interference contrast) equipment
- for fluorescence application

Super contrast semi-apochromatic objectives with collar adjustment ring assure perfect observation of cells or tissues in 1.2 mm thick Petri dishes or flasks



















DI.1053-PLPHi

HIGHLIGHTS

- Life science applications
- Observation of tissue cultures, living cells
- Brightfield, phase contrast
- DIC (differential interference contrast)
- Long working distance IOS plan semi apochromatic objectives
- Revolving sextuple nosepiece
- 5 W LED or 100 W halogen transmitted illumination
- Backwards tilting condenser arm
- Easy placement of large objects
- 10 Years warranty

SPECIFICATIONS

EYEPIECES

Pair of HWF plan 10x/25 mm or 10x/22 mm eyepieces with diopter adjustment (optional)

HEAD

Trinocular 45° inclined tubes. Interpupillary distance of 47 to 78 mm. Trinocular head with 100-0, 80/20 and 0/100 positions

NOSEPIECE

Revolving sextuple nosepiece on ball-bearings. The nosepiece can be equipped with DIC prisms for the 10x, 20x, 40x and 60x objectives

OBJECTIVES

High numerical infinity semi-apochromatic long working distance plan phase Fluarex PLPHFi 10x/0.30, 20x/0.45, S40x/0.60 IOS objectives enable the sub-cellular structures. An optional 4x/0.13 and 60x/0.70 IOS objectives are also available. The 20x, 40x and optional 60 objectives are equipped with collar adjustment ring for glass thicknesses from 0 to 1.2 mm

Fluarex[™] objectives are made of low-absorption glass. Fluarex[™] is a trademark of Euromex microscopen bv. All optics are anti-fungus treated and anti-reflection coated for maximum light throughput



 Phase contrast brightfield and differential interference contrast condenser

STAGE

Stage 340 x 230 mm, equipped with a coaxial mechanical 130 x 85 mm X-Y stage. Supplied with:

- · Metal insert for Ø 38 mm cell culture dish
- Metal insert for Ø 54 mm cell culture dish or 76 x 26 mm slides
- Metal insert for Multiwell plates (127.76 x 85.48 mm)
- Metal insert for Teraski plates (83.3 x 58.0 mm)
- · Optional universal cell culture holder

CONDENSER

Rotating N.A. 0.55 condenser with 6 positions, iris diaphragm and filter holders. Working distance is 26 mm. Supplied with phase contrast annuli for 10x/20x, 40x and 60x objectives, brightfield position and slots for optional DIC prisms. Three filter holders allow the insertion of Ø 38 mm filters in the optical path. The arm with condenser can be tilted backwards for convenient access to the stage. This allows easy placement of large objects like flasks and Petri dishes

MAGNIFICATION CHANGER

A magnification changer with a 1.5x lens allows intermediary magnifications of 1.5 times the standard objective magnifications. For example switching from 20x to 30x or from 60x to 90x magnification can be done without the need to change objectives

FLUORESCENCE FILTER SET WHEEL

The Delphi-X Inverso is supplied with a 6-position fluorescence filter set wheel. See photo below. (More information on fluorescence in the Delphi-X Inverso fluorescence)



FOCUSING ADJUSTMENT

Coaxial 10 mm coarse and fine adjustments, 1 µm precision and with friction adjustment

ILLUMINATION

Transmitted 5 W LED or 100 W halogen Intensity adjustable with internal 100-240 V power supply. Fuse holder 5 A / 250 V. Delphi-X Inverso can be extended with fluorescence equipment

PACKAGE CONTENT

Supplied with metal insert for Ø 38 mm cell culture dish and a metal insert for Ø 54 mm cell culture dish with 76 x 26 mm slides, metal insert for Multiwell plates, metal insert for Teraski plates, blue and green interference Ø 38 mm filters, power cord, dust cover, green filter and alignment telescope and user manual

ICSI SET

(Intracytoplasmic sperm injection)

- · Perfect for inexperienced users in need of training practice as well as for professionals
- Complete manual system
- · Large movement range
- · Easy micropipette repositioning
- Adjustable micropipette holder angle between 20° and 40°
- · Micropipette holder fixing knob reduces vibration and provides easy handling of the sperm
- Easy installation and service
- 3D Hydraulic manipulation joysticks for smooth movement
- Pneumatic Air Injector for ICSI and holding
- No service required for injector
- Identical sensitive injectors on both sides and interchangeable
- · Top quality for affordable price
- Medical device CE mark
- Movement range: X/Y/Z: 20 mm each, 1 mm for one complete turn of the handle
- Optional heating stage with controller

Set includes two 3D hydraulic joysticks, two pipette setup mechanisms, one connection bar with moving handle, two air injectors with tubing and pen type micromanipulation, pipette holder, two metal plates for injectors, one set of Allen wrenches, one ruler for mechanic home position adjustment. Unit is packed in a solid carry case



Filters in sliders

HEATING STAGE AE.8010

Heating glass stage for Euromex microscope stage with 110 mm circular hole. The glass plate fits the circular opening of the X-Y stage and enables a flat glass object-plate with constant temperature. The stage has an aluminum frame for superior resistance and flatness. Glass thickness 0.5 mm.



Controller AE.8010

- 2-Channel Temperature Controller with touchscreen interface
- One controller can control up to two devices
- · On-board data logging allows for recording temperature as a function of time and logging calibration events and alarms
- The password protected controller is equipped with routines to re-calibrate the sensors against certified thermometers
- Temperature range: from ambient to 60°C
- Temperature accuracy on specimen: ± 0.3°C
- · 4.3" touch screen interface
- · Alarm buzzer and external alarm connector
- Self calibration routines enable high temperature accuracy



MODELS LWD Plan phase 10x/20x/S40x objectives 100 W Halogen illumination

5 W LED illumination

DI.1053-PLPHFi

DI.2053-PLPHFi

158 **a euromex**

euromex 159

ACCESSORIES AND SPARE PARTS

EYEPIECES

DI.6010 Super wide field SWF 10x/25 mm eyepiece **DI.6010-C** Super wide field SWF 10x/25 mm evepiece with crosshairs

DI.6010-M Super wide field SWF 10x/25 mm eyepiece

with micrometer

DI.6010-CM Super wide field SWF 10x/25 mm eyepiece with micrometer and crosshairs

DI.6010-SG Super wide field SWF 10x/25 mm eyepiece with 20 x 20 square grid reticle

DI.6012 Wide field WF 12.5x/17.5 mm eyepiece DI.6015 Wide field WF 15x/16 mm evepiece

Super wide field SWF 10x/22 mm eyepiece DI.6210

Wide field WF 20x/12 mm evepiece

DI.6099-L Eyecup for eyepiece

DIFFERENTIAL INTERFERENCE CONTRAST

DI.9690-00 DIC prism with polarizer for condenser. To be used with Plan Semi-Apo 20/40x objectives

DI.9690-10 DIC prism with polarizer for condenser. To be used with Plan Semi-Apo 10x objective

DI.9693-10 DIC prism for nosepiece to be used with Plan Semi-Apo 10x objective

DI.9693-20 DIC prism for nosepiece to be used with Plan Semi-Apo 20x objective

DI.9693-40 DIC prism for nosepiece to be used with Semi-Apo 40x objective

DI.9698 DIC analyzer for nosepiece



OBJECTIVES

DI.6020

Plan Semi-Apochromatic Fluarex infinity corrected PL-SAFi, IOS 45 mm parfocal. Recommended for fluorescence

DI.8604 4x/0.13 PL-SAFi objective, LWD 17 mm. DI.8610 10x/0.30 PL-SAFi objective*, LWD 7.4 mm.

Recommended for DIC

DI.8620 20x/0.45 PL-SAFi objective*, LWD 8 mm.

Recommended for DIC

DI.8640 40x/0.60 PL-SAFi objective*, LWD 3.3 mm.

Recommended for DIC

DI.8660 60x/0.70 PL-SAFi objective, LWD 1.9 mm. With

built-in iris diaphragm. Coverglass correction

0.1 - 1.3 mm

Plan Phase Semi-Apochromatic Fluarex infinity corrected PLPHFi, IOS 45 mm parfocal

4x/0.13 PLPHFi objective*. LWD 16.8 mm. DI.8704 Needs an installed 4x phase annulus

DI.8710 10x/0.30, PLPHFi objective. LWD 10.2 mm DI.8720 20x/0.45 PLPHFi objective**. LWD 7.5 to 8.8 mm.

DI.8740 S40x/0.60 PLPHFi objective**. LWD 3 to 4.4 mm

LWD = Long working distance *Coverglass correction 1.2 mm

**Coverglass correction 0 - 2 mm

All objectives M25 mounting thread

DI.9191 Phase contrast annuli for 4x PLPHFi objective DI.8704

DI.9961 100 Watt 12 V halogen bulb DI.9997 5 Watt LED replacement

MISCELLANEOUS

AE.5214 500 mA 250 V fuses for LED models, 10pcs

AE.5216 5 A 250 V fuses for Halogen models, 10pcs

DISPOSABLES

Microscope slides 76 x 26 mm, ground edges, 50 pieces per pack

PB.5157-W Microscope slides 76 x 26 mm, ground edges and frosted side white color, 50 pieces per pack

PB.5157-B Microscope slides 76 x 26 mm, ground edges and frosted side blue color, 50 pieces per pack

PB.5165 Coverglasses 18 x 18 mm, 0.13-0.17 mm,

100 pieces

PB.5168 Coverglasses 22 x 22 mm, 0.13-0.17 mm,

100 pieces

PB.5245 Lens cleaning paper, 100 sheets per pack

PB.5274 Isopropyl alcohol 99%, 200 ml

PB.5275 Cleaning kit: lens fluid, lint free lens tissue/paper,

brush, air blower, cotton swabs

MICROMANIPULATOR ATTACHMENT

AE.8000 Micromanipulator for intracytoplasmic sperm injection (ICSI) suitable with the Oxion Inverso inverted microscope

AE.8010 Heating stage with transparent glass plate for AE.8000 Micromanipulator, including digital

temperature controller

CAMERA ACCESSORIES

DI.9810 C-mount with 1x magnification for C-mount camera

DI.9840 C-mount with high resolution 0.40x objective for

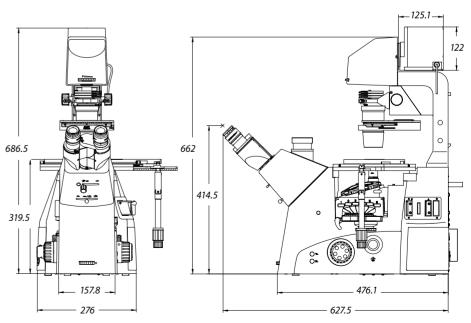
DI.9850 C-mount with high resolution relay 0.50x

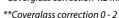
objective for 1/2 inch C-mount camera

DIMENSIONS









1/3 inch C-mount camera



HIGHLIGHTS

- Life science applications
- Observation of tissue cultures, living cells
- Brightfield and phase contrast
- Long working distance IOS plan achromatic objectives
- Revolving quintuple nosepiece
- 5 W LED transmitted illumination
- 10 Years warranty

 Micromanipulator for intracytoplasmic sperm injection (ICSI)

Oxion Inverso

The Oxion Inverso inverted microscopes are useful for observation of living organisms and tissues cultures in cell culture dishes and flasks

The Oxion Inverso series is available in two configurations:

- · for brightfield and phase contrast
- for fluorescence (see chapter on fluorescence)

Dedicated objectives are suitable for 1.2 mm thick glass bottoms of cell culture dishes and flasks



OX.2053-PLPH















OX.2003-PL / OX.2053-PL

SPECIFICATIONS

EYEPIECES

Pair of HWF plan 10x/22 mm eyepieces

HEAD

Trinocular 45° inclined tubes with extended low and high positions for eyepieces. One diopter adjustment on left eyepiece. Interpupillary distance of 54 to 75 mm. Trinocular head with 100-0 % and 0-100 % positions

NOSEPIECE

Revolving quintuple nosepiece on ball-bearings

OBJECTIVES FOR BRIGHTFIELD

(models OX.2003-PL and OX.2053-PL) infinity color corrected long working distance plan 10x/0.25, 20x/0.40, 40x/0.60 IOS objectives. An optional 60x/0.70 IOS objective is also available

OBJECTIVES FOR PHASE CONTRAST

(models OX.2003-PLPH and OX.2053-PLPH) infinity color corrected long working distance plan phase 10x/0.25, 20x/0.40, 40x/0.60 IOS objectives

FLUAREX OBJECTIVES FOR BRIGHTFIELD

infinity color corrected long working distance plan Fluarex 10x/0.30, 20x/0.45, 40x/0.65 IOS objectives. An optional plan Fluarex 60x/0.75 IOS objective is also available

FLUAREX OBJECTIVES FOR PHASE CONTRAST

infinity color corrected long working distance plan Fluarex 10x/0.30 and plan phase Fluarex 20x/0.45 and S40x/0.65 IOS objectives

All objectives corrected for 1.2 mm thickness. Fluarex[™] objectives are made of low-absorption glass Fluarex[™] is a trademark of Euromex microscopen by

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

STAGE

Stage 250 x 230 mm equipped with a coaxial mechanical 120 x 78 mm X-Y stage. Delivered with:

- Stage extension plate
- Metal insert for Ø 65 mm cell culture dish or Multiwell
- Metal insert for 76 x 26 mm slides and 54 mm cell dish (only for models with X-Y stage)
- · Optional universal cell culture holder

CONDENSER

N.A. 0.30 condenser with iris diaphragm.

Working distance 72 mm

The models for the phase contrast OX.2003-PLPH, OX.2053-PLPH, OX.2253-PLPHF and OX.2453-PLPHF are supplied with a slider with 4x/10x and 20x/40x pre-centered phase rings

FOCUSING ADJUSTMENT

Coaxial 25 mm coarse and fine adjustments, 2 µm precision and with friction adjustment

ILLUMINATION

Transmitted 5 W LED Intensity adjustable with internal 100-240 V power supply. Fuse holder 3.15 A / 250 V Oxion Inverso can be extended with fluorescence equipment

FILTERS FOR PHASE CONTRAST MODELS

Interference filter 550 nm green and blue filter, Ø 45 mm

PACKAGE CONTENT

Supplied with metal insert with Ø 25 mm hole, metal insert for Ø 35 mm cell culture dish, blue LBD and green 550 nm interference Ø 45 mm filter, power cord, dust cover and user manual. Phase contrast models are supplied with 4x/10x and 20x/40x phase contrast annuli in slider, green filter and alignment telescope

ICSI SET (AE.8000)

(Intracytoplasmic sperm injection)

- · Perfect for inexperienced users in need of training practice as well as for professionals
- Complete manual system
- · Large movement range
- · Easy micropipette repositioning
- Adjustable micropipette holder angle between 20° and 40°
- Micropipette holder fixing knob reduces vibration and provides easy handling of the sperm
- · Easy installation and service
- · 3D Hydraulic manipulation joysticks for smooth movement
- · Pneumatic air injector for ICSI and holding
- · No service required for injector
- · Identical sensitive injectors on both sides and interchangeable
- · Top quality for affordable price
- Movement range: X/Y/Z: 20 mm each, 1 mm for one complete turn of the handle
- · Optional heating stage with controller

Set includes two 3D hydraulic joysticks, two pipette setup mechanisms, one connection bar with moving handle, two air injectors with tubing and pen type micromanipulation, pipette holder, two metal plates for injectors, one set of Allen wrenches, one ruler for mechanic home position adjustment

MODELS	LWD Plan 10x/20x/40x objectives	LWD Plan phase 10x/20x/40x objectives	Mechanical stage	ICSI equipment
OX.2003-PL	•			
OX.2053-PL	•		•	
OX.2003-PLPH		•		
OX.2053-PLPH		•	•	
OX.2053-PLPH-ICSI		•	•	•

LWD = long working distance

HEATING STAGE AE.8010

Heating glass stage for Euromex microscope stage with 110 mm circular hole. The glass plate fits the circular opening of the X-Y stage and enables a flat glass object-plate with constant temperature. The stage has an aluminum frame for superior resistance and flatness. Glass thickness 0.5 mm. Plate diameter 110 mm

Controller AE.8010

- 2-Channel Temperature Controller with touchscreen interface
- One controller can control up to two devices
- External temperature sensor (included) and self calibration routines allow easy calibration of the heating devices
- · On-board data logging allows for recording temperature as a function of time and logging calibration events and alarms
- The password protected controller is equipped with routines to re-calibrate the sensors against certified thermometers
- Temperature range: from ambient to 60°C



- Controller of the AE.8010
- Temperature accuracy on specimen: ± 0.3°C
- 4.3" touch screen interface
- External temperature sensor
- · On-board data logging to USB drive
- · Alarm buzzer and external alarm connector
- One controller can control up to two devices
- Self calibration routines enable high temperature accuracy



EYEPIECES

OX.6010 HWF 10x/22 mm eyepiece

OX.6015 HWF 15x/16 mm evepiece

OX.6099 Pair of eyecups

OX.6110 HWF 10x/22 mm eyepiece with

micrometer reticule

Plan infinity corrected PLi, IOS 45 mm parfocal(1)

OX.8304 4x/0.13 PLi objective, LWD 11 mm

OX.8310 10x/0.25 PLi objective, LWD 7.45 mm

OX.8320 20x/0.40 PLi objective, LWD 6.92 mm

OX.8340 40x/0.65 PLi objective, LWD 2.74 mm

OX.8360 60x/0.70 PLi objective, LWD 1.28 mm

OX.8604 4x/0.13 PLFi objective, LWD 18.95 mm

OX.8610 10x/0.30 PLFi objective, LWD 7.27 mm

OX.8620 20x/0.45 PLFi objective, LWD 6.03 mm

OX.8640 40x/0.65 PLFi objective, LWD 1.79 mm

OX.8660 60x/0.75 PLFi objective, LWD 1.28 mm

fluorescence, IOS 45 mm parfocal(1)

Plan Fluarex infinity corrected PLFi for brightfield and

DISPOSABLES

PB.5155 Microscope slides 76 x 26 mm, ground edges, 50 pieces

PB.5165 Coverglasses 18 x 18 mm, thickness 0.13 - 0.17 mm, 100 pieces

PB.5168 Coverglasses 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 = 1.515 (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





Accessories supplied with

MICROMANIPULATOR ATTACHMENT

AE.8000 Micromanipulator for intracytoplasmic sperm injection (ICSI) suitable with the Oxion Inverso inverted microscope

AE.8010 Heating stage with transparent glass plate for AE.8000 Micromanipulator, including advanced digital temperature controller

AE.3199 Glass fuses 3.15 A 250 V packed, per 10 pieces

CAMERA ACCESSORIES

contrast annuli

alignment

OX.9810 CS/C mount with 1.0x objective OX.9833 C-mount adapter with 0.33x objective for Oxion microscopes and 1/3" cameras **OX.9850** C-mount adapter with 0.5x objective for Oxion and Oxion Inverso microscopes and 1/2" cameras

PHASE CONTRAST ATTACHMENTS

OX.9148 Telescope for phase contrast fluorescence

OX.9149 Telescope for phase contrast alignment

OX.9190 Slider with 4x/10x and 20x/40x phase

AE.5120-2 Trinocular 23.2 mm tube for Oxion photo port revision-2

AE.5130 Universal SLR camera adapter with 2x projection lens for 23.2 mm tubes Needs T2 adapter and AE.5120-2

AE.5025 T2 adapter for Nikon D digital SLR cameras AE.5040 T2 adapter for Canon EOS digital SLR cameras

STAGES AND HOLDERS

OX.9500	Mechanical coaxial X-Y 120 x 78 mm stage		
OX.9506	Transparent glass insert with Ø 30 mm hole		
OX.9508	Metal insert with Ø 25 mm hole		
OX.9510	Metallic insert for Ø 65 mm cell culture dish		
	and Multiwell		
OX.9512	Metal insert with 76 x 26 mm slide holder		

and Ø 55 mm cell culture dish holder

OX.9535 Metal insert for Ø 35 mm cell culture dish holder

OX.9550 Stage extension plate

OX.9599 Universal cell culture dish holder

Plan Phase infinity corrected PLPHi, IOS 45 mm parfocal (1) (2)

ACCESSORIES AND SPARE PARTS

OX.8404	4x/0.13 PLPHi objective, LWD 10.75 mm
OX.8410	10x/0.25 PLPHi objective, LWD 7.45 mm
OX.8420	20x/0.40 PLPHi objective, LWD 6.92 mm
OX.8440	40x/0.65 PLPHi objective, LWD 2.74 mm

Plan Phase Fluarex infinity corrected PLPHFi for fluorescence and phase contrast, IOS 45 mm parfocal (1) (2) (3)

OX.8720	20x/0.45 PLPHFi objective. LWD 6.12 mm
OX.8740	40x/0.65 PLPHFi objective. LWD 1.79 mm

⁽³⁾ Phase contrast objectives require slider with phase contrast annuli OX.9163 All optical parts are anti-fungus treated LWD = Long working distance

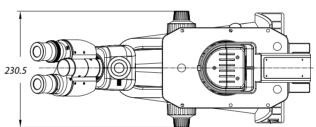


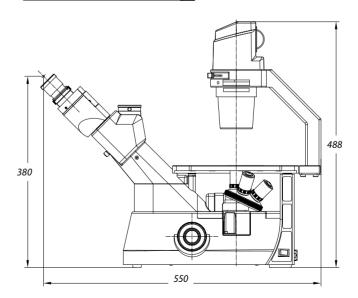
DIMENSIONS

MISCELLANEOUS

OX.9700 Blue filter Ø 45 mm

OX.9985 5 W NeoLED[™] replacement unit







phase contrast models

⁽¹⁾ All objectives are corrected for 1 mm coverglass thickness except OX.8304

⁽²⁾ Phase contrast objectives require slider with phase contrast annuli OX.9163

fluorescence microscopes

Euromex offers a wide range of life science upright and inverted microscopes for researchers and biologists worldwide

On the next pages you will find all models that can be used in life science fluorescence applications, using mercury vapor lamps or LED technology together with optimized fluorescence filter sets

life science

fluorescence microscopes



ISCOPE • 170

BSCOPE • 176

ACHIOS-X OBSERVER • 182

DELPHI-X OBSERVER • 186

OXION • 192

ACHIOS-X INVERSO • 198

DELPHI-X INVERSO • 204

OXION INVERSO • 210

EUROMEX LED SOURCES • 216

FLUORESCENCE FILTER SETS • 218





- · 6-position rotating attachment with 100 W mercury vapor light source
- · 3-position slider attachment with 100 W mercury vapor light source























IS.3153-XXX

● IS.3152 PLi-3

HIGHLIGHTS

- HWF 10x/22 mm eyepieces
- Binocular and trinocular models
- Optional ergonomic tilting head
- Quintuple revolving nosepiece
- E-Plan, plan and plan Fluarex corrected IOS objectives
- 187/230 x 140 mm rackless stage with integrated X-Y stage
- Height adjustable Abbe condenser N.A. 1.25

- Coarse and fine adjustment
- Diascopic intensity adjustable 3 W NeoLED™ Köhler illumination
- Epi-fluorescence 100 W HBO mercury vapor
- iCare sensor for energy saving
- CSS Cable Storage System
- 10 Years warranty



IS.3153-PLFi/6

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 (IS.1153-PLi) has a light path selector (100:0 / 50:50) and \pm 5 diopter adjustments on both Ø 30 mm tubes. The trinocular head of the E-plan infinity corrected models (IS.1153-EPLi) has a fixed built-in light path beam splitter (50:50) and one \pm 5 diopter adjustment on the Ø 30 mm left tube

HEAD

Binocular and trinocular Siedentopf type heads are equipped with 30° inclined tubes, interpupillary distance from 48 to 76 mm and 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. An optional ergonomic

tilting head and corresponding Ø 23.2 mm photo tube attachment are also available (only infinity corrected models) To order an iScope® with tilting head use reference IS.3158-xxx

NOSEPIECE

Revolving and reversed nosepiece for a maximum of five objectives

OBJECTIVES

See table below

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

OBJECTIVES

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*	S40x/0.65	S60x/0.85*	S100x/1.25 oil
Plan PLFi IOS	4x/0.13	10x/0.30	20x/0.50*	S40x/0.75		S100x/1.30 oil

^{*} optional: the plan Fluarex PLFi ™ objectives are suitable for violet and ultra violet excitation All optics are anti-fungus treated and anti-reflection coated for maximum light throughput

UT

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 \$40x/\$100x oil immersion IOS objectives for economical phase contrast. With magnification indication. A slider with a simple dark stop for darkfield 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 darkfield stop position for darkfield contrast observation up to 400x magnification

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

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 life span

The Köhler illumination on models with IOS plan and plan phase infinity corrected systems 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 or 3-position slider fluorescence attachments are supplied with standard 100 W HBO mercury vapor light source for a broad powerful light spectrum and 100-240 V external power supply with indication of the life span of 100 W HBO lamp

Supplied with standard fluorescence filter sets for blue excitation (EX460-490 (BP) DM500 EM520 (LP)) and green excitation (EX510-550 (BP) DM570 EM590 (LP)) and a UV protection shield. Optional standard fluorescence filters for UV excitation (EX330-385 (BP) DM400 EM420 (LP)) and violet excitation (EX400-410 (BP) DM455 EM455 (LP))

The iScope® fluorescence microscopes can also be supplied with optimized and zero-pixel shift optimized filter sets on request. See end of this chapter

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

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

6-POSITION ROTATING ATTACHMENT

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

MODELS	Trino	WF 10x/22 mm	Diopter adjustable on left side	Diopter adjustable on both sides	E-plan EPLi 4x/10x/S40x and S100x objectives	Plan PLi 4x/10x/540x and 5100x objectives	Plan PLF 4x/10x/S40 and S100x objectives	100 W HBO light source	Filter sets (blue & green)	NeoLED™ illumination
IS.3153-EPLi/6	•		•		•			•		
IS.3153-PLi/6	•	•		•		•		•		•
IS.3153-PLFi/6				•			•	•		

3-POSITION SLIDER ATTACHMENT

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

MODELS	Trino	WF 10x/22 mm	Diopter adjustable on both sides	Plan PLi 4x/10x/ S40x and S100x objectives	Plan PLF 4x/10x/ S40x and S100x objectives	100 W HBO light source	Filter sets (blue & green)	NeoLED™ illumination
IS.3153-PLi/3	•	•	•	•		•	•	•
IS.3153-PLFi/3	•		•		•			•

ACCESSORIES AND SPARE PARTS

EYEPIECES Ø 30 mm tube

			•
IS.6210	EWF 10x/22 mm eyepiece	IS.7710	10x/0.25 PLPH objective. WD 12.2 mm
IS.6210-C	EWF 10x/22 mm eyepiece with crosshairs	IS.7720	20x/0.40 PLPH objective. WD 5 mm
IS.6210-P	EWF 10x/22 mm eyepiece with pointer	IS.7740	S40x/0.65 PLPH objective. WD 0.37 mm
IS.6210-CN	EWF 10x/22 mm eyepiece with	IS.7700	S100x/1.25 PLPH objective. WD 0.13 mm
	10/100 micrometer and crosshairs		
IS.6212	WF 12.5x/17 mm eyepiece	E-plan infi	nity corrected EPLi, IOS 45 mm parfocal

OBJECTIVES

IS.6215

IS.6220

IS.6299

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

WF 15x/16 mm eyepiece

WF 20x/12 mm eyepiece

Pair of eyecups infinity models

IS.8804	4x/0.10 EPLi objective. WD 15.4 mm
IS.8810	10x/0.25 EPLi objective. WD 5.8 mm
IS.8840	S40x/0.65 EPLi objective. WD 0.43 mm
IS.8800	S100x/1.25 EPLi objective. WD 0.13 mm

Plan Phase PLPH, 45 mm parfocal

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 condens		
IS.7204	4x/0.10 PLi objective. WD 15.4 mm		
IS.7210	10x/0.25 PLi objective. WD 10 mm		
IS.7220	20x/0.40 PLi objective. WD 5.1 mm		
IS.7240	S40x/0.65 PLi objective. WD 0.54 mm		



IS.7260	S60x/0.85 PLi objective. WD 0.14 mm	IS.9163	Phase contrast slider set with 20x and S100x PLPHi
IS.7200	S100x/1.25 PLi objective. WD 0.13 mm		IOS infinity corrected objectives and annuli for 20x/
IS.7200-I	S100x/1.25 PLi super contrast objective with built-		S100x PLPHi IOS infinity corrected objectives
	in iris diaphragm. WD 0.13 mm	IS.9190	Slider with phase contrast annuli for 10x and
			S40 phase contrast non-IOS objective (without
Plan Fluar	ex infinity corrected PLFi, IOS 45 mm parfocal		objective, condenser and without alignment
IS.7404	4x/0.13 PLFi objective. WD 16.4 mm		telescope)
IS.7410	10x/0.30 PLFi objective. WD 2.9 mm	IS.9192	Slider with phase contrast annuli for 20x and
IS.7420	20x/0.50 PLFi objective. WD 1.4 mm		S100 phase contrast non-IOS objective (without
IS.7440	S40x/0.75 PLFi objective. WD 0.34 mm		objective, condenser and without alignment
IS.7400	S100x/1.30 PLFi objective. WD 0.2 mm		telescope)
		IS.9194	Slider with phase contrast annuli for S40 phase
Plan Phase	e infinity corrected PLPHi, IOS 45 mm parfocal		contrast objective
IS.8910	10x/0.25 PLPHi objective. WD 10.2 mm	IS.9196	Slider with phase contrast annuli for 10x and S40
IS.8920	20x/0.40 PLPHi objective. WD 5.1 mm		phase contrast IOS objective (without objective,
IS.8940	S40x/0.65 PLPHi objective. WD 0.5 mm		condenser and without alignment telescope)
IS.8900	S100x/1.25 PLPHi objective. WD 0. 13 mm	IS.9198	Slider with phase contrast annuli for 20x and S100
WD = work	king distance		phase contrast IOS objective (without objective,
			condenser and without alignment telescope)
CONDE	NSERS		

PHASE	CONTRAS	ST ATTAC	CHMENTS

IS.9105 Swing-out 0.9/1.25 NA condenser

IS.9102 Standard Abbe condenser 1.25 NA condenser

with slot for darkfield and phase contrast sliders

THASE CONTRAST ATTACHMENTS		
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.9148	Telescope for phase contrast Ø30 mm tube	
IS.9149	Telescope for phase contrast Ø 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

POLARIZATION ATTACHMENTS

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

FILTERS

TILILIAS		
Blue filter 45 mm for lamphouse		
Green filter 45 mm for lamphouse		
Yellow filter 45 mm for lamphouse		
White opaque filter 45 mm for lamphouse		
ID25		
Neutral density 25 % transmission filter ND25 for		
6-positions Fluorescence attachment		
CAMERA ACCESSORIES		
single photo tube attachment with one \emptyset 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 adapter for Nikon D SLR digital camera AE.5040 T2 adapter 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

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

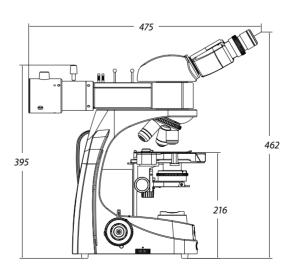
AE.3684 Glass fuses 500 mA 250 V, 10 pieces

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

SL.1385 100 W HBO mercury vapor lamp for fluorescence

SL.5500 NeoLED™ replacement unit

DIMENSIONS



DISPOSABLES

	50 pieces per pack
PB.5165	Coverglasses 18 x 18 mm, 0.13-0.17 mm, 100 pieces
PB.5168	Coverglasses 22 x 22 mm, 0.13-0.17 mm, 100 pieces
PB.5245	Lens cleaning paper, 100 sheets per pack

PB.5155 Microscope slides 76 x 26 mm, ground edges,

PB.5255 Immersion oil, 25 ml. Refraction index n = 1.515

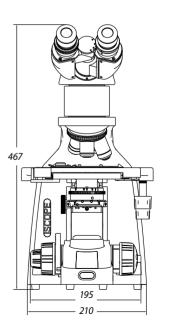
PB.5274 Isopropyl alcohol 99%, 200 ml

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









bScope®

fluorescence

The bScope® microscope for fluorescence microscopy is equipped with four monochromatic LEDs

The microscopes are supplied with fluorescence filter sets and dichroic mirrors for excitation in the blue, green, violet and ultraviolet spectral regions









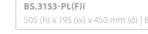






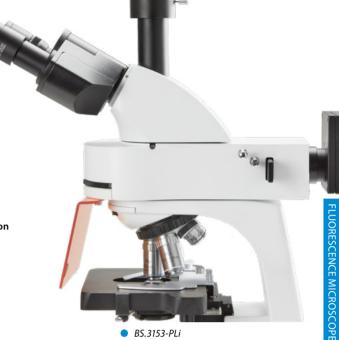


BS.3153-PLi



HIGHLIGHTS

- Trinocular models
- WF 10x/22 mm eyepieces, 30 mm tubes
- Reversed ball-bearing quintuple nosepiece with slot for polarization filter
- Plan IOS and plan Fluarex IOS objectives
- Rackless integrated X-Y mechanical stage
- Color coded condenser
- Epi-fluorescence illumination with four monochromatic LEDs
- 3 W NeoLED™ adjustable transmitted illumination
- Integrated carrying grip
- Cable storage system and anti-theft system
- 10 Years warrantv



SPECIFICATIONS

EYEPIECES

Wide field HWF 10x/22 mm secured eyepieces (Ø 30 mm tube)

HEAD

The bScope® is equipped with a Siedentopf type head and with 30° inclined Ø 30 mm tubes and with a \pm 5 diopter adjustment on left eyepiece. The interpupillary distance is adjustable between 48 to 76 mm

The trinocular head comes with a Ø 23.2 mm tube, ensuring maximum flexibility. The prisms inside the heads are designed to minimize the light absorption for perfect digital imaging. The trinocular head has a 20:80 beamsplitter and generates an erect image

NOSEPIECE

Revolving and reversed ball-bearing quintuple nosepiece

OBJECTIVES

The state-of-the-art production techniques and multi layer coatings used for the manufacturing of the bScope® objectives enable the bScope® to be used for the most demanding applications. World class spherical aberration correction and modern CNC and assembly technology ensure the perfect centering of the objectives

- Plan infinity corrected PLi 4x/0.10, 10x/0.25, 20x/0.40, S40x/0.65, S60x/0.85 and S100x/1.25 oil immersion IOS objectives for applications where violet or Ultra-Violet excitation is not needed
- Plan Fluarex infinity corrected PLFi 4x/0.10, 10x/0.25, 20x/0.40, S40x/0.65 and S100x/0.90 IOS objectives for applications where either higher resolving power or violet or ultra-violet excitation is needed

All S40x, S60x and S100x oil immersion objectives are spring loaded. All optics are anti-fungus treated and anti-reflection coated for maximum light throughput

FOCUSING

Double coaxial, low-positioned coarse and fine adjustments with 180 graduations, Precision 1.1 um, 200 um per rotation, total travel range is approximately 19 mm. Supplied with an adjustable rack stop to prevent damage to sample and objectives. The coarse adjustment is equipped with friction control

STAGE

The bScope® is equipped with a scratch-resistant 152/197 x 131 mm stage with integrated 75 x 36 mm X-Y rackless mechanical stage, Vernier scale, soft-close removable specimen holder. The rackless stage has no protruding parts, enables more smooth movements and is safer in use. Low-positioned X-Y control knobs prevent fatigue during long working sessions

CONDENSER FOR BRIGHTFIELD

The standard height adjustable Abbe N.A. 1.25 condenser for brightfield comes with an iris diaphragm and swingout filter holder. The condenser is color coded. Optionally available swing-out Abbe condenser (BS.9105)

CONDENSER FOR ZERNIKE PHASE CONTRAST

The height adjustable Zernike NA. 1.25 phase contrast disc condenser comes with phase annuli for 10/20/S40x and S100x phase contrast objectives, an iris diaphragm, a swing-out filter holder and also a BF position for brightfield contrast. Phase contrast objectives are available in either EPL-PHi or PL-PHi versions. Supplied with alignment telescope and green filter

CONDENSER FOR SIMPLE PHASE CONTRAST

The height adjustable NA. 1.25 simple phase contrast condenser has a free slot for either a slider for 10/S40x phase contrast objectives, or a slider for 20/S100x phase contrast objectives. The condenser has an iris diaphragm and filter holder. The condenser includes a BF position for brightfield contrast with an iris diaphragm and filter holder. Phase contrast objectives available in either EPL-PHi or PL-PHi version. Supplied with alignment telescope and green filter

POLARIZATION

The bScope® has an integrated slot above the nosepiece for an optional polarization filter

FLUORESCENCE ATTACHMENT

- Epi-illumination with four 5 W LEDs for fluorescence excitation from 450 to 470 nm (blue), 515 to 535 nm (green), 390 to 400 (violet) and 360 to 370 nm (ultraviolet). External 100-240 V power supply
- Fluorescence filter set for blue excitation (EX450-490 (BP) DM505 EM515 (LP)), green excitation (EX495-555 (BP) DM580 EM595 (LP)), UV excitation (EX320-380 (BP) DM420 EM435 (LP)) and violet excitation (EX380-415 (BP) DM460 EM475 (LP))
- · Supplied with UV protection shield

NEOLED™ TRANSMITTED ILLUMINATION

The 3 W adjustable Köhler NeoLED™ transmitted illumination is powered by an internal 100-240 V power supply making it suitable for worldwide use. The innovative NeoLED™ design offers larger apertures, allowing the optical system of the bScope® 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 life span

KÖHLER ILLUMINATION

A Köhler illumination ensures for all infinity corrected IOS models the highest possible contrast and the maximum achievable resolving power. Generates a uniform illumination of the sample and eliminates all interference from dust on lenses and side glare of the light source

Ergonomic carrying grip for easy transportation



CORDLESS USE

The optional rechargeable AA batteries turn the bScope® into a cordless system for transmitted illumination

CSS - CABLE STORAGE SYSTEM

Allows users to easily stow away excess cable length into the back of the instrument during operation and to roll up the power cable for easy storage

CARRYING GRIP

The integrated carrying grip at the back of the microscope ensures safe transportation of the microscope

ANTI-THEFT SLOT

At the back of the microscope a Kensington Security Slot is placed, which can be used to secure the instrument from theft

PACKAGE CONTENT

Smart polystyrene packaging ensures a low environmental footprint while maintaining maximum safety during transport. Supplied with power cord, dust cover, tools, a spare fuse, white filter, user manual and 5 ml immersion oil





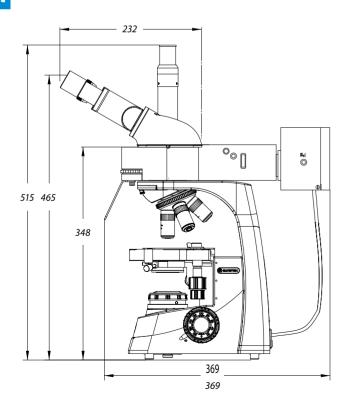


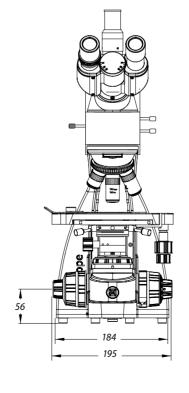
BSCOPE® WITH EPI-FLUORESCENCE 4 LED ILLUMINATION (BLUE, GREEN, VIOLET AND ULTRA-VIOLET)

MODELS	Trinocular	HWF 10x/22 mm eyepieces	Quintuple nosepiece Plan PLi 4/10/S40/ S100x	Quintuple nosepiece Plan Fluarex PLFi 4/10/S40/ S100x *
BS.3153-PLi	•	•	•	
BS.3153-PLFi	•	•		•

*The plan Fluarex infinity corrected IOS objectives are recommended for applications where either higher resolving power or violet or ultra-violet excitation is needed

DIMENSIONS





ACCESSORIES AND SPARE PARTS

EYEPIECES

BS.6310	WF 10x/22 mm eyepiece, Ø 30 mm tube
BS.6310-M	WF 10x/22 mm eyepiece, Ø 30 mm tube
BS.6315	WF 15x/12 mm eyepiece, Ø 30 mm tube
BS.6399	Pair of eyecups, Ø 30 mm tube

OBJECTIVES

Plan infinity corrected PLi, IOS 45 mm parfocal

BS.8404	4x/0.10 PLi objective. WD 21.0 mm
BS.8410	10x/0.25 PLi objective. WD 5.0 mm
BS.8420	20x/0.40 PLi objective. WD 8.8 mm
BS.8440	S40x/0.65 PLi objective. WD 0.66 mm
BS.8460	S60x/0.80 PLi objective. WD 0.46 mm
BS.8400	S100x/1.25 oil immersion PLi objective.
	WD 0.36 mm

Plan Fluarex infinity corrected PLFi, IOS 45 mm parfocal

86.550	4x /0.15 PLFi objective. WD 21.6 mm
86.552	10x/0.35 PLFi objective. WD 2.9 mm
86.554	20x/0.65 PLFi objective. WD 1.5 mm
86.556	PLF S40x/0.85 PLFi objective WD 0.6 mm
BS.7400	S100x/0.9 oil immersion PLFi objective. WD 0.13 mm
WD = working distance	
For phase contrast equipment and accessories,	

CONDENSERS

see chapter 4 Life science, bScope®

BS.9102	Abbe condenser 1,25 NA with slot for darkfi
	and phase contrast sliders
BS.9170	Slider with darkfield stop for standard Abbe
	condenser with slot
BS.9105	Swing-out Abbe condenser 0.9/1.25 NA

POLARIZATION ATTACHMENTS

BS.9647	Polarization polarizer Ø 6 mm for slider unde
	bScope® head
BS.9651	Polarization attachment for lamphouse
	with 360° scale

MISCELLANEOUS

BS.999	3 NeoLED™ replacement unit
BS.920	0-LED/WOO
	Epi-Fluorescence illuminator Life science
	microscopes
AE.137	Set of rechargeable AA batteries, three pieces

CAMERA ACCESSORIES

AE.5226 Glass fuses 3A 250V, 10pcs

AE.5130	Universal Ø 23.2 mm tube adapter with built-in	
	2x lens for SLR photo camera with APS-C sensor.	
	Needs T2 adapter	
AE.5025	T2 adapter for Nikon D SLR digital camera	
AF 5040	T2 adapter for Canon EOS SLR digital camera	

PB.5155 Microscope slides 76 x 26 mm, ground edges,

DISPOSABLES

50 pieces
Coverglasses 18 x 18 mm,
thickness 0.13-0.17 mm, 100 pieces
Coverglasses 22 x 22 mm,
thickness 0.13-0.17 mm, 100 pieces
Lens cleaning paper, 100 sheets per pack
Immersion oil (25 ml). n = 1.515
Isopropyl alcohol 99% (200 ml)
Cleaning kit: lens cleaning fluid, lint free lens
tissue/paper, brush, air blower, cotton swabs
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
20ml , 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







Achios-X Observer

fluorescence

State-of-the-art microscopes for routine Life Science applications

Experience optimal comfort and cutting-edge performance with the Achios-X Observer fluorescence, an ergonomic masterpiece featuring a 60 mm parfocal enhanced infinity optical system (EIS) for routine fluorescence applications

















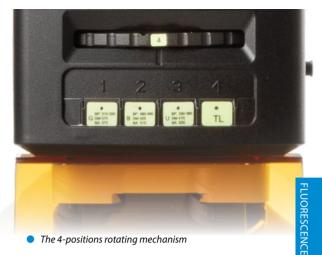


AX.3153-PLI

AX.3153-PLi

HIGHLIGHTS

- Extra Wide field WF 10x/22 mm, Ø 30 mm
- LED fluorescence
- Smart Light Control (SLC)
- Revolving quintuple or sextuple reversed nosepiece
- Infinity corrected 60 mm achromatic Plan or Plan Semi-Apochromatic EIS objectives
- Low positioned stage adjustment knobs
- Adjustable color temperature with transmitted 3 W NeoLED



SPECIFICATIONS EYEPIECES

EWF 10x/22 mm eyepieces, with diopter adjustment

HEADS

- Standard Siedentopf trinocular with 30° inclined tubes
- Ergonomic tilting head (0° 35°)

OBJECTIVES - EIS 60 MM PARFOCAL

- · Infinity corrected achromatic Plan EIS objectives*
- · Infinity corrected achromatic Plan Semi-Apochromatic EIS objectives*

*M25 mounting thread

STAGE

The Achios-X Observer comes complete with a generously sized, hard coated, rackless mechanical stage, meticulously designed for enhanced safety

- · Free from any sharp edges protruding from the microscope's sides, this stage ensures a secure and worry-
- Suitable for two slides and allows single handed placement of slides
- Measurements: stage, 230 x 150 mm X-Y and mechanical stage, 78 x 54 mm

CONDENSERS

Depending on the configuration, the Achios-X Observer fluorescence is supplied with a

- · Standard Abbe condenser
- · Swing-out Abbe condenser

NOSEPIECE

Experience the ease of an intuitive quintuple or an optional sixtuple nosepiece on ball-bearings, equipped with gripped ring for effortless and precise rotation

LIGHT AND COLOR TEMPERATURE CONTROL

The Achios-X Observer introduces Smart Light Control. This intelligent function memorizes the last used light intensity level for each objective. The color temperature of the NeoLED light source can be adjusted and stored. This innovation not only heightens comfort but also saves valuable time during routine magnification shifts. The eco-friendly NeoLED light source is both environmentally conscious and built to endure

ILLUMINATION

The Köhler illumination of the Achios-X Observer provides the most uniformly illuminated and bright field of view

ILLUMINATION FOR FLUORESCENCE

The fluorescence attachment of the Achios-X Observer™ is equipped with a 4-positions rotating mechanism that can be used to select between any of the 3 filter sets and brightfield (transmitted light). It is supplied with 3 dedicated LED sources to match the included fluorescence filter sets

Supplied with UV shield and standard fluorescence filters sets:

AX.9745 Blue excitation @ 485 nm with long pass filter set (EX 460-495 DM 505 EM 510 LP)

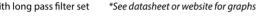
AX.9746 Green excitation @ 525 nm with long pass filter set (EX 510-550 DM 570 EM 575 LP)

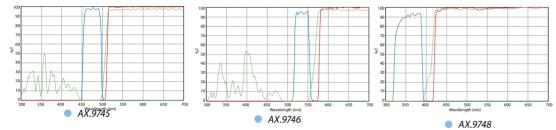
AX.9748 UV excitation @ 365 nm with long pass filter set (EX 330-385 DM 410 EM 420 LP)

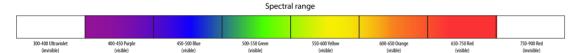
Power is supplied by the microscope no external power supply is required. Other more specific band pass optimized fluorescence filter sets are also available

OPTIONAL FLUORESCENCE FILTER SETS*

AX.9750.FITC FITC band pass filter set with LED AX.9750.TRITC TRITC band pass filter set with LED AX.9750.DAPI DAPI band pass filter set with LED







NEOLED

The innovative NeoLED™ design is a combination of a custom LED and a specially designed thin lens with a short focal length in order to obtain four main benefits:

- . More oblique light from the NeoLED™ can be captured, which increases the light output significantly
- Less energy is required to achieve this level of light intensity
- The larger aperture of NeoLED™ allows the optical system of the microscope to produce images at higher resolutions, very close to the theoretical diffraction limit of the optics
- Super long life span, up to 50.000 hrs nominal, L70 norm

CSS - CABLE STORAGE SYSTEM

Allows users to easily stow away excess cable length into the back of the instrument during operation and to roll up the power cable for easy storage

CARRYING GRIP

The integrated carrying grip at the back of the microscope ensures safe transportation of the microscope

PACKAGING

Supplied with power cord, dust cover, screwdriver, user manual and 5 ml immersion oil for models supplied with a 100x objective

MODELS	Bino	Trino	Ergo head	eyepieces EW 10x/22 mm	Plan IOS objectives 4/10/40/100x (oil)	Plan Semi-Apo IOS Fluarex objectives 4/10/40/100x (oil)	LED Fluorescence Blue, Green, UV
AX.3152-PLi	•			•	•		•1
AX.3153-PLi		•		•	•		• 1
AX.3158-PLi				•	•		• 1
AX.3152-APLi	•			•		•	•
AX.3153-APLi		•		•		•	•
AX.3158-APLi			•	•		•	•

Sixtuple nosepiece is also available

Some models are also available as in vitro diagnostic medical devices class A - (EU) 2017/746. Contact your Euromex dealer

Not suitable for UV LED because of incompatibility with PLi objectives (Objective will be damaged due to long term UV absorbtion)

ACCESSORIES

EYEPIECES (Ø30 MM TUBE)

AX.6010 EWF 10x/22 mm eyepiece for Achios-X observer. With diopter adjustment

OBJECTIVES

Plan infinity corrected PLi_FIS 60 mm narfocal*

riuli illillilli	ty corrected FLI, E13 00 mm parrocal
AX.7204	4x/0.10 PLi objective. WD 30 mm
AX.7210	10x/0.25 PLi objective. WD 10.2 mm
AX.7220	20x/0.40 PLi objective. WD 10.2 mm
AX.7240	S40x/0.65 PLi objective. WD 1.5 mm
DX.7250	S50x/0.95 oil immersion PLi objective. WD 0.19 mm
AX.7260	S60x/0.80 PLi objective**. WD 1.5 mm

Plan Semi-Apochromatic infinity corrected PL-SAFi Fluarex, EIS 60 mm parfocal*

AX.7200 S100x/1.25 oil-immersion PLi objective. WD 0.3 mm

AX.7304	4x/0.15 PL-SAFi objective. WD 0.17 mm		
AX.7310	10x/0.3 PL-SAFi objective. WD 15.8 mm		
AX.7320	20x/0.5 PL-SAFi objective. WD 2.7 mm		
AX.7340	S40x/0.75 PL-SAFi objective. WD 1.35		
AX.7300	S100x/1.25 oil-immersion PL-SAFi objective.		
	WD 0.18 mm		
WD = Work	WD = Working distance		

*25 mm mounting thread

HEADS

AX.5700-ADD

Ergonomical Siedentopf trinocular head with tilting tubes ADD-ON option for Achios-X observer Only with the purchase of new microscopes Add the AX.5700-ADD price to a Achios-X Observer model in order to have the prices of a configuration with ergo titilng head and order the microscope as

AX.1158 xxxx / AX.3158-xxxx

CONDENSERS

AX.9100 Standard Abbe Condenser

AX.9105-ADD

Swing-out Abbe Condenser Add-on option. Only

with new microscopes

AX.9105 Swing-out Abbe Condenser

CAMERA

AX.9850 C-mount adapter 0.5x

MISCELLANEOUS

AX.9896-ADD Nosepiece with 6 objectives ADD-ON option for Achios-X Observer. Only available with the purchase of a new microscope

DX.9501-R-ADD

Mechanical stage with Gorilla glass, right handed ADD-ON option. Only available with the purchase of a new microscope

AX.9660 Simple polarization kit



UT



State-of-the-art microscopes for advanced life science fluorescence applications. The outstanding optical performance of the Delphi-X Observer[™] makes it ideal for life science fluorescence applications, where a high performance optical system is required. The larger 22 mm fields of view of the super wide field eyepieces and the high numerical aperture of the plan Fluarex 60 mm parfocal EIS objectives enable perfect observations and color rendering at high resolving power



















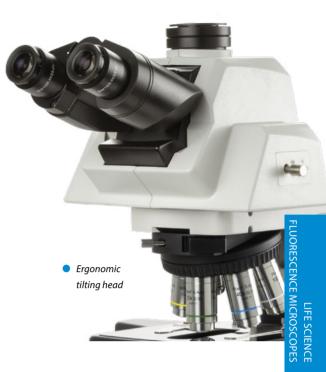


DX.3153-PLi 454 (h) x 260 (w) x 367 mm (d) | 26 kg DX.3153-PLi/HAL 454 (h) x 260 (w) x 480 mm (d) | 26.5 kg

DX.3153-PLi

HIGHLIGHTS

- Trinocular model
- Ergonomic tilting head
- Super wide field SWF 10x/22 mm, Ø 30 mm tubes
- Sextuple reversed nosepiece
- Enhanced infinity corrected EIS optical system
- 60 mm parfocal plan EIS objectives
- 60 mm parfocal plan semi-apochromatic EIS objectives
- M25 objective thread mounting
- 100 W HBO mercury vapor illumination
- 3 W NeoLED™ illumination
- 100 W halogen illumination



SPECIFICATIONS

EYEPIECES

Extended wide field EWF 10x/22 mm, Ø 30 mm tubes

STANDARD HEAD

Siedentopf trinocular head with 30° inclined tubes. Interpupillary distance adjustable between 47 and 78 mm. Three position beam splitter (0:100/80:20 / 100:0). Diopter ± 5 adjustments on both eyepieces

ERGONOMIC TILTING HEAD

Optional ergonomic 0 to 35° tilting trinocular head supplied with SWF 10x/25 mm eyepieces, interpupillary distance 47-78 mm and photo tube, standard with Ø 23.2 mm tube

NOSEPIECE

Revolving sextuple reversed nosepiece on ball-bearings with 25 mm mounting threads for objectives

MOTORIZED MODEL

The Delphi-X Observer[™] can be supplied with a motorized revolving sextuple reversed nosepiece together with a flipdown condenser. A precise step-motor allows the user to switch from objective by a simple push of a button. Another button allows quick switching between two preselected objectives. The electronics memorize automatically the

light intensity levels for each objective after switching. The electronics also automatically flip-out the front lens of the flip-down condenser when the 4x objective is used

ENHANCED INFINITY SYSTEM (EIS)

The enhanced infinity system (EIS) of the Delphi-X Observer™ consists of super wide field SFWF 10x22 mm eyepieces, high numerical aperture 60 mm parfocal objectives and a 200 mm focal length tube lens. This tube lens reduces the angle of the light rays passing through the optics and as a direct result it significantly improves the chromatic aberration corrections and contrast of the images produced. The objectives with larger diameter enable much higher numerical apertures, improving the overall resolving power of the optical system

PLAN ACHROMATIC EIS OBJECTIVES

(clinical routine applications)

The Delphi-X Observer™ is supplied with plan achromatic 4x/0.10, 10x/0.25, 20x/0.40, S40x/0.65 and S100x/1.25 (oil immersion) infinity corrected EIS objectives Available as an option:

2x/0.06, S50x/0.95 (oil immersion) and S60x/0.80



OBJECTIVES

Plan PLi	2x/0.06*	4x/0.10	10x/0.25	20x/0.40	S40x/0.65	S50x/0.95 oil*	S60x/0.80*	S100x/1.25 oil	S100x/1.25 oil iris*
Plan semi-apo Fluarex		4x/0.13	10x/0.30	20x/0.50	S40x/0.75			S100x/1.30 oil	

All objectives are 60 mm parfocal and have a M25 mounting thread, all optics are anti-fungus treated and anti-reflection coated for maximum light throughput and all S40x, S50x, S60x and S100x objectives are spring loaded * Optional

PLAN SEMI-APOCHROMATIC FLUAREX **OBJECTIVES**

(Anatomo- and histopathology applications)

The Delphi-X Observer[™] can also be supplied with plan semi-apochromatic 4x/0.13, 10x/0.30, 20x/0.50, S40x/0.75 and S100x/1.30 (oil immersion) infinity corrected EIS objectives

STAGE

190 x 152 mm stage with 78 x 32 mm integrated right-handed mechanical stage. Supplied with scratch-resistant Gorilla glass. Sapphire scratch-resistant glass is available on request. Left-handed mechanical stage is available on request

FOCUSING

Coaxial coarse and fine adjustment, 100 graduations, 1 μm precision, 100 μm per rotation, total travel range is approximately 35 mm. Supplied with an adjustable rack stop to prevent damage to sample and objectives. The coarse adjustments are equipped with friction control. The focusing knobs can be switched from left to right according to the user's preference

CONDENSER FOR BRIGHTFIELD

In height adjustable N.A. 0.90/1.25 Abbe swing-out condenser with numerical aperture identification marks

ILLUMINATION FOR FLUORESCENCE

The attachment for fluorescence of the Delphi-X Observer™ is equipped with a rotating block which can contain up to six filter cubes and supplied with 100 W HBO mercury vapor light source for a broad powerful light spectrum

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

DIASCOPIC ILLUMINATIONS

Two Köhler illuminations are available for the Delphi-X Observer[™] microscope:

- Diascopic intensity adjustable 3 W NeoLED™ Köhler illumination with internal 100-240 V power supply
- · Diascopic intensity adjustable 100 W halogen Köhler illumination with internal 100-240 V power supply

The diascopic halogen illumination comes with two pushin/push-out neutral density filters for smooth attenuation of the light intensity for all kind of samples and with one Light Balancing Daylight filter (LBD). The diascopic NeoLED™ illumination comes with a frosted difuse filter

LIGHT INTENSITY MEMORY FUNCTION

The electronics memorize automatically the light intensity levels for each objective after switching. The electronics also automatically flip out the front lens of the flip-down condenser when the 4x objective is used. Optionally available, only for a new Delphi-X Observer

NEOLED™

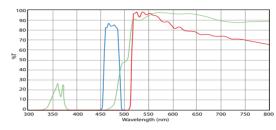
The innovative NeoLED™ design is a combination of a custom LED and a specially designed thin lens with a short focal length in order to obtain three main benefits:

- · More oblique light from the LED light source can be captured, which increases the light output significantly
- · Less energy is required to achieve this level of light intensity
- The larger aperture of NeoLED™ allows the optical system to produce images at higher resolutions, very close to the theoretical diffraction limit of the optics

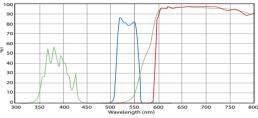
STANDARD GENERAL PURPOSE FLUORESCENCE FILTER SETS

Supplied with standard fluorescence filter sets for blue excitation (EX460-495 DM505 EM510LP) and green excitation (EX510-550 DM570 EM750LP), UV shield and external power supply. Optional: fluorescence filter sets for UV excitation (EX330-385 DM400 EM420LP) and violet excitation (EX400-410 DM455 EM460LP). On special request, the microscope can also be supplied with optimized and zero-pixel shift optimized filter sets on request. See end of this chapter

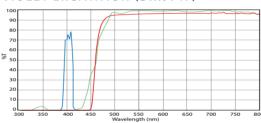
BLUE EXCITATION (DX.9745)



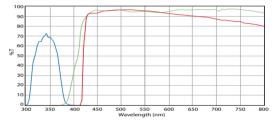
GREEN EXCITATION (DX.9746)



VIOLET EXCITATION (DX.9747)



ULTRA-VIOLET EXCITATION (DX.9748)



Other with more specific and optimized and application related fluorescence filter sets are also available

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

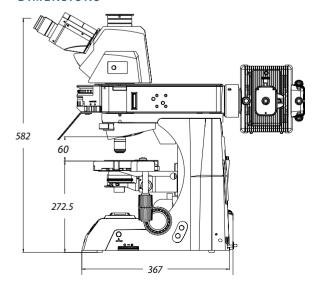
CARRYING GRIP

The carrying grip at the back of the microscope ensures safe transportation of the microscope and the integrated tool & holder makes sure the right tool is always available

PACKAGE CONTENT

Supplied with power cord, dust cover, a spare fuse, user manual and 5 ml immersion oil. All packed in a polystyrene box

DIMENSIONS



UI

DELPHI-X OBSERVER FOR FLUORESCENCE WITH TRINOCULAR HEAD

MODELS	SWF 10x/22 mm eyepieces	Plan 4/10/20/S40/ S100x oil EIS objectives	Plan semi-apo Fluarex 4/10/20/ S40/S100x oil EIS objectives	3 W NeoLED™ illumination	100 W Halogen illumination
DX.3153-PLi	•	•		•	
DX.3153-APLi	•		•	•	
DX.3153-PLi/HAL	•	•			•
DX.3153-APLi/HAL	•		•		•

FOR ORDERING MOTORIZED MODELS

Substitute the third digit 5" of the model reference with the digit 7". Example: DX.1173-PLi = DX.1153-PLi model but with motorized nosepiece, flip-down condenser and automatic light control

FOR ORDERING LIGHT INTENSITY MEMORY FUNCTION ONLY

Substitute the third digit 5" of the model reference with the digit 8". Example: DX.1183-PLi = DX.1153-PLi model but with automatic light control

ACCESSORIES AND SPARE PARTS

EYEPIECES

DX.6210	Super wide field SWF 10x/22 mm eyepiece for	DX.7250	S
	Ø 30 mm tube	DX.7260	S
DX.6210-CM	Super wide field SWF 10x/22 mm eyepiece with	DX.7200	S
	micrometer and crosshairs for \emptyset 30 mm tube	DX.7200-I	S
DX.6210-SG	Super wide field SWF 10x/22 mm eyepiece with		ir
	20 x 20 square grid reticle. For \emptyset 30 mm tube		
DX.6012	Wide field WF 12.5x/17.5 mm eyepiece	Plan Semi-A	р
	for Ø 30 mm tube	EIS 60 mm fo	ar
DX.6015	Wide field WF 15x/16 mm eyepiece	DX.7304	4
	for Ø 30 mm tube	DX.7310	1
DX.6020	Wide field WF 20x/12 mm eyepiece for	DX.7320	2
	Ø 30 mm tube	DX.7340	S
DX.6099-L	Eyecup for eyepieces	DX.7300	S

OBJECTIVES

Plan infinity corrected PLi, EIS 60 mm parfocal

DX.7201	1x/0.04 PLi objective. WD 3.2 mm
DX.7202	2x/0.06 PLi objective. WD 7.5 mm
DX.7204	4x/0.10 PLi objective. WD 30 mm
DX.7210	10x/0.25 PLi objective. WD 10.2 mm
DX.7220	20x/0.40 PLi objective. WD 12 mm
DX.7240	S40x/0.65 PLi objective. WD 0.7 mm

DX.7250	S50x/0.95 PLi oil objective. WD 0.19 mm
DX.7260	S60x/0.80 PLi objectives. WD 0.3 mm
DX.7200	S100x/1.25 PLi oil immersion objective. WD 0.2 mm
DX.7200-I	S100x/1.25 PLi oil immersion objective with built-
	in iris diaphragm. WD 0.2 mm

oochromatic Fluarex infinity corrected, PL-SAFi

EIS 60 mm	farfocal
DX.7304	4x/0.13 PL-SAFi objective. WD 16.5 mm
DX.7310	10x/0.30 PL-SAFi objective. WD 8.1 mm
DX.7320	20x/0.50 PL-SAFi objective. WD 2.1 mm
DX.7340	S40x/0.75 PL-SAFi objective. WD 0.7 mm
DX.7300	S100x/1.30 PL-SAFi oil immersion objective.
	WD 0.15 mm

WD = working distance

MISCELLANEOUS

DX.9501-R	Stage with Gorilla glass. Right handed
DX.9501-L	Stage with Gorilla glass. Left handed
DX.9504-R	Stage with Sapphire glass. Right handed
DX.9504-L	Stage with Sapphire glass. Left handed
DX.9501-LG	Option* for left handed stage with Gorilla glass

DX.9504-RS Option* for right handed stage with Sapphire glass **DX.9504-LS** Option* for left handed stage with Sapphire glass **SL.1385** 100 W HBO mercury vapor lamp for fluorescence * Option mounted only on new Delphi-X Observer™ microscopes (resp. DX.xx5x-xxx/RS and DX.xx5x-xxx/LS)

CONDENSERS

DX.9105	Abbe condenser with 0.9/1.25 swing-out front lens
DX.9110	Dry darkfield condenser

DX.9112 Oil immersion darkfield condenser

CAMERA ACCESSORIES

DX.9810	C mount with 1 magnification for C mount comore
DX.9610	C-mount with 1 magnification for C-mount camera
DX.9835	C-mount with high resolution relay 0.35x
	objective for 1/3 inch C-mount camera
DX.9850	C-mount with high resolution relay 0.50x
	objective for 1/2 inch C-mount camera
DX.9863	C-mount with high resolution relay 0.63x
	objective for 2/3 inch C-mount camera
AE.5130	Universal SLR adapter with built-in 2x lens for
	standard 23.2 mm tube. Needs T2 adapter
AE.5025	T2 adapter for Nikon D SLR digital camera
AE.5040	T2 adapter for Canon EOS SLR digital camera

DX.9501-L Stage with Gorilla glass. Left handed



MISCELLANEOUS

DX.9660	Simple polarization kit
DX.9662	Special polarization kit for gout
DX.9704	Yellow filter for lamphouse, diameter 45 mm
DX.9960	100 W 24 V halogen bulb (revision 1 models)
DX.9961	100 W 12 V halogen bulb (revision-2 models
DX.9993	3 Watt LED replacement
AE.5214	500 mA 250 V fuses for LED models, 10pcs
AE.5216	5 A 250 V fuses for halogen models, 10pcs



DX.9112 Oil immersion darkfield condenser

DISPOSABLES

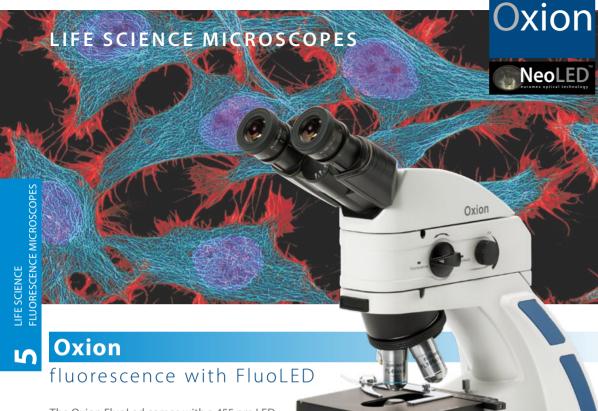
B.5155	Microscope slides 76 x 26 mm, ground edges,
	50 pieces per pack
B.5165	Coverglasses 18 x 18 mm, 0.13 - 0.17 mm,
	100 pieces
B.5168	Coverglasses 22 x 22 mm, 0.13 - 0.17 mm,
	100 pieces
B.5245	Lens cleaning paper, 100 sheets per pack
B.5255	Immersion oil, 25 ml. Refraction index $n = 1.515$
B.5274	Isopropyl alcohol 99%, 200 ml
B.5275	Cleaning kit: lens fluid, lint free lens tissue/paper,
	brush, air blower, cotton swabs











The Oxion FluoLed comes with a 455 nm LED and one filter cube, especially developed for efficient and fast detection of tuberculosis by the Auramine-O fluorochrome. Other FluoLED 470 and 560 nm wavelengths are also available. The Oxion fluorescence microscopes are intended for professionals in life science applications, university labs and research centers





















454 (h) x 185 (w) x 294 mm (d) | 8.7 kg

OX.3230

HIGHLIGHTS

- Binocular and trinocular models
- HWF 10x/22 mm eyepieces
- Reversed nosepiece for a maximum of five objectives
- Plan, plan Fluarex and plan semi apochromatic
- Fluarex IOS objectives
- Integrated mechanical stage
- Coaxial coarse and fine adjustments
- Height adjustable Abbe N.A. 1.25 condenser with iris diaphragm and filter holder
- 3 W LED transmitted illumination
- Fluorescence attachment with single filter block and 455 nm (blue), 470 nm (green) or 560 nm (UV) incident illumination
- Ergonomic stand and head
- 10 Years warranty



• Close up of the OX.3230

SPECIFICATIONS

EYEPIECES

HWF 10x/22 mm eyepieces. All eyepieces can be secured by an Allen screw

HEAD

Binocular and trinocular Siedentopf type heads are supplied with 30° inclined tubes, interpupillary distance from 50 to 75 mm and two \pm 5 diopter adjustments. A unique rotating system allows the ergonomic positioning of both tubes in a high (431 mm) and in a low position (397 mm)

NOSEPIECE

Revolving and reversed nosepiece for a maximum of five objectives

OBJECTIVES

- Plan 4x/0.10, 10x/0.25, S40x/0.65 and S100x/1.25 oil immersion IOS objectives
- Plan semi apochromatic Fluarex 4x/0.10, 10x/0.25, S40x/0.65 and S100x/1.25 oil immersion IOS objectives

All S40x, S60x and S100x oil immersion objectives are spring loaded. All optics are anti-fungus treated and anti-reflection coated for maximum light throughput

FOCUSING

Coaxial coarse and fine adjustments, 200 graduations, 1 µm per graduation, 200 µm per rotation, total travel range is approximately 28 mm. Supplied with an adjustable rack stop to prevent damage to sample and objectives. The coarse adjustments are equipped with friction control

STAGE

150 x 140 mm stage with integrated 76 x 50 mm X-Y mechanical stage

CONDENSER FOR BRIGHTFIELD

Height adjustable Abbe condenser N.A. 1.25 with iris diaphragm. Supplied with a white diffusion filter. A darkfield stop in slider for the 10x, 20x and S40x objectives can also be inserted with magnification indication

CONDENSER FOR FLUORESCENCE

The fluorescence attachment is equipped with an integrated condenser with iris diaphragm and a field diaphragm

ILLUMINATION FOR BRIGHTFIELD

All models are supplied with a 3 W adjustable NeoLED™ illumination with built-in 100-240 V power supply. Köhler illumination with field diaphragm

ILLUMINATION FOR FLUORESCENCE (LED)

The FluoLED attachment is standard delivered with a 455 nm LED (EX 425-475, DM 480, EM 485 LP filter set) for detection of tuberculosis with Auramine-O fluorochrome. FluoLED attachments with 365 nm LED (EX 340-390, DM 400, EM 420 LP filter set, DAPI), 470 nm LED (EX 450-490, DM 495, EM 500-525 filter set, FITC/GFP/eGFP) and 560 nm LED (EX 540-580, DM 585, EM 608-690 filter set, TexasRed) are also available. On special request, the microscope can also be supplied with optimized and zero-pixel shift optimized filter sets on request. See end of this chapter

PACKAGE CONTENT

Supplied with power cord, dust cover, white filter, user manual and 5 ml immersion oil for models with S100x objective. All packed in a polystyrene box

MODELS	Binocular	Trinocular	Plan 4x/10x/S40x/S100x objectives	Plan semi apo Fluarex 4x/10x/S40x/S100x objectives	455 nm FluoLED illumination
OX.3230	•		•		•
OX.3235		•	•		•
OX.3232	•			•	•
OX.3237		•		•	•

ACCESSORIES AND SPARE PARTS

EYEPIECES

AE.3210	HWF 10x/22 mm eyepiece
AE.3215	HWF 15x/13 mm eyepiece
AE.3223	HWF 10x/22 mm eyepiece with
	10 mm/100 micrometer
AE.3225	Pair of eyecups

OBJECTIVES

Plan infinity corrected PLi, IOS 45 mm parfocal

AE.3102	2x/0.06 PLi objective. WD 5 mm
AE.3104	4x/0.10 PLi objective. WD 11.9 mm
AE.3106	10x/0.25 PLi objective. WD 12.1 mm
AE.3108	20x/0.40 PLi objective. WD 1.5 mm
AE.3110	S40x/0.65 PLi objective. WD 0.36 mm
AE.3112	S60x/0.85 PLi objective. WD 0.30 mm
AE.3114	S100x/1.25 PLi oil IOS objective. WD 0.18 mm

Plan Fluarex infinity corrected PLFi, IOS 45 mm parfocal,

IS.7400	S100x/1,30 PLFi objective. WD 0.13 mm
13.7 400	3100X/1,501 E110bjective. Wb 0.13 111111

Plan Semi Apochromatic Fluarex infinity corrected PL-SAFi, IOS 45 mm parfocal

AE.3144	4x/0.13 PL-SAFi objective. WD 18.5 mm
AE.3146	10x/0.30 PL-SAFi objective. WD 10.6 mm
AE.3148	20x/0.50 PL-SAFi objective. WD 2.33 mm
AE.3152	S40x/0.75 PL-SAFi objective. WD 0.6 mm
AE.3156	S100x/1.28 oil immersion PL-SAFi objective.
	WD 0.21 mm

WD = working distance

POLARIZATION ATTACHMENTS

AE.3190	Polarizer/analyzer set
AE.3192	Polarizer slider for nosepiece
AE.3194	Polarizer for lamphouse

FILTERS

AE.3196	Frosted white filter 45 mm, to be mounted
	on lamphouse
AE.3198	Blue filter 45 mm, to be mounted on lamphouse
AE.3200	Yellow filter 45 mm, to be mounted on
	lamphouse
AE.3202	Green filter 45 mm, to be mounted on
	lamphouse

CAMERA ACCESSORIES

CAMERA	ACCESSORIES
AE.5120-2	Standard 23.2 mm diameter tube for Oxion
	photo port revision-2
AE.5130	Universal SLR camera adapter with 2x projection lens
	for 23.2 mm tubes. Needs T2 adapter and AE.5120
AE.5025	T2 adapter for Nikon D digital SLR cameras
AE.5040	T2 adapter for Canon EOS digital SLR cameras
OX.9850	CS/C mount with 0.5x objective for 1/2"
	sensor cameras
OX.9833	CS/C mount with 0.33x objective for 1/3"
	sensor cameras

MISCELLANEOUS

AE.5168-O	Heating stage and temperature controller up
	to 50°C. Only with new microscopes
SL.5510	NeoLED™ replacement unit for Oxion
AE.3199	Glass fuses 3.15 A 250 V, 10 pieces

• AE.5168-O Heating stage and temperature controller



AE.3194 Polarizer for lamphouse



AE.3192 Polarizer slider



DISPOSABLES

PB.5155 Microscope slides 76 x 26 mm, ground edges, 50 pcs

PB.5165 Coverglasses 18 x 18 mm, thickness

0.13-0.17 mm, 100 pieces

PB.5168 Coverglasses 22 x 22 mm, thickness

0.13-0.17 mm, 100 pcs

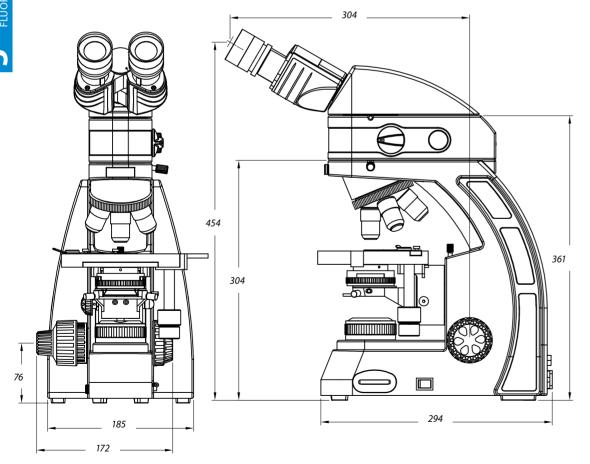
PB.5245 Lens cleaning paper, 100 sheets per pack

PB.5255 Immersion oil, n = 1.515 (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

DIMENSIONS



about

fluorescence

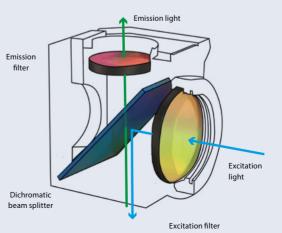
It took many years - since the discovery by Osamu Shimomura of the first proteins aequorin and green fluorescent protein (GFP) in the bioluminescent jellyfish Aeguorea Victoria around the sixties - to develop a specific fluorescence microscope for live-cell imaging which permits essential progress in medical and biological sciences. Today it has become an important tool in Life and Materials Sciences

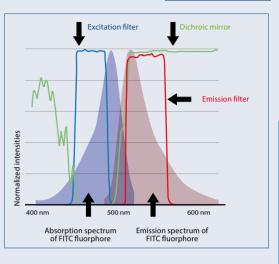
INTRODUCTION TO FLUORESCENCE **MICROSCOPY**

Fluorescence is the phenomenon of subsequent specific emission of photons by a fluorophore (chemical compound) after the absorption of specific excitation photons. Fluorophores are used as a dye for staining cells, tissues or materials that can be observed as markers under a fluorescence microscope

DESIGN OF A FLUORESCENCE MICROSCOPE

The basic function of a fluorescence microscope is to bring specific excitation" wavelengths to a stained specimen (with a specific fluorophore) and to catch the subsequent weak emission wavelengths in order to visualize the fluorescent structures on the retina of the eyes or on an imaging camera





TECHNICAL

FACTS

The excitation light of a microscope for fluorescence is provided with either a mercury vapor light source or a monochrome LED. The selection of the specific fluorophore excitation light is done by a so-called emission interference filter that is mounted in a cube together with a dichroic mirror (beam splitter) and the emission filter. The filtered excitation light is further reflected by the dichroic mirror through the objectives towards the sample

The fluorophore(s) inside the specimen will absorb this excitation energy with some efficiency (quantum yield) and will start re-emitting the so-called emission energy, visible light with longer wavelengths than the absorbed light. The emission light from the specimen that fluoresces will

be collected by the objective, pass the dichroic mirror and
is separated from excitation and other unwanted light
wavelengths by the emission filter. The filtered emission light is
further projected to the eyepieces or/and camera imaging sensor

UV	Violet	Blue	Cyaan	Green	Yellow	Orange	Red	
315-380	380-450	450-490	590-515	515-570	570-590	590-620	620-750	

Achios-X Inverso

fluorescence

Experience optimal comfort and cuttingedge performance with the Achios-X Inverso, an ergonomic masterpiece featuring a state-of-the-art optical system

Tailored to meet the demands of advanced Life Science applications such as life cell imaging and tissue cultures.

This microscope stands as an unparalleled choice



















Achios-X

AI.4058-PLFi

HIGHLIGHTS

- Extra Wide field WF 10x/22 mm, Ø 30 mm
- Head with 45° inclined tubes
- Head with ergo tilting 5° 35° tubes and backwards tilting illumination column
- Revolving quintuple nosepiece
- IOS 60 mm Plan, Plan Phase or Plan Semi-Apochromatic objectives
- Hoffman contrast and 3D relief contrast
- Low positioned stage adjustment knobs
- 3 W NeoLED
- LCD screen for Smart Light Control
- Blue, green and UV LED fluorescence
- 10 Years warranty

SPECIFICATIONS

EYEPIECES

SWF 10x/22 mm wide field eyepieces with adjustable diopter

HEAD

Binocular head with 45° inclined tubes OR binocular ergo head with 5-35° tilting tubes. Interpupillary distance of 48 to 75 mm. Optional side photo port with 100-0/0-100 beamsplitter

NOSEPIECE

Revolving quintuple nosepiece on ball-bearings

OBJECTIVES - 60 MM PARFOCAL

Objectives with 1.2mm coverslip correction

Plan Semi Apo Fluarex IOS 4x/0.13 10x/0.30 20x/0.45 S40x/0.60

Objectives with adjustable coverslip correction

Plan Semi Apo Fluarex IOS 20x/0.45 S40x/0.60 S60x/0.70

Fluarex™ objectives are made of low-absorption glass Fluarex™ is a trademark of Euromex microscopen by. All optics are antifungus treated and anti-reflection coated for maximum light throughput

STAGE

- 170 x 250 mm stage with 129 x 83 mm mechanical X-Y stage
- Supplied with metal insert for Ø 65 glass plate and universal cell culture dish holder (Al.9569)
- Optional metal inserts, Ø 35, Ø 54 and Ø 90 mm cell culture dish holder with 27x26 mm slide holder
- Optional metal insert for Multiwell plates (127.76 x 85.48 mm) (AI.9517)

CONDENSER

- WD (Working distance): 75 mm, without condenser: 187 mm
- The condenser can be removed to increase WD, allowing multilayered culture flasks
- With slot for phase contrast/embossed contrast/Hoffman contrast sliders

For AI.3xxx models

• Condenser N.A. 0.30 with iris diaphragm and slot for sliders

For AI.4xxx models

- Height adjustable Kohler condenser N.A. 0.30 with iris diaphragm and 3 filter holders and shutter function
- Mounted on a backwards tilting illumination column allowing easy access to samples and placement multilayered culture flasks, without removing the condenser

FOCUS ADJUSTMENT

- Coaxial 37.5 mm coarse and fine adjustments with 200 graduations
- Precision 1 μm, 0.2 mm per rotation
- Fine focus knobs are left/right interchangeable

ILLUMINATION

LED epi-fluorescence attachment with 365, 485 and 525 nm LED

Supplied with filters cubes:

UV excitation EX: 360-390 nm - BS: 415 nm -

EM: 435-485 nm for DAPI

Blue excitation EX: 460-495 nm - BS: 505 nm -

EM: 510-550 nm for FITC

Green excitation EX: 528-553 nm - BS: 565 nm -

EM: 578-633 nm for TRITC

SMART LIGHT CONTROL

This intelligent function:

- · memorizes the light intensity level for each objective
- heightens comfort
- · saves valuable time during routine magnification shifts

NEOLED

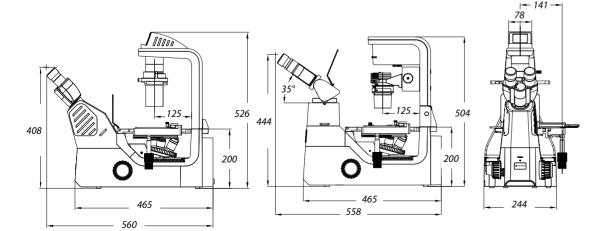
The innovative NeoLED™ design is a combination of a custom LED and a specially designed thin lens with a short focal length. Four main benefits:

- More oblique light from the NeoLED™ light source, which increases the light output significantly
- · Less energy is required to achieve this level of light intensity
- The larger aperture of NeoLED™ allows the optical system of the microscope to produce images at higher resolutions, very close to the theoretical diffraction limit of the optics
- Super long life span, up to 50.000 hrs nominal, L70 norm

PACKAGE CONTENT

- Supplied with Ø 65 glass plate and universal cell culture dish holder, power cord, dust cover and user manual
- Fluorescence models are supplied with an anti-reflection shield to be mounted on the condenser and an orange protection shield

DIMENSIONS





AI.4053-PLFi

MODELS	ergo head	Backwards tilting arm	Plan Semi-Apo Fluarex objectives 4/10/20/40 IOS	Height-adjustable condenser	Epi-fluorescence equipment for B, G and UV excitation	Köhler illumination
Al.3053-PLFi	•		•		•	
Al.4058-PLFi		•	•	•	•	•

U

ACCESSORIES AND SPARE PARTS

EYEPIECES (Ø 30 MM TUBE)

AI.6015 WF 15x/16 mm eyepiece AI.6020 WF 20x/12 mm eyepiece AI.6099 Pair of eyeshades

OBJECTIVES

Plan infinity corrected PLi, EIS 60 mm parfocal,

AI.8304 4x/0.10 PLi objective*. LWD 30 mm 10x/0.25 PLi objective*. LWD 10.2 mm AI.8320 20x/0.40 PLi objective*. LWD 12.0 mm 40x/0.60 PLi objective*. LWD 2.2 mm

Plan Semi Apo Fluarex PL-SAFi, EIS 60 mm parfocal

4x/0.13 PL-SAFi objective*. LWD 17 mm AI.8604 10x/0.30 PL-SAFi objective*. LWD 7.4 mm AI.8610 20x/0.45 PL-SAFi objective*. LWD 8 mm AI.8620 40x/0.60 PL-SAFi objective*. LWD 3.6 mm AI.8640

Plan Semi Apochromatic Fluarex PL-SAFi with iris diaphragm, EIS 60 mm parfocal

AI.8620-I 20x/0.45 PL-SAFi objective**. LWD 7.5-8.8 mm AI.8640-I 40x/0.60 PL-SAFi objective.** LWD 3-4.4 mm AI.8660-I 60x/0.70 PL-SAFi objective***. LWD 1.8-2.6 mm

Plan Semi-Apochromatic Phase Fluarex PLPH-SAFi EIS 60 mm parfocal

AI.8904 4x/0.13 PLPH-SAFi objective**. LWD 17.78mm 10x/0.3 PLPH-SAFi objective**. LWD 7.4mm AI.8920 20x/0.45 PLPH-SAFi objective**. LWD 8 mm 40x/0.6 PLPH-SAFi objective**. LWD 3.6 mm AI.8940

Plan Semi-Apochromatic Phase Fluarex PLPH-SAFi with iris diaphragm. EIS 60 mm parfocal

AI.8920-I 20x/0.45 PLPH-SAFi objective**. LWD 7.5-8.8 mm AI.8940-I 40x/0.6 PLPH-SAFi objective**. LWD 3-4.4mm AI.8960-I 60x/0.7 PLPH-SAFi objective***. LWD 1.8-2.6mm WD = working distance

*Coverglass correction 1.2 mm

** Coverglass correction 0-2 mm

*** Coverglass correction 0.1-1.3 mm

All objectives M25

CAMERA ACCESSORIES

For AI.1053 and AI.3153 models

AI.9810-3 C-mount photo adapter 1x AI.9850-3 C-mount photo adapter 0.5x

For Al.4058 and Al.4158 models with Ergo head

AI.9810-4 C-mount photo Adapter 1x AI.9870-4 C-mount photo Adapter 0.7x Al.9850-4 C-mount photo Adapter 0.5x

AI.9506

AI.9550 Stage extension plate

MISCELLANEOUS AI.9205 UV protection shield Anti-reflection shield for standard condensers of models for fluorescence AI.9569 Universal cell culture dish holder, Ø 35-65 mm. Also holds Multiwell plates AI.9508 Metal insert with hole for culture flasks AI.9517 Metal insert for MultiWell plates (127.76 x 85.48 mm) AI.9535 Petri dish insert 35 mm with 27 x 26 mm slide holder AI.9554 Petri dish insert 54 mm with 27 x 26 mm slide holder AI.9590 Petri dish insert 90 mm with 27 x 26 mm slide holder

Transparant glass insert ø 112 mm, inner hole ø 30 mm



AI.9517 and AI.9535 combined



Al.9554 Petri dish insert 54 mm



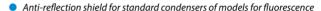
AI.9517 MultiWell plate holder



Al.9535 Petri dish insert 35 mm



AI.9590 Petri dish insert 90 mm









an inverted microscope for the professional who needs to observe tissues or cells stained with fluorescence dyes. Super contrast semiapochromatic Fluarex[™] objectives with collar adjustment ring assure perfect observation of cells or tissues in 1.2 mm thick Petri dishes or flasks

DI.3053-PLPHFi





















DI.1053-PLPHFi

HIGHLIGHTS

- Life science applications
- Observation of fluorescence in tissues and cells
- Brightfield, phase contrast fluorescence observations
- DIC (differential interference contrast)
- Long working distance IOS plan semi-apochromatic Fluarex achromatic objectives
- Revolving sextuple nosepiece
- 5 W LED or 100 W halogen transmitted illumination
- 100 W HBO mercury vapor fluorescence illumination
- Backwards tilting condenser arm
- Easy placement of large objects
- 10 Years warrantv



SPECIFICATIONS

EYEPIECES

Pair of HWF plan 10x/25 mm or 10x/22 mm eyepieces with diopter adjustment

HEAD

Trinocular 45° inclined tubes. Interpupillary distance of 47 to 78 mm. Trinocular head with 100-0, 80/20 and 0/100 positions

NOSEPIECE

Revolving sextuple nosepiece on ball-bearings

OBJECTIVES

High numerical infinity semi-apochromatic long working distance plan phase Fluarex PLPHFi 10x/0.30, 20x/0.45, S40x/0.60 IOS objectives enable the sub-cellular structures. An optional 60x/0.80 IOS objective is also available. The 20x, S40x and optional S60 objectives are equipped with collar adjustment ring for glass thicknesses from 0 to 1.2 mm Fluarex[™] objectives are made of low-absorption glass. Fluarex[™] is a trademark of Euromex microscopen by. All optics are anti-fungus treated and anti-reflection coated for maximum light throughput

STAGE

Stage 340 x 230 mm, equipped with a coaxial mechanical 130 x 85 mm X-Y stage. Supplied with:

- · Metal insert for O 38 mm cell culture dish
- Metal insert for O 54 mm cell culture dish or 76 x 26 mm slides
- Metal insert for Multiwell plates (127.76 x 85.48 mm)
- Metal insert for Teraski plates (83.3 x 58.0 mm)
- · Optional universal cell culture holder

CONDENSER

Rotating N.A. 0.55 condenser with iris diaphragm. Working distance 26 mm. Supplied with phase contrast annuli for 10x/20x, 40x and 60x objectives and the DIC prisms for the 10x/20x/40x and 60x objectives. Three filter holders allow the insertion of Ø 38 mm filters in the optical path. The arm with condenser can be tilted backwards for convenient access to the stage. This allows easy placement of large objects like flasks and Petri dishes

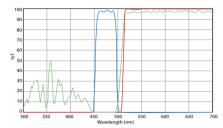
LENS CHANGER

A lens changer with a 1.5x lens allow intermediary magnifications of 1.5 times the standard objective magnifications. Switching from 20x to 30x or 40 to 60 and from 60x to 90x magnification can be done without the need to re-focus on the sample

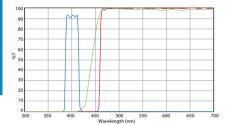
1

FLUORESCENCE ATTACHMENT

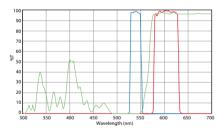
The Delphi-X Inverso for fluorescence microscopy is supplied with a 6-position fluorescence filter set wheel and comes with two fluorescence filter sets for blue and green excitation



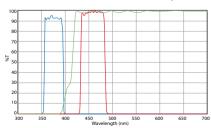
DI.9745 Blue excitation EX 460-495 DM 505 EM 510 long pass



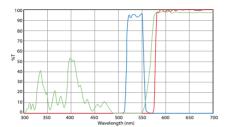
 DI.9747 Violet excitation EX 400-410 DM 455 EM 460 Long pass



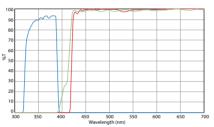
 DI.9750.TRITC Green excitation EX 528-553 DM 565 EM 578-633 band pass



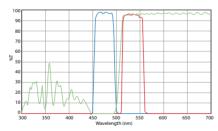
 DI.9750.DAPI UV excitation EX 360-390 DM 415 EM 435-485 band pass (DI.9745 and DI.9746). On special request, the microscope can also be supplied with optimized and zero-pixel shift optimized filter sets on request. See end of this chapter



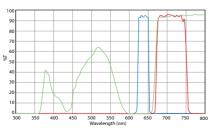
 DI.9746 Green excitation EX 510-550 DM 570 EM 575 long pass



 DI.9748 Ultra violet excitation EX 330-385 DM 410 EM 420 Long pass



 DI.9750.FITC Blue excitation EX 460-495 DM 505 EM 510-550 band pass



 DI.9750.R Red excitation EX 620-650 DM 660 EM 670-750 band pass

FOCUSING ADJUSTMENT

Coaxial 10 mm coarse and fine adjustments, 1 µm precision and with friction adjustment

ILLUMINATION

Fluorescence illumination with a 100 W mercury vapor lamp with external 100-240 V power supply. Transmitted 5 W LED or 100 W halogen illumination and internal power supply. Fuse holder 3.15 A / 250 V

PACKAGE CONTENT

Supplied with metal insert for Ø 38 mm cell culture dish and a metal insert for Ø 54 mm cell culture dish with 76 x 26 mm slides, metal insert for Multiwell plates, metal insert for Teraski plates, blue and green interference Ø 45 mm filters, power cord, dust cover, green filter and alignment telescope and user manual

MODELS	10x/20x/40x PLPHFi objectives	100 W Halogen illumination	5 W LED illumination	100 W HBO fluorescence illumination
DI.3053-PLPHFi	•		•	•
DI.3053-PLPHFi/HAL	•	•		•





• 6-Position fluorescence filter set wheel and 1.5 lens changer

ACCESSORIES AND SPARE PARTS

EYEPIECES

DI.6010	Super wide field SWF 10x/25 mm eyepiece
DI.6010-C	Super wide field SWF 10x/25 mm eyepiece with
	crosshairs
DI.6010-M	Super wide field SWF 10x/25 mm eyepiece with
	micrometer
DI.6010-CM	Super wide field SWF 10x/25 mm eyepiece with
	micrometer and crosshairs
DI.6010-SG	Super wide field SWF 10x/25 mm eyepiece with
	20 x 20 square grid reticle
DI.6012	Wide field WF 12.5x/17.5 mm eyepiece
DI.6015	Wide field WF 15x/16 mm eyepiece
DI.6020	Wide field WF 20x/12 mm eyepiece
DI.6099-L	Eyecups for eyepiece

OBJECTIVES

Plan Semi-Apochromatic Fluarex infinity corrected PL-SAFi,

EIS 60 mm parfocal. Recommended for fluorescence		
DI.8604	4x/0.13 IOS objective, LWD 17 mm	
DI.8610	10x/0.30 IOS objective*, LWD 7.4 mm.	
	Also recommended for DIC	
DI.8620	20x/0.45 IOS objective*, LWD 8 mm.	
	Also recommended for DIC	
DI.8640	40x/0.60 IOS objective*, LWD 3.3 mm.	
	Also recommended for DIC	
DI.8660	60x/0.70 IOS objective**, with built-in iris	
	diaphragm. LWD 1.9 mm	
*Coverglass correction 1.2 mm		

**Coverglass correction 0.1 - 1.3 mm

Plan Phase Semi-Apochromatic Fluarex infinity corrected PLPH-SAFi, EIS 60 mm parfocal

DI.8710 10x/0.30, PLPH-SAFi objective*. LWD 10.2 mm DI.8720 20x/0.45 PLPH-SAFi objective**. LWD 7.5 to 8.8 mm

DI.8740 S40x/0.60 PLPH-SAFi objective**. LWD 3 to 4.4 mm

*Coverglass correction 1.2 mm

**Coverglass correction 0-2 mm

LWD = Long working distance

M25 mounting thread

DIFFERENTIAL INTERFERENCE CONTRAST

DI.9690-00 DIC prism with polarizer for condenser. To be used with Plan Semi-Apo 20/40x objectives

DI.9690-10 DIC prism with polarizer for condenser. To be used with Plan Semi-Apo 10x objective

DI.9693-10 DIC prism for nosepiece to be used with Semi-Apo 10x objective

DI.9693-20 DIC prism for nosepiece to be used with Semi-Apo 20x objective

DI.9693-40 DIC prism for nosepiece to be used with Semi-Apo 40x objective

DI.9698 DIC analyzer for nosepiece

STANDARD GENERAL PURPOSE **FLUORESCENCE FILTER SETS**

filter from 420 nm

Long pass type:

DI.9745 Fluorescence filter block for blue excitation with excitation at 460 to 495 nm, dichroic mirror at 505 nm and emission long pass filter from 510 nm DI.9746 Fluorescence filter block for green excitation with excitation at 510 to 550 nm, dichroic mirror at 570 nm and emission long pass filter from 575 nm DI.9747 Fluorescence filter block for violet excitation with excitation at 400 to 410 nm, dichroic mirror at 455 nm and emission long pass filter from 460 nm DI.9748 Fluorescence filter block for ultra violet

excitation with excitation at 330 to 385 nm,

dichroic mirror at 410 nm and emission long pass

DI.9749 Empty cube for Delphi-X Inverso Fluorescence attachment

Band-pass type

DI.9750.TRITC

Fluorescence filter block for blue excitation with excitation at 528 to 553 nm, dichroic mirror at 565 nm and emission band pass filter at 578 to 633 nm. Suitable for TRTIC

DI.9750.FITC

Fluorescence filter block for green excitation with excitation at 460 to 495 nm, dichroic mirror at 505 nm and emission band pass filter at 510 to 550 nm. Suitable for FITC

DI.9750.DAPI

Fluorescence filter block for ultraviolet excitation with excitation at 360 to 390 nm, dichroic mirror at 415 nm and emission band pass filter at 435 to 485 nm. Suitable for DAPI

DI.9750.RED

Fluorescence filter block for red excitation with excitation at 620 to 650 nm, dichroic mirror at 660 nm and emission band pass filter at 670 to 750 nm

CAMERA ACCESSORIES

DI.9810 C-mount with 1x magnification for

C-mount camera

DI.9840 C-mount with high resolution 0.40x objective

for 1/3 inch C-mount camera

DI.9850 C-mount with high resolution relay 0.50x

objective for 1/2 inch C-mount camera

MISCELLANEOUS

DI.9961 100 Watt 12 V halogen bulb DI.9997 5 Watt LED replacement

AE.5214 500 mA 250 V fuses for LED models, 10pcs AE.5216 5 A 250 V fuses for halogen models, 10pcs SL.1385 100 W HBO mercury vapor lamp for fluorescence

DISPOSABLES

PB.5155 Microscope slides 76 x 26 mm, ground edges, 50 pieces per pack

PB.5157-W Microscope slides 76 x 26 mm, ground edges and frosted side white color, 50 pieces per pack

PB.5157-B Microscope slides 76 x 26 mm, ground edges and frosted side blue

color, 50 pieces per pack

PB.5165 Coverglasses 18 x 18 mm 0.13 - 0.17 mm, 100 pieces

PB.5168 Coverglasses 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

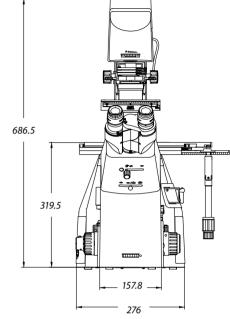
PB.5274 Isopropyl alcohol 99%, 200 ml

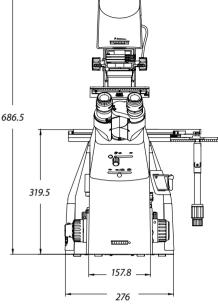
PB.5275 Cleaning kit: lens fluid,

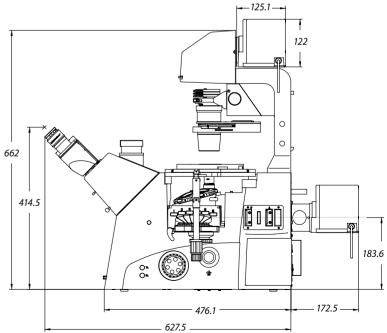
> lint free lens tissue/paper, brush, air blower,

cotton swabs

DIMENSIONS







Uī



Oxion Inverso

fluorescence

The Oxion Inverso inverted microscopes for fluorescence are useful for observation of living organisms and tissue cultures in cell culture dishes and flasks

The Oxion Inverso models for fluorescence are available with brightfield and phase contrast. Dedicated objectives are suitable for 1.2 mm thick glass bottoms of cell culture dishes and flasks





















OXION FLUORESCENCE OX.2453-PLPHF

OX.2453-PLPHF

SPECIFICATIONS

EYEPIECES

Pair of HWF plan 10x/22 mm eyepieces

HEAD

Trinocular 45° inclined tubes with extended low and high positions for eyepieces. One diopter adjustment on left eyepiece. Interpupillary distance of 54 to 75 mm. Trinocular head with 0-100 % beamsplitter

NOSEPIECE

Revolving quintuple nosepiece on ball-bearings

OBJECTIVES FOR BRIGHTFIELD AND FLUORESCENCE MICROSCOPY

(models OX.2253-PLF and OX.2453-PLF) infinity color corrected long working distance plan Fluarex 10x/0.30, 20x/0.45, 40x/0.65 IOS objectives. An optional plan Fluarex 60x/0.75 IOS objective is also available

OBJECTIVES FOR PHASE CONTRAST AND FLUORESCENCE MICROSCOPY

(models OX.2253-PLPHF and OX.2453-PLPHF) infinity color corrected long working distance plan Fluarex 10x/0.30 and plan phase Fluarex 20x/0.45 and S40x/0.65 **IOS** objectives

All objectives corrected for 1.2 mm thickness. All optics are anti-fungus treated and anti-reflection coated for maximum light throughput

ICSI SET

HIGHLIGHTS

Life science applications

10 Years warranty

 Revolving quintuple nosepiece 5 W LED transmitted illumination

Observation of tissue cultures, living cells Brightfield and phase contrast fluorescence

• 100 W mercury vapor lamp for fluorescence

Long working distance IOS plan achromatic objectives

Micromanipulator with two 3D hydraulic joysticks for Intracytoplasmic sperm injection is available for the Oxion Inverso fluorescence. See chapter 4

STAGE

Stage 250 x 230 mm equipped with a coaxial mechanical 120 x 78 mm X-Y stage, supplied with:

- Stage extension plate
- Metal insert for Ø 65 mm cell culture dish or Multiwell
- Metal insert for 76 x 26 mm slides and 54 mm cell dish (only for models with X-Y stage)
- · Glass insert with Ø 30 mm hole
- Optional universal cell culture holder



Accessories supplied with models with mechanical stage

CONDENSER

N.A. 0.30 condenser with iris diaphragm. Working distance 72 mm. The models for the phase contrast OX.2253-PLPHF and OX.2453-PLPHF are supplied with a slider with 4x/10x and 20x/40x pre-centered phase rings

FOCUSING ADJUSTMENT

Coaxial 25 mm coarse and fine adjustments, 2 µm precision and with friction adjustment

ILLUMINATION

Transmitted 5 W LED Intensity adjustable with internal 100-240 V power supply. Fuse holder 3.15 A / 250 V

The fluorescence models are equipped with a reflected 100 W HBO mercury vapor light source with external 100-240 V power supply, fuse holder 3.15 A / 250 V, UV protection shield

LED ILLUMINATION FOR FLUORESCENCE

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

FILTERS FOR PHASE CONTRAST MODELS

Interference filter 550 nm green and blue filter, Ø 45 mm

STANDARD FLUORESCENCE FILTERS

(for fluorescence models)

The fluorescence models OX.2253-PLF and OX.2253-PLPHF are come with two filter sets for excitation:

- · In the blue spectrum, OX.9745, EX465-495 (BP) DM505 (LP) EM515-555 (BP)
- · In the green spectrum, OX.9746, EX540-580 (BP) DM600 (LP) EM605-665 (BP)

The fluorescence models OX.2453-PLF and OX.2453-PLPHF equipped with a 4-positions filter rail are supplied with three standard filter sets for excitation:

- · In the blue spectrum, OX.9745, EX465-495 (BP) DM505 (LP) EM515-555 (BP)
- · In the green spectrum, OX.9746, EX540-580 (BP) DM600(LP) EM605-665 (BP)
- · In the UV spectrum, OX.9747, EX361-389 (BP) DM415 (LP) EM435-485 (BP)

On special request, the microscope can also be supplied with optimized and zero-pixel shift optimized filter sets on request. See end of this chapter

PACKAGE CONTENT

Supplied with metal insert with Ø 25 mm hole, metal insert for Ø 35 mm cell culture dish, blue LBD and green 550 nm interference Ø 45 mm filter, power cord, dust cover and user manual. Phase contrast models are supplied with 4x/10x and 20x/40x phase contrast annuli in slider, green filter and alignment telescope



Standard accessory

MODELS	LWD Plan Fluarex 10x/ 20x/40x objectives	LWD Plan Fluarex 10x and plan phase Fluarex 20x/40x objectives	2-position filter block	4-position filter block	Mechanical stage
OX.2253-PLF	•		•		•
OX.2453-PLF	•			•	•
OX.2253-PLPHF		•	•		•
OX.2453-PLPHF		•		•	•

Fluarex[™] objectives are made of low-absorption glass for fluorescence applications Fluarex[™] is a trademark of Euromex microscopen by LWD = long working distance

ACCESSORIES AND SPARE PARTS

EYEPIECES

OX.6010	HWF 10x/22 mm eyepiece
OX.6015	HWF 15x/16 mm eyepiece
OX.6110	HWF 10x/22 mm eyepiece with micrometer reticule
OX.6099	Pair of eyecups

Plan Fluarex infinity corrected PLFi, for brightfield and fluorescence(1)

OX.8604	4x/0.13 PLFi objective, LWD 18.95 mm
OX.8610	10x/0.30 PLFi objective, LWD 7.27 mm
OX.8620	20x/0.45 PLFi objective, LWD 6.03 mm
OX.8640	40x/0.65 PLFi objective, LWD 1.79 mm
OX.8660	60x/0.75 PLFi objective, LWD 1.28 mm

Plan Phase Fluarex infinity corrected PLPHFi for fluorescence AND phase contrast (1) (2) (3)

OX.8720	20x/0.45 PLPHFi objective. LWD 6.12 mm
OX.8740	40x/0 65 PI PHFi objective LWD 1.79 mm

- (1) All objectives corrected for 1 mm coverglass thickness except OX.8304
- (2) Phase contrast objectives require slider with phase contrast annuli OX.9163
- (3) Phase contrast objectives require slider with phase contrast annuli OX.9163

All optical parts are anti-fungus treated

LWD = Long working distance

STANDARD GENERAL PURPOSE **FLUORESCENCE FILTER SETS:**

	OX.9745	Fluorescence filter block
9		for blue excitation 465-495 nm
	OX.9746	Fluorescence filter block
		for green excitation 540-580 nm

OX.9747	Fluorescence filter block
	for ultra violet excitation 361-389 nm

OX.9748 Fluorescence filter block for violet excitation 415-445 nm

PHASE CONTRAST ATTACHMENTS

OX.9148	Telescope for phase contrast fluorescence alignment
OX.9149	Telescope for phase contrast alignment
OX.9190	Slider with 4x/10x and 20x/40x phase
	contrast annuli

CAMERA ACCESSORIES

OX.9810	C mount with 1.0x objective
OX.9833	C-mount adapter with 0.33x objective for Oxion
	microscopes and 1/3" cameras
OX.9850	C-mount adapter with 0.5x objective for Oxion an

AE.5120-2 Trinocular 23.2 mm tube for Oxion photo port revision-2

Oxion Inverso microscopes and 1/2" cameras

AE.5130 Universal SLR camera adapter with 2x projection lens for 23.2 mm tubes. Needs T2 adapter and AE.5120-2

AE.5025 T2 adapter for Nikon D digital SLR cameras

AE.5040 T2 adapter for Canon EOS digital SLR cameras

STAGES AND HOLDERS

OX.9500 Mechanical coaxial X-Y 120 x 78 mm stage **OX.9506** Transparent glass insert with Ø 30 mm hole OX.9508 Metal insert with Ø 25 mm hole **OX.9510** Metallic insert for Ø 65 mm cell culture dish and Multiwell **OX.9512** Metal insert with 76 x 26 mm slide holder and Ø 55 mm cell culture dish holder **OX.9535** Metal insert for Ø 35 mm cell culture dish holder **OX.9550** Stage extension plate OX.9599 Universal cell culture dish holder AE.8010 Heating stage with transparent glass plate for

AE.8000 Micromanipulator, including digital



temperature controller

MICROMANIPULATOR ATTACHMENT

AE.8000 Micromanipulator for intracytoplasmic sperm injection (ICSI) suitable for the Oxion Inverso inverted microscope

MISCELLANEOUS

OX.9700 Blue filter Ø 45 mm

OX.9985 5 W NeoLED™ replacement unit

AE.3199 Glass fuses 3.15 A 250 V packed, per 10 pieces

100 W HBO mercury vapor lamp for fluorescence SL.1385

OX.9703 IR cut-off filter

OX.9749 Empty filter block

OX.9753 Filter block rail, three positions, without filters

OX.9754 Filter block rail, four positions, without filters

DISPOSABLES

PB.5155 Microscope slides 76 x 26 mm, ground edges, 50 pieces

PB.5165 Coverglasses 18 x 18 mm, thickness 0.13 - 0.17 mm, 100 pieces

PB.5168 Coverglasses 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)

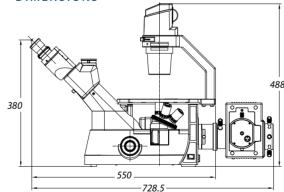
PB.5274 Isopropyl alcohol 99% (200 ml)

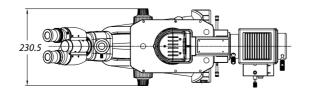
PB.5275 Cleaning kit: lens cleaning fluid, lint free lens tissue, brush, air blower, cotton swabs



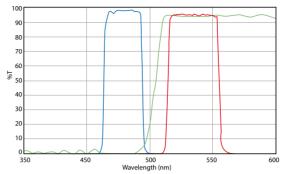
Accessories supplied with phase contrast models

DIMENSIONS



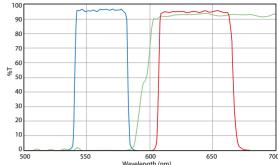


STANDARD GENERAL PURPOSE FLUORESCENCE FILTER SETS



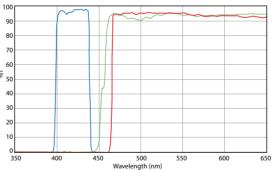


Also suitable for: Acridine Orange + DNA, Alexa Fluor 488™, Atto 488, Azami Green, BODIPY FL/pH7.2, Calcein, Calcium Green™-1, Cy2™, DiO, DyLight 488, EGFP, Emerald GFP, FAM, FITC, Fluo-4, GFP LysoTracker Green/pH 5.2, MitoTracker Green FM/MeOH, mWasabi, Oregon Green™ 488, SYBR® Green I, SYTO 9/DNA, ZsGreen



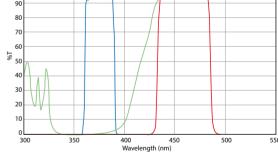
OX.9746 Green excitation 540-580 nm Texas Red / mCherry / Alexa Fluor 594 EX540-580 (BP) DM600 (LP) EM605-665 (BP)

Also suitable for: Alexa Fluor 568™, Alexa Fluor 594™, CAL Fluor® Red 610, Cy3.5™, DyLight 594, FusionRed, Killer Red, mCherry, MitoTracker Red/MeOH, mKate2, mRFP1, ReAsH-CCPGCC, Rhodamine Red™-X, ROX, Sulforhodamine 101, Texas Red®, Texas Red®-X, X-rhod-1/Ca2+



OX.9747 Ultra-Violet excitation 361-381 nm DAPI / Hoechst / Alexa Fluor 350 350 EX361-389 (BP) D415 (LP) EM435-485 (BP)

Also suitable for: Alexa Fluor 350™, Biosearch Blue, Coumarin, DAPI, DyLight 350, Hoechst 33258, LysoTracker Blue/MeOH



OX.9748 Violet excitation 415-445 nm UV/DAPI/Hoechst/AlexaFluor 350 EX415-445 (BP) DM455 (LP) EM465-495 (BP)

The fluorescence microscopes can be equipped with more specific, optimized and application related fluorescence filter sets, see accessories section and/or separate fluorescence filter catalog







Euromex offers two high-end and extremely easy-touse LED light sources for fluorescence applications that can replace mercury vapor HBO light sources of our microscope solutions for fluorescence

The standard LE.6400 system has a 100-240 V power supply/ intensity control unit with keyboard for selection and intensity adjustment of four wavelength bands. Standard fits for all models, except Oxion inverso. For that model we offer LE.6400-OX. For other brand microscopes we offer adapters

HIGHLIGHTS

- Stand-alone operation
- Easy mounting and operation
- 9 excitation wavelengths-bands are available
- 2 Years warranty

The ultimate LED light source for fluorescence LE.6900 fits nine available wavelength bands for fluorescence, ranging from 330 to 670 nm









LAMPHOUSE CONTROLLER 75 (h) x 150 (w) x 205 (d) | 0.90 kg

SPECIFICATIONS

LAMPHOUSE

The lamphouse can be mounted with a specific adapter on a Euromex Delphi-X Observer, iScope and Oxion upright microscopes as well as for our Oxion Inverso and Delphi-X Inverso inverted models. For other brands, contact Euromex The ultimate LE.6900 system has a 100-240 V power supply/ intensity control unit with keyboard pad for selection and intensity adjustment of all nine wavelength bands

CONTROLLERS

The standard LE.6400 system has a 100-240 V power supply/ intensity control unit for selection and intensity adjustment of five wavelength bands



Keyboard pad

LE.6400

Band	Wavelength	FWHM (nm)	Range	Color	Power (mW)
1	365	18	330-380	Ultra violet	≥ 2000
5	470	24	450-490	Blue	≥ 900
6	525	40	505-545	Green	≥ 500
8B	630	30	620-640	Red	≥ 600

LE.6400-OX

Band	Wavelength	FWHM (nm)	Range	Color	Power (mW)
1	365	18	330-380	Ultra violet	≥ 2000
5	470	24	450-490	Blue	≥ 900
7B	560	40	540-580	Emerald green	≥ 600
8B	630	30	620-640	Red	≥ 600

LE.6900

Band	Wavelength	FWHM (nm)	Range	Color	Power (mW)	E.g. compatible fluorochromes
1	365	18	330-380	Ultra violet	205	DAPI (359 nm), Biosearch Blue (352 nm), Calcofluor White (350 nm)
2	385	14	370-395	Royal violet	126	Coumarin (384 nm), FluoroGold (390 nm), wtGFP (395 nm)
3	405	22	380-420	Violet	468	DyLight 405 (399 nm)
4	450	26	440-470	Royal blue	485	Auramine (460 nm)
5	470	24	450-490	Blue	315	Cy2 (489 nm), rsGFP (488 nm), EGFP (488 nm), FITC (494 nm), Acridine Orange (DNA -500 nm)
6	525	29	505-545	Green	142	Citrine (514 nm), Acridine Orange (500 nm)
7	545	16	510-560	Emerald green	172	TRITC (555 nm), Cy3 (552 nm), DsRed (557 nm), Alexa Fluor 546 (556 nm)
8	625	20	605-650	Orange-Red	130	Cy5 (649nm), Alexa Fluor 633 (632 nm)
9	660	21	645-670	Red	221	Cy5 (649nm), Alexa Fluor 647 (649 nm)

FLUORESCENCE FILTER SETS

For ordering a specific fluorescence filter set find the fluorochrome you need and add the filter set reference 'xxxx' as follows:

FOR ISCOPE:

IS.9750.xxxx/6, iScope® with 6-position fluorescence attachment, needs also empty block IS.9749/6 IS.9750.xxxx/3 iScope® with 3-position fluorescence attachment, needs also empty block IS.9749/3

FOR DZ SERIES:

DZ.9750.xxxx, this set is supplied with two emission filters and also needs empty block DZ.9749

EXAMPLE:

the reference for the iScope® with a 39001 filter set is IS.9750.39001

OPTIMIZED FILTER SETS

19xxx series is an optimized filter set with long pass filter 39xxx series is a standard optimized filter set 49xxx series is a zero-pixel shift optimized filter set

Acridine Orange DNA - EX: 500 nm EM: 526 nm

EX: 465-495 nm DM 505 nm EM: 515 nm (LP) • 19002 EX: 465-495 nm DM 505 nm EM: 590-650 nm • 39009 EX: 460-500 nm DM 510 nm EM: 510-560 nm • 49011

Acridine Orange DNA+RNA - EX: 500 nm EM: 526 nm

EX: 460-500 nm DM 510 nm EM: 510 nm (LP) • 49011

Alexa Fluor 488™ - EX: 498 nm EM: 520 nm

EX: 460-500 nm DM 510 nm EM: 510-560 nm • 49011

Alexa Fluor 514™ - EX: 517 nm EM: 539 nm

EX: 485-505 nm DM 515 nm EM: 525-555 nm • 39003

EX: 490-510 nm DM 515 nm EM: 520-550 nm • 49003

Alexa Fluor 546™ - EX: 556 nm EM: 573 nm

EX: 528-553 nm DM 565 nm EM: 578-633 nm • 39004

EX: 532-557 nm DM 605 nm EM: 570-640 nm • 49004

FOR DELPHI-X OBSERVER/INVERSO:

DX.9750.xxxx, Delphi-X Observer™ with 6-position fluorescence attachment, needs also empty block DX.9749/6 DI.9750.xxxx, Delphi-X Inverso[™] with 6-position fluorescence attachment, needs also empty block DI.9749/6

FOR OXION SERIES:

OX.9750.xxxx Oxion inverso with 3-position fluorescence attachment, needs also empty block OX.9749/3 OX.9750.xxxx Oxion inverso with 4-positions fluorescence attachment, needs also empty block OX.9749/4 AE.3250.xxxx, Oxion upright with 4-positions fluorescence attachment, needs also empty block AE.3249



Alexa Fluor 555™ - EX: 553 nm EM: 568 nm

EX: 528-553 nm DM 565 nm EM: 578-633 nm • 39004

EX: 532-557 nm DM 605 nm EM: 570-640 nm • 49004

Alexa Fluor 568™ - EX: 578 nm EM: 603 nm

EX: 540-580 nm DM 600 nm EM: 615-665 nm • 39010

EX:540-580 nm DM 585 nm EM: 593-667 nm • 49008

Alexa Fluor 594™ - EX: 590 nm EM: 617 nm

EX: 540-580 nm DM 600 nm EM: 615-665 nm • 39010

Alexa Fluor 647™ - EX: 649 nm EM: 666 nm

EX: 595-645 nm DM 655 nm EM: 665-715 nm • 39007

EX: 590-650 nm DM 660 nm EM: 663-737 nm • 49006

EX: 625-655 nm DM 660 nm EM: 665-715 nm • 49009

AmCyan - EX: - 458 nm EM: 489 nm

EX: 425-445 nm DM 455 nm EM: 465-495 nm • 39001

Auramine longpass - EX: 460 nm EM: 550 nm

EX: 425-475 nm DM 485 nm EM: 495 nm (LP) • 19008

Auramine-rhodamine - EX: 450 nm EM: 550 nm

EX: 465-495 nm DM 485 nm EM: 515 nm (LP) • 19002

Azami Green - EX: 492 nm EM: 505 nm

EX: 465-495 nm DM 505 nm EM: 515-555 nm • 39002

EX: 450-490 nm DM 525 nm EM: 500-550 nm • 49002

Biosearch Blue - EX: 352 nm EM: 447 nm

EX: 361-389 nm DM 415 nm EM: 435-485 nm • 39000

BODIPY FL/pH7.2 - EX: 505 nm EM: 512 nm

EX: 465-495 nm DM 505 nm EM: 515-555 nm • 39002

EX: 450-490 nm DM 525 nm EM: 500-550 nm • 49002

CAL Fluor® Red 590 - EX: 569 nm EM: 591 nm

EX: 528-553 nm DM 565 nm EM: 578-633 nm • 39004

EX: 532-557 nm DM 605 nm EM: 570-640 nm • 49004

CAL Fluor® Red 610 - EX: 590 nm EM: 610 nm

EX: 540-580 nm DM 600 nm EM: 615-665 nm • 39010

Calcein - EX: 494 nm EM: 517 nm

EX: 465-495 nm DM 505 nm EM: 515-555 nm • 39002

EX: 450-490 nm DM 525 nm EM: 500-550 nm • 49002

EX: 460-500 nm DM 510 nm EM: 510-560 nm • 49011

Calcium Green™-1 - EX: 506 nm EM: 531 nm

EX: 465-495 nm DM 505 nm EM: 515-555 nm • 39002

EX: 450-490 nm DM 525 nm EM: 500-550 nm • 49002

EX: 460-500 nm DM 510 nm EM: 510-560 nm • 49011

Calcofluor White - EX: 350 nm EM: 475 nm

EX: 361-389 nm DM: 415 nm EM: 435 nm (LP) • 19000

Cerulean - EX: 433 nm EM: 475 nm

EX: 425-445 nm DM 455 nm EM: 465-495 nm • 39001

CFP - EX: 433 nm EM: 475 nm

EX: 425-445 nm DM 455 nm EM: 465-495 nm • 39001

Citrine - EX: 514 nm EM: 529 nm

EX: 485-505 nm DM 515 nm EM: 525-555 nm • 39003

EX: 490-510 nm DM 515 nm EM: 520-550 nm • 49003

Coumarin - EX: 384 nm EM: 470 nm

EX: 390-420 nm DM: 440 nm EM: 450 nm (LP) • 19011

Cy2™ - EX: 489 nm EM: 506 nm

EX: 465-495 nm DM 505 nm EM: 515-555 nm • 39002

EX: 450-490 nm DM 525 nm EM: 500-550 nm • 49002

EX: 460-500 nm DM 510 nm EM: 510-560 nm • 49011

Cy3.5™ - EX: 581 nm EM: 598 nm

EX: 540-580 nm DM 600 nm EM: 615-665 nm • 39010

EX:540-580 nm DM 585 nm EM: 593-667 nm • 49008

Cv3™ - EX: 552 nm EM: 570 nm

EX: 528-553 nm DM 565 nm EM: 578-633 nm • 39004

EX: 532-557 nm DM 605 nm EM: 570-640 nm • 49004

Cv5™ - EX: 649 nm EM: 670 nm

EX: 595-645 nm DM 655 nm EM: 665-715 nm • 39007

EX: 590-650 nm DM 660 nm EM: 663-737 nm • 49006

EX: 625-655 nm DM 660 nm EM: 665-715 nm • 49009

Cy7™ - EX: 743 nm EM: 767 nm

EX: 672-747 nm DM 760 nm EM: 765-855 nm • 49007

DAPI - EX: 359 nm EM: 461 nm

EX: 361-389 nm DM 415 nm EM: 435-485 nm • 39000

Drag5 - EX: 647 nm EM: 683 nm

EX: 595-645 nm DM 655 nm EM: 665-715 nm • 39007

DsRed - EX: 557 nm EM: 584 nm

EX: 528-553 nm DM 565 nm EM: 578-633 nm • 39004

EX: 532-557 nm DM 605 nm EM: 570-640 nm • 49004

DvLight 350 - EX: 352 nm EM: 435 nm

EX: 361-389 nm DM 415 nm EM: 435-485 nm • 39000

DyLight 405 - EX: 399 nm EM: 433 nm

EX: 390-420 nm DM: 440 nm EM: 450 nm (LP) • 19011

DvLight 488 - EX: 492 nm EM: 517 nm

EX: 450-495 nm DM 505 nm EM: 515-555 nm • 39002

EX: 450-490 nm DM 525 nm EM: 500-550 nm • 49002

EX: 460-500 nm DM 510 nm EM: 510-560 nm • 49011

DyLight 549 - EX: 554 nm EM: 569 nm

EX: 528-553 nm DM 565 nm EM: 578-633 nm • 39004

EX: 532-557 nm DM 605 nm EM: 570-640 nm • 49004

DyLight 594 - EX: 592 nm EM: 616 nm

EX: 540-580 nm DM 600 nm EM: 615-665 nm • 39010

EX:540-580 nm DM 585 nm EM: 593-667 nm • 49008

DyLight 649 - EX: 652 nm EM: 667 nm

EX: 595-645 nm DM 655 nm EM: 665-715 nm • 39007

EX: 590-650 nm DM 660 nm EM: 663-737 nm • 49006

EX: 625-655 nm DM 660 nm EM: 665-715 nm • 49009

DvLight 750 - EX: 751 nm EM: 772 nm

EX: 672-747 nm DM 760 nm EM: 765-855 nm • 49007

ECFP - EX: 434 nm EM: 477 nm

EX: 425-445 nm DM 455 nm EM: 465-495 nm • 39001

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FLUORESCENCE FILTER SETS (continued)

EGFP - EX: 488 nm EM: 507 nm LysoTracker Red/pH 5.2 - EX: 577 nm EM: 590 nm EX: 465-495 nm DM 505 nm EM: 515-555 nm • 39002 EX:540-580 nm DM 585 nm EM: 593-667 nm • 49008 EX: 450-490 nm DM 525 nm EM: 500-550 nm • 49002 LvsoTracker Yellow HCK-123 - EX: 486 nm EM: 563 nm Emerald GFP - EX: 489 nm EM: 510 nm EX: 465-495 nm DM 505 nm EM: 590-650 nm • 39009 EX: 465-495 nm DM 505 nm EM: 515-555 nm • 39002 mCherry - EX: 587 nm EM: 610 nm EX: 450-490 nm DM 525 nm EM: 500-550 nm • 49002 EX: 540-580 nm DM 600 nm EM: 615-665 nm • 39010 EYFP/pH 7 - EX: 514 nm EM: 527 nm EX:540-580 nm DM 585 nm EM: 593-667 nm • 49008 EX: 485-505 nm DM 515 nm EM: 525-555 nm • 39003 mCitrine - EX: 514 nm EM: 529 nm EX: 490-510 nm DM 515 nm EM: 520-550 nm • 49003 EX: 485-505 nm DM 515 nm EM: 525-555 nm • 39003 FITC - EX: 490 nm EM: 525 nm EX: 490-510 nm DM 515 nm EM: 520-550 nm • 49003 EX: 465-495 nm DM 505 nm EM: 515-555 nm • 39002 MitoTracker Green FM/MeOH - EX: 490 nm EM: 516 nm EX: 450-490 nm DM 525 nm EM: 500-550 nm • 49002 EX: 465-495 nm DM 505 nm EM: 515-555 nm • 39002 EX: 460-500 nm DM 510 nm EM: 510-560 nm • 49011 EX: 450-490 nm DM 525 nm EM: 500-550 nm • 49002 Fluo-4 - EX: 494 nm EM: 516 nm EX: 465-495 nm DM 505 nm EM: 515-555 nm • 39002 MitoTracker Orange/MeOH - EX: 551 nm EM: 576 nm EX: 450-490 nm DM 525 nm EM: 500-550 nm • 49002 EX: 528-553 nm DM 565 nm EM: 578-633 nm • 39004 EX: 460-500 nm DM 510 nm EM: 510-560 nm • 49011 EX: 532-557 nm DM 605 nm EM: 570-640 nm • 49004 FluoroGold - EX: 390 nm EM: 600 nm MitoTracker Red/MeOH - EX: 578 nm EM: 599 nm EX: 361-389 nm DM: 415 nm EM: 515 nm (LP) • 19012 EX: 540-580 nm DM 600 nm EM: 615-665 nm • 39010 FM™ 1-43 - EX: 479 nm EM: 598 nm EX:540-580 nm DM 585 nm EM: 593-667 nm • 49008 EX: 465-495 nm DM: 505 nm EM: 600 nm (LP) • 19010 MitoTracker Deep Red 633/MeOH - EX: 644 nm EM: 665 nm FM™ 4-64 - EX: 515 nm EM: 740 nm EX: 590-650 nm DM 660 nm EM: 663-737 nm • 49006 EX: 540-580 nm DM: 600 nm EM: 610 nm (LP) • 19006 EX: 625-655 nm DM 660 nm EM: 665-715 nm • 49009 FM™ 4-64 - EX: 515 nm EM: 740 nm mRFP1 - EX: 584 nm EM: 607 nm EX: 465-495 nm DM: 505 nm EM: 600 nm (LP) • 19010 EX: 540-580 nm DM 600 nm EM: 615-665 nm • 39010 FusionRed - EX: 576 nm EM: 603 nm EX:540-580 nm DM 585 nm EM: 593-667 nm • 49008 EX: **540-580** nm DM 600 nm EM: **615-665** nm • **39010** mWasabi - EX: 493 nm EM: 509 nm EX:540-580 nm DM 585 nm EM: 593-667 nm • 49008 EX: 465-495 nm DM 505 nm EM: 515-555 nm • 39002 GFP - EX: 488 nm EM: 507 nm EX: 450-490 nm DM 525 nm EM: 500-550 nm • 49002 EX: 465-495 nm DM 505 nm EM: 515-555 nm • 39002 Nile Blue - EX: 631 nm EM: 660 nm EX: 450-490 nm DM 525 nm EM: 500-550 nm • 49002 EX: 590-650 nm DM 660 nm EM: 663-737 nm • 49006 Hoechst 33258 - EX: 352 nm EM: 461 nm Oregon Green™ 488 - EX: 490 nm EM: 514 nm EX: 361-389 nm DM 415 nm EM: 435-485 nm • 39000 EX: 465-495 nm DM 505 nm EM: 515-555 nm • 39002 Lucifer Yellow - EX: 428 nm EM: 540 nm EX: 450-490 nm DM 525 nm EM: 500-550 nm • 49002 EX: 400-440 nm DM 455 nm EM: 515-555 nm • 39008 Oregon Green™ 514 - EX: 506 nm EM: 526 nm LvsoTracker Blue/MeOH - EX: 373 nm EM: 425 nm EX: 485-505 nm DM 515 nm EM: 525-555 nm • 39003 EX: 361-389 nm DM 415 nm EM: 435-485 nm • 39000 EX: 490-510 nm DM 515 nm EM: 520-550 nm • 49003 LysoTracker Green/pH 5.2 - EX: 504 nm EM: 511 nm Pacific Blue - EX: 405 nm EM: 455 nm EX: 465-495 nm DM 505 nm EM: 515-555 nm • 39002 EX: 390-420 nm DM: 440 nm EM: 450 nm (LP) • 19011 EX: 450-490 nm DM 525 nm EM: 500-550 nm • 49002

Propidium Iodide - EX: 536 nm EM: 617 nm EX: 528-552 nm DM 565 nm EM: 590-650 nm • 39005 EX: 530-560 nm DM 570 nm EM: 590-650 nm • 49005 Pulsar™ 650 - EX: 460 nm EM: 650 nm EX: 465-495 nm DM: 505 nm EM: 600 nm (LP) • 19010 Quasar® 670 - EX: 647 nm EM: 670 nm EX: 595-645 nm DM 655 nm EM: 665-715 nm • 39007 Rhod-2 - EX: 552 nm EM: 581 nm EX: 528-553 nm DM 565 nm EM: 578-633 nm • 39004 EX: 532-557 nm DM 605 nm EM: 570-640 nm • 49004 Rhodamine 123 - EX: 507 nm EM: 529 nm EX: 485-505 nm DM 515 nm EM: 525-555 nm • 39003 EX: 490-510 nm DM 515 nm EM: 520-550 nm • 49003 Rhodamine Red™-X - EX: 570 nm EM: 590 nm EX: 540-580 nm DM 600 nm EM: 615-665 nm • 39010 EX:540-580 nm DM 585 nm EM: 593-667 nm • 49008 Sulforhodamine 101 - EX: 586 nm EM: 605 nm EX: 540-580 nm DM 600 nm EM: 615-665 nm • 39010 SYBR® Green I - EX: 498 nm EM: 522 nm EX: 465-495 nm DM 505 nm EM: 515-555 nm • 39002 EX: 450-490 nm DM 525 nm EM: 500-550 nm • 49002 EX: 460-500 nm DM 510 nm EM: 510-560 nm • 49011 SYTO 9/DNA - EX: 483 nm EM: 500 nm EX: 465-495 nm DM 505 nm EM: 515-555 nm • 39002 EX: 450-490 nm DM 525 nm EM: 500-550 nm • 49002 EX: 460-500 nm DM 510 nm EM: 510-560 nm • 49011 **SYTO® 60 - EX: 652 nm EM: 678 nm** EX: 595-645 nm DM 655 nm EM: 665-715 nm • 39007 EX: 590-650 nm DM 660 nm EM: 663-737 nm • 49006 EX: 625-655 nm DM 660 nm EM: 665-715 nm • 49009 TagRFP - EX: 556 nm EM: 584 nm EX: 528-553 nm DM 565 nm EM: 578-633 nm • 39004 TAMRA - EX: 555 nm EM: 580 nm EX: 528-553 nm DM 565 nm EM: 578-633 nm • 39004 EX: **532-557** nm DM 605 nm EM: **570-640** nm • **49004** Texas Red® - EX: 595 nm EM: 620 nm EX: 540-580 nm DM 600 nm EM: 615-665 nm • 39010 EX:540-580 nm DM 585 nm EM: 593-667 nm • 49008 Orange#2 FISH single band

Texas Red®-X - EX: 595 nm EM: 615 nm EX: 540-580 nm DM 600 nm EM: 615-665 nm • 39010 EX:540-580 nm DM 585 nm EM: 593-667 nm • 49008 TO-PRO™-3 - EX: 642 nm EM: 661 nm EX: 595-645 nm DM 655 nm EM: 665-715 nm • 39007 Topaz - EX: 514 nm EM: 529 nm EX: 485-505 nm DM 515 nm EM: 525-555 nm • 39003 EX: 490-510 nm DM 515 nm EM: 520-550 nm • 49003 TRITC - EX: 555 nm EM: 580 nm EX: 528-553 nm DM 565 nm EM: 578-633 nm • 39004 Turbo FP650 - EX: 592 nm EM: 650 nm EX: 540-580 nm DM: 600 nm EM: 610 nm (LP) • 19006 EX:540-580 nm DM 585 nm EM: 593-667 nm • 49008 wtGFP - EX: 475 nm EM: 509 nm EX: 425-475 nm DM: 485 nm EM: 495 nm (LP) • 19008 X-rhod-1/Ca2+ - EX: 580 nm EM: 601 nm EX: **540-580** nm DM 600 nm EM: **615-665** nm • **39010** ZsGreen1 - EX: 493 nm EM: 505 nm EX: 465-495 nm DM 505 nm EM: 515-555 nm • 39002 OPTIMIZED FISH SINGLE BAND FILTERS DAPI 395 nm FISH single band EX: 385-407 nm DM 425 EM: 435-485 • 49028 Blue FISH single band EX: 400-410 nm DM 425 EM: 442-478 • 49301 Aqua FISH single band EX: 426-446 nm DM 425 EM: 465-495 • 49302 Green#1 FISH single band EX: 483-507 nm DM 515 EM: 522-551) • 49303 Green#2 FISH single band EX: 473-497 nm DM 515 EM: 510-540 • 49308 Green#3 Narrow band FISH single band EX: 480-500 nm DM 505 EM: 515-535 • 49312 Gold FISH single band EX: 541-551 nm DM 556 EM: 560-583 • 49304 Orange#1 FISH single band



EX: 535-557 nm DM 565 EM: 573-606 • 49305

EX: 529-550 nm DM 556 EM: 561-592 • 49309

FLUORESCENCE FILTER SETS (continued)

Red#1 FISH single band

EX: 568-592 nm DM 600 EM: 595-640 • 49306

Red#2 FISH single band

EX: 581-602 DM 610 EM: 615-645 • 49310

Red#3 Narrow band FISH single band

EX: 592-605 nm DM 612 EM: 618-646 • 49311

Far Red FISH single band

EX: 620-640 nm DM 647 EM: 637-697 • 49307

Cy5 Narrow Excitation single band

EX: 625-655 nm DM 660 EM: 665-715 • 49009

OPTIMIZED FISH DUAL BAND FILTERS

DAPI/Green FISH dual band 3 filters

EX: 380-410 / EX: 470-495, DM 424-462 / 515-560 / 610-660,

EM: 515-540 / EM: 615-645 • 59001v2

DAPI/Orange FISH dual band 3 filters

EX: 380-405 / 530-560, DM 430-495 / 570-615.

EM: 445-475 / 570-610 • 59002v2

DAPI/Red FISH dual band 3 filters

EX: 380-405 / EX: 565-590, DM 445-475 / 605-650

EM: 445-475 / EM: 605-645 • 59003v2

Green/Red #1 FISH dual band 3 filters

EX: 480-500 / EX: 574-594, DM 424-462 / 510-560 / 610-660,

EM: 515-540 / EM: 615-640 • 59010

Green/Orange #1 FISH dualband 3 filters

EX: 465-490 / EX: 550-570, DM 425-455 / 505-535 / 590-625

EM: 425-455 / EM: 505-535) EM: 590-620 • 59011

Green/Orange #2 FISH dualband 3 filters

EX: 460-485 / EX: 540-560, DM 500-530 / 575-620

EM: 500-530 / EM: 575-620 • 59012

Aqua/Gold FISH dualband 3 filters

EX: 430-445 / EX: 525-545, DM 465-495 / 565-595

EM: 470-490 / EM: 570-590 • 59033

OPTIMIZED FISH TRIPLE BAND FILTERS

ECFP/EYFP/mCherry triple band 3 filters

EM: 430-445 / EM: 495-510 / EM: 565-585,

DM 455-480 / 520-550 / 600-660.

EM: 460-480 / EM: 520-550 / EM: 605-660 • 69008

DAPI/Green/Orange #1 FISH triple band 3 filters

EX: 380-405 / EX: 465-490 / EX: 550-570,

DM 425-450 / 505-535 / 590-625

EM: 425-450 / EM: 505-535 / EM: 590-620 • 69013v2

DAPI/Green/Red FISH triple band 3 filters

EX: 380-405 / EX: 480-495 / EX: 575-590

DM 425-460 / 515-560 / 610-655

EM: 425-460 / EM: 515-560 / EM: 610-655 • 69015

Aqua/Green/Orange FISH triple band 3 filters

EX: 425-445 / EX: 490-505 / EM: 550-560

DM 460-475 / 520-540 / 590-630

EM: 460-475 / EM: 520-540 / EM: 595-625 • 69011

DAPI/Aqua/Green/Orange FISH triple band 3 filters

EX: 380-390 / EX: 420-440 / EX: 555-575

DM 455-475 / 518-540 / 590-628

EM: 460-475 / EM: 518-540 / EM: 595-630 • 69014

NEUTRAL DENSITY FILTERS:

25 mm diameter, 1 mm thick and unmounted

AE.3250.ND01 Neutral density filter, ND 0.10 (T 80 %)

32 mm diameter, 1 mm thick and unmounted

AE.3252.ND01 Neutral density filter, ND 0.10 (T80 %)

AE.3252.ND02 Neutral density filter, ND 0.20 (T 65 %)

AE.3252.ND03 Neutral density filter, ND 0.30 (T 50 %)

AE.3252.ND04 Neutral density filter, ND 0.40 (T 40 %)

AE.3252.ND05 Neutral density filter, ND 0.50 (T 32 %)

AE.3252.ND06 Neutral density filter, ND 0.60 (T 25 %

AE.3252.ND10 Neutral density filter, ND 1.0 (T 10 %)

AE.3252.ND13 Neutral density filter, ND 1.3 (T 5 %)

On request, microscopes can be equipped with more specific, optimized and application related fluorescence filter sets

about

Antoni van Leeuwenhoek

1632, Delft, the Netherlands

As a cloth merchant, Antoni van Leeuwenhoek became familiar with the use of magnifying glasses, which he used to check the quality of the fabric and the density of the weave. Eventually he began to grind and polish his own lenses. Around 1670 he developed the single microscope, which could magnify many times more than the compound microscopes of that time

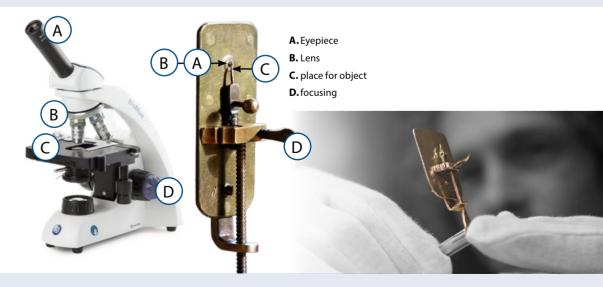
VAN LEEUWENHOEK'S MICROSCOPE

The design of Van Leeuwenhoek's microscopes is relatively simple: a small glass lens riveted between two metal plates. The preparation sits on a pin that can move up and down and closer or further from the lens with screwsin order to focus

Where contemporaries' microscopes reached a magnification of around 30x, Van Leeuwenhoek made microscopes that were much more powerful. Most of Van Leeuwenhoek's microscopes magnified about 80x, but there were also outliers with a magnification factor of 250, which was phenomenal for the time



HISTORICAL FACTS



UT

life science

stereo microscopes



stereo microscopes





NEXIUSZOOM • 226

STEREOBLUE • 236

DZ SERIES • 240

Z SERIES • 246

P SERIES • 252

Euromex stereo microscopes enable you to examine and analyze your specimens in both two and three dimensions. Combined with LED illumination the high-performance digital cameras and easy-to-use ImageFocus software provide perfect solutions for precise analysis and documentation



The NexiusZoom and NexiusZoom EVO stereo microscopes allow three-dimensional observation of your specimen, suitable for highly demanding applications. These top level zoom microscopes are perfect for analyzing all kinds of material surfaces or for observing and preparing biological samples

These stereo microscopes are supplied with a large choice of stands, with or without LED illumination. Ideal for a wide variety of applications. With additional lenses and objectives magnifications from 3.3x up to 220x can be achieved





















NZ.1903-S

NZ.1903-S / NZ.1703-S 339 (h) x 256 (w) x 311 mm (d) | 5.1 kg NZ.1903-P / NZ.1703-P

HIGHLIGHTS

- Binocular and trinocular heads with HWF 10x/22 mm or HWF 10x/23 mm eyepieces
- Zoom ratio 1: 6.7, 6.7x to 45x or 1:8.4, 6.5x to 55x
- Click-stops standard on EVO models
- Ergonomic stands
- Double 3 W LED illuminations
- Configurations up to 220x magnification
- Large working distance (WD)
- 10 Years warranty



SPECIFICATIONS

EYEPIECES

The standard NexiusZoom is supplied with a pair of HWF 10x/22 mm eyepieces. The NexiusZoom EVO is supplied with a pair of HWF 10x/23 mm eyepieces

HEAD

Binocular or trinocular heads with 45° inclined tubes. Both eyepieces have ± 5 diopter adjustments. Interpupillary distance adjustable between 54 mm and 75 mm. Trinocular head is supplied with a fixed light path beam splitter (50:50). The NexiusZoom EVO models are now equipped with click-stops

OBJECTIVES

The standard NexiusZoom is supplied with a 1:6.7 zoom objective with 0.67x to 4.5x magnifications, a field of view from 33 mm to 4.9 mm. Working distance 110 mm

The NexiusZoom EVO is supplied with a 1:8.4 zoom objective with 0.65x to 5.5x magnifications, a field of view from 35.4 mm to 4.2 mm. WD 110 mm

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

AUXILIARY LENSES

For extra working distances the following auxiliary lenses are available for both the standard NexiusZoom and NexiusZoom EVO: 0.3x, 0.4x, 0.5x, 0.75x, 1.5x and 2.0x. For fields of view and working distances, see table magnifications



O

POLARIZATION

The NexiusZoom and NexiusZoom EVO can be supplied with an optional 360° rotatable circular stage with built-in polarization filter and/or an optional rotatable analyzer filter in mount to be screwed under the objective

STANDS

- Ergonomic pillar or rack & pinion stand with 3 W incident and 3 W transmitted LED illuminations (-P and -S stands)
- Ergonomic pillar stand with two 3 W goose-neck type incident LED illuminations on each side and a 3 W transmitted LED illumination (-PG stand)
- Ergonomic pillar stand with rotating mirror and 3 W LED transmitted and incident illuminations (-M stand)
- Ergonomic universal or boom stands, without illumination (-U and -B stands)
- Articulated arm stand for table mounting or with heavy desktop base plate, both without head holder, without illumination (-A and -AP stands)
- · Lightweight articulated arm stand, with head holder, without illumination (NZ.9047)

All pillar and rack & pinion stands are supplied with two object clamps. Alloy metal cast, hardened coating



STAGE

180 x 155mm X-Y mechanical stage with 76 x 55mm translation stage and transparent glass plate for NexiusZoom, fixed on stage of microscope. Only available with new microscopes (due to fixing), so it has to be ordered with the purchase of a microscope (see picture: NZ.9505)

ILLUMINATION

3 W transmitted and incident LED illuminators with internal power supply 100-240 V. Both illuminators can be used simultaneously and the light intensities can be adjusted separately. The universal single or double arm stands and the articulated stands can be equipped with the ring illuminators LE.1974 and LE.1973 with respectively 72 or 144 power LEDs controlled in segments or with the LE.5212 illumination station, ideal for creating or lifting shades

ANTI-THEFT SLOT

At the back of the microscope a Kensington Security slot is placed, which can be used to secure the instrument from theft (only on th P-, PG-, and S-models)

PACKAGE CONTENT

Supplied with power cord, a pair of eyecups, dust cover, a spare fuse and user manual. All packed in a polystyrene box



MAGNIFICATIONS

NexiusZoom: working distance and field of view with standard HWF 10x / 22 high wide field eyepieces

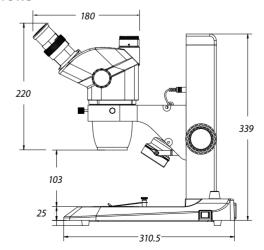
Zoom indication		ary lens 287 mm		ary lens 220 mm		ary lens 183 mm		ary lens D 105 mm		auxiliary 110 mm		ary lens O 53 mm		ary lens 34 mm
	Total mag.	FoV in mm	Total mag.	FoV in mm	Total mag.	FoV in mm	Total mag.	FoV in mm						
0.67	2.0	109.5	2.7	82.1	3.35	65.7	5.0	43.8	6.7	32.8	10.1	21.9	13.4	16.4
0.7	2.1	104.8	2.8	78.6	3.5	62.9	5.3	41.9	7.0	31.4	10.5	21.0	14.0	15.7
0.8	2.4	91.7	3.2	68.8	4.0	55.0	6.0	36.7	8.0	27.5	12.0	18.3	16.0	13.8
1.0	3.0	73.3	4.0	55.0	5.0	44.0	7.5	29.3	10.0	22.0	15.0	14.7	20.0	11.0
1.5	4.5	48.9	6.0	36.7	7.5	29.3	11.3	19.6	15.0	14.7	22.5	9.8	30.0	7.3
2.0	6.0	36.7	8.0	27.5	10.0	22.0	15.0	14.7	20.0	11.0	30.0	7.3	40.0	5.5
3.0	9.0	24.4	12.0	18.3	15.0	14.7	22.5	9.8	30.0	7.3	45.0	4.9	60.0	3.7
4.0	12.0	18.3	16.0	13.8	20.0	11.0	30.0	7.3	40.0	5.5	60.0	3.7	80.0	2.8
4.5	13.5	16.3	18.0	12.2	22.5	9.8	33.8	6.5	45.0	4.9	67.5	3.3	90.0	2.4

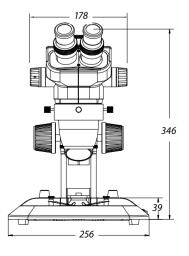
NexiusZoom EVO: working distance and field of view with standard HWF 10x / 23 high wide field eyepieces

Zoom indication		ry lens 287 mm		ary lens 220 mm		ary lens 183 mm		y lens 0. 105 mm		auxiliary 110 mm		ry lens O 53 mm		ary lens 34 mm
	Total mag.	FoV in mm	Total mag.	FoV in mm	Total mag.	FoV in mm	Total mag.	FoV in mm	Total mag.	FoV in mm	Total mag.	FoV in mm	Total mag.	FoV in mm
0.65	1.95	117.9	2.6	88.5	3.25	70.8	4.9	47.2	6.5	35.4	9.8	23.6	13.0	17.7
1.0	3.0	76.7	4.0	57.5	5.0	46.0	7.5	30.7	10.0	23.0	15.0	15.3	20.0	11.5
1.5	4.5	51.1	6.0	38.3	7.5	30.7	11.3	20.4	15.0	15.3	22.5	10.2	30.0	7.7
2.0	6.0	38.3	8.0	28.8	10.0	23.0	15.0	15.3	20.0	11.5	30.0	7.7	40.0	5.8
2.5	7.5	30.7	10.0	23.0	12.5	18.4	18.8	12.3	25.0	9.2	37.5	6.1	50.0	4.6
3.0	9.0	25.6	12.0	19.2	15.0	15.3	22.5	10.2	30.0	7.7	45.0	5.1	60.0	3.8
3.5	10.5	21.9	14.0	16.4	17.5	13.1	26.3	8.8	35.0	6.6	52.5	4.4	70.0	3.3
4.0	12.0	19.2	16.0	14.4	20.0	11.5	30.0	7.7	40.0	5.8	60.0	3.8	80.0	29
4.5	13.5	17.0	18.0	12.8	22.5	10.2	33.8	6.8	45.0	5.1	67.5	3.4	90.0	2.6
5.0	15.0	15.3	20.0	11.5	25.0	9.2	37.5	6.1	50.0	4.6	75.0	3.1	100.0	2.3
5.5	16.5	13.9	22.0	10.5	27.5	8.4	41.3	5.6	55.0	4.2	82.5	2.8	110.0	2.1

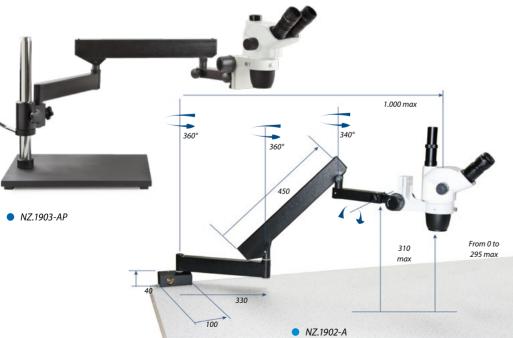
WD = working distance, FoV = Field of view, Total mag. = total magnification

DIMENSIONS









NEXIUSZOOM 0.67-4.5 (WF 10X/22MM)

MODELS	Bino	Trino	Pillar stand	Rack & pinion stand	Universal stand	Boom stand on heavy base plate	Articulated arm stand on table clamp	Articulated arm stand on heavy base plate	Gooseneck dual LED	Mirror LED	Weight (kg)
NZ.1902-P	•		•								5.0
NZ.1902-PG	•		•						•		5.1
NZ.1902-S	•			•							4.9
NZ.1902-U	•				•						15.6
NZ.1902-B	•					•					22.1
NZ.1902-A	•						•				8.6
NZ.1902-AP	•							•			20.7
NZ.1903-P		•	•								5.2
NZ.1903-PG		•	•						•		5.3
NZ.1903-M		•	•							•	5.1
NZ.1903-S		•		•							5.1
NZ.1903-U		•			•						15.7
NZ.1903-B		•				•					22.2
NZ.1903-A		•					•				8.7
NZ.1903-AP	•							•			20.8

NEXIUSZOOM EVO 0.65-5.5 (WF 10X/23MM)

MODELS	Bino	Trino	Pillar stand	Rack & pinion stand	Universal stand	Boom stand on heavy base plate	Articulated arm stand on table clamp	Articulated arm stand on heavy base plate	Gooseneck dual LED	Mirror LED	Weight (kg)
NZ.1702-P	•		•								5.0
NZ.1702-PG	•		•						•		5.1
NZ.1702-M	•		•							•	4.9
NZ.1702-S	•			•							4.9
NZ.1702-U	•				•						15.6
NZ.1702-B	•					•					22.1
NZ.1702-A	•						•				8.6
NZ.1702-AP	•							•			20.7
NZ.1703-P		•	•								5.2
NZ.1703-PG		•	•						•		5.3
NZ.1703-M			•							•	5.1
NZ.1703-S		•		•							5.1
NZ.1703-U					•						15.7
NZ.1703-B		•				•					22.2
NZ.1703-A		•					•				8.7
NZ.1703-AP		•						•			20.8

The NexiusZoom EVO models are now equipped with click-stops

ACCES	SSORIES AND SPARE PA	RTS	
HEADS &	EYEPIECES	STANDS	
NZ.5302	NZ binocular head 0.67-4.5x*	NZ.9000	Ergo pillar stand without illumination.
NZ.5303	NZ trinocular head 0.67-4.5x*		Height 35 cm
NZ.5312	NZ EVO binocular head 0.65-5.5x*	NZ.9005	Ergo pillar stand with adjustable transmitted
NZ.5313	NZ EVO trinocular head 0.65-5.5x*		3 W LED illumination. Height 35 cm
* without head	d holder	NZ.9010	Ergo rack & pinion stand with incident and
			transmitted 3 W LED illuminators
NZ.6010	Pair of HWF 10x/22 mm eyepieces	NZ.9015	Ergo pillar stand with incident and transmitted
NZ.6010-C	HWF 10x/22 mm eyepiece only with crosshairs		3 W LED illuminators
NZ.6010-CM	HWF 10/22 mm eyepiece only with 10/100	NZ.9018	Ergonomic pillar stand with two 3 W gooseneck
	micrometer and crosshairs		type incident LED illuminations on each side and
NZ.6015	Pair of HWF 15x/16 mm eyepieces for NZ		a 3 W transmitted LED illumination
NZ.6020	Pair of HWF 20x/12 mm eyepieces for NZ	NZ.9020	Universal one-arm stand without
NZ.6099	Pair of eyecups for NZ		NZ head holder
NZ.6210	Pair of HWF 10x/23 mm eyepieces for NZ EVO	NZ.9025	Black universal stand with table clamp without
NZ.6210-C	HWF 10x/23 mm eyepiece only with crosshairs		NZ head holder
	for NZ EVO	NZ.9027	Black universal stand with heavy baseplate
NZ.6210-CM	HWF 10x/23 mm eyepiece only with 10/100		without NZ head holder
	micrometer and crosshairs for NZ EVO	NZ.9030	Universal double-arm boom stand without NZ
NZ.6020-CM	HWF 20x/12 mm eyepieces with 10/100		head holder
	micrometer and crosshairs	NZ.9032	Universal two-arm stand with table clamp
			without NZ head holder
AUXILIAF	RY LENSES	NZ.9042	Stand with rotating mirror and indirect
NZ.8903	Additional 0.3x lens for NZ. WD 287 mm.		transmitted LED illumination
	Only suitable for A, AP, U, B and BC stands	NZ.9047	Lightweight articulated arm stand,
NZ.8904	Additional 0.4x lens for NZ. WD 220 mm.		with head holder, without illumination
	Only suitable for A, AP, U, B and BC stands		Q.
NZ.8905	Additional 0.5x lens for NZ. WD 183 mm.		1
	Not suitable for S stands	0)	
NZ.8907	Additional 0.75x lens for NZ. WD 105 mm		
NZ.8915	Additional 1.5x lens for NZ. WD 53 mm		
NZ.8920	Additional 2.0 lens for NZ. WD 34 mm.	NZ.900	15
	Not suitable for S stands		V II





























NZ.9081

	articulated arm stand NZ.9025 and NZ.9027
NZ.9090	Head holder, suitable for NZ.9000/9005/9015/9
	017/9020/9030 stands
NZ.9095-ADD	Head holder, ADD-ON, with fine and coarse
	adjustment. For NZ.9000/9005/9015/9018/9020
	/9030/9032 and NZ.9042 stands. Only available
	with new microscopes

Head 76 mm holder for NexiusZoom head on



ILLUMINATION

LE.5207	Multi-functional dual 3 W LED adjustable light
	source. Equipped with two flexible gooseneck
	arms with LED illuminator
LE.5212	Euromex illumination station with two
	independently controlled goosenecks, a ring
	light and a transmitted stage illuminator
	(see photos on next page)
LE.5260	Interchangeable high power (standard) white
	6500K light guide for NZ.9018 / LE.5207 /
	LE.5212, 1 pc
LE.5261	Interchangeable high power 365 nm flexible
	arm for NZ.9018/LE.5207/LE.5212, 1 pc
LE.5262	Interchangeable high power 395 nm flexible
	arm for NZ.9018/LE.5207/LE.5212, 1 pc
LE.5263	Interchangeable high power 420 nm flexible
	are for NZ.9018/LE.5207/LE.5212, 1 pc
LE.1974	Ring illuminator with 72 LEDs with adjustable
	light intensity. External power supply 110-
	240 Vac / 12 Vdc (50/60 Hz). With segment
	controller. Brightness of 20,000 Lux at 100 mm
	distance and color temperature of 6,500 K.
	Mounting for stereo head with diameter from
	25 to 61 mm

LE.1973	Ring illuminator with 144 LEDs with adjustable
	light intensity. External power supply 100-
	240 Vac / 12 Vdc (50/60 Hz). With segment
	controller. Brightness of 23,000 Lux at 100 mm
	distance and color temperature of 6,500 K.
	Mounting for stereo head with diameter from
	25 to 61 mm
LE.5210	Euromex cold light illuminator EK-1, 100 W.

	110V and 230V models available
LE.5211	Euromex cold light illuminator, 150 W halogen
	110 V and 230 V models available

LE.5211-LED Euromex cold light illuminator LED, 30W high power LED

LE.5214 Dual arm light conductor, gooseneck selfsustaining, 50 cm long, 4 mm diameter core

LE.5215 Triple arm light conductor, gooseneck elfsustaining, 50 cm long, 4 mm diameter core

LE.5222 Focusing head suitable for focusing lens LE.5214 and LE.5215. Needs LE.5224

LE.5224 Aspherical focusing lens for mounting

in LE.5222

More illumination options, see chapter 11

STAGES

NZ.9850

NZ.9505	Mechanical 180 x 155 mm X-Y stage with
	75 x 55 mm translation and transparent
	glass plate
NZ.9524	360° rotatable circular stage with built-in
	polarization filter for NZ
NZ.9525	360° rotatable analyzer in mount to be screwed
	under head of NZ
AE.5168-NZ	Heating stage for NZ microscope stage

CAMERA ACCESSORIES

		1/2 inch cameras
ı	AE.5130	Universal SLR adapter with built-in 2x lens for
		standard 23.2 mm tube. Needs T2 adapter
	AE.5025	T2 adapter for Nikon D SLR digital camera
	AE.5040	T2 adapter for Canon EOS SLR digital camera

C-mount adapter with 0.5x lens for

MISCELLANEOUS

NZ.8950 Protection glass window for NZ NZ.9520 Polarization kit for NZ: 360° rotatable circular stage with built-in polarization filter (NZ.9524) + analyzer in mount to be screwed under head (NZ.9525) NZ.9040 Darkfield attachment for NZ

NZ.9045 Fall protection ring for NexiusZoom pillars.

Note: the one- and double arm stands are as a

standard supplied with this ring

NZ.9570 Pair of object clamps for standard stage

NZ.9572 Adjustable GEM object clamp for

P, PL and S stand of NZ

NZ.9950 Standard plexiglass object plate, opaque,

with black border

NZ.9956 Pair of object stage plates (black/white)

Ø 90 mm

NZ.9958 Standard glass object plate, opaque

NZ.9983-R 3 W LED replacement unit for NZ,

incident illumination

NZ.9983 3 W LED replacement unit for NZ,

transmitted illumination

AE.1112 Micrometer 76 x 26 mm slide, 50 mm/500

divisions, 100 µm per division

NZ.4300 Aluminium case for NexiusZoom microscopes

with -P/-S/-PG stands

DISPOSABLES

PB.5245 Lens cleaning paper, 100 sheets per pack

PB.5274 Isopropyl alcohol 99%, 200 ml

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 toolbox

NZ = NexiusZoom

WD = working distance





• The LE.5212 in two different configurations

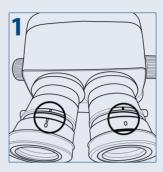




how to set up a

stereo microscope

Setting up your stereo microscope properly is essential to getting parfocal images during the entire zoom range. It also prevents head aches, stressful eyes and fatigue. Below you will find a setup guide that will help get the best out of your microscope



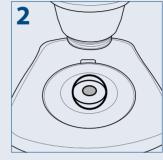
Turn the diopter adjustment rings of both eyepieces to position 0"



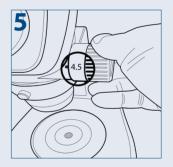
Rotate the focus adjustment knob to bring the specimen into focus



Turn the zoom adjustment knob to the lowest magnification



Put a specimen on the stage plate



Turn the zoom adjustment knob to the highest magnification



Rotate the diopter adjustment rings of the left and right eyepiece to bring the specimen into focus



Turn the zoom adjustment knob to the lowest magnification



Rotate the focus adjustment knob to bring the specimen into focus

PLEASE NOTE

Put the zoom adjustment knob at the highest magnification again and check the image focusing. The diopter adjustment is complete when the image is accurately focused during zooming

If not, please repeat steps 3 to 8



These stereo (zoom) microscopes are especially developed for laboratory applications, education and are greatly appreciated by biologists, entomologists and geologists

Equipped with either a parfocal zoom system with 1:6.4 zoom ratio or a double magnification revolver - both with LED illumination - the StereoBlue range guarantees crisp, high resolution images

















SB.1903



330 (h) x 220 (w) x 266 mm (d) | 4.4 kg SB.1903-P

299 (h) x 220 (w) x 266 mm (d) | 5.1 kg

SB.1302-P/SB.1402-P

299 (h) x 220 (w) x 266 mm (d) | 4.7 kg

HIGHLIGHTS

- Designed for professional use
- Robust and sturdy
- WF 10x/21 mm evepieces
- Dual magnification or zoom models
- Available in ergonomic rack & pinion, pillar, universal and boom stands
- Double 3 W LED illumination
- Also available with batteries
- Ergonomic carrying grip
- 5 Years warranty



SPECIFICATIONS

EYEPIECES

Pair of WF 10x/21 mm secured eyepieces supplied with eyecups

HEAD

- · Binocular or trinocular 45° inclined tubes
- Diopter adjustment on both eyepieces, except the models SB.1302-P/1402-P and SB.1302 /1402, which have diopter adjustment on one side
- Interpupillary distance adjustable between 55 mm and 75 mm
- Trinocular head is supplied with a fixed light path beam

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

DUAL MAGNIFICATION OBJECTIVES

- Nosepiece with dual 1x/3x or 2x/4x revolving objectives
- Magnifications 10x/30x or 20x/40x
- Field of view 21 mm/6.9 mm or 10.5 mm/5.25 mm
- · Working distance 100 mm

ZOOM OBJECTIVE

- Zoom stereo 0.7x to 4.5x parfocal objective
- Magnification from 7x to 45x
- Field of view 29.9 mm to 4.6 mm
- · Working distance 100 mm



Built-in ring light with 30 intensity adjustable LED's

EVO ZOOM OBJECTIVE

- Zoom stereo 0.5x to 5.5x parfocal objective
- Magnification from 5x to 55x
- · Field of view 38 mm to 3.9 mm
- · Working distance 100 mm

STAND

- The rack & pinion and pillar stands of the StereoBlue are equipped with ergonomic flat bases, complete with two object clamps and Ø 60 mm transparent and black/white stage plates The coarse adjustment is equipped with tension control
- The ergonomic universal (single arm stand, U) and boom stand (dual arm, B) are ideal for viewing large samples or working under the microscope. They come without illumination



- The U- and B-stand can be equipped with ring illuminators LE.1974 and LE.1973 with respectively 72 or 144 power LEDs controlled in segments, ideal for creating or lifting shades
- The stands are alloy metal casted with hardened coating More illumination options see chapter 11 (Accessories)

ILLUMINATION

3 W transmitted and incident LED illuminators which can be used simultaneously. Model SB.3903 and SB.3903-P are equipped with 3 W transmitted and incident LED illuminators and a built-in 30 LED ring light incident illuminator. The light

intensities can be adjusted separately. Also available with batteries (add "B" after article number, e.g. SB.1302-PB)

ANTI-THEFT SLOT

At the back of the microscope a Kensington Security slot is placed, which can be used to secure the instrument from theft (not on the U- and B-models)

PACKAGE CONTENT

Models with illumination are supplied with power cord, dust cover, eyecups, a spare fuse, Ø 60 mm transparent, black/white stage plates and user manual. All packed in a polystyrene box

STEREOBLUE 1X/3X AND 2X/4X OBJECTIVES

MODELS	Binocular	1x/3x objective	2x/4x objective	Rack & pinion stand 3 W LED	Pillar stand 3 W LED	Weight (kg)
SB.1302	•	•		•		3.3
SB.1302-P	•	•			•	4.2
SB.1402	•		•	•		3.3
SB.1402-P					•	4.2

STEREOBLUE 0.7X UP TO 4.5X ZOOM/0.5X UP TO 5.5X ZOOM EVO

	Bino	Trino	0.7 - 4.5x	0.5 - 5.5x	Rack & pinion	Pillar stand	Universal	Boom stand on	30 LED	Weight
MODELS			zoom	zoom EVO	stand 3 W LED	3 W LED	stand	heavy base plate	right light	(kg)
SB.1902	•		•		•					3.6
SB.1902-P	•		•			•				4.4
SB.1902-U	•		•				•			15.4
SB.1902-B	•		•					•		21.9
SB.1903		•	•		•					3.7
SB.1903-P		•	•			•				4.5
SB.1903-U		•	•				•			15.5
SB.1903-B		•	•					•		22.0
SB.3903		•	•		•				•	3.7
SB.3903-P		•	•			•			•	4.5
SB.1702	•			•	•					3.6
SB.1702-P	•			•		•				4.4
SB.1702-U	•			•			•			15.4
SB.1702-B	•			•				•		21.9
SB.1703		•		•	•					3.7
SB.1703-P		•		•		•				4.5
SB.1703-U		•		•			•			15.5
SB.1703-B		•		•						22.0

ACCESSORIES AND SPARE PARTS

EYEPIECES

SB.6210	Pair of HWF 10x/21 mm eyepieces
SB.6210-C	WF 10X/21 mm eyepiece with crosshairs
SB.6210-M	WF 10X/21 mm eyepiece with micrometer scale
SB.6015	Pair of HWF 15x/15 mm eyepieces
SB.6015-C	WF 15X/15 mm eyepiece with crosshairs
SB.6015-M	WF 15X/15 mm eyepiece with micrometer scale
SB.6020	Pair of HWF 20x/10 mm eyepieces
SB.6020-C	WF 20/10 mm eyepiece with crosshairs
SB.6020-M	WF 20/10 mm eyepiece with micrometer scale
SB.6099	Pair of eyecups

AUXILIARY LENSES

SB.8903	Auxiliary 0.3x lens for zoom models, WD 287 mm.
	Only suitable for boom and articulated stands
SB.8905	Auxiliary 0.5x lens for zoom models,
	WD 179 mm. Not suitable for SB.1X02, SB.1X03,
	SB.3903 and SB.3903-P
SB.8907	Auxiliary 0.75x lens for zoom models, WD 105 mm
SB.8915	Auxiliary 1.5x lens for zoom models, WD 53 mm.
	Not suitable for SB.39xx

POLARIZATION ATTACHMENT

PULARIZ	ZATION ATTACHMENT	
SB.9520	Polarization kit: 360° rotatable circular stage with	n
	built-in polarization filter (SB.9524) + analyzer in	
	mount to be screwed under the head (SB.9525)	
SB.9524	360° rotatable circular stage with	
	built-in polarization filter	
SB.9525	360° rotatable analyzer in mount	
	to be screwed under the head	
		e
MISCELL	ANEOUS	
SB.8950	Protection glass window	
SB.9020	Universal single-arm stand without	
	band balder and without illumination	

	3
SB.9020	Universal single-arm stand without
	head holder and without illumination
SB.9030	Universal double-arm stand without
	head holder and without illumination
SB.9090	Head holder for SB.9020
SB.9045	Fall protection ring for StereoBlue pillars.
	Note: the one- and double arm stands are
	as a standard supplied with this ring

SB.9570 Pair of object clamps for stage **SB.9952** Stage plate transparent, Ø 60 mm SB.9956 Stage plate black/white, Ø 60 mm SB.9983-R 3 W LED replacement unit, incident illumination **SB.9983** 3 W LED replacement unit, transmitted illumination **AE.1112** Micrometer 76 x 26 mm slide, 50 mm/50 divisions

CAMERA ACCESSORIES

SB.9850	C-mount adapter with 0.5x lens for 1/2" cameras.
	Only for trinocular models
AE.5130	Universal SLR camera adapter with 2x projection
	lens for 23.2 mm tubes. Needs T2 adapter
AE.5025	T2 adapter for Nikon D digital SLR cameras
AE.5040	T2 adapter for Canon EOS digital SLR cameras
Other T2 ac	dapters on request

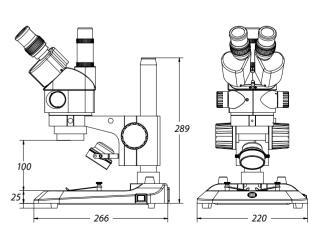
DISPOSABLES

PB.5245	Lens cleaning paper, 100 sheets per pack
PB.5274	Isopropyl alcohol 99% (200 ml)
PB.5275	Cleaning kit: lens cleaning fluid, lint free lens
	tissue, brush, air blower, cotton swabs





DIMENSIONS





The modular stereo microscopes of the DZ series combine ergonomics with very high resolution optics. Either standard versions or customized models are available thanks to the large choice of central zoom units, eyepieces, stands and accessories

A fluorescence illumination unit enables scientific research such as for studies of vertebrate development and gene function, teratology, genetics and environmental sciences









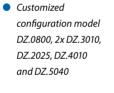














444 (h) x 330 (w) x 285 (d) mm | 5.2 kg

HIGHLIGHTS

- Binocular and trinocular models
- Six standard configurations or customized configuration
- Ergonomic tilting head from 0° to 35° tilting or fixed 20° inclined head, EWF 10x/22mm eyepieces,
- Three central zoom units from 4x to 320x
- Fields of view from 55 mm to 1.4 mm
- Working distances from 126 mm to 33 mm
- Ergonomic rack & pinion stands, universal stand or articulated arm stand
- Transmitted and incident LED illumination
- 100 W epi-fluorescence mercury vapor illuminator
- 10 Years warrantv

SPECIFICATIONS

EYEPIECES

Pair of EWF 10x/22 mm eyepieces

HEAD

- Ergonomic binocular 0-35° tilting head
- · Binocular 20° tilted head
- Diopter ± 5 adjustment on both eyepieces
- · Interpupillary distance from 55 to 75 mm
- Photo ports for one or two cameras
- Click-stops

CENTRAL ZOOM UNIT

Three central zoom units are available:

- 1:6.3 for total magnifications from 8 to 50x
- 1:8 for total magnifications from 8 to 64x
- 1:10 for total magnifications from 8 to 80x

COMMON MAIN OBJECTIVE

Standard configurations are supplied with a plan apochromatic common main objective (CMO) 1x, working distance 78 mm. Other plan apochromatic common main objectives 0.5x (WD 126 mm) and 2x (WD 33 mm) are also available



 Customized specification fluorescence model

All optics have an anti-reflection coating for maximum light throughput and are anti-fungus treated

STAND

Large ergonomic stand with Ø 100 mm object plate and two object clamps. Coarse adjustment with adjustable friction. A universal stand and an articulated arm stand without illumination are also available for configurations built to customer's specifications

ILLUMINATION

The transmitted and incident 3 W LED illuminations are supplied with a built-in 100-240 V power supply. Both illuminators can be used simultaneously and the light intensities can be adjusted separately

PACKAGE CONTENT

Supplied with power cord, dust cover, a spare fuse and user manual. All packed in a polystyrene box

STANDARD CONFIGURATIONS

All six standard configurations are equipped with EWF 10x/22mm eyepieces, plan achromatic common main objective (CMO) 1x and rack & pinion stand with incident and transmitted LED illumination

DZ SERIES STANDARD

MODELS	Binocular 20° head	Binocular ergo 0 to 35° tilting	Magnifications from 8 to 50x	Magnifications from 8 to 64x	Magnifications from 8 to 80x
DZ.1100		•			•
DZ.1105	•				•
DZ.1800		•		•	
DZ.1805	•			•	
DZ.1600		•	•		
DZ.1605	•		•		

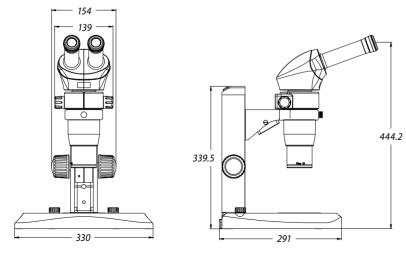
All equipped with EWF 10x/22mm evenieces

MAGNIFICATIONS AND FIELDS OF VIEW FOR STANDARD CONFIGURATIONS

0.5x Objective

				WD 126 m	WD 126 mm		WD 78 mm		WD 33 mm	
M	ODE	LS	Zoom indication	Total magnification	Field of view	Total magnification	Field of view	Total magnification	Field of view	
			0.8x	4x	55	8x	27.5	16x	13.7	
			1.0x	5x	44	10x	22	20x	11	
		505	1.5x	7.5x	29.3	15x	14.6	30x	7.3	
		DZ.1605	2.0x	10x	22	20x	11	40x	5.5	
	305		3.0x	15x	14.6	30x	7.3	60x	3.6	
	Z.18	DZ.1600/	4.0x	20x	11	40x	5.5	80x	2.7	
9	DZ.1800 / DZ.1805	DZ	5.0x	25x	8.8	50x	4.4	100x	2.2	
Ž.1.	180		6.0x	30x	7.3	60x	3.6	120x	1.8	
1100 / DZ.1105	DZ		6.4x	32x	6.8	64x	3.4	128x	1.7	
12			7.0x	35x	6.3	70x	3.1	140x	1.5	
DZ.			8.0x	40x	5.5	80x	2.75	160x	1.4	

DIMENSIONS



1.0x Objective

2.0x Objective

BUILD YOUR OWN STEREO MICROSCOPE

A customized DZ series stereo microscope can be configured to customer's specifications by choosing one of the three central zoom units DZ.0630, DZ.0800 or DZ.1000 and adding the necessary components for the application. A pair of eyepieces, an ergonomic 0 to 35° tilting head or fixed 20° inclined head, a 0.5x, 1x or 2x common main objective (CMO), a large ergonomic LED stand, a universal or an articulated arm stand. Other accessories, such as a photo/camera unit or dual iris diaphragm, can complete the configuration

CENTRAL ZOOM UNITS

DZ.0630 Central zoom unit 1:6.3 with magnifications from 8 to 50 times

DZ.0800 Central zoom unit 1:8 with magnifications from 8 to 64 times

DZ.1000 Central zoom unit 1:10 with magnifications from 8 to 80 times

HEADS

DZ.2020 Ergonomic binocular 0-35° tilting head without eyepieces

DZ.2025 Binocular 20° tilted head without eyepieces Interpupillary distance from 55 to 75 mm

EYEPIECES

DZ.3010 EWF 10x/22 eyepiece, 1 piece

DZ.3012 EWF 10x/22 eyepiece with micrometer and crosshairs, 1 piece

DZ.3015 WF 15x/16 eyepiece, 1 piece

DZ.3020 WF 20x/12 eyepiece, 1 piece



Eyepieces

IRIS DIAPHRAGMS

DZ.9010 Double iris diaphragms for increased depth of field

OBJECTIVES

DZ.4003	Plan common main objective 0.3x. WD 276 m
DZ.4005	Plan apochromatic common main objective
	0.5x. WD 126 mm
DZ.4010	Plan apochromatic common main objective
	1.0x. WD 78 mm

DZ.4020 Plan apochromatic common main objective 2.0x. WD 33 mm

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

STANDS

DZ.5020 Universal stand without illumination. Dimensions 460(h) x 280 (l) x 400 (d) mm

DZ.5040 Ergonomic stand with transmitted and incident LED illumination. Coaxial coarse and fine adjustments, 100 graduations, 0.015 mm per graduations

65.980 Articulated arm stand for mounting on table without head holder (65.981)

Head holder 76 mm for DZ series 65.981 and black articulated arm stand (65.980)

NZ.9025 Articulated arm stand with table clamp (without DZ head holder 65.981)

NZ.9027 Articulated arm stand with heavy stand (without DZ head holder 65.981)

NZ.9042 Stand with rotating mirror and transmitted LED illumination

NZ.9030 Boom (double arm) stand with heavy stand (without head holder NZ.9090)

NZ.9032 Boom (double arm) stand with table clamp (without head holder NZ.9090)

Head holder, suitable for NZ.9000/9005/9015/9017 NZ.9090 /9020/9030 stands

FLUORESCENCE ATTACHMENT

DZ.9050 Attachment for fluorescence with 100 W mercury vapor illumination with GFP-B and GFP-LP filter sets and one 23.2 mm photo port. Supplied with power supply

DZ.9060 Filter cube with GFP-B band-pass filter set for

blue excitation, EX 460-500, DM 505, EM 510-560

DZ.9061 Filter cube with GFP-L long-pass filter set for Blue

excitation, EX 460-500, DM 505, EM 510

DZ.9049 Empty filter cube

Other premium and premium zero-pixel shift optimized filter sets are also available on request. See end of chapter 5

• customized configuration model DZ.0800, 2x DZ.3010, DZ.2025, DZ.9005, DZ.9010, DZ.4010 and DZ.5040



ACCESSORIES/SPARE PARTS

POLARIZATION ATTACHMENTS

DZ.9045 Polarizer, 360° rotatable, to be mounted on common main objectives of DZ series

DZ.9047 Polarizer, 360° rotatable, to be placed on the stage

CAMERA ACCESSORIES

DZ.9005 Photo port attachment with one 23.2 mm tube **DZ.9007** Photo port attachment with two 23.2 mm tubes

DZ.9013 C-mount 1x objective for insertion into photo port attachments

AE.5130 Universal SLR camera adapter with 2x projection lens for 23.2 mm tubes. Needs T2 adapter

AE.5025 T2 adapter for Nikon D digital SLR cameras

AE.5040 T2 adapter for Canon EOS digital SLR cameras

AE.5063 0.7x Objective with C-mount. To be mounted over a 23.2 mm tube of a Z-, M-. F-series

Other T2 adapters on request

MISCELLANEOUS

DZ.9020 Large 185 x 145 mm stage with mechanical X-Y 50 x 50 mm stage, to be moved by hand

DZ.9040 Darkfield attachment for DZ.5040

AE.1112 Micrometer slide, 50 mm/50 divisions

AE.1900 Glass object plate, Ø 100 mm

AE.1903 Acrylic white/black object plate 50.875 Adjustable GEM clamp

SL.5520 LED replacement for incident LED illumination

of DZ.5040 stand

DISPOSABLES

AE.1385 100 W HBO mercury vapor bulb for fluorescence

PB.5245 Lens cleaning paper, 100 sheets per pack

PB.5274 Isopropyl alcohol 99% (200 ml)

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







of life science research and industry because of the excellent optical and mechanical characteristics of this series





















HEAD + STAND ST.1740

ZE.1624 and ST.1735

HIGHLIGHTS

- Modular system
- Binocular and trinocular models
- Standard HWF 10x/23 mm eyepieces
- Stereo zoom heads with a fixed 45° inclined tubes
- Zoom magnification objectives
- Superior resolution optics
- Multiple stands
- 10 Years warranty



EYEPIECES

Pair of SWF 10x/23 mm eyepieces

HEAD

- Binocular or trinocular heads with a 45° inclined tubes
- Diopter \pm 6° adjustment on both tubes for Z series Interpupillary distance from 55 to 75 mm
- · Optional click-stops

ZOOM MAGNIFICATION OBJECTIVES

- Zoom objective with magnifications from 0.4x to 2.5x
- Zoom objective with magnifications from 0.7x to 4.5x
- Zoom objective with magnifications from 1x to 7x Zoom objectives with click stops are also available on request All optics have an anti-reflection coating for maximum light throughput and are anti-fungus treated

STANDS WITHOUT ILLUMINATION

ST.1710 Pillar stand with ST.1790 head holder. Pillar height 210 mm, diameter Ø 20 mm Dimensions 250 (h) x 150 (w)x 240 (d) mm

ST.1718 Pillar ergonomically flat stand with ST.1790 head holder. Pillar height 213 mm, diameter Ø 20 mm. Dimensions 258 (h) x 330 (w) x 306 (d)



STANDS WITH ILLUMINATION

ST.1740 Rack & pinion stand with 5 W halogen illumination. Supplied with frosted filter for transmitted illumination and a blue filter for incident illumination. Both illuminations are adjustable and can be used simultaneously. With integrated power supply. Dimensions: (d)240 x (w)160 x (h)290 min/max height 240-290 mm

Stand with 3 W LED illumination and rotatable double-sided coated mirror



BOOM STANDS

ST.1720 Articulated one arm boom stand with a 270 x 270 mm base, 610 mm and Ø 29 mm pillar, with orientable stereo head holder ST.1794. Vertical post 780 mm. Weight 19.5 kg 65.980 Articulated one arm stand to be mounted on table without 83 mm head holder. Depth positioning of stereo head between 33 and 100 cm. WD between 0 and a maximum of 295 mm 65.983 Head holder 85 mm diameter for 65.980

HEAD HOLDERS

Other optional head holders for boom stands

ST.1790 Head holder with coarse adjustment* Head holder with coarse and fine adjustment* ST.1792 Head holder with coarse adjustment and opening for one fiber light guide* ST.1794 Orientable head holder with coarse adjustment

and opening for one fiber light guide**

* Not suitable for boom stands ST.1720 and 65.980/65.983

** Only suitable for boom stand ST.1720

All head holders have an internal diameter of 84 mm and a friction adjustment

FOCUSING

Coarse adjustment and friction adjustment for head holders for ST.1790, ST.1794, ST1796. The head holders ST.1796 is also equipped with a fine focusing adjustment

PACKAGE CONTENT

Models with illumination are supplied with power cord, dust cover, a spare fuse and user manual. All packed in a polystyrene box



ZOOM STEREO HEADS

MODELS	Binocular	Trinocular	Tilt tubes	Objective zoom	Magnification	WD (mm)	Field of view (mm)
ZE.1624	•		45°	0.7 - 4.5x	7 - 45x	93	32/5.1
ZE.1654		•	45°	0.7 - 4.5x	7 - 45x	93	32/5.1
ZE.1657		•*	45°	0.7 - 4.5x	7 - 45x	104	32/5.1
ZE.1670	•		45°	1 - 7x	10 - 70x	104	23/3.3

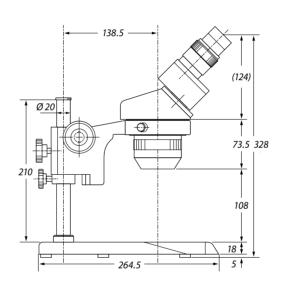
^{*} When the trinocular tube is engaged, the image is still available in both other tubes All zoom stereo heads are supplied with SWF 10x/23 mm eyepieces without eyecups

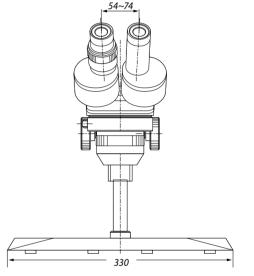
STANDS

MODELS	Column (mm)	Diameter (mm)	Rack & pinion	Base (w x d mm)	Height (mm)	Head holder	Illumination
ST.1710	210	20		240 x 150	250	ST.1790	
ST.1718	213	20		330 x 306	285	ST.1790	
ST.1720	610	29		780 x 270	650	ST.1794	
ST.1735			•	240 x 160	290		3 W LED
ST.1740			•	240 x 160	290		10 W Hal
65.980/65.983			•	Ø 1000*	0/295	65.983	

^{*} Length with the two arms totally extended

DIMENSIONS





ACCESSORIES AND SPARE PARTS

EYEPIECES

(without eyecups)

AE.1836 Pair of SWF 10x/23 mm eyepieces AE.1834 Pair of SWF 12.5x/20 mm eyepieces AE.1840 Pair of SWF 30x/7.5 mm eyepieces AE.5439 Pair of eyecups AE.5425 Pair of eyecups, suitable when

wearing spectacles

MICROMETER EYEPIECE

(with adjustable lens)

AE.1839 SWF 10x/21 mm with 10 mm/100 micrometer reticle and crosshairs

MICROMETER SLIDE

AE.1112 Object slide 76 x 26 mm with micrometer 50 mm/500, 100 μm/division

ADDITIONAL LENSES

(for ZE.1659)

AE.1822 Additional 0.57x lens. WD 300 mm

ADDITIONAL LENSES

(for ZE.1624, ZE.1654, ZE.1670, ZE.1626)

AE.1870 Additional 0.44x lens. WD 180 mm. Suitable with ST.1720, ST.1780, ST.1785 and 65.980 stands

AE.1856 Additional 0.5x lens. WD 150 mm. Suitable with ST.1740. Maximum object size is 15 mm

AE.1857 Additional 0.75x lens. WD 97 mm Additional 1.5x lens. WD 50 mm

AE.1859 Additional 2.0x lens. WD 34 mm

ADDITIONAL LENSE

(for ZE.1657)

AE.1818 Additional 1.5x lens. WD 57 mm

PROTECTION WINDOW

(to be screwed under the objectives)

except ZE.1659

AE.1845 Protection window for all heads of ZE series

MECHANICAL STAGE

AE.1876 Plain stage 145 x 115 mm with 75 x 50 mm X-Y mechanical stage on ball bearings. Horizontal coaxial adjustment. Double Vernier with 0.1 mm graduations. Only with ST.1710 and ST.1740

OBJECT PLATES - Ø 94 MM

AE.1882 Acrylic black/white object plate

FILTERS - Ø 40 MM

AE.1897 Frosted glass filter

OBJECT HOLDER

AE.5446 Orientable clamp for gems. Interchangeable with object plate clamp

FUSE

AE.5252 Fuses for ST.1740 stand. Per 10 pieces

CAMERA ACCESSORIES

DC.1320 Projection 1x objective with C-mount DC.1324 Projection 0.5x objective with C-mount for cameras with 1/2" sensor. To be inserted into a 23.2 mm tube

DC.1326 Projection 0.33x objective with C-mount for cameras with 1/3" sensor.

To be inserted into a 23.2 mm tube

AE.5130 Universal SLR camera adapter with 2x projection lens for 23.2 mm tubes. Needs T2 adapter AE.5025 T2 adapter for Nikon D digital SLR cameras **AE.5040** T2 adapter for Canon EOS digital SLR cameras

Other T2 adapters on request









HIGHLIGHTS

- Binocular models
- Easy to use
- 360° revolving rotatable head with 45° inclined tubes
- Secured WF 10x/20 mm eyepieces
- 10x/30x and 20x/40x magnification in revolving nosepiece
- Robust rack & pinion stand with powerful halogen or LED illumination
- LED illumination with rechargeable AA batteries for cordless use
- Incident and transmitted illuminations can be used simultaneously
- Lightweight; easy to carry to any location
- 5 Years warranty



• 60.100 (P-10)

SPECIFICATIONS

EYEPIECES

Secured pair wide field eyepieces WF 10x/20 m m. Supplied with eyecups

HEAD

Binocular head with 45° inclined tubes. One tube supplied with diopter adjustment. Interpupillary distance from 55 to 75 mm

OBJECTIVES

- The P-10 and P-10 LED models are supplied with revolving 1x/3x objectives for a total magnification of 10 and 30 times with fields of view from 20 mm to 6.7 mm
- The P-20 and P20-8 LED models are supplied with revolving 2x/4x objectives for a total magnification of 20 and 40 times with fields of view from 10 mm to 5 mm

By using 5x or 20x eyepieces, magnifications from 5 to 80x can be achieved

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

STAND

Robust pillar stand with 35 mm coarse adjustment. Supplied with white/black object plate and two object clamps

ILLUMINATION

The P-10 and P-20 models are supplied with 10 W 12 V halogen transmitted and incident illumination and internal power supply. Both illuminators can be operated independently or simultaneously

The P-10 LED and P-20 LED models are supplied with high power LED transmitted and incident illumination. With three rechargeable AA batteries for a maximum of 35 hours continuous cordless operation. Both illuminators can be operated independently or simultaneously. Comes with external mains adapter

50.961

CAMERAS

Euromex offers a wide range of industrial and laboratory grade cameras, see chapter 6 (Digital Solutions). For P series, the camera replaces one of the eyepieces

PACKAGE CONTENT

Supplied with power cord, three rechargeable AA batteries, dust cover, a spare fuse and user manual (and spare bulb for halogen models). All packed in a polystyrene box

ACCESSORIES AND SPARE PARTS

EYEPIECES

50.805	Pair of wide field eyepieces WF 5x/22 mm
50.810	Pair of wide field eyepieces WF 10x/20 mm
50.811	Micrometer eyepiece WF 10x/20 mm, 10 mm/100
50.815	Pair of wide field eyepieces WF 15x/16 mm
50.820	Pair of wide field eyepieces WF 20x/10 mm
50.840	Pair of eyecups

Black/white stage plate 94 mm diameter

50.815

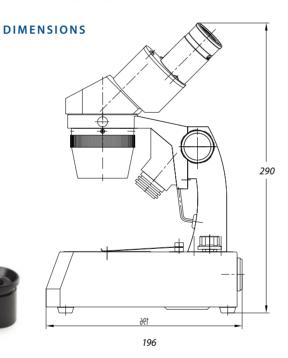
MISCELLANEOUS

50.873	Glass stage plate 94 mm diameter
50.875	Adjustable GEM object clamp for P series
50.876	Darkfield attachment
50.882	Spare halogen bulb 12 V 10 W for P series
	(transmitted illumination)

Plastic case for P series

DISPOSABLES

AE.1112	Micrometer slide, 50 mm/50 divisions
PB.5245	Lens cleaning paper, 100 sheets per pack
PB.5274	Isopropyl alcohol 99% (200 ml)
PB.5275	Cleaning kit: lens cleaning fluid, lint free lens
	tissue, brush, air blower and cotton swabs



MODELS	45° head	1x/3x objective	2x/4x objective	Transmitted halogen illumination	Incident halogen illumination	Transmitted LED illumination	Incident LED illumination
60.100 (P-10)	•	•		•	•		
60.110 (P-10 LED)	•	•				•	•
60.200 (P-20)			•	•	•		
60.210 (P-20 LED)	•		•			•	•

50.820

about

microscope optics

TECHNICAL FACTS

RESOLVING POWER

A human eye cannot distinguish two points when these are closer than approximately 0.3 mm or 300 µm to each other. That is what is called resolving power"; the capacity to resolve two points which are close together or optical resolution", the ability of an imaging system to resolve detail

MAGNIFICATION

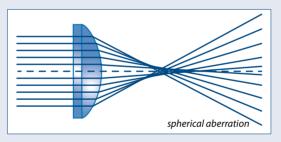
If one needs to detect details of 10 µm, one needs at least $300 \, \mu m / 10 \, \mu m = 30 x \, magnification in order to resolve$ this detail. Knowing that conventional stereo microscopes can magnify - without the help of additional lenses and without introducing additional optical aberrations – up to approximately max. 100 times, the smallest detail that a stereo microscope can resolve is 300 μ m / 100 = 3 μ m

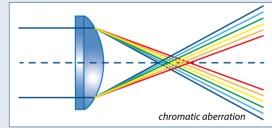
For details smaller than approximately 3 µm, one could better choose an optical compound microscope to resolve these details

OPTICAL RESOLUTION

The resolution of an optical microscope can be defined as the shortest distance between two points that the microscope can reveal for a human eye or camera

The theoretical maximum resolution is limited by the diffraction laws of physics and is equal to $r = 1.22 \lambda / (N.A. of objective + N.A. condenser)$ with r = resolution, N.A. = numerical aperture, $\lambda = imaging wavelength$





ABERRATIONS

In practice, the resolution of a microscope is lower than the theoretical resolution due to optical aberrations, improper illumination or bad alignment of the optics and components of the microscope. Despite corrections for chromatic and spherical aberrations, coma, astigmatism and distortion, the real maximum resolution of a microscope with a 100x objective is about 0.25 μm for 550 nm light rays

Chromatic aberration	Difference in focus of different colors caused by difference in refractive indices for each wavelength
Spherical aberration	Difference in focus caused by defects or irregularities on the surface of a lens
Astigmatism	Rays traveling through two perpendicular planes having different focal planes
Coma aberration	Variation in magnification over the entrance pupil
Distortion	Stratching of an image as a variation in magnification across the lens field

50.810

life science

digital solutions





Get ready to discover the digital world of microscopy with the newest Euromex digital laboratory products. The broad Euromex product range of digital cameras and digital microscopes with built-in camera offers the best suitable solutions for your specific application needs

> Euromex digital laboratory products incorporate all the latest available technology in this field such as WiFi, HDMI and sCMOS sensors, especially designed for fluorescent microscopy. Our digital solutions package includes the powerful ImageFocus software for image analysis





DIGITAL MICROSCOPES • 258

MACROZOOMS • 266

WIFI CAMERAS • 274

USB CAMERAS • 275

HD CAMERAS • 278 COOLED CAMERAS • 282

TABLET CAMERA • 284

SOFTWARE • 286

ADAPTERS • 290



microscopes uses an Ultra HD camera together with a high resolution 13" screen, to bring the most vivid images directly to you. This is extremely useful for demonstrations or for educational applications

This digital solution can work in two modes:

• A stand-alone mode, where the mouse driven built-in software enables the capturing of images and recording of videos as well as a full range of measuring functions and playback functions





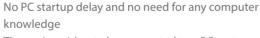












AX.1152-PLi + AX.DIGI-ADD

• The option either to be connected to a PC, or to stream images to different WiFi enabled devices, such as smartphones, tablets or computers

HIGHLIGHTS

- Extremely usefull for discussions, demonstrations and education
- Real time images directly on 13"HD screen
- 3840 x 2160 pixels, 60 fps, H264 codec
- Ultra HD 2160p, 8.3 MP, 1/8 inch color 4K Sony sensor
- Built-in mouse-driven software
- Interfaces: HDMI, USB-3, Ethernet, WiFi
- Stand alone mode or with computer





● IS.1152-Pli + IS.DIGI -ADD

258 **a euromex**

COMPUTER CONTROLLED MODE

Besides working in the stand alone mode of the camera, you can also choose to connect the camera to a computer. Thus enjoying even more features of the Euromex ImageFocus Alpha software. Such as saving captured images in JPG, TIFF or BMP formats and recording videos in .avi format directly on the hard drive. The software offers different measurement features on live and captured images, and also full control over the camera parameters

WIFI MODE

The system streams high resolution images simultaneously to several WiFi enabled smartphones, tablets or computers with iOS, Android or Windows operating systems. Ideal for demonstrations where remote viewing is needed

An Android app for this camera is available on www.euromex.com. IOS app can be downloaded from the App Store (free of charge)

MODELS

Ordering is based on the standard iScope, Achios-X Observer, Delphi-X Observer and Achios-X Inverso model rerferences, together with the corresponding DIGI-ADD reference

For example

IS.xxxx-xxx + IS.DIGI-ADD

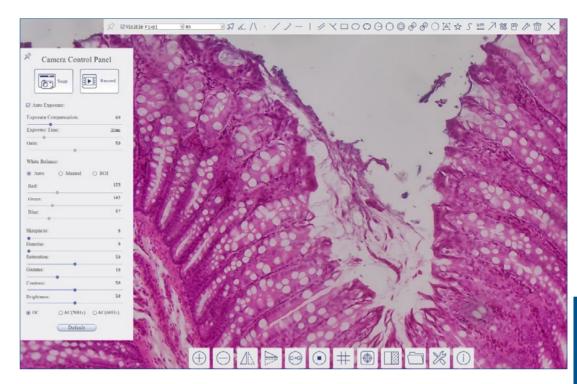
AX.xxxx-xxx + AX.DIGI-ADD

DX.xxxx-xxx + DX.DIGI-ADD

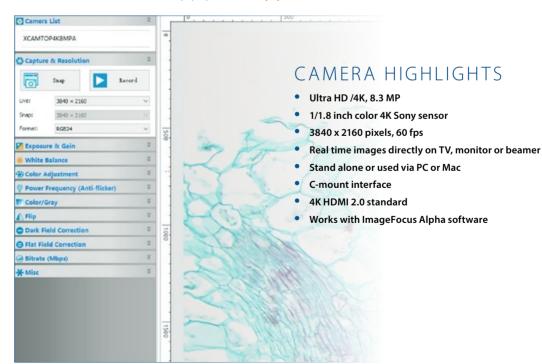
Al.xxxx-xxx + Al.DIGI-ADD

For further information on the microscope models, please refer to the specific microscope section in this catalog





• Actual view of the screen. The menus pop-up automatically by mouse control





HIGHLIGHTS

- Monocular and binocular models
- Models with a 7" LCD screen
- Reserved quadruple nosepiece for semi plan objectives
- Built-in digital 5.0 MP USB-2.0 camera
- Integrated mechanical stage
- LED and NeoLED™ illumination
- Cordless operation
- 10 Years warranty (2 years on camera)



SPECIFICATIONS

MODELS WITH 5 MP CAMERA

All the BioBlue digital microscopes are equipped with a 5.0 MP 1/2.8" CMOS USB-2.0 camera, a maximum of resolution 2560 x 1920, 24 bits color depth, up to 30 frames per second. Supplied with USB-2.0 cable and a 1 mm/100 calibration slide

SOFTWARE

The capture and analysis ImageFocus Plus software allows to save images in .jpg, .tif, .bmp or .dicom formats as well as .avi format videos. Measurements and annotations can be done on live or captured images. Compatible with Windows 10 and higher, both 32 and 64 bits configurations. A Mac OS version is also available. Free software can be downloaded from our website

MODELS WITH LCD SCREEN

The BioBlue is also available with a 7" LCD screen, with all the features of the regular BioBlue. This screen allows live viewing, saving images and videos directly to a micro SD card and even has a basic line measurement function included. The HD LCD screen can only be operated as a stand alone.

Screen resolution 1920 x 1080 @ 30 fps, image resolution up to 1844 x 1080 in JPG and video resolution 1280 x 720 AVI format* *For full microscope specifications and accessories see chapter 1: Biological microscopes

MODELS BB.4205 BB.4225 BB.4245 BB.4255 BB.4267 BB.4269 BB.4200-LCD BB.4220-LCD

chapter 1





















BB.4225





corrected objectives for brightfield observations. Also

EPLPHi IOS and PLPHi IOS infinity corrected objectives for phase contrast observations























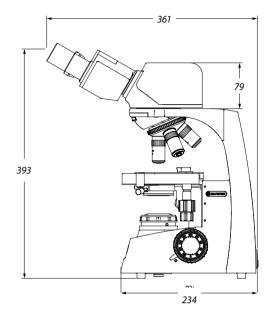


BS. 1157-PLi

BS.1157-PLi 409 (h) x 195 (w) x 235 (d) | 7.1 kg

HIGHLIGHTS

- Binocular model
- Integrated 5.0 MP CMOS color USB.2 camera
- 2592 x 1944 pixels
- 7 frames per second (2592 x 1944 pixels)
- 27 frames per second (1280 x 960 pixels)
- 10 Years warranty (2 years on camera)



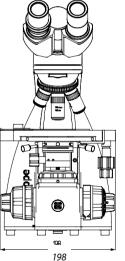
SPECIFICATIONS

CAMERA

The digital bScope microscopes are equipped with a 5.0 MP 1/2.5 inch CMOS USB-2.0 camera, 24 bits color depth, 7 frames per second (2592 x 1944 pixels) or 27 frames per second (1280 x 960 pixels). Dynamic range is 76 dB and signal/noise ratio 41 dB. Supplied with USB-2.0 cable and a micrometer 1mm/100 calibration slide

SOFTWARE

The capture and analysis ImageFocus Alpha software allows t o save images in .jpg, .tif, .bmp or .dicom formats as well as .avi format videos. Measurements and annotations can be done on live or captured images. Compatible with Windows 10 and higher, both 32 and 64 bits configurations. A Mac OS version is also available. Free software can be downloaded from our website. For full microscope specifications and accessories see chapter 4: Biological microscopes



MODELS	Binocular head	HWF 10x/20 mm eyepieces	Quintuple nosepiece E-plan IOS 4/10/S40/S100x	Quintuple nosepiece plan IOS 4/10/S40/S100x	Köhler NeoLED™
BS.1157-EPLi	•	•	•		•
BS.1157-PLi		•		•	•

All models can optionally be supplied with three rechargeable AA batteries

HIGHLIGHTS

- MonoZoom stand-alone digital microscope
- Zoom from 0.7x up to 5x
- 105 mm working distance
- 110 mm working distance with 0.5x lens
- Built-in incident LED ring light
- Built-in 1080p 2 MP HD camera
- HD 11.6 inch screen, -5° to 15°
- Built-in mouse driven on-screen software
- Conveniently build-in capture button
- Removable 32 GB memory stick
- Metal stand
- 2 Years warrantv



Adjustable screen

SPECIFICATIONS

CENTRAL ZOOM OBJECTIVE

The digital MacroZoom MZ.5000 features a single zoom objective with a 0.7 to 5x zoom magnification. Zoom adjustment engravings on 1, 1.5, 2, 3, 4 and 5x. The working distance is 105 mm. Supplied with a 0.5x additional lens with a working distance of 110 mm

STAND

The Central Zoom Objective with attached screen and LED ring light is mounted on a rack and pinion system that sits on a large 320 x 260 mm metal stand. Travel range is 225 mm

ILLUMINATION

A supplied 5,500 K LED ring light with 56 LED's can be mounted under the microscope body. The intensity is adjustable

BUILT-IN CAMERA

Built-in HD 1080p high definition 2 MP CMOS high speed camera, 1920 x 1080 pixels, 60 fps with attached 11.6 screen. The standard field of view is 29.8 to 4.18 and with the 0.5x additional lens from 59 to 8.35. The camera has one HDMI output that can be connected either to the attached screen or to an external HD screen

stick (up to 128 GB) and a supplied wireless mouse that drives the built-in on-screen software. The operator can also take and save images to the SD card by pressing on a capture button at the right side of microscope body

BUILT-IN SOFTWARE

The built-in on-screen software is mouse driven and features functions such as Capture image, Freeze image, Automatic white balance, Automatic exposition, File manager, Grids and camera settings such as exposure time, gain, saturation, contrast, sharpness, HDR

Measurement functions are also available from the software such as line, area, angle. Images are saved in .jpg format and videos are saved in .avi format. With the digital zoom function, objects can be observed with a magnification up to 70 times

PACKAGE CONTENT

Supplied with 32 GB memory stick, mouse, short HDMI cable for attached screen, external 100-240 Vac / 12Vdc / 3 A power supply



The digital MacroZoom is equipped with a built-in full High Definition 1080p camera which can deliver up to 60 images per second and is connected either to the supplied and attached 11.6" screen or an external







stand-alone HD screen













MZ.5000

445/635 (h) x 320 (w) x 260 mm (d) | 4.6 kg

M7.4700-HDS





HIGHLIGHTS

- Stand-alone or PC operated
- Sony 1/2.8" 4K/1080P CMOS sensor 18x optical zoom ratio
- Optical zoom factor up to 5.6x
- On-screen magnification from 2.8 to 47x
- 205 215 mm Working distance
- Standard LED ring light
- Optional directional LED ring light
- Built-in mouse-driven software
- 2 Years warranty

SPECIFICATIONS

ZOOM OBJECTIVE

- · The 16 elements objective has a 18x zoom ratio and produces magnifications up to 0.56 magnification with a manual or automatic focusing function
- Field of views from 255 x 145 mm (1x zoom) to 14 x 8 mm (18x zoom)
- On-screen magnification 2.8 to 47x @190 mm WD (24" screen)
- Focusing range is between 205 and 225 mm WD = working distance

CAMERA

- The 8.3 MP camera is equipped with a Sony 1/2.8 inch 4K UHD/1080P CMOS High Definition sensor with high signal-to-noise ratio generating a 3840 x 8160 pixels video streaming up to 60 images per second
- The 4K/UHD signal fits the HDMI input of a HD screen
- · Image and video storage is done with a built-in SD card
- Stand-alone or PC operated (ImageFocus Alpha)

BUILT-IN SOFTWARE

The built-in intuitive software is controlled by the supplied and to the camera connected mouse. It features a camera-, an autofocus control panel and a measurement toolbar

ILLUMINATION

A standard LED ring light assures a good standard lighting of the sample. A ring light with 12x 1W, 30° directional LEDs enables very flexible lighting of the sample

STAND

MZ.4735

- · The MacroZoom can be mounted on a dedicated rack&pinion stand with or without a dedicated HD screen
- With the 30° directional 12x 1W LED ring light (MZ. 4735,) the MacroZoom (MZ.4705) can also be mounted on the NexiusZoom stands (for instance, the NZ.9047, see dedicated datasheet on the website)

PACKAGE CONTENT

Supplied with a standard ring light, a 32 GB SD card, mouse, WiFi dongle, HDMI cable and external 100-240 Vac / 12Vdc / 3A power supply

ORDER PRODUCT REFERENCES

MZ.4700 Stand-alone digital autofocus MacroZoom (1)

with standard (2) stand

MZ.4700-HDS Stand-alone digital autofocus MacroZoom (1)

with standard (2) stand and HD screen

MZ.4705 Stand-alone digital autofocus MacroZoom (1)

MZ.4710 Standard (2) stand for MZ.4705

MZ.4712 11 inch HD screen for MZ.4710 inclusive pillar

attachment

MZ.4740 Standard LED ring light

MZ.4735 Directional 12 x 1W LEDs ring light (2)

- (1) Supplied with a 32 GB SD card, mouse, WiFi dongle, HDMI cable and External 100-240 Vac / 12Vdc / 3A power supply
- (2) With the MZ. 4735 a MZ.4705 can also be mounted on NexiusZoom stands

























MZ.4705





MZ.4605 on

NZ.9047

BUILT- IN SOFTWARE

The built-in on-screen software (only English language) is mouse driven and features functions such as capture or record images, automatic or manual white balance, color adjustments, file manager, grids, flip/mirror, freese image, WDR (white dark regulation), crosshair and crosslines, text annotations. Camera settings such as automatic or manual exposition time, gain, brightness, saturation, contrast, sharpness, digital 1-6x zoom are available. Measurement functions are also available from the software such as line, polygon circle, rectangle, angle, arc. Images are saved in .jpg or .bmp format and video in .mp4 videos format

HIGHLIGHTS

- MonoZoom stand-alone digital microscope
- Magnification on screen from 2.5 up to 19x

- 2 Years warrantv



USB memory stick

The MZ.4600 has a built-in high definition 1080p 2 MP camera which can deliver up to 60 images per seconds and needs to be connected to an external stand-alone HD screen











MZ.4600

The Digital MacroZoom MZ.46000 features a single zoom objective with a 0.7 to 5x zoom magnification. Zoom adjustment engravings on 0.7, 1, 1.5, 2, 2.5, 3, 4 and 5x. The working distance is 100 mm. An optional 3D attachment

- Standard pillar stand (Ø 32 mm) that sits on a large 320 x
- The MacroZoom objective can also be mounted on the NexiusZoom stands. (for instance, the NZ.9047, see dedicated datasheet on the website)

ILLUMINATION

The MZ.4600 comes with a 144 LED ringlight, adjustable from the side of the MacroZoom body

BUILT-IN CAMERA

Built-in HD 1080p high definition 2 MP 1/2.8" CMOS high speed camera, 1920 x 1080 pixels, 2.9 µm x 2.9 µm pixels and 60 images per seconds. Magnification on screen from 2.5x up

to 19x with field of view from 210 x 120 mm up to 27 x 15 mm

PACKAGE CONTENT MZ.4600

Supplied with

- Digital MacroZoom body with ringlight illumination
- 32 GB memory stick, mouse, HDMI cable for HD screen. external 100-240 Vac / 12Vdc / 3A power supply
- · Standard pillar stand with head holder, without illumination (MZ.4610)

ORDER PRODUCT REFERENCES:

MZ.4600 MacroZoom body with standard stand

MZ.4600-NZ MacroZoom body with NexiusZoom stand

(NZ.9018), equipped with two 2 W gooseneck

LED illuminations

MZ.4605 MacroZoom body with ringlight illumination

MZ.4610 Standard* stand for MZ body MZ.4605

MZ.4615 3D attachment for observation under 45° angle* MZ.4625 Additional 0.5x lens working distance 165 mm

MZ.4627 Additional 0.7x lens working distance 128 mm

MZ.4622 Additional 2x lens working distance 40 mm



3-D attachment MZ.4615 Below: view from above and from a 45° angle





OPTIONAL LIGHT SOURCES:

Ring light with 144 LEDs with adjustable light intensity. External power supply 100-240. Vac / 12 Vdc (50/60 Hz). With seament controller. Luminous flux of 23,000 Lux and color temperature of 6500 K

LE.1974 Ring light with 72 LEDs with adjustable light intensity. External power supply 110-240 Vac / 12 Vdc (50/60 Hz). With segment controller. Luminous flux of 20,000 Lux and color temperature of 6500 K

LE.5207 Light source with 2x 3W LED light source mounted on two self-sustaining Goosenecktype 56 cm long guide. Luminous flux 25.000 Lux, 6500K

LE.5212 Multiple light source station with

- · two self-sustaining gooseneck-type 56 cm long guides with 2x 3 Watt white 6500 K power LEDs, each with a 3-lens focusing heads
- 60 LEDs ring light, 6.500 K, 24.000 Lux
- transmitted 42 LEDs light stage, 6.500 K, 8.000 Lux. Stage diameter 94.5 mm, 15 mm thick



how to match

is a 1.1 µm detail

camera resolution

In microscopy, the image of the sample under observation is projected by the optical components of the microscope (objective lenses, eyepiece lenses, intermediate lens or camera relay lenses) onto the surface of a camera sensor or the retina of a human eye

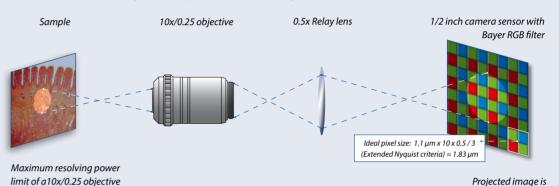
Not the total amount of pixels - which basically determines the field of view of the camera image - is primordial but

a more important specification is the pixel size of the camera sensor. What might be astonishing to know about digital resolution of camera's is the fact, that the higher the magnification, the fewer pixels the chip of a camera needs!

TECHNICAL FACTS

To optimize the transfer of the details of the sample (resolving power) to the camera, the pixel size of the photodiodes of the camera sensor is a key element

EXAMPLE OF A 10X/0.25 OBJECTIVE WITH 1/2 INCH CAMERA SYSTEM



MAXIMUM AND OPTIMUM PIXEL SIZE REQUIREMENTS:

Obj. Magn.	NA	Resolving power ⁽¹⁾ (µm)	Projected size (μm)	Projected size with 0.5x lens (μm)	Maximum ⁽²⁾ camera pixel size (μm)	Optimum (2) (3) camera pixel size (µm)
1x	(0.04)	6.90	6.90	3.45	1.72	1.15
2x	(0.06)	4.60	9.20	4.60	2.30	1.53
4x	(0.10)	2.80	11.2	5.60	2.80	1.86
10x	(0.25)	1.10	11.0	5.50	2.75	1.83
20x	(0.40)	0.69	13.8	6.90	3.45	2.30
40x	(0.65)	0.42	16.8	8.40	4.20	2.80
60x	(0.80)	0.34	20.4	10.2	5.10	2.40
100x	(1.25)	0.22	22.0	11.0	5.50	3.67

- (1) Resolving power of the objectives: $r = 1.22 \cdot \lambda / (NA \ Objective + NA \ Condenser)$. With NA = numerical aperture, $\lambda = wavelength$ and r = optical resolving power. The resolving power limits are based on various theoretical calculations. Low specimen contrast, improper or low illumination conditions, etc, may serve to lower resolving power limits, more often than not, the real-maximum values are not realized in practice
- (2) The Nyquist criterion states that the maximum camera pixel size can't exceed half of the resolving limit of the objective. For high resolution images, the Nyquist criterion is even extended to 2.5 to 3 pixels per detail and thus the optimum camera pixel size (3) is calculated as maximum 1/3 of the resolving limit of the objective
- (3) Although smaller pixel size of photodiodes of the camera sensor improve the resolution, smaller pixel sizes lower signal to noise ratios, lower the dynamic range and collect less light! Binning techniques can compensate for lower signal to noise ratios

 $1.1 \, \mu m \, x \, 10x \, x \, 0.5 = 5.5 \, \mu m$

Besides capturing images and videos, the ImageFocus Plus



with fast CMOS sensor

CAMERAS FOR

The CMEX-2f, CMEX-5f and CMEX-12f are equipped with a fast CMOS sensor. The CMEX cameras are equipped with USB-2.0 data interface

software allows measurements on still and live images and annotations on captured images. Compatible with Windows 10 and higher, both 32 and 64 bits configurations. A Mac OS version is also available. Free software can be downloaded from our website



The CMEX-5 WiFi-4 camera is equipped with a 4.0 MP Sony CMOS sensor with 12 bits grayscale conversion and a 24 bits color rendering and it can be used either through the USB data interface or

The CMEX camera streams H.264 encoded high resolution images simultaneously to several WiFi enabled smartphones, tablets or computers with iOS, Android or Windows operating systems

through the WiFi interface

Power supply through USB charger or computer USB port. Standard C-mount mounting

Adding a WiFi camera to your microscope is ideal for wireless sharing/viewing of microscope images. Ideal for demonstrations where remote viewing is needed

Android app for this camera is available on www.euromex. com. IOS app can be downloaded from the App Store (free of charge). ImageFocus Alpha software can be used by means of WiFi on PC's and Macs and is available on www.euromex.com

The camera is powered by the included USB charger or a computers USB port. Standard 0.5x C-mount objective is included

MODEL	Sensor	Sensor size (inches)	Pixels size (μm)	Resolutions	Grayscale conversion	Color rendering	-	•	Sensitivity V/ lux-1/30 s	Product number
CMEX-5 WiFi-4	CMOS	1/1.8"	2.9 x 2.9	2688 x 1512	12 bits	24 bits	44	48	921	DC.5000-WiFi-4

The CMEX-5 WiFi-3 camera is supplied in a box with USB cable, 30.0 and 30.5 mm adapters to use with stereo microscopes, and a 0,5x C-mount objective

MODELS	Number of pixels (MP)	Sensor	Pixels size (μm)	Resolutions	Max. frames (p/sec)*	Grayscale conversion	Color rendering	Dynamic (dB)	Sensitivity V/lux- sec (at 550 nm)	Product number
CMEX-2f	2.0	1/2.9" CMOS	2.8 x 2.8	1920 x 1080	30	8 bits	24 bits	72	0.51	DC.2000f
CMEX-5f	5.0	1/2.8" CMOS	2.0 x 2.0	2560 x 1920 1600 x 1200	30 50	8 bits	24 bits	72	2.0	DC.5000f
CMEX-12f	12.0	1/2.3" CMOS	1.33 x 1.33	4000 x 3000 2592 x 1944	15 30	8 bits	24 bits	60	1.5	DC.12000f

The CMEX cameras are supplied with USB cable, 30.0 and 30.5 mm to 23.2 mm conversion adapters for use with stereo microscopes and a 1 mm/100 (10 μm/division) calibration slide. The cameras are supplied with a 0.45x C-mount objective

^{*} Frame rates have been determined at optimal conditions



Advanced CMEX USB-3.0 cameras

with CMOS sensor

The CMEX-3 Pro. -5 Pro. -10 Pro and -20 Pro cameras are equipped with a 3.1, 5.1, 10 or 20 MP CMOS sensor with 12 bits grayscale conversion and a 24 bits color rendering. These cameras are equipped with a USB-3.0 data interface, enabling fast frame rate

Besides capturing images and videos, the ImageFocus Alpha software allows measurements on still and live images and annotations on captured images. Compatible with Windows 10 and higher, both 32 and 64 bits configurations. A 2 GB RAM 2.8 GHz computer and 17 inch display is recommended. A Mac OS version is available. Free software can be downloaded from our website

CMEX-20 Pro

MODELS	Sensor	Sensor size (inch)	Pixels size (µm)	Exposure time	Resolutions	Max. frames (p/sec)*	Signal/ Noise (dB)	Dynamic (dB)	Sensitivity /lux-sec	Product number
CMEX-3 Pro	CMOS	1/3″	2.2 x 2.2	1 ms ~ 2000 ms	2048 x 1534 1024 x 770	28 53	39	100	1.9 V	DC.3000-PRO
CMEX-5 Pro	CMOS	1/2.5″	2.2 x 2.2	1 ms ~ 2000 ms	2592 x 1944 1296 x 972 640 x 486	16 50 98	39	68.	1.76 V	DC.5000-PRO
CMEX-10 Pro	CMOS	1/2.3"	1.67 x 1.67	1 ms ~ 2000 ms	3584 x 2746 1792 x 1372	8 25	35.5	63.5	0.31 V	DC.10000-PRO
CMEX-20 Pro	CMOS	1/1.8"	1.4 x 1.4	0.2 ms ~ 15 s	5120 x 3840 2560 x 1920	20 45	39.3	63.8	8.4 ke	DC.20000-PRO

The CMEX-3 Pro, -5 Pro, -10 Pro and -20 Pro cameras are supplied with USB-3.0 cable, 30.0 and 30.5 mm adapters to use with stereo microscopes, 1 mm/100 (10 μm/division) calibration slide. The CMEX-5 Pro and -10 Pro are supplied with a 0.5x C-mount objective. The CMEX-3 Pro is supplied with a 0.37x, the -20 Pro with a 0.75x C-mount objective * Frame rates have been determined at optimal conditions

with scientific grade sCMOS sensor

The sCMEX-3, sCMEX-6, sCMEX-20 and sCMEX-32 cameras are equipped with a scientific grade back illuminated Sony sCMOS sensor with 16 bits grayscale conversion and an outstanding 36 bits color rendering. Suitable for brightfield, darkfield and fluorescence. The sCMEX cameras are equipped with a USB-3.0 data interface and work with ImageFocus Alpha software

sCMEX USB-3.0 cameras

USB CAMERAS

Besides capturing images and videos, the ImageFocus Alpha software allows measurements on still and live images and annotations on captured images. Compatible with Windows 10 and higher, both 32 and 64 bits configurations. Also compatible with Mac OS. PC requirements: Intel Core2 2.8 GHz or higher or equivalent, 2 GB memory, USB-3.0 port, 17 inch display. Free software can be downloaded from our website

MODELS	Number of pixels (MP)	Sensor and size (inches)	Pixels size (µm)	Exposure time	Resolutions	Max. frames (p/sec)*	Color rendering	Dynamic range (dB)	S/N Ratio (dB)	Sensitivity V/lux-sec	Product number
sCMEX-3	3.1	1/2.8" sCMOS	2.5 x 2.5	0.244 ~ 15000 ms	2048 x 1536 1920 x 1080	50 58	36 bits			0.15	DC.3000s
sCMEX-6	6.3	1/1.8" sCMOS	2.5 x 2.5	0.244 ~ 15000 ms	3072 x 2048 1536 x 1024	30 38	36 bits	66.8	44.51	0.15	DC.6000s
sCMEX-20	20	1" sCMOS	2.4 x 2.4	0.264 ~ 15000 ms	5440 x 3648 2736 x 1824 1824 x 1246	15 50 60	36 bits	66.3	44.74	0.21	DC.20000s
sCMEX-32	32	1.15" sCMOS	2.3 x 2.3	0.1 ~ 15000 ms	5600 x 5600 2800 x 2800 1400 x 1400		36 bits	88	50	0.43	DC.32000s

The sCMEX cameras are supplied in a carton box with USB-2.0 cable, 30.0 and 30.5 mm to 23.2 mm conversion adapters for use with stereo microscopes, 1 mm/100 (10 μ m/division) calibration slide. The DC.3000s is supplied with a 0.37x objective, the DC.6000s is supplied with a 0.5x objective, the DC.20000s and DC.32000s are supplied with a 1.0x adapter

^{*} Frame rates have been determined at optimal conditions



(Ultra) high definition cameras

CMOS color cameras

These UHD-4K and HD cameras offer the perfect solution to modern microscopy where real-time images are needed. These HD image quality cameras can be used with biological, metallurgical or stereo microscopes

STAND-ALONE MODE

To use these cameras you do not need a computer or have any computer knowledge. Most camera settings are done automatically and therefore these cameras are very user-friendly. This results in faster, more flexible and compact working conditions. Simply connect the camera to a high definition dedicated 11.6" or 13" HD screen, TV-HD or HD-beamer with a HDMI input and the system is ready to go. The mouse driven built-in software of the camera enables captured images and recorded videos to be saved on the integrated SD memory card

Almost all HD cameras offer a full range of measuring functions on live and captured images

COMPUTER CONTROLLED MODE

Users who want more camera controls and more functions can also connect the camera to a computer and benefit from the extensive functions of the Euromex ImageFocus software. It runs on Windows 10 and higher, both 32 and 64 bits. Besides extended camera settings, the software can save images in JPG, TIFF or BMP formats and record videos in .avi format on the hard disk of the computer. The software offers different measurement functions on live and captured images and also full control over the camera parameters

HIGHLIGHTS

- (Ultra) high definition cameras
- Real-time images directly on TV, monitor or beamer
- Stand-alone or computer controlled mode
- Built-in mouse-driven software and SD memory card
- HDMI, USB-2.0/3.0
- GbE (Ethernet) (VC.3042)
- WiFi (VC.3042 and VC.3034)
- Autofocus model available
- Compatible with ImageFocus software



VC.3034-HDS on the BioBlue

PACKAGE CONTENT

MODELS	UHD-4K	UHD-4K Touch	HD-Ultra	HD-Lite	HD-Mini	HD-Mini +HDS	HD-Autofocus	HD-Pro
C-mount with objective	0.5x	0.5x	0.37x	0.45x	0.37x	0.37x	0.5x	0.37x
Interface(s)	Digital HDMI, USB-3, WiFi	Digital HDMI, USB-2	Digital HDMI, USB-2	Digital HDMI, USB-2	Digital HDMI	Digital HDMI	Digital HDMI, WiFi	Digital HDMI, USB-2
30 and 30.5 mm adapters	•	•	•	•	•	•	•	•
SD card	32 GB	32 GB	16 GB	8 GB	32 GB	32 GB	32 GB	32 GB
Cailbration slide 10mm/100	•	•	•	•	•	•	•	•
External power supply	12V 1A	12V 2A	12V 2A	12V 2A	12V 1A	12V 1A	12V 1A	12V 1A
Dimensions (w x d x h)	88 x 78 x 65	88 x 78 x 65	80 x 70 x 90	80 x 70 x 90	51ø x 60	50 x 50 x 60	81 x 65 x 78	81 x 65 x 78
Product number	VC.3045	VC.3043	VC.3036	VC.3031	VC.3023		VC.3034	VC.3039
With HD screen	13" VC.3045-HDS	13" Touch VC.3043-HDS	11.6" VC.3036-HDS	11.6" VC.3031-HDS		13" VC.3024-HDS	13" VC.3034-HDS	13" VC.3039-HDS

⁽¹⁾ English, Chinese Simplified, Traditional Chinese, Thai, German, Italian, French, Korean, Japanese, Russian, Polish and Portugese

⁽²⁾ English, Catalan, Indonesian, Polish, Chinese Simplified, Traditional Chinese, Thai, German, Italian, French, Korean, Japanese, Russian, Turkish, Spanish

ALL HD-CAMERAS

MODELS	UHD-4K	UHD-4K Touch	HD-Ultra	HD-Lite	HD-Mini	HD-Mini + HDS	HD-Autofocus	HD-Pro HDMI
Sensor	Sony 4K	Sony 4K	Sony	Aptina	Sony	Sony	Sony	Sony
Format	1/1.8", HDTV 4K	1/1.8", HDTV 4K	1/2.8", HDTV 1080p	1/2.5", HDTV 1080p	1/2.8", HDTV 1080p	1/2.8", HDTV 1080p	1/1.9", HDTV 1080p	1/2.8", HDTV 1080p
Resolution*	3840 x 2160 (1,2) 30-60 fps*	3840 x 2160 (1,2) 20-30 fps*	3264 x 1836 ⁽¹⁾ 1920 x 1080 ⁽²⁾ 30-60 fps*	2592 x 1944 ⁽¹⁾ 1920 x 1080 ⁽²⁾ 15 fps*	1920 x 1080 (1,2) 60 fps*	1920 x 1080 (1,2) 60 fps*	1920 x 1080 (1,2) 25-60 fps*	3840 x 2160 ⁽¹⁾ 1920 x 1080 ⁽²⁾ 26-60 fps*
Pixel size	2.0 x 2.0 (μm)	2.0 x 2.0 (μm)	2.8 x 2.8 (μm)	2.2 x 2.2 (μm)	2.9 x 2.9 (μm)	2.9 x 2.9 (µm)	3.75 x 3.75 (µm)	1.45 x 1.45 (μm)
Video output	HDMI, USB- 2.0, Ethernet, WiFi	HDMI, USB-2.0	HDMI, USB-2.0	HDMI, USB-2.0	HDMI	HDMI	HDMI, WiFi	HDMI, USB-C
Exposure	Automatic/ manual	Automatic/ manual	Automatic/ manual	Automatic/ manual	Automatic/ manual	Automatic/ manual	Automatic/ manual	Automatic/ manual
White balance	Automatic/ manual/ROI	Automatic/ manual/ROI	Automatic/ manual	Automatic/ manual	Automatic/ manual	Automatic/ manual	Automatic/ manual	Automatic/ manual/ROI
Sensitivity lux-sec	3541 mv with 1/30 s	505 mV	510 mV	1000 mV	1300 mV	1300 mV	1120 mV (1/30s)	300 mV (1/30s)
Color rendering	36 bits	32 bits	36 bits	24 bits	12 bits	12 bits	24 bits	24 bits
Signal/Noise	40.5 dB	40.5 dB	55 dB	40.5 dB	42 dB	42 dB	50 dB	38 dB
Dynamic (dB)	60 dB	60 dB	69 dB	60 dB	69 dB	69 dB	65 dB	66 dB
Interface	Digital HDMI, USB-3, Ethernet, WiFi	Digital HDMI, USB-2	Digital HDMI, USB-2	Digital HDMI, USB-2	Digital HDMI	Digital HDMI	Digital HDMI, WiFi	Digital HDMI, USB-C
Camera buttons	on/off	on/off	on/off	on/off			on/off	on/off
Mounting	C-mount	C-mount	C-mount	C-mount	C-mount	C-mount	C-mount	C-mount
Storage	32 GB SD card (or USB drive)	32 GB SD card (or USB drive)	16 GB SD card (max. 32 GB)	8 GB SD card (max. 32 GB)	32 GB SD card (max.128 GB)	32 GB SD card (max.128 GB)	32 GB SD card (max. 128 GB)	32 GB SD card (max. 128 GB)
Software	ImageFocus Alpha	ImageFocus Alpha	ImageFocus Plus	ImageFocus Plus				ImageFocus Alpha
Software languages	15 (6)	15 (6)	13 (5)	13 (5)			15 (6)	15 ⁽⁶⁾
External power supply	100-240 Vac to 12Vdc/1A	100-240 Vac to 12Vdc/2A	100-240 Vac to 12Vdc/2A	100-240 Vac to 12Vdc/2A	100-240 Vac to 12Vdc/1A	100-240 Vac to 12Vdc/1A	100-240 Vac to 12Vdc/2A	100-240 Vac to 12Vdc/2A
Relative humidity	30 - 80 %	30 - 80 %	45 - 85 %	45 - 85 %	30 - 80 %	30 - 80 %	45 - 85%	30 - 80%
Temperature Operation Storage	-10 - 50° C -20 - 60° C	-10 - 50° C -20 - 60° C	0 - 60° C -20 - 70° C	0 - 60° C -20 - 70° C	-10 - 50° C -20 - 60° C	-10 - 50° C -20 - 60° C	–10 - 40° C -20°C - 60° C	-10 - 50° C -20°C - 60° C
Compatible	Win 10 + higher Mac OS, Linux	Win 10 + higher Mac OS, Linux	Win 10 + higher Mac OS	Win 10 + higher Mac OS				Win 10+ higher Mac OS, Linux
Product number	VC.3045 VC.3045- HDS (4)	VC.3043 VC.3043- HDS Touch ⁽⁴⁾	VC.3036 VC.3036- HDS ⁽⁴⁾	VC.3031 VC.3031- HDS ⁽⁴⁾	VC.3023	VC.3024- HDS ⁽⁴⁾	VC.3034 VC.3034- HDS ⁽⁴⁾	VC.3039 VC.3039- HDS (4)

^{*} Frame rates depend on resolution and output mode and have been determined at optimal conditions

BUILT-IN SOFTWARE FEATURES (HDMI MODE)

MODELS	UHD-4K	UHD-4K Touch	HD-Ultra	HD-Lite	HD-Mini	HD-Mini + HDS	HD- Autofocus	HD-Pro HDMI
Image capturing (JPEG)	3840 x 2160	3840 x 2160	3261 x 1840	2592 x 1944	1920 x 1080	1920 x 1080	1920 x 1080	3840 x 2160
Video recording	3840 x 2160 MP4	3840 x 2160 MP4	1920 x 1080 AVI	1920 x 1080 AVI	1920 x 1080 MP4	1920 x 1080 MP4	1920 x 1080 ASF	1920 x 1080 MP4
Browse saved images	•	•	•	•	•	•	•	•
Browse saved video's	•	•	•	•	•	•	no	
Mouse driven	•	•	•	•	•	•	•	•
Auto exposure	•	•	•	•	•	•	•	•
Exposure time	0.04 ~ 1000 ms	0.04 ~ 1000 ms	0.001s ~ 10 s	0.001s ~ 10 s	0.01 ~ 1000 ms	0.01 ~ 1000 ms	0.06 ~ 918 ms	0.04 ~ 1000 ms
Gain	•	•	•	•	•	•	•	•
RGB & white balance	•	•	•	•	•	•	•	
Gamma	•	•	•	•	•	•	•	•
Sharpness	•		•	•	•	•	•	
Noise reduction	3D algorithm	standard noise reduction	3D algorithm	3D algorithm	3D algorithm	3D algorithm	3D algorithm	3D algorithm
Saturation & contrast	•	•	•	•	•	•	•	
Horiz. & vert. flip	•	•	•	•	•	•	•	•
Grids	cross/multi	cross/multi	cross/multi	multi	multi	multi	multi	User defined
Autofocus								
Compare function			•	•			•	
Measurement functions	captured & live images	captured & live images	captured & live images		captured & live images	captured & live images	captured & live images	captured & live images
Line & free curve	•	•	•				•	•
Polygon & rectangle	•		•				•	
Angle	•	•	•				•	
Circle 3 points	•	•	•				•	•
Circle radius	•	•	•				•	•
Export function	CSV	CSV	CSV, Txt				CSV	CSV
Languages	10 (4)	10 (4)	9 (3)	9 (3)	10 (4)	10 (4)	10 (4)	10 (4)
Product number	VC.3045 VC.3045-HDS	VC.3043 VC.3043-HDS Touch	VC.3036 VC.3036-HDS	VC.3031 VC.3031-HDS	VC.3023	 VC.3024-HDS	VC.3034 VC.3034-HDS	VC.3039 VC.3039-HDS

HDMI mode





⁽¹⁾ capture mode

⁽²⁾ live view

⁽³⁾ USB-2.0 compatible

⁽⁴⁾ model with attached HD screen, 1080p

⁽⁵⁾ English, Chinese Simplified, Traditional Chinese, Thai, German, Italian, French, Korean, Japanese, Russian, Polish and portugese

⁽⁶⁾ English, Catalan, Indonesian, Polish, Chinese Simplified, Traditional Chinese, Thai, German, Italian, French, Korean, Japanese, Russian, Turkish, Spanish

⁽³⁾ English, Chinese Simplified, Traditional Chinese, German, Italian, French, Korean, Japanese, Spanish (4) English, Chinese Simplified, Traditional Chinese, Thai, German, Italian, French, Korean, Japanese, Russian

TECHNICAL

FACTS

about

COOLED

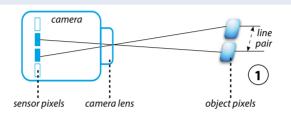
CAMERAS FOR

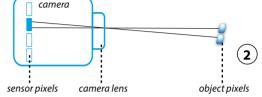
LIFE SCIENCE

camera resolution and limits

Resolution of a camera system is the ability to reproduce object detail on screen. In practice it is depending on factors such as the good lighting of the object, the sensor pixel size and the capabilities of the optics. The smaller the object detail, the higher the required resolution

The highest frequency – expressed as line pair per mm that can be resolved – is 2 pixels or one line pair, the so-called Nyquist frequency





(1) Space between objects is large enough to be detected by minimum two pixels of the camera sensor

(2) Space between objects is too small to be detected by minimum two pixels of the camera sensor

Cooled color camera

COOLED CAMERAS

with CCD or CMOS sensor

DC.20000i and DC.6000i

The Euromex 6 and 20 Megapixel Peltier cooled cameras are equipped with Peltier cooling elements that allow the camera to be used for fluorescence and other low light applications. These advanced and premium models are supplied with a USB-3.0 interface

ImageFocus Alpha software has specific functions for fluorescence like combining capture fluorescence images. Furthermore it allows capturing of images and videos, doing measurements and annotations, generating reports, live image stitching etc. Compatible with Windows 10 and higher, both 32 and 64 bits configurations. A Mac OS version is also available (with a few differences in features)

MODELS	Number of pixels (MP)	Sensor	Pixel size (μm)	Resolutions	Max. frames (p/sec)*	USB-3	Dynamic range (dB)	S/N Ratio	Sensitivity @ 1/30 sec	Peltier cooling
DC.6000i	6	1" CCD	4.54 x 4.54	2748 x 2200 2748 x 1092	7.5 14	•	62.34	41.6	880 mV	•
DC.20000i	20	1" CMOS	2.4 x 2.4	5440 x 3648 4096 x 2160 2736 x 1824 1824 x 1216	5 10 15 30		66.3	41.74	462 mV	•

^{*} Frame rates have been determined at optimal conditions

THE LIMITING SENSOR RESOLUTION

(image space resolution) of a camera is commonly calculated as:

$$\left(\frac{1\ lp}{2\ x\ s}\right)\ X\left(^{1}\frac{000\mu m}{l\ mm}\right)$$

whereby $\mathbf{s} = \text{pixel size (in } \mu \text{m)}$ and expressed as line pair per mm (Lp/mm)

The formula shows that a sensor with smaller pixels will have higher image space resolution:

Pixel size	Image Space resolution
1.67	229 LP/mm
2.2	227 LP/mm
3.45	145 LP/mm
5.5	90 LP/mm

Considering the Euromex DC.18000-Pro 2/3 inch camera which is equipped with 4921 x 3684 pixels camera on a 8.6 x 6.6 mm large sensor

THE NYOUIST IMAGE SPACE RESOLUTION

can also be calculated as 1/2 x sampling pixels/mm (Lp/mm) or:

- Horizontal 4921 / 8.6 = 572 (sampling pixels) x 0.5 = 286 Lp/mm
- Vertical

3684 / 6.6 = 558 (sampling pixels) x 0.5 = 279 Lp/mm The Nyquist object space resolution or the smallest detail that could be theoreticaly resolved is then equal to:

1000 mm / (286 Lp/mm) or 3.5 μm

However, taken into account the manufacturing limitations and inevitable optical aberrations, the real image space resolution can be calculated as:

1/2 x Kell factor (approx 0.70) x sampling pixels (Lp/mm) or:

- Horizontal
- 4921 / 8.6 = 572 (sampling pixels) x 0.35 = 200 Lp/mm
- Vertical

3684 / 6.6 = 558 (sampling pixels) x 0.35 = 195 Lp/mm or approx. 1000 mm / 200 Lp/mm or $5 \mu \text{m}$ In comparison, the by physics diffraction limited object space resolution (smallesy detail that ever can be observerd through the eyepieces of a optical compound microscope, is around 0.20 µm

HIGHLIGHTS

- 12.1" Tablet with microscope camera
- 2160 x 1440 pixels touch screen
- ImageFocus Plus software for PC
- ImageFocus Alpha for WiFi enabled PC, Android and iOS devices
- Tablet can be fully detached



Processor	Quad Core max 3.3 GHz HD graphics processor
Screen	12.1 inch IPS 2160*1440 / 3:2
Memory	12 GB
Storage	512 GB Flash HDD, micro SD/SDHC sloth for cards up to 64 GB
Webcam	2 MP front and 5MP rear camera
Connectivity	Micro USB 2.0, Micro HDMI, USB-C, WiFi 6 and Bluetooth 4.0
Audio	Stereo with 3.5 mm audio jack, internal microphone and speaker
Battery	Lithium, 38Wh, 5000mA
Weight	0.8 KG (tablet) 4.8 kg (complete)
System	Windows 11
Software	ImageFocus Plus

Specifications can be changed by Euromex microscopen by without notice.

Consult website to check latest specifications

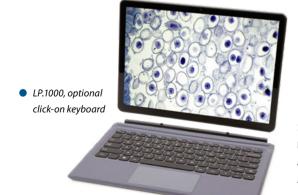
MODELS	Camera (MP)	Sensor size	Resolution	Pixels size (μm)	ADC	Color rendering	Dynamic (dB)	Sensitivity	Interface	Product number
LaboPad-2	2.1	1/2.9"	1920 x 1080	2.8 x 2.8	12 bits	24 bits		0.51 V/lux-sec	1 2.0	LP.2000f
LaboPad-5	5.1	1/2.8"	2592 x 1920	2.0 x 2.0	12 bits	24 bits	72 dB	2.0 V/lux-sec	\$\psi\$ 2.0	LP.5000f
LaboPad-12	12.0	1/2.3"	4072 x 3176	1.33 x 1.33	8 bits	24 bits	60 dB	1.5 V/lux-sec	1 2.0	LP.12000f
LaboPad-WiFi	4	1/1.8"	2688x1512	2.9 x 2.9	12 bits	24 bits	48 dB	0.9 V/lux-1/30 sec	# \$ \$ \$	LP.5000-WiFi

All LaboPad models are supplied with a C-mount objective that fits the standard 23.2 mm trinocular tubes



The LaboPad with a 12.1 inch display can be

supplied with a 2.1 MP, 5.1 MP, 12.0 MP or a 4 MP WiFi camera. Together with the ImageFocus Plus or ImageFocus Alpha software it offers a state-of-theart solution for a modern digital solution



SOFTWARE

LaboPad USB camera works with ImageFocus Plus software and LaboPad with WiFi camera works with ImageFocus Alpha. The WiFi camera can also be operated through IOS and Android apps

SOFTWARE

The software is compatible with all cameras mentioned in table below. Besides live imaging the software captures images in various formats and video in .avi format

IMAGE FOCUS 4
DC.1300c

IMAGE FOCUS PLUS				
DC.2000f	VC.3036			
DC.5000f	VC.3031			
DC.12000f				

IMAGE FOCUS ALPHA				
DC.3000-Pro	DC.5000-WiFi			
DC.5000-Pro	DC.3000s			
DC.10000-Pro	DC.6000s			
DC.18000-Pro	DC.20000s			
VC.3039	VC.3042			

IMAGE STITCHING

Image stitching is the process of combining multiple images with overlapping fields of view to produce one image

EXTENDED DEPTH OF FOCUS

"The extended depth of focus" function in the ImageFocus Alpha software or "stacking software, allows to combine a number of digital images of a object, focused at different focus planes, into one final image with much greater depth of field (see illustration below)







FREE UPDATES **AVAILABLE ON EUROMEX.COM**

ImageFocus Plus

software

ImageFocus Plus has a wide range of functions:

Measurements on still and live image

Extended depth of focus and stitching on still and live image (only with VC.3036 and VC.3031 cameras)

Images can be saved in .jpg, .tif, .bmp or .dicom formats as well as .avi and mpeg-4 format videos

The brightness, contrast and saturation of captured images can be adjusted

Camera parameters for exposure time, white balance and color control are easily accessible

The software also has specific functions for fluorescence such as combining captured fluorescence images

Compatible with Windows 10 and higher, both

32 and 64 bits configuration. A Mac OS version

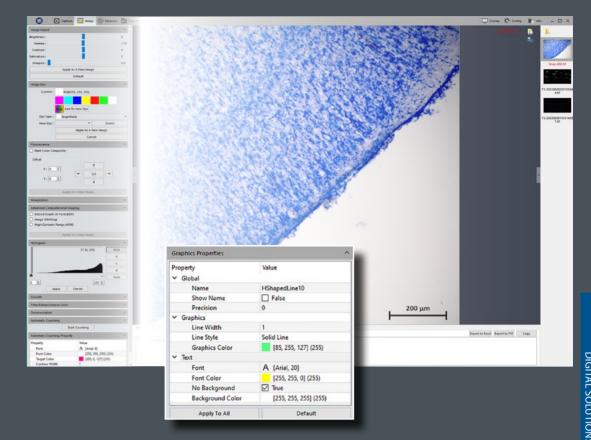
PC requirements: Intel Core2 2.8 GHz or higher or equivalent, 2 GB memory or more, 17" screen

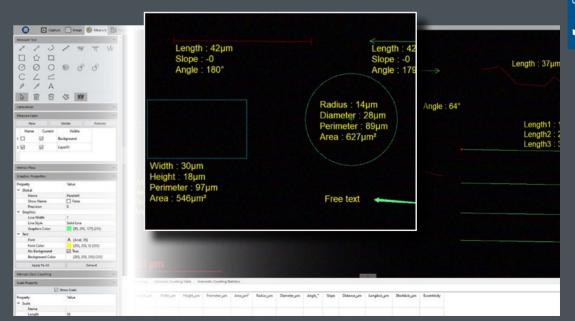
ImageFocus Plus software features English, German, French, Dutch, Spanish and Russian













ImageFocus Alpha

software

ImageFocus Alpha has a wide range of functions:

- Measuring, segmentation & counting, stichting of images, extended depth of focus, etc
- Images can be saved in .jpg, .tif, .bmp or .dicom formats as well as .avi format videos
- The brightness, contrast and saturation of captured images can be adjusted
- Camera parameters for exposure time, white balance and color control are easily accessible

- The software also has specific functions for fluorescence such as combining captured fluorescence images
- Compatible with Windows 10 and higher, both
 32 and 64 bits configuration. A Mac OS version is also supplied (with a few differences in features)
- PC requirements: Intel Core2 2.8 GHz or higher or equivalent, 2GB memory or more, 17" screen

One language can be selected during initial installation of the ImageFocus Alpha software English, Catalan, French, German, Indonesian, Italian, Japanese, Korean, Polish, Russian, Simplified Chinese, Spanish, Thai, Traditional Chinese, Turkish



ImageFocus 4

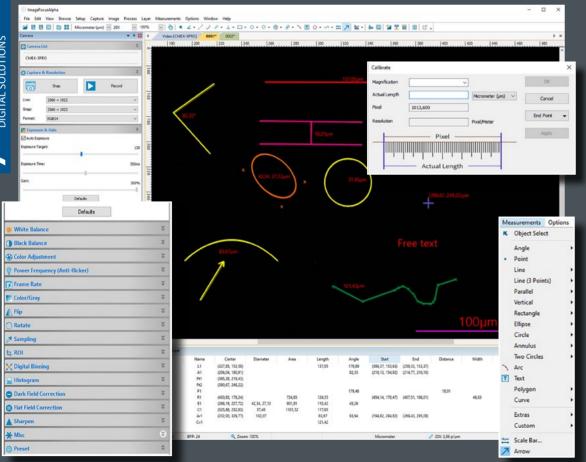
software

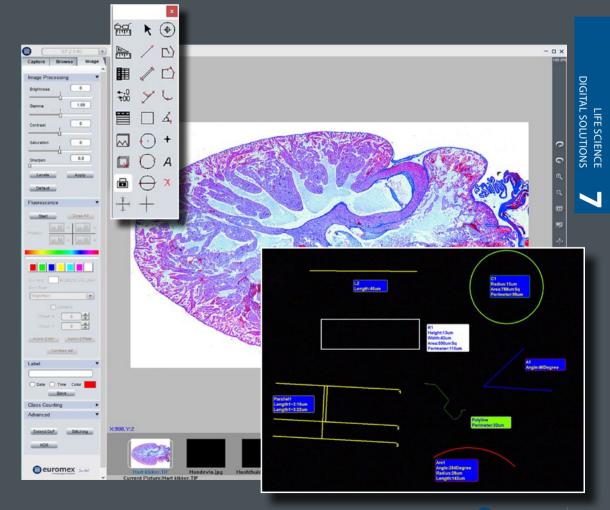
ImageFocus 4 has a wide range of functions:

- Measurements can be done on still and live image
- Images can be saved in .jpg, .tif, .or .bmp formats as well as .avi format videos
- The brightness, contrast and saturation of captured images can be adjusted
- Camera parameters for exposure time, white balance and color control are easily accessible

- The software also has specific functions for fluorescence such as combining captured fluorescence images
- Compatible with Windows 10 and higher, both
 32 and 64 bits configuration. A Mac OS Light version is also available for capturing images*
- PC requirements: Intel Core2 2.8 GHz or higher or equivalent, 2GB memory or more, 17" screen
- * Mac version not available for VC Series

One language can be selected during initial installation of the ImageFocus 4 software: English, German, French, Dutch, Spanish





288





Most Euromex cameras are supplied with a photo port C-mount adapterto connect it to any Euromex trinocular microscope*. Monocular microscopes require the removal of the eyepiece so that the camera can be fitted into the 23.2 mm tube. Binocular microscopes require the removal of an eyepiece plus an additional mechanical adapter. To connect our cameras to another microscope brand, see adapter references below:

* Except for the Oxion, Oxion Inverso and Delphi-X Inverso™ series. They need an additional adapter. See next page

MODELS	1/3 inch camera	1/2 inch camera	2/3 inch camera	1 inch camera
Leica (1)	AE.9835-L (0.35x)	AE.9855-L (0.55x)	AE.9870-L (0.70x)	AE.9810-L (1x)
Olympus (2)	AE.9835-O (0.35x)	AE.9850-O (0.50x)	AE.9863-O (0.63x) AE.9880-O (0.80x)	AE.9810-O (1x)
Zeiss (3)	AE.9835-Z (0.35x)	AE.9850-Z (0.50x)	AE.9865-Z (0.65x) AE.9880-Z (0.80x)	AE.9810-Z (1x)
Zeiss PrimoStar 3 (4)	AE.9835-ZP3 (0.35x)	AE.9850-ZP3 (0.50x)	AE.9865-ZP3 (0.65x)	AE.9810-ZP3 (1x)
Zeiss ZA (5)		AE.9850-ZA (0.50x)	AE.9863-ZA (0.63x) AE.9880-ZA (0.80x)	AE.9810-ZA (1x) AE.9812-ZA (1.2x)
Nikon (6)	AE.9835-N (0.35x)	AE.9855-N (0.55x)	AE.9870-N (0.70x) AE.9880-N (0.80x)	AE.9810-N (1x)

⁽¹⁾ Leica DM, 35 mm to 25.4 mm C-mount, stainless steel

Standard C-Mount: 25.4 mm (1 inch) diameter with 32 threads per inch



23.2 MM PHOTO PORT C-MOUNT ADAPTERS

Suitable for all Ø 23.2 mm (photo) tubes

DC.1324	C-mount adapter with 0.45x objective for 1/2"
	camera

DC.1353 C-mount adapter with 0.37x objective, fixed focal length and short barrel*. For 1/3 camera

DC.1355 C-mount adapter with 0.50x objective, fixed focal length and short barrel*. For 1/2" camera

DC.1357 C-mount adapter with 0.75x objective, fixed focal length and short barrel*. For 2/3" camera

DC.1359 C-mount adapter with 1x lens, fixed focal length and short barrel, for standard 23.2 mm tube and 1 inch camera

DC.1330 30 mm to 23.2 mm conversion adapters

DC.1335 30.5 mm to 23.2 mm conversion adapters

^{*} for increased light efficiency











AE.5130

AE.5025

AE.5040

DIGITAL SLR ADAPTERS

together with a brand-specific T-2 adapter

adapter

Other T2 adapters on request

Digital singe lens reflex camera with a APS-C sensor can be mounted on a standard 23.2 mm trinocular tube

Choose the universal DC.5130 adapter with built-in 2x objective,

Universal SLR camera adapter for 23.2 mm tube

with built-in 2x magnification lens. Needs T2

T2 adapter for Nikon D digital SLR cameras

T2 adapter for Canon EOS digital SLR cameras



AE.5130 AE.5120-2

PHOTO PORT ADAPTERS

for 2/3 inch C-mount camera

DC.1355

Suitable for Euromex microscopes with a photo port such as Oxion, NexiusZoom, StereoBlue, Delphi-X Observer and Delphi-X Inverso

AE.5120-2	Standard 23.2 mm diameter tube	DX.9810	C-mount with 1 magnification for C-mount camera
	for Oxion photo port	NZ.9850	C-mount adapter with 0.5x objective for
DI.9840	C-mount with high resolution 0.40x objective		NexiusZoom microscopes and 1/2" cameras
	for 1/3 inch C-mount camera	OX.9810	C-mount adapter with 1x magnification
DI.9850	C-mount with high resolution 0.50x objective		for 1" cameras
	for 1/2 inch C-mount camera	OX.9833	C-mount adapter with 0.33x objective for Oxion
DI.9810	C-mount with 1x magnification for C-mount camera		microscopes and 1/3" cameras
DX.9835	C-mount with high resolution relay 0.35x objective	OX.9850	C-mount adapter with 0.5x objective for Oxion
	for 1/3 inch C-mount camera		and Oxion Inverso microscopes and 1/2" cameras
DX.9850	C-mount with high resolution relay 0.50x objective	SB.9850	C-mount adapter with 0.5x objective for
	for 1/2 inch C-mount camera		StereoBlue microscopes and 1/2" cameras
DX.9863	C-mount with high resolution relay 0,63x objective		

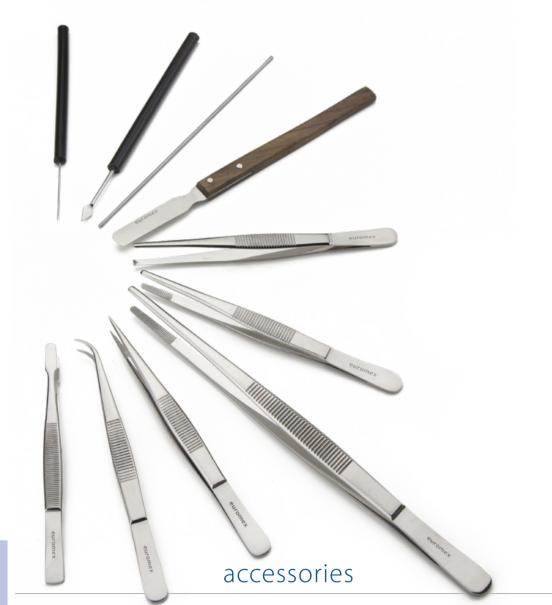
⁽²⁾ Olympus CX, CX2, BX, BX2, IX, MX, GX, SZX, STM, 42 mm to 25.4 mm C-mount, anodized aluminum

⁽³⁾ Zeiss PrimoStar, PrimoStar Vert, 30 mm to 25.4 mm C-mount, anodized aluminum

⁽⁴⁾ Zeiss PrimoStar, C-mount, anodized aluminum

⁽⁵⁾ Zeiss 60N-C, 60N-T2 photo ports of Axio examiner, Axio Imager, Axio Lab, Axio Observer, Axio Scope, Axio Zoom, Stemy 508 and SteREO Discovery

⁽⁶⁾ Nikon E100, E200, 50i, 55i, 80i, 90i, Ni series, Ti Series, SMZ800,SMZ1000, SMZ15000, 38 mm to 25.4 mm C-mount, stainless steel



accessories

for microscopy





- **ILLUMINATION SOLUTIONS 399**
- **DISSECTION INSTRUMENTS 406**
 - **DISSECTION KITS 408**
- MICROSCOPE PREPARED SLIDES 410
- MICROSCOPE SLIDES PROFESSIONAL 422
 - DISPOSABLES 428
 - STAINS 429



For stereo microscopes choosing the right illumination is essential to obtain a perfect image with maximum resolution. LED light sources have a much longer life span, less energy consumption and less heating than halogen light sources

The major advantage of LED illumination is the constant light spectrum at all light intensity levels. These light sources are suitable for all kinds of applications in industry, life sciences and materials sciences









ILLUMINATION SOLUTIONS

The right light source solution can enhance and reveal the details you want to examine



Illumination solutions

MULTIFUNCTIONAL 150 W HALOGEN OR 30 W POWER-LED • COLD LIGHT SOURCE

A powerful multifunctional 150 W halogen (LE.5211) and 30 W PowerLED cold light source is ideal for the advanced requirements of numerous applications in life and materials science. The intensity is adjustable and has a built-in forced air cooling. The LE.5211 and LE.5211-LED light sources require a light fiber conductor such as the single LE.5213, dual LE.5214, triple LE.5215 or the LE.5239 ring light fiber conductors. The LE.5213, LE.5214 and LE.5215 light conductors can be equipped with a lens holder (LE.5222) and a focusing lens (LE.5224)



LE.5211-LED/LE.5211 + LE.5214 +2x LE.5222 + 2x LE.5224

Power	150 W halogen	30 W PowerLED (equivalent to 120 W halogen)
Luminous flux	21,000 lux max ¹⁾	30,000 lux max.*
Color temperature	3,000 K	6,500 K
Operating voltage	100 and 240 V AC / 12 V DC (50/60 Hz)	100-240 V AC / 12 V DC (50/60 Hz)
Dimensions	(h) 150 x (w) 150 x (d) 230 mm	150 (h) x 150 (w) x 230 mm (d)
Weight	3,9 kg	2.8 kg
Model	LE.5211	LE.5211-LED

^{*} with LE.5214 dual arm light conductor

MULTIFUNCTIONAL 100 W HALOGEN • COLD LIGHT SOURCE

This popular multifunctional cold light source contains a 100 W halogen light source. The intensity is adjustable and it has a built-in forced air cooling. The LE.5210 light source requires a light fiber conductor such as the single LE.5213, dual LE.5214, triple LE.5215 or the LE.5239 ring light fiber conductors. The LE.5213, LE.5214 and LE.5215 light conductors can be equipped with a lens holder (LE.5222) and a focusing lens (LE.5224). Ideal for all kinds of applications in Life and Materials sciences, various industrial applications and for stereo microscopy



Power	100 W halogen
Luminous flux	20,000 lux max.*
Color temperature	3,000 K
Operating voltage	100 and 240 V AC / 12 V DC (50/60 Hz)
Dimensions	115 (h) x 320 (w) x 215 mm (d)
Weight	3.8 kg
Model	LE.5210

^{*} with LE.5214 dual arm light conductor

COMPACT SINGLE 20 W LIGHT SOURCE



Compact cold light source with single 40 cm, 6 mm diameter fiber light conductor. Equipped with a 20 W halogen lamp. Light intensity is factory preset and can not be adjusted

Power	20 W halogen
Color temperature	3,000 K
Operating voltage	110 V AC and 230 V AC versions (50/60 Hz)
Dimensions	80 (h) x 110 (w) x 165 mm (d)
Weight	2.0 kg
Model	LE.5209

ECONOMICAL AND COMPACT DUAL 3 W LED · LIGHT SOURCE

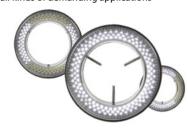


Economical dual LED intensity adjustable light source with two 44 cm flexible gooseneck arms, each mounted with a 3 W LED. Ideal for applications in life and materials sciences, various industrial applications and for stereo microscopy

Power	2x 3 W LED = 2x 28 W halogen equivalent
Luminous flux	25,000 lux
Color temperature	6,500 K
Operating voltage	100-240 V AC / 5 V DC (50/60 Hz)
Dimensions	70 (h) x 106 (w) x 140 mm (d)
Weight	1.5 kg
Model	LE.5207

144 LEDS RING LIGHT SOURCE • LE.1973

LED ring light source with high illuminance and segment illumination for all kinds of demanding applications



Ring illumination	144 LEDs with adjustable intensity and 4 segment illumination
Color temperature	6,500 K
Illuminance	23,000 lux at 100 mm distance
working distance:	from 55 to 200 mm
Mounting	for stereo head with diameter from 25 to 61 mm
Power supply	100-240 V AC / 12 V DC (50/60 Hz) / 4.5 Watt
External diameter	100 mm
Model	LE.1973

COMPACT 72 LEDS • LE.1974

Compact 20,000 lux LED ring light source



Ring illumination	72 LEDs with adjustable intensity and 4 segment illumination		
Color temperature	6,500 K		
Illuminance	21,000 lux at 100 mm distance		
working distance:	from 50 to 180 mm		
Mounting	for stereo head with diameter from 25 to 61 mm		
Power supply	100-240 V AC / 12 V DC (50/60 Hz) / 4 Watt		
External diameter	100 mm		
Model	LE.1974		

POLARIZING LED RING LIGHT • LE.1975

LED ring light with white or polarized light for all kinds of demanding applications



Ring illumination	16 high power LEDs with adjustable intensity
Color temperature	6,500-7,500 K
Illuminance	≥ 44000 lux at 100 mm distance
working distance:	from 40 to 120 mm
Mounting	for stereo head with diameter from 25 to 61 mm
Power supply	100-240 V AC / 24 V DC
External diameter	90 mm
Model	LE.1975

PROFESSIONAL HIGH POWERLED RING LIGHT SOURCES LE.1980/ LE.1981/ LE.1990/ LE.1991

LED ring light source with maximum illuminance and metal construction for professional usage. With adjustable intensity, optional power supply/segment controller, diffuser, polarizers and Fresnel focusing lenses for perfect illumination of objects



MODELS	Number of LEDs	Color temperature	Illuminance	For mounting diameters	Internal/external diameter	Required power supply/ controller
LE.1980	48	6,000 K	17,000 lux	from 30 to 66 mm	45/90 mm	LE.1992 Analog controller
LE.1981	48	6,000 K	17,000 lux	from 30 to 66 mm	45/90 mm	LE.1993 Digital segments controller
LE.1990	72	6,000 K	21,000 lux	from 40 to 66 mm	60/110 mm	LE.1992 Analog controller
LE.1991	72	6,000 K	21,000 lux	from 40 to 66 mm	60/110 mm	LE.1993 Digital segments controller

ILLUMINATION STATION LE.5212

Light source station with multiple power supply connections for two self-sustaining gooseneck-type guides, one ring light and one transmitted stage illumination. For stand-alone usage or mounted on stereo microscope pillar stands with diameters up to 44 mm or with 35- and 25-mm pole mounting adapter rings

Each self-sustaining gooseneck-type LED guide is equipped with a 3-lens focusing head and has a length of 56 cm White 6,500 K LED ring light generating with 60 LEDs up to 24,000 Lux. Mounting diameters from 21 to 61 mm Transmitted light stage illumination with a 6,500 K white LED generating up to 8,000 Lux with 42 LEDs. Stage diameter 94.5 and 15 mm thick

MODELS	3 W gooseneck guide LED	4 W white LED ring light	2 W white LED transmitted light stage
LE.5212	White LED, 6,500 K	•	•
LE.5212-365	365 nm, monochrome	•	•
LE.5212-395	395 nm, monochrome	•	•
LE.5212-420	420 nm, monochrome	•	•

FLUORESCENCE 40 HZ RING LIGHT SOURCE FOR Z SERIES STEREO ZOOM MICROSCOPES

Suitable for Z series stereo zoom microscopes, except for ZE.1659. Integrated 240 V AC power supply



Ring illumination	Fluorescent 40 kHz ring, fixed intensity
Color temperature	5,200 K
Illuminance	6,500 lux at 100 mm distance
working distance:	35-160mm
Mounting	48 mm with adapter for ZE series microscopes
Power supply	230-250 V
External diameter	100 mm
Model	LE.1863

(1,000 hrs nominal), MR16 fits LE.5210

ACCESSORIES AND SPARE PARTS

FOR LE.5210, LE.5211 AND LE.5211-LED COLD LIGHT SOURCES

FIBER LIGHT CONDUCTORS

LE.5213	Single arm fiber light conductor,	LE.5217	Triple arm flexible fiber light conductor,
	gooseneck self-sustaining,		100 cm long, 4 mm diameter
	50 cm long, 4 mm diameter	LE.5218	Single arm flexible fiber light conductor,
LE.5214	Dual arm fiber light conductor,		100 cm long, 8 mm diameter
	gooseneck self-sustaining,	LE.5220	Single arm flexible fiber light conductor,
	50 cm long, 4 mm diameter		200 cm long, 8 mm diameter
LE.5215	Triple arm fiber light conductor,	LE.5222	Focusing head for focusing lens LE.5224, LE.5228
	gooseneck self-sustaining,		or filters LE.5229 and LE.5231
	50 cm long, 4 mm diameter		(for fiber light conductors)
LE.5219	Dual arm fiber light conductor,	LE.5224	Focusing lens. Requires LE.5222 or LE.5228 for
	gooseneck self-sustaining,		mounting on LE.5213, LE.5214 and LE.5215
	70 cm long, 4 mm diameter	LE.5228	Focusing head with iris diaphragm
LE.5239	Slit ring-shaped fiber light conductor		(for fiber light conductors)
	60 cm long, 8 mm diameter	LE.5231	Conversion KB12/80B filter
LE.5241	Flexible fiber light conductor,		
	curved 90°, 60 cm long, 4 mm diameter	HALOGI	EN BULBS AND FUSES
LE.5216	Single arm flexible fiber light conductor,	SL.5219	Halogen 100 W 12 V bulb with reflector
	100 cm long, 4 mm diameter		(50 hrs nominal), MR16 fits LE.5210
LE.5235	Dual arm flexible fiber light conductor,	SL.5230	Halogen 100 W 12 V 'Long Life' bulb

SL.5235	Halogen 150 W 15 V bulb			
	(50 hrs nominal), MR16 fits LE.5211			
SL.5240	Halogen 150 W 15 V 'Long Life' bulb			
	(500 hrs nominal), MR16 fits LE.5211			

FOR LE.1980 AND LE.1981

LE.1984-050 Fresnel lens, WD from 40 to 80 mm **LE.1984-100** Fresnel lens, WD from 80 to 150 mm **LE.1984-200** Fresnel lens, WD from 150 to 240 mm LE.1984 Diffusing filter, for WD from 40 to 300 mm LE.1985 Glass protection window LE.1987 Polarizing filter LE.1888 Rotatable polarizing filter LE.1992 100-230 V power supply analog controller. Intensity adjustable from 0-100% LE.1993 100-230 V power supply digital segment

controller. Intensity adjustable from 0-100%

LE.5263 Interchangeable self-sustaining gooseneck-type guide with a 420 nm high-power Violet-LED for NZ.9018, LE.5207 or LE.5212, 1 pc (D) LE.5264 Polarization filter, screw on type for Interchangeable self-sustaining gooseneck-type guides for NZ.9018, LE.5207 or LE.5212, 1 pc

FOR LE.1863

SL.1864 Spare fluorescence lamp

WD = working distance

FOR LE.1990 AND LE.1991

LE.1994-050 Fresnel lens, WD from 40 to 80mm **LE.1994-100** Fresnel lens, WD from 80 to 150 mm **LE.1994-200** Fresnel lens, WD from 150 to 240 mm LE.1994 Diffusing filter, for WD from 40 to 300 mm LE.1995 Glass protection window LE.1997 Polarizing filter LE.1998 Rotatable polarizing filter LE.1992 100-230 V power supply analog controller. Intensity adjustable from 0-100% LE.1993 100-230 V power supply digital segment controller. Intensity adjustable from 0-100%



Fresnel lens



FOR LE.5212

LE.5260	Interchangeable self-sustaining gooseneck-type	
	guide with a white 6,500 K high-power LED for	
	NZ.9018, LE.5207 or LE.5212, 1 pc (A)	
LE.5261	Interchangeable self-sustaining gooseneck-type	
	guide with a 365 nm high-power UV-LED for	
	NZ.9018, LE.5207 or LE.5212, 1 pc (B)	
LE.5262	Interchangeable self-sustaining gooseneck-type	
	guide with a 395 nm high-power Violet-LED for	

NZ.9018, LE.5207 or LE.5212, 1 pc (C)





100 cm long, 4 mm diameter

PREPARATION ACCESSORIES

Euromex offers the right tools for sample preparing. Before using a microscope good samples are essential to get the most accurate results





dissection instruments

PB.5050	Dissecting needle, straight tip		
1 0.5050	Dissecting needle, straight tip		
	with plastic handle		
PB.5054	Dissecting needle, lancet-shaped		
	with plastic handle		
PB.5056	Blunt-pointed probe, Ø 2 mm,		
	length 140 mm		
PB.5058	Section lifter		
	with wooden handle		

PB.5060 Serrated thumb dressing forceps, length 13 mm

PB.5062 Dressing forceps with blunt tips, length 13 cm

PB.5064 Dressing forceps with blunt tips, length 20 cm

Dissecting forceps with sharp tips, PB.5067 length 13 cm

Dissecting forceps with finely PB.5069

curved sharp tips, length 13 cm

PB.5077 Cover glass forceps, length 11 cm



SCISSORS AND BLADES

PB.5080	Dressing scissors with blunt/sharp tip, length 14 cm	
PB.5084	Dissecting scissors, sharp tips, length 11 cm	
PB.5092	Scalpel with blunt tip, length 15 cm	
PB.5094	Scalpel handle no. 4	
	(for blades PB.5095 and PB.5096)	
PB.5095	Scalpel blades with sharp tip, 5 pieces per set	
PB.5096	Scalpel blades with blunt tip, 5 pieces per set	
PB.5103	Strop, double sided for stropping of scalpels,	
	microtome knifes. Includes stropping paste	
PB.5105	Razor plano/concave, for sectioning.	
	With plastic handle	
PB.5106	Microtome knife plano/concave.	

HANDHELD MICROTOMES

MT.5500 Cylinder microtome. Circular stage Ø 70 mm with flat black glass top. Height adjustable with micrometer division 0.01 mm. Complete with plano-concave knife PB.5106 and wooden cabinet MT.5501 Cylinder microtome. Identical to MT.5500 but without knife and wooden cabinet MT.5503 Handheld microtome. Box type with table clamp and razor blade holder. Thickness adjustment by 0.025 mm

intervals. Complete with wooden cabinet





dissection kits

4-PC DISSECTION KIT PB.5110 IN IMITATION LEATHER CASE

Kit with straight dissecting needle (PB.5050), dissecting forceps (PB.5067), dissecting scissors (PB.5084) and scalpel (PB.5092). Supplied with imitation leather case

6-PC DISSECTION KIT PB.5111 IN PLASTIC CASE

Kit with straight dissecting needle (PB.5050), lancet-shaped dissecting needle (PB.5054), dissecting forceps (PB.5067), dissecting scissors (PB.5084), scalpel handle no. 4 (PB.5094) and blades (PB.5096). Supplied with plastic case



10-PC DISSECTION KIT PB.5112 IN IMITATION LEATHER CASE

Kit with two straight dissecting needles (PB.5050), lancet-shaped dissecting needle (PB.5054), dressing forceps (PB.5062), dissecting forceps (PB.5067), scissors (PB.5080), dissecting scissors (PB.5084), two scalpels (PB.5094), five scalpel blades with straight tip and five blades with blunt tip (PB.5095/PB.5096). Supplied with imitation leather case



9-PC DISSECTION KIT PB.5114 IN WOODEN CASE

Kit with two straight dissecting needles (PB.5050), lancet-shaped dissecting needle (PB.5054), dressing forceps (PB.5062), dissecting forceps (PB.5067), scissors (PB.5080), dissecting scissors (PB.5084), two scalpels (PB.5094), five scalpel blades with straight tip and five blades with blunt tip (PB.5095/PB.5096). Supplied with wooden cabinet



6-PC DISSECTION KIT FOR KOI FISH PB.5115 IN PLASTIC CASE

Dissecting set for Koi fish. Consisting of plastic box with forceps with 1 x 2 points (PB.5060), forceps blunt points, 13 cm (PB.5062), scissors, blunt/ sharp points, 14 cm (PB.5080), microscope scissors, sharp points, 11 cm (PB.5084), blunt-pointed probe (PB.5056), scalpel handle no. 4 (PB.5094), five scalpel blades with straight tip and five blades with blunt tip (PB.5095/PB.5096)



PROFESSIONAL SLIDE PREPARATION KIT PB.5125 IN PLASTIC DELUXE CASE

Kit with three prepared slides, 50 microscope slides (PB.5150) and 100 cover glasses (PB.5165). Two microscope slides with cavity. Canada balsam, dissecting needle (PB.5050 and PB.5054). Dissecting forceps (PB.5067), dissecting scissors (PB.5084) and scalpel (PB.5092). Supplied with plastic deluxe case



MICROSCOPE PREPARED SLIDES



Euromex offers teachers, students and microscopy amateurs a wide range of quality micro-slides, which can be used immediately in biology classes as introduction to histology, zoology and botany

sets with 25 slides for education

histology, zoology and botany set

PB.5211 FOR EDUCATION

Set with 25 microscopy slides for education: histological samples of mammals, zoology and botany. All microscope slides are supplied in a plastic box for 25 slides. The set contains:

HISTOLOGY

SH.1011	1011 Hard bone grinding, human, section			
SH.1045	045 Skeletal muscle, dog, l.s and c.s			
SH.1072	2 Skin section through hair follicle, human			
SH.1078	1078 Stratified flat epithelium, dog, section			
SH.1150 Blood smear, human, Giemsa stained				
ZOOLOGY				
SZ.1510 Amoeba proteus, w.m				
SZ.1580	SZ.1580 Hydra with bud, w.m			
C7 1640	Lumbrieus aarthuarm s			

SZ.1580	Hydra with bud, w.m
SZ.1640	Lumbricus - earthworm, c.s
SZ.1655	Daphnia sp., water flea, w.m
SZ.1715	Musca domestica, house fly, mouth parts
SZ.1717	Musca domestica, house fly, leg with clinging pads
SZ.1719	Musca domestica, house fly, wing w.m
	, ,, 3

BOTANY

SB.2006	Allium cepa, onion, scale epidermis, w.m
SB.2009	Allium cepa, onion, mitosis root tip, l.s
SB.2055	Zea mays, corn, stem, cs
SB.2060	Triticum aestivum, wheat, stem, c.s
SB.2070	Helianthus, sunflower, young stem, c.s
SB.2130	Helianthus, sunflower, leaf, c.s
SB.2205	Monocot/dicot flower, zea mays/ranunculus, c.s
SB.2212	Lilium, lily, ovary, c.s
SB.2335	Mnium, w.m
SB.2355	Rhizopus nigricans, bread mold, developed sporangia
SB.2377	Diatoms, w.m
SB.2381	Spirogyra sp., vegetative mass, w.m
SB.2405	Dental plaque, smear

histology, zoology and botany set

PB. 5212 FOR EDUCATION

Set with 25 microscopy slides for education: histological samples of mammals, zoology and botany. All microscope slides are supplied in a plastic box for 25 slides. The set contains:

HISTOLOGY

SH.1005	Hyaline cartilage rabbit, se	
SH.1160	Lymph node, rabbit, sectio	
SH.1230	Small intestine, dog, c.s	
SH.1250	Liver, pig, section	
SH.1430	Cerebrum section, dog	

SH.1001 Loose connective tissue, rabbit

SH.1430	Cerebrum section, dog		
ZOOLO	OGY		
SZ.1520	Paramecium, w.m		
SZ.1625	Schistosoma Japonicum, fluke eggs, bilharziose		
SZ.1630	Taenia, tapeworm cattle, mature proglottid, w.m		
SZ.1635	SZ.1635 Ascaris megalocephala, horse roundworm,		
	female + male, c.s		
SZ.1708	Apis mellifica, honey bee, mouth parts		
SZ.1725	Periplaneta, cockroach, mouth parts of chewing type		
SZ.1730	Pieres brassicae, cabbage-white butterfly,		
	mouth, w.m		
SZ.1750	Periplaneta, cockroach, spiracle of insect, w.m		

BOTANY

SB.2115	Sambucus, elderberry or Morus Alba, mulberry,	
	stem with cork cambium + lenticels, c.s	
SB.2160	Lilium, lily leaf, c.s	
SB.2225	Zea mays, corn, corn seed with embryo, l.s	
SB.2235	Pirus, pear, stone cells, section	
SB.2240	Triticum aestivum, wheat, kernel, l.s	
SB.2305	Cyrtomium, holly fern, c.s of rhizom	
SB.2310	Cyrtomium, holly fern, section	
SB.2386	Oscillatoria, blue-green algae	

SB.2095 Monocot/dicot stem, zea mays/pumpkin, c.s

SB.2105 Hibiscus, young stem, c.s

SB.2110 Cucurbita, pumpkin, stem, l.s

USED ABBREVIATIONS		
c.s cross section l.s longitudinal section		
		w.m

histology, zoology and botany set

PB. 5213 FOR EDUCATION

Set with 25 microscopy slides for education: histological samples of mammals, zoology and botany.

All microscope slides are supplied in a plastic box for 25 slides. The set contains:

HISTOLOGY

SH.1006	Elastic cartilage, rabbit	SH.1130	Artery and vein, rabbit, c.s
SH.1040	Smooth muscle, teased preparation, rabbit, l.s+c.s	SH.1410	Nerve, rabbit, c.s and l.s
SH.1110	Lung with injected blood vessels, rabbit, c.s		

ZOOLOGY

SZ.1535	Euglena virides, a flagellate with eyespot
SZ.1586	Hydra, w.m of tentacles
SZ.1620	Schistosoma Japonicum, female, w.m
SZ.1705	Apis mellifica, honey bee, posterior leg, w.m
SZ.1733	Pieres brassicae, cabbage-white butterfly,
	part of wing
SZ.1738	Locusta, grasshopper, mouth parts, w.m

SZ.1780 Insects - four types of legs, honey bee, house fly, house mosquito, spider

SZ.1877 Rana sp, frog, blood smear

BOTANY

Zea mays, corn root tip with hairs, l.s
Helianthus, sunflower, old root, c.s
Monocot/dicot plant roots, zea mays/helantius, c.s
Solanum tuberosum, potato, starch grains
Tilia, lime tree, one year stem, c.s
Hydrilla stem, c.s
Pelargonium hortorum, geranium, stem c.s
Mnium, antheridial branch, l.s
Mnium, archegonial branch, l.s
Coprinus, ink caps mushroom, section of pleus
Spirogyra sp. in conjugation

SB.2420 3 types of bacteria, cocci, bacilli, spirelli

histology, zoology and botany set

PB. 5214 FOR EDUCATION

Set with 25 microscopy slides for education: histological samples of mammals, zoology and botany.

All microscope slides are supplied in a plastic box for 25 slides. The set contains:

HISTOLOGY OF MAMMALS

SH.1060	Tendon I.s (Dense connective tissue), dog
SH.1075	Skin section with sweat gland, human
SH.1330	Testis rabbit, c.s
SH.1340	Ovary rabbit with developed eggs

SH.1360 Sperm, human, smear SH.1490 Retina, rabbit, sec

ZOOLOGY

SZ.1522	Paramecium conjugation w.m
SZ.1524	Paramecium in fission, w.m
SZ.1540	Trachelomonas, a free swimming type euglena
SZ.1585	Hydra with endoderm + ectoderm, c.s
SZ.1710	Apis mellifica - honey bee compound eye, w.m
SZ.1720	Culex pipiens - house mosquito, larva w.m
SZ.1724	Giant chromosomes of salivary gland, w.m
SZ.1810	Mya arenaria, clam gill, c.s

SZ.1860 Lancelet, Section through gonads and gills, c.s

BOTANY

SB.2015	Ranunculus, buttercup, root c.s
SB.2076	Tilia, lime tree, 1, 2 & 3 year stem, c.s on one slide
SB.2080	Pinus - pine tree, stem l.s
SB.2140	Triticum, wheat, leaf, c.s
SB.2150	Monocot/dicot leaves,zea mays/
	ligustrum lucidum, c.s
SB.2230	Pinus, pine tree, male (cone) globose fruit l.s
SB.2232	Pinus, pine tree, female (cone) globose fruit l.s
SB.2315	Fern, prothallium w. young sporophyte w.m
SB.2320	Cyrtomium, fern, leaf with sporangia
SB.2384	Volvox sp. w.m

histology, zoology and botany set

PB. 5215 FOR EDUCATION

Set with 25 microscopy slides for education: histological samples of mammals, zoology and botany.

All microscope slides are supplied in a plastic box for 25 slides. The set contains:

HISTOLOGY

SH.1043	Cardiac muscle, dog, l.s
SH.1070	Squamous epithelium, human,
	isolated cells from mouth, smear
SH.1315	Kidney rat, sec. cortex & medulla
SH.1420	Cerebellum section, dog
SH.1450	Spinal cord, rabbit, c.s
SH.1470	Taste buds, rabbit, l.s

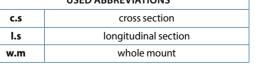
ZOOLOGY cot		coty	
SZ.1610	Planaria, flat worm, injected intestinal tube, w.m	SB.2234	Pinu
SZ.1636	Ascaris megalocephala, horse roundworm,	SB.2330	Marc
	mitosis eggs	SB.2360	Sacc
SZ.1760	Ctenocephalus canis, dog flea, w.m	SB.2365	Peni
SZ.1770	Tetranychus, red spider mite, w.m	SB.2410	Strep
SZ.1930	Bird, wing and down feather, section	SB.2415	Bacil
SZ.1940	Chicken, embryo 48 hours, sagittal section		

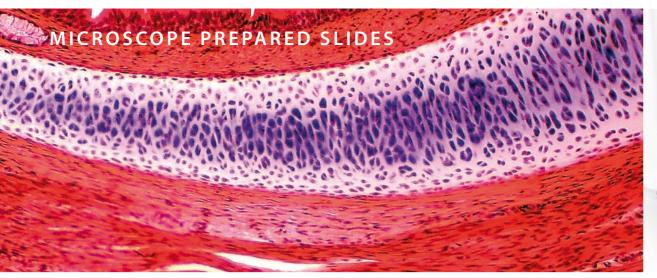
BOTANY

SB.2112	Cucurbita, pumpkin, stem, c.s
SB.2135	Nerium oleander, leaf with sunken stomata, c.s
SB.2210	Lilium, lily, anther with mature pollen, c.s
SB.2214	Lilium, lily, pollen, different stages of meiosis
SB.2220	Capsella, shepherds' purse, ovary w. embryo in
	pre-cotyledon stadium, l.s
SB.2222	Capsella, shepherds' purse, ovary w. embryo in
	cotyledon stadium, l.s
SB.2234	Pinus, pine tree, pollen, w.m
SB.2330	Marchantia, liverworts, thallus with gemma cup, c.s
SB.2360	Saccaromyces sp., yeast, budding, w.m
SB.2365	Penicillium sp., w.m
SB.2410	Streptococus lactis, milk bacteria, smear
SB.2415	Bacillus subtilis, hay bacteria, smear

SB.2090 Hydrilla verticillata, hydrilla stem tip, l.s

	USED ABBREVIATIONS
c.s	cross section
l.s	longitudinal section
w.m	whole mount







sets with 23 slides for education

mammal histology set

PB.5221 SET FOR EDUCATION

Set with 23 microscopy slides for education: histological samples of mammals. All microscope slides are supplied in a plastic box for 25 slides. The set contains:

EPHITELIUM AND CONNECTIVE TISSUES

SH.1001 Loose connective tissue, rabbit SH.1005 Hyaline cartilage, rabbit, section

SH.1011 Hard bone grinding, human, section

SH.1049 Muscle types, striated, smooth, heart muscle, dog, l.s

SH.1060 Tendon, dog, l.s

SH.1070 Squamous epithelium, human, isolated cells

from mouth, smear

SH.1072 Skin section through hair follicle, human

SH.1078 Stratified flat epithelium, dog, section

RESPIRATORY, BLOOD CIRCULATION AND ENDOCRINE SYSTEM

SH.1120 Trachea rabbit, c.s

SH.1130 Artery and vein, rabbit, c.s

SH.1150 Blood smear, human, Giemsa stained

DIGESTIVE SYSTEM

SH.1210 Stomach wall, dog, section

SH.1230 Small intestine, dog, c.s

SH.1250 Liver, pig, section

URINARY AND GENITAL SYSTEM

SH.1310 Injected kidney, rabbit, sec

SH.1330 Testis, rabbit, c.s

SH.1340 Ovary with developed eggs, rabbit

SH.1376 Human chromosomes in blood, female

NERVOUS SYSTEM AND SENSORY ORGANS

SH.1410 Nerve, rabbit, c.s and l.s

SH.1430 Cerebrum section, dog

SH.1450 Spinal cord, rabbit, c.s

SH.1470 Taste buds, rabbit, l.s

SH.1490 Retina, rabbit, sec

mammal histology set

PB.5222 SET FOR EDUCATION

Set with 23 microscopy slides for education: histological samples of mammals.

All microscope slides are supplied in a plastic box for 25 slides. The set contains:

EPHITELIUM AND CONNECTIVE TISSUES

SH.1006 Elastic cartilage, rabbit

SH.1012 Hard bone grinding of rabbit, tooth, de-calcium

SH.1040 Smooth muscle, teased preparation, rabbit,

l.s+c.s

SH.1043 Cardiac muscle, dog, l.s

SH.1045 Skeletal muscle, dog, l.s and c.s

SH.1075 Skin section with sweat gland, human

SH.1080 Ciliated epithelium, trachea, rabbit

RESPIRATORY, BLOOD CIRCULATION AND ENDOCRINE SYSTEM

SH.1110 Lung with injected blood vessels, rabbit, c.s

SH.1140 Pancreas, rabbit, section

SH.1160 Lymph node, rabbit, section

SH.1170 Thyroid gland, rabbit, section

SH.1180 Adrenal gland, rabbit, section

DIGESTIVE SYSTEM

SH.1220 Oesophagus dog, c.s

SH.1235 Large intestine, dog, c.s

SH.1260 Gall bladder, dog, section

SH.1280 Golgi apparatus in Basal spinal ganglion, dog

URINARY AND GENITAL SYSTEM

SH.1315 Kidney, rat, sec. cortex & medulla

SH.1360 Sperm, human, smear

SH.1375 Human chromosomes in blood, male

SZ.1724 Fruit fly, drosophila, giant chromosomes of

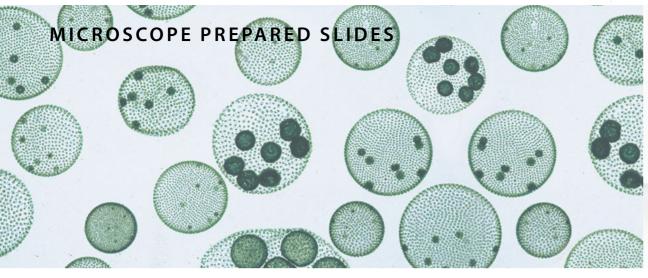
salivary gland, w.m

NERVOUS SYSTEM AN SENSORY ORGANS

SH.1415 Motor nerve cells with end plates, rabbit, w.m.

SH.1420 Cerebellum section, dog

SH.1480 Eyeball section, rabbit, sagittal section





set for hobby 10 slides

zoology and botany set

PB.5204 SET FOR HOBBY

Set with 10 prepared microscopy slides for hobby: zoology and botany.

All microscope slides are supplied in a plastic box with transparent cover for 25 slides. The set contains:

ZOOLOGY

SH.1040 Smooth muscle, teased preparation, rabbit, I.sand c.s

SH.1110 Lung with injected blood vessels, rabbit, c.s **SZ.1708** Apis mellifica, honey bee, mouth parts

SZ.1733 Pieres brassicae, cabbage-white butterfly, part of wing

SZ.1877 Rana sp, frog, blood smear

SB.2015 Ranunculus, buttercup, root, c.s

BOTANY

SB.2160 Lilium, lily leaf, c.s

SB.2222 Capsella, shepherds' purse, ovary w. embryo in cotyledon stadium, l.s

SB.2374 Aspergillus, brown mold, w.m

SB.2384 Volvox sp., w.m

USED ABBREVIATIONS c.s cross section l.s longitudinal section whole mount w.m

set for hobby 25 slides

slides of histology, zoology and botany

PB.5218 SET FOR HOBBY

Set with 25 prepared microscopy slides for hobby: zoology and botany.

All microscope slides are supplied in a plastic box with transparent cover for 25 slides. The set contains:

HISTOLOGY OF HUMAN AND MAMMALS

SH.1072 Skin section through hair follicle, human SH.1150 Blood smear human, Giemsa stained **SH.1415** Motor nerve cells with end plates, rabbit w.m. SH.1470 Taste buds, rabbit, l.s.

BOTANY SB.2009 Allium cepa, onion, mitosis root tip, l.s **SB.2055** Zea mays, corn, stem, cs SB.2075 Tilia, lime tree, one year stem, c.s **SB.2100** Pelargonium hortorum, geranium, stem c.s SB.2112 Cucurbita, pumpkin, stem, c.s SB.2130 Helianthus, sunflower, leaf, c.s SB.2135 Nerium oleander, leaf with sunken stomata, c.s **SB.2210** Lilium, lily, anther with mature pollen, c.s **SB.2225** Zea mays, corn, corn seed with embryo, l.s

ZOOLOGY

SZ.1520 Paramecium, w.m.

SZ.1535 Euglena virides, a flagellate with eyespot **SZ.1580** Hydra with bud, w.m **SZ.1630** Taenia, tapeworm cattle, mature proglottid, w.m. **SZ.1635** Ascaris megalocephala, horse roundworm, female and male, c.s **SZ.1640** Lumbricus, earthworm, c.s **SZ.1655** Daphnia sp., water flea, w.m **SZ.1705** Apis mellifica, honey bee, posterior leg, w.m **SZ.1710** Apis mellifica, honey bee compound eye, c.s **SZ.1719** Musca domestica, house fly, wing w.m **SZ.1722** Culex pipiens, house mosquito, female, mouth parts SZ.1724 Fruit fly, drosophila, giant chromosomes of salivary gland, w.m



individual euroslides

prepared slides

Euromex supplies complete sets and individual prepared microscope slides for educational use as well as for the hobby market

These high quality microscope slides are usually supplied directly from stock, at the very best prices. The slides on the next page are separately available



HOW TO ORDER INDIVIDUAL EUROSLIDES

individual euroslides for histology

These histological microscope slides consist of sample of ephitelium and connective tissues, the respiratory system, blood circulation, endocrine system, digestive system, urinary and genital systems, nervous system and sensory organs

EPHITELIUM AND CONNECTIVE TISSUES

SH.1001 Loose connective tissue, rabbit **SH.1005** Hyaline cartilage rabbit, section

SH.1006 Elastic cartilage, rabbit

SH.1011 Hard bone grinding, human, section

SH.1012 Hard bone grinding of rabbit, tooth, decalcium

SH.1040 Smooth muscle, teased preparation, rabbit. Ls and c.s.

SH.1045 Skeletal muscle, dog, l.s and c.s

SH.1049 Muscle types, striated, smooth, heart muscle, dog, l.s

SH.1060 Tendon, dog, l.s

SH.1072 Skin section through hair follicle, human

SH.1078 Stratified flat epithelium, dog, section

SH.1080 Ciliated epithelium, trachea, rabbit

RESPIRATORY, BLOOD CIRCULATION AND ENDOCRINE SYSTEM

SH.1110 Lung with injected blood vessels, rabbit, c.s

SH.1120 Trachea, rabbit, c.s

SH.1130 Artery and vein, rabbit, c.s

SH.1140 Pancreas, rabbit, section

SH.1150 Blood smear, human, Giemsa stained

SH.1160 Lymph node, rabbit, section

DIGESTIVE SYSTEM

SH.1220 Oesophagus, dog, c.s SH.1230 Small intestine, dog, c.s

SH.1250 Liver, pig, section

URINARY AND GENITAL SYSTEM

SH.1310 Injected kidney, rabbit, section

SH.1330 Testis, rabbit, c.s

SH.1340 Ovary with developed eggs, rabbit

SH.1360 Sperm, human, smear

NERVOUS SYSTEM

AND SENSORY ORGANS

SH.1410 Nerve, rabbit, c.s and l.s

SH.1415 Motor nerve cells with end plates, rabbit, w.m

SH.1420 Cerebellum section, dog

SH.1450 Spinal cord, rabbit, c.s

SH.1470 Taste buds, rabbit, l.s

SH.1490 Retina, rabbit, section

	USED ABBREVIATIONS
c.s	cross section
l.s	longitudinal section
w.m	whole mount



individual euroslides for zoology

This series of zoology microscopy slides consists of samples with single-cell organisms (protozoa), coelenterate, worms (helminthes), Crustaceans (crustaceae), insects and amphibians

PROTOZOA

SZ.1510	Amoeba proteus, w.m
SZ.1520	Paramecium, w.m
SZ.1522	Paramecium in conjugation w.m
SZ.1535	Euglena virides, a flagellate with eyespot
SZ.1540	Trachelomonas, a free swimming type eugle

COELENTERATA

SZ.1580 Hydra with bud, w.m

HELMINTHES

SZ.1630	Taenia, tapeworm pig, mature proglottid, w.m
SZ.1635	Ascaris megalocephala, horse roundworm,
	female + male c.s
SZ.1636	Ascaris megalocephala, horse roundworm,
	mitosis eggs
SZ.1640	Lumbricus, earthworm, c.s

CRUSTACEANS

SZ.1655 Daphnia sp., water flea, w.m

INSECTS

SZ.1705	Apis mellifica, honey bee, posterior leg, w.m
SZ.1708	Apis mellifica, honey bee, mouth parts
SZ.1710	Apis mellifica, honey bee compound eye, c.s
SZ.1719	Musca domestica, house fly, wing, w.m
SZ.1720	Culex pipiens, house mosquito, larva, w.m
SZ.1722	Culex pipiens, house modquito, female,
	mouth parts
SZ.1724	Drosophila, fruit fly, giant chromosomes
	of salivary gland, w.m
C7 1730	Diagos bysosiesa esbbsos white buttorfly

SZ.1730	Pieres brassicae, cabbage-white butterfly
	mouth, w.m

SZ.1760	Ctenocephalus canis, dog flea, w.m

SZ.1780	Insects- four types of legs, honey bee, house fly,
	house modquito, spider

SZ.1733 Pieres brassicae, cabbage-white butterfly, part of wing

AMPHIBIANS

SZ.1877	Rana sp, frog, blood smear
SZ.1880	Frog uncleaved egg, c.s
SZ.1881	Frog egg, two cells stadium, c.s
SZ.1883	Frog egg, advanced cleavage c.s
SZ.1885	Frog egg, blastula phase, c.s
SZ.1887	Frog egg, early gastrula phase, c.s
SZ.1889	Frog egg, advanced gastrula phase, o

HOW TO ORDER INDIVIDUAL EUROSLIDES

Minimum purchase quantity is 10 pieces of the same slide

The individual slides always have to be ordered together with a storage box (e.g. PB.5181 for 25 slides)

individual euroslides for botany

This series of botanic microscopy slides consists of samples of sections of roots, stems, leaves, flowers, fruits and seeds, ferns and mosses, fungi, algae and bacteria

ROOTS

SB.2009	Allium cepa, onion, mitosis root tip, l.s
SB.2015	Ranunculus, buttercup, root, c.s
SB.2020	Helianthus, sunflower, old root, c.s
SB.2025	Monocot/dicot plant roots, zea mays/helantius, c.s
SB.2040	Solanum tuberosum, potato, starch grains

SB.2006 Allium cepa, onion, scale epidermis, w.m.

STEMS

SB.2055 Zea mays, corn, stem, c.s

SB.2060 Triticum aestivum, wheat, stem, c.s

SB.2070	Helianthus, sunflower, young stem, c.s
SB.2076	Tilia, lime tree, 1, 2 and 3 year stems on one slide,
SB.2095	Monocot/dicot stem, corn/pumpkin, c.s
SB.2100	Pelargonium hortorum, geranium, stem, c.s
SB.2105	Hibiscus, young stem, c.s
SB.2115	Sambucus, elderberry or Morus Alba, mulberry,

LEAVES

SB.2130	Helianthus, sunflower, leaf, c.s
SB.2135	Nerium oleander, leaf with sunken stomata, c.s
SB.2140	Triticum, wheat, leaf, c.s
SB.2150	Monocot/dicot leaves, zea mays/ligustrum lucidum, c.s
SB.2160	Lilium, lily leaf, c.s

stem with crok cambium and lenticels, c.s

FLOWERS, FRUITS AND SEEDS

SB.2210	Lilium, lily, anther with mature pollen, c.s
SB.2212	Lilium, lily, overy, c.s
SB.2214	Lilium, lily, pollen, different stages of meiosis
SB.2220	Capsella, shepherds' purse, ovary w. embryo
	in pre-cotyledon stadium, l.s
SB.2222	Capsella, sheperd's purse, ovary w. embryo
	in cotyledon statium, l.s
SB.2225	Zea mays, corn seed with embryo, l.s
SB.2232	Pinus, pine tree, female (cone) globose fruit, l.s
SB.2240	Triticum aestivum, wheat, kernel, l.s

SB.2205 Monocot/dicot flower, zea mays/ranunculus, c.s

FERNS AND MOSSES

SB.2315	Cyrtomium, holly fern, prothallium
	with young sporophyt, w.m
SB.2337	Mnium, antheridial branch, l.s
SB.2339	Mnium, archegonial branch, l.s

FUNGI

SB.2360	Saccaromyces sp., yeast, budding, w.m
SB.2365	Penicillium sp., w.m
SB.2373	Coprinus, ink caps mushroom, section of pileu
SB.2374	Aspergillus, brown mold, w.m

ALGAE

SB.2377	Diatoms, w.m
SB.2380	Spirogyra sp. in conjugation
SR.2384	Volvox sn. w.m.

BACTERIA

SB.2420 3 types of bacteria, cocci, bacilli, spirelli



for professional use

Euromex offers Globe Scientific professional microscope slides in three distinct lines, to meet the demands of today's modern laboratories

MICROSCOPE SLIDES

General purpose microscope slides The economical alternative for less demanding applications

Diamond Essentials microscope slides Produced from the highest quality soda lime glass and ideal for use in all routine applications. These slides provide excellent quality while offering substantial savings

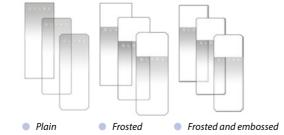
Diamond White Glass microscope slides

Produced from superior quality white glass with exceptional clarity, low self-fluorescence and uniform thickness. The glass is formulated for minimal oxidation, which ensures sample integrity during long-term storage. This top quality line is designed for the most demanding applications and provides considerable savings compared to other name brand white glass slides on the market

Globe Scientific microscope slides are offered in a large selection of Colors, corner styles and edges. All slides are precleaned and ready to use. Globe Scientific can also custom produce microscope slides for your particular needs

CORNER/EDGE TYPES

- Traditional style: 90° ground edge/90° corners. Frosted or plain
- Safety corners: 90° ground edge/slightly clipped corners. Corners are slightly clipped for safety and comfort
- Clipped corners: 45° beveled edge/clipped corners. No sharp edges. Perfect for blood smears



GENERAL PURPOSE SLIDES

ITEM	Plain*	Frosted	Ground edge	Safety corners**	Case
1291	•		•	•	1440
1294		one side	•	•	1440

*The plain slides have painted dots in each corner to help alleviate sticking. All slides are pre-cleaned and ready to use

DIAMOND ESSENTIALS

331	1440 1440 1440
1331 1304	
1304	1440
1324	
1334	1440
1308 .	1440
1328 .	1440
1338 .	1440
1304B • • Blue 1304G • • Gree 1304N • • Orang 1304P • • Pink 1304W • • Whit 1304Y • • Yellor 1324B • • Blue	1440
1304G • Gree 1304N • Orang 1304P • Pink 1304W • Whit 1304Y • Yello 1324B • Blue	1440
1304N • Orang 1304P • Pink 1304W • Whit 1304Y • Yello 1324B • Blue	1440
1304P • Prink 1304W • • Whit 1304Y • • Yello 1324B • • Blue	1440
1304W • • Whit 1304Y • • Yello 1324B • • Blue	1440
1304Y • • Yellor 1324B • • Blue	1440
1324B • • Blue	1440
	1440
1324N • • Orano	1440
	1440
1324P • • Pink	1440
1324W • • Whit	1440
1324Y • Yello	1440
1334B • • • Blue	1440
1334G • • • Gree	1440
1334P • • • Pink	1440
1334W • • Whit	1440
1334Y • • Yello	1440

DIAMOND WHITE GLASS

ITEM	Plain	Frosted	Ground edge	Beveled edge	90° corners	Clipped corners	Charged	Color	Case
1380-10			•		•				1440
1384-10						•			1440
1380-20		one side	•		•				1440
1384-20		one side		•		•			1440
1380-30		two sides	•		•				1440
1384-30		two sides		•		•			1440
1380-50B		•	•		•			Blue	1440
1380-50P		•	•		•			Pink	1440
1380-50W		•	•		•			White	1440
1380-50Y		•	•		•			Yellow	1440
1384-50P		•		•		•		Pink	1440
1384-50W		•		•		•		White	1440
1358B		•	•		•		•	Blue	1440
1358G		•	•		•		•	Green	1440
1358P		•	•		•		•	Pink	1440
1358W		•	•		•		•	White	1440
1358Y		•	•		•		•	Yellow	1440
1354W		•		•		•	•	White	1440

^{**} Safety corners: 90° ground edge/slightly clipped corners. Corners are slightly clipped for safety and comfort

COVER GLASSES

Our Cover glass range is produced to meet microscopy and laboratory needs, ensuring precise results in every analysis. Our cover glass protects specimens, minimizes contamination, and optimizes optical performance. With premium quality, uniform thickness, exceptional clarity, and chemical resistance, our cover glass is versatile for various applications. The cover glass is offered in two thicknesses and various sizes

KEY FEATURES

- High quality material Made from chemically-resistant white glass
- Uniform flatness Ensures consistent sample preparation and examination
- Aluminum wrapped Prevents sticking, ensuring easy separation
- 2 Thicknesses Available in No. 1 (0.14mm) and No. 1.5 (0.175mm)
- Recommended use Ideal for manual applications in histology, cytology, urinalysis, and microbiology



COVER GLASS

ITEM	Size	Thickness 0.14 mm (nr. 1)	Thickness 0.175 mm (nr. 1.5)	Pcs per box	Per carton
1401-10-200	18 x 18 mm	•		200	1000
1401-15-200	18 x 18 mm		•	200	1000
1402-10-200	20 x 20 mm	•		200	1000
1402-15-200	20 x 20 mm		•	200	1000
1404-10-200	22 x 22 mm	•		200	1000
1404-15-200	22 x 22 mm		•	200	1000
1408-10-100	24 x 32 mm	•		100	1000
1408-15-100	24 x 32 mm		•	100	1000
1415-10-100	24 x 50 mm	•		100	1000
1415-15-100	24 x 50 mm		•	100	1000
1419-10-100	24 x 60 mm	•		100	1000
1419-15-100	24 x 60 mm		•	100	1000

SLIDE MAILERS

Our range ensures secure transportation and protection for microscope slides. Engineered for durability, our mailers guarantee your specimens arrive intact

RELIABLE PROTECTION

Our mailers safeguard slides from damage, breakage, and contaminants during transit, offering peace of mind for analysis or archival purposes

KEY FEATURES

- Secure Enclosure: Ensures slides remaining safely enclosed during transportation
- Shock Absorption: Minimizes damage risk with sturdy, cushioned interiors
- Compatibility: Accommodates standard microscope slide sizes and thicknesses
- Convenience: Streamlines packaging and handling with user-friendly designs
- Versatility: Offers various configurations to suit specific shipping and storage needs

Cardboard slide mailers

Cardboard slide mailers feature an inner finger groove for effortless slide removal along with a cover that opens for viewing. The flat surface area is ideal for labeling or writing any necessary information. They are light-weight and reusable to minimize cost. The 20-place cardboard slide holder contains a numerical index that corresponds to the inner slide compartments. The inside flaps are recessed so that there is no contact or contamination between the slides and the cover when closed. With a 360° hinge, the cover folds flat underneath to save space when the holder is in use

Extra sturdy plastic slide mailers

Our plastic slide mailers are produced from polypropylene (PP) and feature a snap-close lid to keep slides secure during transport

Plastic slide mailers with flip top lids

These compact plastic slide mailers are produced from polypropylene (PP) and feature a flip-top lid to keep slides secure during transport. The slim design saves valuable space and features inner slots which keep slides separated

Side opening — for 5 slides

The side opening lid provides easy access to the entire length of the slide



SLIDE STORAGE

Our products ensure the integrity and longevity of your slides. Choose from compact boxes or durable trays to meet your needs

KEY FEATURES

Secure storage:

Protects slides from damage, dust, and contaminants

Organization:

Various sizes and configurations for efficient workflow

- Compatibility:
 - Accommodates standard microscope slides
- Space-efficiency:

Maximizes storage space in laboratories

Slide storage boxes

Globe Scientific's microscope slide storage boxes are produced from durable ABS plastic and offer a hinged lid for easy opening and closing. An inventory sheet is affixed to the inside cover for convenient slide identification and organization. The base of the box is cork lined for added protection. Available in four sizes and various colours, these storage boxes accommodate 25 x 75 mm and 1" x 3" microscope slides

Heavy-duty slide storage boxes with stainless steel clasp

These stackable boxes are produced from durable ABS plastic and feature heavy-duty stainless steel clasps and hinged lids for easy opening and closing. An inventory sheet is affixed to the inside cover for convenient slide identification and organization. The base of the box is cork lined for added protection. Available in 6 colours, these storage boxes accommodate 25 x 75 mm microscope slides



SLIDE MAILERS

ITEM	Material	Specifics	Description	Color	Packaging options
513001	Cardboard		holds 1 slide		100 & 1000
513002	Cardboard		holds 2 slides		100 & 1000
513003	Cardboard		holds 3 slides		50 & 500
513004	Cardboard		holds 4 slides		50 & 200
513025	Cardboard		holds 20 slides		1 & 10
513031	Plastic		holds 1 slide	Natural	100 & 1000
513041	Plastic		holds 2 slides	Natural	100 & 1000
513041B	Plastic		holds 2 slides	Blue	100 & 1000
513045	Plastic		holds 3 slides	natural	100 & 1000
513052	Plastic	with flip top lids	holds 2 slides	Natural	100 & 1000
513052B	Plastic	with flip top lids	holds 2 slides	Blue	100 & 1000
513062	Plastic	with flip top lids	holds 5 slides	Natural	100 & 1000
513062B	Plastic	with flip top lids	holds 5 slides	Blue	100 & 1000
513065	Plastic	Side opening	holds 5 slides	Natural	100 & 1000
513055	Plastic	Side opening	holds 5 slides	Natural	100 & 1000

SLIDE SORAGE

ITEM	Number of slides	With tray	Tray alone	Color	Dimensions (L x W x H)	Case
513029A	20			Grey		Each
513029B	20			Blue		Each
513029G	20			Green		Each
513029Y	20			Yellow		Each
513029W	20			White		Each
513250B	100	•		Blue		Each
513250G	100			Green		Each
513250P	100	•		Pink		Each
513250W	100			White		Each
513250Y	100	•		Yellow		Each
513252B	100			Blue		Each
513252G	100			Green		Each
513252P	100		•	Pink		Each
513252W	100			White		Each
513252Y	100			Yellow		Each
513072A	12			Grey	82 x 51 x 35 mm	1
513072B	12			Blue	82 x 51 x 35 mm	1
513072G	12			Dark grey	82 x 51 x 35 mm	1
513072N	12			Orange	82 x 51 x 35 mm	1
513072W	12			White	82 x 51 x 35 mm	1
513072AST	12			(1 ea. A,B,G,N,W)	82 x 51 x 35 mm	5
513075A	25			Grey	96 x 84 x 35 mm	1
513075B	25			Blue	96 x 84 x 35 mm	1
513075G	25			Dark grey	96 x 84 x 35 mm	1
513075N	25			Orange	96 x 84 x 35 mm	1
513075W	25			White	96 x 84 x 35 mm	1
513075Y	25			(1 ea. A,B,G,N,W)	96 x 84 x 35 mm	5
513077A	50			Grey	203 x 82 x 35 mm	1
513077B	50			Blue	203 x 82 x 35 mm	1
513077G	50			Dark grey	203 x 82 x 35 mm	1
513077N	50			Orange	203 x 82 x 35 mm	1
513077W	50			White	203 x 82 x 35 mm	1
513077AST	50			(1 ea. A,B,G,N,W)	203 x 82 x 35 mm	5
513079A	100			Grey	203 x 165 x 35 mm	1
513079B	100			Blue	203 x 165 x 35 mm	1
513079G	100			Dark grey	203 x 165 x 35 mm	1
513079R	100			Red	203 x 165 x 35 mm	1
513079W	100			White	203 x 165 x 35 mm	1
513079N	100			Orange	203 x 165 x 35 mm	1
513079AST	100			(1 ea. A,B,G,N,W)	203 x 165 x 35 mm	5
513080A	100			Grey	203 x 165 x 35 mm	1
513080B	100			Blue	203 x 165 x 35 mm	1
513080G	100			Dark grey	203 x 165 x 35 mm	1
513080N	100			Orange	203 x 165 x 35 mm	1
513080R	100			Red	203 x 165 x 35 mm	1
513080W	100			White	203 x 165 x 35 mm	1
513080AST	100			(1 ea. A,B,G,N,W)	203 x 165 x 35 mm	5



disposables

Microscope slides for educational use

PB.5150 Microscope slides 76 x 26 mm, clear glass, cut edges. 50 pieces

PB.5155 Microscope slides 76 x 26 mm clear glass,

ground edges. 50 pieces

PB.5157-W Microscope slides 76 x 26 mm,

ground white frosted side, 50 pieces

PB.5157-B Microscope slides 76 x 26 mm,

ground blue frosted side, 50 pieces PB.5160 Microscope slides 76 x 26 mm with concavity,

ground edges. 10 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.5170 Cover glasses Ø18 mm, thickness 0.13-0.17 mm. 100 pieces

MICROSCOPE SLIDE BOXES

PB.5181 Black plastic slide box for 25

PB.5180 Wooden slide box for 25 slides.

White interior with index

PB.5185 Black plastic slide box for 100 slides



STAINS

Staining enables observation of cells and tissues of low contrast. Euromex offers a range of common stains





MISCELLANEOUS ACCESSORIES

PB.5200 Staining trough for 10 slides

PB.5210 Fine pointed brush

PB.5245 Lens paper. 100 sheets

PB.5250 Solid paraffin. Melting point 60°C, 200 grams

PB.5255 Immersion oil, refractive index nD = 1.515, (25 ml)

PB.5265 Entellan, quick drying Canada balsam. In bottle (25 ml)

PB.5274 Isopropyl alcohol 99%. In bottle (200 ml)

PB.5277 Formalin 40%, fixing agent. In bottle (200 ml)

PB.5275 Cleaning kit: lens cleaning fluid, lint free lens

tissue, 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

(DISSOLVED) STAINS

Supplied in 25 ml bottles

PB.5283 Eosin yellow. Stain for general overall-view coloring

PB.5286 Haematoxylin according to Ehrlich. General purpose nuclear stain

PB.5289 Astra Blue. Stain for vegetal cells.

To be used in combination with safranin

PB.5292 Orange-G, stain for most elementary structures of animal tissues

PB.5295 Safranine. A general stain for showing nuclei and cellulose walls. To be used in combination with

PB.5297 Methylene Blue. Biological and bacteriological stain

PB.5300 Analin Blue, to be used as third color for Azo pigmentation

Astra Blue

PB.5305 Fuchsine. For staining bacilli in tissue





PB.5286 - PB.5297



other products

optical instruments







Euromex offers a large range of optical products for a wide variety of applications in different fields

Our high-quality magnifiers, refractometers and other optical instruments all ensure an excellent optical quality and unmatched durability

MAGNIFIERS &

MEASURING MICROSCOPES • 432

REFRACTOMETERS • 437

POLARIMETERS • 443

SPECTROMETERS • 444



MAGNIFIERS & MEASURING MICROSCOPES



handheld magnifiers

and magnifiers with handles

PB.5020	Magnifier with handle 4x, lens Ø 50 mm	
	and handle Ø 8 mm. Fits on PB.5022	III
PB.5021	Magnifier with handle 10x, aplanatic lens Ø 25 mm	
	and handle Ø 8 mm. Fits on PB.5022	and the second
PB.5022	Heavy stand with adjustable cross clamp, base \emptyset	
2	70 mm. Weight 450 grams. For PB.5022 and PB.5021	
		• PB.5021
	PB.5020	• PB.5022
	● PB.5020	10.5022

FOLDING MAGNIFIERS

PB.5016 Aplanatic magnifier 6x, doublet. Lens Ø 20 mm. Field of view 25 mm PB.5018 Aplanatic magnifier 15x, doublet. Lens Ø 18 mm. Field of view 14 mm PB.5032 Achromatic magnifier 10x, triplet. Lens Ø 20 mm. Field of view 15 mm PB.5033 Achromatic magnifier 20x, triplet.

Lens Ø 20 mm. Field of view 8 mm

PB.5036 Aplanatic magnifier 10x, doublet. Lens Ø 20 mm. Field of view 20 mm PB.5037 Achromatic diamond magnifier 10x with four lenses Ø 21 mm. Field of view 25 mm



PB.5032

FOLDING MAGNIFIERS WHITE LED ILLUMINATION

PB.5034-LED Achromatic magnifier 10x triplet. Lens Ø 21 mm. White LED illumination

PB.5018-LED Achromatic magnifier 15x triplet. Lens Ø 21mm. White LED illumination

PB.5033-LED Achromatic magnifier 20x, triplet. Lens Ø 21 mm. White LED illumination

PB.5035-LED Achromatic magnifier 30x triplet. Lens Ø 21 mm. White LED illumination



PB.5016

FOLDING MAGNIFIERS WHITE LED AND UV ILLUMINATION

PB.5034-LUV Achromatic magnifier 10x triplet. Lens Ø 21 mm. White LED and UV illumination

PB.5018-LUV Achromatic magnifier 15x triplet. Lens Ø 21mm. White LED and UV illumination

PB.5033-LUV Achromatic magnifier 20x, triplet.

Lens Ø 21 mm. White LED and UV illumination

PB.5035-LUV Achromatic magnifier 30x triplet.

Lens Ø 21 mm. White LED and UV illumination





PB.5034-LUV

MAGNIFIERS & MEASURING MICROSCOPES

Measuring microscopes are built with a microscope objective for magnifications from 20 to 100x times



magnifiers & measuring microscopes

TABLE MAGNIFIERS

PB.5039 Table magnifier, 15x magnification. Glass achromatic lens Ø 19 mm, field of view 15 mm

PB.5041 Table magnifier, 10x magnification. Glass lens Ø 26 mm, field of view 25 mm

PB.5043 Table magnifier, 4x magnification. Plastic lens Ø 57 mm, field of view 55 mm

PB.5040 Table magnifier, 8x magnification. Plastic lens Ø 23 mm, field of view 30 mm. 10mm/100 reticle

MISCELLANEOUS MAGNIFIERS

PB.5030 Dual sliding magnifier with 3x and 6x magnification. Lens aperture 23 x 23 mm. Fields of view 50 x 50 mm and 25 x 25 mm. Plastic housing

PB.5049 Linen tester folding magnifier with 6x aplanatic lens. A 25 x 25 mm base with millimeter scale. Metal casing lacquered in black. Supplied with plastic case









Measuring scale 10-0-10 mm divided into 0.1 mm and crosshairs

PB.5045 Measuring magnifier 7x. Eyepiece Ø 18 mm. Field of view 24 mm. With 5 interchangeable scales for angle, thickness

PB.5046 Measuring magnifier 10x. Eyepiece Ø 20 mm. Field of view 35 mm. Measuring scale 15-0-15 mm with 0.1, 0.2 and 0.5 mm graduations

and linear measurements

PB.5048 Measuring magnifier 4x. Eyepiece Ø 30 mm. Field of view 65 mm. Measuring scale 25-0-25 mm with 0.1, 0.2 and 0.5 mm graduations

MEASURING MICROSCOPES

PB.5008 Measuring microscope 20x with LED illumination. Measuring scale 7.2 mm with 0.1 mm graduation

PB.5010 Measuring microscope 40x with LED illumination. Measuring scale 3 mm with 0.05 mm graduation

PB.5012 Measuring microscope 60x with LED illumination. Measuring scale 1.75 mm with 0.02 mm graduation

PB.5014 Measuring microscope 100x with LED illumination. Measuring scale 1.1 mm with 0.01 mm graduation



refractometers





refractometers

Refractometers are used for the identification of substances and concentration measurements of fluids. Because the refractive index (R.I.) of a solution is proportional to the concentration, it is easy to identify the substance or to measure the purity and concentrations of solutions

The Euromex refractometers are calibrated at 20° Celsius. Most refractometers are equipped with Automatic Temperature Compensation (ATC)

REFRACTOMETERS • PAGE 430 ABBE REFRACTOMETER • PAGE 433





refractometers

handheld and table models

A refractometer is an instrument that measures the refractive index of a liquid or refractive material such as sugar concentrations in fruits, juices, soft drinks, energy drinks, wines or must, liquors, jams, honey, industrial lubricants, antifreeze, ethanol, battery acids, salt, propylene glycol, ethylene glycol solutions

A few drops of the liquid that needs to be examined are gently deposited on a measuring prism and covered with a cover-glass. The rays of the light source (ambient light, built-in LED light source or external cold-light source) will be bent (refracted) in function of the composition of the liquid under observation

This results in a shadow line between a dark and a light portion. The measured value can be directly read through a focusable eyepiece on a refraction index scale and/or on a specific built-in scale(s) of the refractometer in Brix, Oechsle, Babo units or % volume, specific gravity, protein in serum or in °C

Euromex offers portable or handheld refractometers, analogue or digital and laboratory Abbe refractometer products used in wine making, distilling, food processing, canning, beekeeping, brewing, pharmaceutical, manufacturing, machining, automotive industries

Most of the refractometers have also an A(utomated) T(emperature) C(ompensation) mechanism in order to compensate for temperature variations. Calibration can be verified with a calibration fluid (in most cases distilled water) and adjusted by a screw if needed

						U	Handheld model	Table model	Analog	Digital
Application	Art no	Range	•	Accuracy	Remarks	ATC	Ŧ	Τa	A	ğ
Concentrations of sugar in marmalades, fruits, syrups,	RF.6190	0-90	Brix	0.2	3 scales: 0-42 / 42-71 / 71-90 Brix		•		•	
wine and monitoring	RF.6510	0 - 10	Brix	0.1		•	•		•	
of oil emulsions	RF.6520	0 - 20	Brix	0.1		•	•		•	
	RF.6532	0 - 32	Brix	0.2			•		•	
	RF.6562	28 - 62	Brix	0.2						
	RF.6580	0 - 80	Brix	0.5						
	RF.6582	45 - 82	Brix	0.5						
	RF.6592	58 - 92	Brix	0.2						
	RF.6635	0 - 150 0 - 35 0 - 27 0 - 22 0 - 37	°Oe Brix °KMW % CNM	1 0.2 0.2 0.2 0.5	Oechsle units Sugar concentration Babo units % volume	•	•		•	
	RD.6735	0 - 150 0 - 35 0 - 25 0 - 22	°Oe Brix °KMW %	1 0.1 0.1 0.1		٠	•			•
	RD.6645	0 - 45 1.33 - 1.41	Brix R.I.	0.1 0.0003		•	•			•
	RD.6666	0 - 80 1.33 - 1.51	Brix R.I.	0.5 0.0005		•	•			•
	RD.6667	58 - 92 1.43 - 1.52	Brix R.I.	0.2 0.0003		•	•			•
Honey	RF.6642	13 - 25	%	0.1	Honey moisture				•	
	RF.6644	58 - 92 38 - 43 12 - 27	Brix °Be %	0.5 0.5 1	Water	٠	•		•	
Concentration of sugar/alcohol %	RF.6627	0 - 25 0 - 40 0 - 20	% Brix Baume	0.2 0.2 0.2	% volume	•	•		•	
Salinity and concentration of sugar	RF.6610	0 - 100 0 - 10 1.00 - 1.07	‰ Brix R.I.	1 0.1 0.005		٠	•		•	
	RF.6628	0 - 28	%	0.2		•	•		•	
	RD.6728	0 - 28 0 - 45 1.33 - 1.41	% Brix R.I.	0.1 0.1 0.0003	% NaCl Only for sugar/salt	•	•			•
Clinical applications Proteins	RF.6612	0 - 12 1.00 - 1.05 1.333 - 1.360	g/dl sg R.I	0.2 0.002 0.0003	Proteins in serum Urine specific gravity	•	•		•	
	RF.6614	2 - 14 1.00 - 1.06 1.00 - 1.06	g/dl sg sg	0.1 0.001 0.001	Proteins in serum Urine specific gravity (dog) Urine specific gravity (cat)	•	•		•	

Application	Art no	Range		Accuracy	Remarks	ATC	Handheld model	Table model	Analog	Digital
	RD.6712	0 - 12 1.00 - 1.05 1.33 - 1.39	g/dl sg R.I.	0.1 0.001 0.0001	Proteins in serum Urine specific gravity	•	•			•
	RD.6714	0 - 14 0 - 14 1.00 - 1.06 1.00 - 1.06 1.33 - 1.39	g/dl g/dl sg sg R.I.	0.1 0.1 0.001 0.001 0.0001	Proteins in serum (dog) Proteins in serum (cat) Urine specific gravity (dog) Urine specific gravity (cat)	٠	•			•
Battery Acid/Coolant	RF.6650	1.10 - 1.40 -50 / 0 -50 / 0 -40 / 0	sg ℃ ℃ ℃	0.01 5 5 10	Battery fluids Ethylene glycol G13 Propylene glycol G11/12 windshield washer fluid	•	•		•	
	RD.6730	1.0 - 1.50 -50 / 0 -50 / 0 -40 / 0	sg ℃ ℃ ℃	0.01 0.5 0.5 0.5	Battery fluids Ethylene glycol G13 Propylene glycol G11/12 windshield washer fluid	•	•			•
AdBlue/Urea	RF.6652	0 - 40	%	0.2		•	•		•	
Identification of precious stones	RF.6381	1.30 - 1.81	R.I.	0.01				•	•	

ACCESSORIES AND SPARE PARTS

RF.5295 Test slide 78.8 Brix for calibration of RF.5190

RF.5385 5 ml immersion nD 1.65 liquid for RF.5381 and RF.6381

LE.5209 20 W 12 V cold light source with single fiber light conductor (for Abbe refractometer 98.490)

98.492 Thermometer 0-50° C

(for Abbe refractometer 98.490) 98.496 Calibration slide nD 1.5163

(for Abbe refractometer 98.490)





The Abbe laboratory refractometer is a bench-top instrument for high-precision measurements of an index of refraction and suitable for determination of the refractive index of solid samples, such as glass, plastics, and polymer films

The instrument is supplied with a thermometer and water connection to control fluid temperatures. Also equipped with a Brix and a refraction index scale and supplied with a test plate

Capable of measuring all kinds of concentrations and identifying several types of substances

Substance identification of sugar concentration

	3			
MODEL	Scales	Accuracy	Remarks	Analog
98.490	0-95 Brix	0.5 Brix	Abbe table refractometer without light source	•
	1.300-1.700 RI	0.0002 RI		

The Abbe refractometer can be connected to a water bath for measuring at a controlled temperature. During the use of this type of refractometer the use of a cold light source such

as the LE.5209 is recommended. This Abbe table refractometer has scales for measurement of sugar concentrations and refractive indices. Delivered with carrying case, digital thermometer, calibration plate, adjusting tool and with 0.5 ml calibration liquid





euromex 441

polarimeters & spectroscopes



polarimeters & spectroscopes

A polarimeter measures the rotation angle of polarized light traveling through an optically active substance. The rotation angle of the polarization plane of linear polarized light is different for each optical active substance as described in the Law of Biot

Polarimetry is a non-destructive test method for measuring optical activity of organic and inorganic substances. It is very useful to analyze expensive non-reproducible samples. Polarimeters are extensively used for quality and process control in research laboratories in the chemical and food industry Spectroscopes are used to visualize the light spectrum of light sources



Polarimeters are suitable for fast and accurate measurements of sugars, glucose, perfume, chemical substances and medical drugs. Equipped with a Glan Thomson prism and Laurent Quartz plate, a built-in 230 V 589.3 nm sodium lamp or a high-power LED with 589.3 nm filter

Polar scale, range ± 180° with 0.1° readings. Supplied with observation tubes of 100 mm and 200 mm. Bright light measuring field permits reading with accuracy of 0.1° with aid of Vernier



HIGHLIGHTS

The polarimeters are delivered with 100 and 200 mm observation tubes

Equipped with a built-in 230 V 589.3 nm sodium lamp or high-power LED with 589.3 nm filter Fast and accurate

ACCESSORIES FOR 99.400

99.197 Spare sodium 589.3 nm lamp

99.410	Measuring tube, 100 mm long
99.415	Measuring tube, 200 mm long
99.430	Cover glass for measuring tube Ø 15 mm
99.431	Rubber ring (for 99.430)

MODEL	Scales	Accuracy	Observation tubes 100 and 200 mm	230 V sodium lamp with 589.3 nm filter	230 V High power LED with 589.3 nm filter
99.400	\pm 180 $^{\circ}$	\pm 0.1 $^{\circ}$ polar scale	•	•	
99.400-LED	± 180 °	\pm 0.1 $^{\circ}$ polar scale	•		•



handheld spectroscopes

SP.5200

Handheld spectroscope with adjustable slit, comparison prism, mirror, five glass mini-cuvettes and wavelength scale 400 - 700 nm with 589 nm indication. Divisions 10 nm

- Direct vision type
- Adjustable eye lens
- Adjustable slit 0 1 mm
- Angle dispersion C F 7°
- Linear dispersion 60 mm
- Comparison prism for comparison between products
- Mirror
- 5 Glass cuvettes
- Wavelength scale 400 700 nm



							_		
MODEL	Dimensions	Weight (grams)	Adjustable slit	Comparison prism	Angle dispersion	Linear dispersion	Wavelength scale	589 nm indication	With 5 glass cuvettes
SP.5200	h50xl115xp23	250	0-1 mm	•	C-F 7°	60 mm			

SP.5155

Handheld spectroscope with adjustable slit and comparison prism, mirror and five glass cuvettes

- Direct vision type
- Adjustable eyelens
- Adjustable slit 0 1 mm
- Angle dispersion C F 7°
- Linear dispersion 60 mm
- Comparison prism
- Mirror
- five Glass cuvettes



MC	DEL	Dimensions	Weight (grams)	Adjustable slit	Comparison prism	Angle dispersion	Linear dispersion	Wavelength scale	589 nm indication	With 5 glass cuvettes
SP.5	155	h45x l105xd23	125	0-1 mm	•	C-F 7°	60 mm			•

SP.5150

Handheld spectroscope with adjustable slit from 0 tot 1 mm

- Direct vision type
- Adjustable eye lens
- Adjustable slit 0 1 mm
- Angle dispersion C F 7°
- Linear dispersion 60 mm



MODEL	Dimensions	Weight (grams)	Adjustable slit	Comparison prism	Angle dispersion	Linear dispersion	Wavelength scale	589 nm indication	With 5 glass cuvettes
SP.5150	90 x18 mm Ø	92	0-1 mm		C-F 7°	60 mm			

SP.5100

Handheld spectroscope with fixed slit

- Direct vision type
- Adjustable eye lens
- Fixed slit
- Angle dispersion C F 6°
- Linear dispersion 40 mm



SP.5100

MODEL	Dimensions	Weight (grams)	Adjustable slit	Comparison prism	Angle dispersion	Linear dispersion	Wavelength scale	589 nm indication	With 5 glass cuvettes
SP.5100	90 x18 mm Ø	72			C-F 6°	40 mm			

choose the right

euromex microscope

Euromex offers a large range of microscope series. Selecting the right microscope for your application might be challenging and time consuming.

To simplify this process we have listed our recommended models for most common applications in education, laboratories and industry



EDUCATION

FIELD OF APPLICATION

RECOMMENDED MODELS

• botany	Study of plants as branch of biology. Plant anatomy and morphology. Plant genetics and ecology. Plant biochemistry	MicroBlue, EcoBlue, BioBlue, BioBlue.Lab, AP series, EduBlue, StereoBlue
• digital imaging	Observation and perform analysis on microscope images, storage and share captured and videos	CMEX cameras, CCD cameras, HD cameras, EduPad, MacroZoom
• electronics	Development, production, assembling and inspection of electronic components or circuitry	bScope® (materials), EduBlue, StereoBlue, NexiusZoom, MacroZoom
• entomology	Study of insects as branch of zoology. Identification and classification of beetles, flies, termites, moths and butterflies, bees, ants, wasps	MicroBlue, EcoBlue, BioBlue, BioBlue. Lab, AP series, EduBlue, StereoBlue, MacroZoom
• geology, mineralogy	Earth Science; Study of solids, rocks and processes. Identification and classification of rocks and minerals	EcoBlue (polarization), BioBlue (polarization), AP series, EduBlue, StereoBlue
• geology, petrology	Identification by means of petrographic microscope	EcoBlue (polarization), BioBlue (polarization), AP series, EduBlue, StereoBlue
• mechanics	Manufacturing and quality inspection of mechanical parts	bScope® (materials), EduBlue, StereoBlue, NexiusZoom, MacroZoom
microbiology	Study of microscopic uni-, multi- or acellular small organisms such as protozoa, algae, bacteria and more. Identification and classification	EcoBlue, BioBlue, bScope®, Delphi-X Observer
• mycology	Study of fungi as branch of biology. Identification and classification	EcoBlue, BioBlue, BioBlue.Lab, bScope®, AP series, EduBlue, StereoBlue
• petrology	Study of the composition and structure of rocks as branch of geology. Identification by means of polarization microscopes	EcoBlue (polarization), BioBlue (polarization), AP series, EduBlue, StereoBlue
• zoology	Animal biology. Study of invertebrates and vertebrates and related branches	EcoBlue, BioBlue, BioBlue.Lab, bScope®, AP series, EduBlue, StereoBlue, MacroZoom

UNIVERSITY LABS FIELD OF APPLICATION

RECOMMENDED MODELS

• agronomy & forestry	Selective breeding of plants, fruit and production of food from plants, wood from trees, fuel. Plant physiology and genetics research	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series, MacroZoom
anatomopathology	Diagnosis of diseases of organs or tissues. Cytopathology and forensic pathology	BioBlue.Lab, bScope®, iScope®, Oxion, Delphi-X Observer, NexiusZoom, DZ series
asbestos control	Research of asbestos fibers, environmental protection during restoration of older buildings	iScope® (asbestos and polarization), NexiusZoom, DZ series, Z series
bacteriology	Study of bacteria as subdivision of microbiology. Identification, classification	BioBlue.Lab, bScope®, iScope®, Oxion, Delphi-X Observer
biochemistry	Study of chemical processes within living organism. Identification and classification of enzymes and structure of biomolecules	BioBlue.Lab, bScope®, iScope®, Oxion, Delphi-X Observer
• biomedical	Study of medical microbiology, virology, epidemiology, biomedical engineering	BioBlue.Lab, iScope®, Oxion, Delphi-X Observer
• biotechnology	Study of living organism in order to make food products, for plant protection (genetically modified organism) and other bio-process engineering. Development of pharmaceutical drugs, genetic testing, enzymes production, biofuels, textile	BioBlue.Lab, bScope®, iScope®, Oxion, Delphi-X Observer, StereoBlue, NexiusZoom, DZ series
• botany	Study of plants as branch of biology. Plant anatomy and morphology. Plant genetics and ecology. Plant biochemistry	BioBlue.Lab, bScope®, StereoBlue, NexiusZoom, DZ series, MacroZoom
• cell culture	Controlled growing of cells and tissues, fungal culture and microbiological culture	Delphi-X Inverso, Oxion Inverso, NexiusZoom, DZ series
• chemistry	Study of the composition and properties of chemicals	iScope® (materials and polarization), Oxion (materials), bScope® (materials), NexiusZoom, DZ series
• cosmetics	Research, development and testing (safety) of substances for make-up or perfume	iScope® (materials), Oxion (materials), bScope® (materials), NexiusZoom, DZ series
• cytology	Study of cell structure, function and chemistry. Detection of cellular diseases	BioBlue.Lab, iScope®, Oxion, Delphi-X Observer
• dermatology	Study and diagnosis, treatment of skin, nails and hair diseases	iScope®, Oxion, NexiusZoom, StereoBlue, DZ series, MacroZoom
• digital imaging	Observation and analysis of microscope images, save and share captured images and videos	CMEX cameras, CCD cameras, HD cameras, Cooled cameras, EduPad, ProPad
• electronics	Development, production, assembly and inspection of electronic components or circuitry	iScope® (materials), Oxion (materials), bScope® (materials), StereoBlue, Nexius- Zoom, DZ series, Z series, MacroZoom
• embryo collection	Embryo collection and transfer in mares, pigs, cows. Quality control	NexiusZoom, DZ series, Z series

• embryology	Study of gametes, embryos and foetuses	BioBlue.Lab, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series
• entomology	Study of insects as branch of zoology. Identification and classification of beetles, flies, termites, moths and butterflies, bees, ants, wasps	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series, MacroZoom
• environmental	Monitoring of environmental conditions such as water, atmosphere, ecosystems, soil and pollution	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series
• fluorescence	Study of living and non living materials with the help of fluorescence markers (fluorochromes)	iScope® (fluorescence), Oxion (fluorescence), Delphi-X Observer (fluorescence), Oxion Inverso (fluorescence), bScope® (fluorescence), DZ series
• food and beverages	Quality and safety controls, before, during and after the production of food and beverages	BioBlue.Lab, bScope®, iScope®, Oxion
• forensics	Analysis of scientific evidence. Toxicology, fingerprints, Forensic anthropology and archeology, forensic botany and entomology	BioBlue.Lab, iScope®, iScope® (materials and polarization), Oxion, Oxion (materials), Oxion Inverted, Oxion Inverted (materials), NexiusZoom, DZ series, Z series
• genetics	Study of genes, heredity in living organisms including bacteria, plants, animals and humans	iScope®, Oxion, Delphi-X Observer, DZ series
• geology, mineralogy	Earth Science; Study of solids, rocks and processes Identification and classification of rocks and minerals	iScope® (materials), Oxion (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series, MacroZoom
• geology, petrology	Identification by means of petrographic microscopy	iScope® (polarization), Delphi-X Observer (polarization), StereoBlue, NexiusZoom, DZ series
• glass industry	Quality control, before, during and after the production of glass and coatings	iScope® (materials), Oxion (materials), Oxion Inverso (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series
• hematology	Study and diagnosis, treatment and prevention of diseases of the blood	iScope®, bScope® (darkfield), iScope® (darkfield), Oxion, Oxion (darkfield)
histopathology	Microscopic examination of tissue, diagnosis of diseases	iScope®, Oxion, Delphi-X Observer
horticulture	Selective breeding of plants and fruit for production of food	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series, MacroZoom
• in vitro fertilization	In vitro fertilization IFV. Quality control of collected egg and sperm	StereoBlue, NexiusZoom, DZ series, Z series
• marine Biology	Study of organisms living in the ocean or seas as branch of biology	bScope®, BioBlue.Lab, iScope®, Oxion
• mechanics	Manufacturing and quality inspection of mechanical parts	Delphi-X Observer (materials), iScope® (materials), Oxion (materials), Oxion Inverso (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series, MacroZoom
• metallurgy	Manufacturing and quality inspection of metallic elements, intermetallic compounds and alloys	Delphi-X Observer (materials), iScope® (materials), Oxion (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series, MacroZoom
microbiology	Study of microscopic uni-, multi- or acellular small organisms such as protozoa, algae, bacteria and more	iScope®, Oxion, StereoBlue, NexiusZoom, DZ series
• mycology	Study of fungi as branch of biology	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series

RECOMMENDED MODELS

• mining	Extraction of minerals for identification, quantitative and qualitative evaluation of minerals	iScope® (materials and polarization), Oxion (materials and polarization), Oxion Inverso (materials), bScope® (materials), StereoBLue, NexiusZoom, DZ series, MacroZoom
neuropathology	Study and diagnosis of diseases in nervous system tissue	Delphi-X Observer, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series
• oncology	Study and diagnosis, treatment and prevention of cancers	Delphi-X Observer, iScope®, Oxion
ornithology	Study of birds as branch of zoology. Diagnosis of diseases in birds such as competition pigeons	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series
• paleontology	Study of fossils in order to determinate organisms evolution	iScope® (materials), Oxion (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series, MacroZoom
• paper industry	Production of paper related products. Quality inspection	iScope® (materials), Oxion (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series, MacroZoom
• parasitology	Study of parasites, medical and veterinary	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series, MacroZoom
• pathology	Study and diagnosis of diseases	Delphi-X Observer, iScope®, Oxion
• petrochemical	Research and transformation of crude oil and natural gas	iScope® (materials), Oxion (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series
• petrology	Study of the composition and structure of rocks as branch of geology. Identification by means of polarization	iScope® (polarization), StereoBlue, NexiusZoom, DZ series
• pharmaceutics	Development and production of drugs for medication. Quality assurance and inspection of produced products	Delphi-X Observer, iScope® (polarization), StereoBlue, NexiusZoom, DZ series
phytopathology	Study and diagnosis of plant diseases	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series
• plastics	Development and production of plastics and plastic based compounds. Quality assurance and inspection	iScope® (materials), Oxion (materials), Oxion Inverso (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series
• textile	Development and production of all kinds of textile based products. Quality assurance and inspection	iScope® (materials), Oxion (materials), bScope® (materials), AP series, StereoBlue, NexiusZoom, DZ series, MacroZoom
veterinary medicine	Prevention, diagnosis and treatment of diseases, injuries in animals	BioBlue.Lab, bScope®, iScope®, Oxion, Oxion Inverso, StereoBlue, NexiusZoom, DZ series
• virology	Study and diagnosis of viruses and virus-like agents	Delphi-X Observer, iScope®, Oxion, BioBlue.Lab, bScope®
• water treatment	Production of drinking water and wastewater treatment. Quality control and disease prevention	BioBlue.Lab, bScope®, iScope®, Oxion
• wood production	Wood production for construction material, fuel. Quality control	iScope® (materials), Oxion (materials), Oxion Inverso (materials), bScope® (materials), AP series, StereoBlue, NexiusZoom, DZ series, MacroZoom
• zoology	Animal biology. Study of invertebrates and vertebrates and related branches	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series

LIFE SCIENCE LABORATORIES FIELD OF APPLICATION

RECOMMENDED MODELS

LIFE	SCI	ENC	E
LAB	ORA	TOR	IFS

FIELD OF APPLICATION

RECOMMENDED MODELS

• agronomy & forestry	Selective breeding of plants, fruit and production of food from plants, wood from trees, fuel. Plant physiology and genetics research	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series, MacroZoom
anatomopathology	Diagnosis of diseases of organs or tissues. Cytopathology and forensic pathology	Delphi-X Observer, iScope®, bScope®, BioBlue.Lab, Oxion, StereoBlue, NexiusZoom, DZ series
bacteriology	Study of bacteria as subdivision of microbiology. Identification, classification	BioBlue.Lab, bScope®, iScope®, Oxion, Oxion Inverso, Delphi-X Observer
biochemistry	Study of chemical processes within living organism. Identification and classification of enzymes and structure of biomolecules	BioBlue.Lab, bScope®, iScope®, Oxion
• biomedical	Study of medical microbiology, virology, epidemiology, biomedical engineering	Delphi-X Observer, iScope®, bScope®, BioBlue.Lab, Oxion
biotechnology	Study of living organism in order to make food products, for plant protection (genetically modified organism) and other bioprocess engineering. Development of pharmaceutical drugs, genetic testing, enzymes production, biofuels, textile	Delphi-X Observer, iScope®, bScope®, BioBlue.Lab, Oxion, NexiusZoom, DZ series, MacroZoom
• botany	Study of plants as branch of biology. Plant anatomy and morphology. Plant genetics and ecology. Plant biochemistry	BioBlue.Lab, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series
• cell culture	Controlled growth of cells and tissues, fungal culture and microbiological culture	Delphi-X Inverso, Oxion Inverso, NexiusZoom, DZ series
• chemistry	Study of the composition and properties of chemicals	iScope® (materials and polarization), Oxion (materials), bScope® (materials), NexiusZoom, DZ series
• cosmetics	Research, development and testing (safety) of substances for make-up or perfume	bScope® (materials), iScope® (materials), NexiusZoom, Oxion (materials), DZ series
• cytology	Study of cell structure, function an chemistry. Detection of cellular diseases	Delphi-X Observer, iScope®, bScope®, BioBlue.Lab, Oxion
• dermatology	Study and diagnosis, treatment of skin, nails and hair diseases	iScope®, Oxion, NexiusZoom, StereoBlue, DZ series, MacroZoom
• digital imaging	Observation and analysis of microscope images, save and captured the images and videos	CMEX cameras, CCD cameras, HD cameras, Cooled cameras, ProPad, MacroZoom
embryo collection	Embryo collection and transfer in mares, pigs, cows. Quality control	NexiusZoom, DZ series, Z series
• embryology	Study of gametes, embryos and fetuses	BioBlue.Lab, bScope®, iScope®, Oxion, NexiusZoom, DZ series, Z series
• entomology	Study of insects as branch of zoology. Identification and classification of beetles, flies, termites, moths and butterflies, bees, ants, wasps	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series, MacroZoom
• environmental	Monitoring of environmental conditions such as water, atmosphere, ecosystems, soil and pollution	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series
• fluorescence	Study of living and non living material with the help of fluorescence markers (fluorochromes)	Delphi-X Observer (fluorescence), iScope® (fluorescence), Oxion (fluorescence), Oxion Inverso (fluorescence), bScope® (fluorescence), DZ series
• forensics	Analysis of scientific evidence. Toxicology, fingerprints, Forensic anthropology and archeology, forensic botany and entomology	BioBlue.Lab, bScope®, iScope®, Delphi-X Observer, Oxion, Oxion Inverted, NexiusZoom, DZ series, Z series
• food and beverages	Quality and safety controls, before, during and after the production of food and beverages	BioBlue.Lab, bScope®, iScope®, Oxion

• genetics	Study of genes, heredity in living organism including bacteria, plants, animals and humans	Delphi-X Observer, iScope®, Oxion, DZ series
• hematology	Study and diagnosis, treatment and prevention of diseases of the blood	Delphi-X Observer, iScope®, bScope® (dark filed), iScope® (darkfield), Oxion, Oxion (darkfield), iScope®, Oxion
histopathology	Microscopic examination of tissue, diagnosis of diseases	Delphi-X Observer, iScope®, Oxion
• horticulture	Selective breeding of plants and fruit for production of food	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series, MacroZoom
histopathology	Microscopic examination of tissue, diagnosis of diseases	iScope®, Oxion
• in vitro fertilization	In vitro fertilization IVF. Quality control of collected egg and sperm	StereoBlue, NexiusZoom, DZ series, Z series
• marine miology	Study of organisms living in the ocean or seas as branch of biology	iScope®, Oxion, NexiusZoom, DZ series
• microbiology	Study of microscopic uni-, multi- or acellular small organisms such as protozoa, algae, bacteria and more. Identification and classification	Delphi-X Observer, iScope®, Oxion, NexiusZoom, DZ series
• mycology	Study of fungi as branch of biology. Identification and classification	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series
neuropathology	Study and diagnosis of diseases in nervous system tissue	Delphi-X Observer, iScope®, Oxion, NexiusZoom, DZ series
• oncology	Study and diagnosis, treatment and prevention of cancers	Delphi-X Observer, iScope®, Oxion
• parasitology	Study of parasites, medical and veterinary	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series
• pathology	Study and diagnosis of diseases	Delphi-X Observer, iScope®, Oxion
• pharmaceutics	Development and production of drugs for medication. Quality assurance and inspection of produced products	iScope® (polarization), StereoBlue, NexiusZoom, DZ series
• phytopathology	Study and diagnosis of plant diseases	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series, MacroZoom
veterinary medicine	Prevention, diagnosis and treatment of diseases, injuries on animals	BioBlue.Lab, bScope®, iScope®, Oxion, Oxion Inverso, StereoBlue, NexiusZoom, DZ series
• virology	Study and diagnosis of viruses and virus-such as agents	Delphi-X Observer, BioBlue.Lab, bScope®, iScope®, Oxion
• water treatment	Production of drinking water and wastewater treatment. Quality control and disease prevention	BioBlue.Lab, bScope®, iScope®, Oxion
• zoology	Animal biology. Study of invertebrates and vertebrates and related branches	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series

INDUSTRY FIELD OF APPLICATION RECOMMENDED MODELS

• aerospace	Manufacturing and quality inspection of rockets and space vehicles related parts	iScope® (materials), Oxion (materials), NexiusZoom, DZ series, Z series
agronomy & forestry	Selective breeding of plants, fruit and production of food from plants, wood from trees, fuel. Plant physiology and genetics research	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series, MacroZoom
asbestos control	Research of asbestos fibers, environmental protection during restoration of older buildings	iScope® (asbestos and polarization), NexiusZoom, DZ series, Z series
• automotive	Manufacturing and quality inspection of automotive related parts	iScope® (materials), Oxion Inverso (materials), NexiusZoom, DZ series, Z series
• avionics	Manufacturing and quality inspection of aircraft related parts	iScope® (materials), NexiusZoom, DZ series
• biochemistry	Study of chemical processes within living organism. Identification and classification of enzymes and structure of biomolecules	BioBlue.Lab, iScope®, Oxion, NexiusZoom, DZ series
• chemistry	Study of the composition and properties of chemicals	iScope® (materials), Oxion (materials)
• cosmetics	Research, development and testing (safety) of substances for make-up or perfume	bScope® (materials), iScope® (materials), Oxion (materials), NexiusZoom, DZ series
• digital imaging	Observation and analysis of microscope images, save and captured the images and videos	CMEX cameras, CCD cameras, HD cameras, ProPad, MacroZoom
• electronics	Development, production, assembling and inspection of electronic components or circuitry	iScope® (materials), Oxion (materials), NexiusZoom, DZ series, Z series, BE-50 LED, MacroZoom
• environmental	Monitoring of environmental conditions such as water, atmosphere, ecosystems, soil and pollution	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series
• food and beverages	Quality and safety controls, before, during and after the production of food and beverages	BioBlue.Lab, bScope®, iScope®, Oxion
• forensics	Analysis of scientific evidence. Toxicology, fingerprints, Forensic anthropology and archeology, forensic botany and entomology	BioBlue.Lab, bScope®, bScope® (materials), iScope®, iScope® (materials and polarization), Oxion, Oxion (materials), Oxion Inverted, Oxion Inverted (materials), NexiusZoom, DZ series, Z series
• geology, mineralogy	Earth science that study the solid, rocks and processes. Identification and classification of rocks and minerals	iScope® (materials), Oxion (materials), Oxion Inverso (materials), B+ (materials), StereoBlue, NexiusZoom, DZ series, MacroZoom
• geology, petrology	Identification by means of an petrographic microscope	iScope® (polarization)
• glass industry	Quality control, before, during and after the production of glass and coatings	iScope® (materials), Oxion (materials), Oxion Inverso (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series
horticulture	Selective breeding of plants and fruit for production of food	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series, MacroZoom
• jewelry	Precise manufacturing of very small decorative items such as brooches, rings, bracelets and more	BE-50 LED series, StereoBlue, NexiusZoom, DZ series, Z series

INDUSTRY RECOMMENDED MODELS FIELD OF APPLICATION

• mechanics	Manufacturing and quality inspection of mechanical parts	iScope® (materials), Oxion (materials), Oxion Inverso (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series, MacroZoom
• metallurgy	Manufacturing and quality inspection of metallic elements, intermetallic compounds and alloys	iScope® (materials), Oxion (materials), Oxion Inverso (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series, MacroZoom
• mining	Extraction of minerals Identification, quantitative and qualitative evaluation of minerals	iScope® (materials and polarization), Oxion (materials and polarization), Oxion Inverso (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series
• paper industry	Production of paper related products. Quality inspection	iScope® (materials), Oxion (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series, MacroZoom
• petrochemical	Research and transformation of crude oil and natural gas	iScope® (materials), Oxion (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series
• petrology	Study of the composition and structure of rocks as branch of geology. Identification by means of polarization microscopy	iScope® (polarization), StereoBlue, NexiusZoom, DZ series
• pharmaceutics	Development and production of drugs for medication. Quality assurance and inspection of produced products	iScope® (polarization), StereoBlue, NexiusZoom, DZ series
• plastics	Development and production of plastics and plastic based compounds. Quality assurance and inspection	iScope® (materials), Oxion (materials), Oxion Inverso (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series
• printing industry	Production of relief printing, lithography	iScope® (materials), Oxion (materials), bScope® (materials), AP series, StereoBlue, NexiusZoom, DZ series, MacroZoom
• textile	Development and production of all kinds of textile based products. Quality assurance and inspection	iScope® (materials), Oxion (materials), Oxion Inverso (materials), B+ (materials), AP series, StereoBlue, NexiusZoom, DZ series, MacroZoom
• water treatment	Production of drinking water and wastewater treatment. Quality control and disease prevention	BioBlue.Lab, bScope®, iScope®, Oxion
• wood production	Wood production for construction material, fuel. Quality control	iScope® (materials), Oxion (materials), Oxion Inverso (materials), B+ (materials), AP series, StereoBlue, NexiusZoom, DZ series, MacroZoom

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