

MICROSCOPES FOR EDUCATION, LIFE SCIENCE AND INDUSTRY

PART 1 MICROSCOPES FOR EDUCATION PART 2 MICROSCOPES FOR LIFE SCIENCE



# contents

euromex MICROSCOPE COLLECTION 2020

PART 1	EDUCATION biological microscopes	1
	EDUCATION stereo microscopes	2
	EDUCATION digital solutions	3
PART 2		
PART 3		
HER	ACCESSORIES for microscopy	11
OTHER	OTHER OPTICAL PRODUCTS magnifiers   instruments	12



#### EDUCATION | BIOLOGICAL MICROSCOPES MicroBlue • EcoBlue • BioBlue

BioBlue.Lab • bScope • iScope

EDUCATION | STEREO 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 • Delphi-X Observer • Oxion BioBlue.Lab • Oxion Inverso • Delphi-X Inverso

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

**IFE SCIENCE | STEREO MICROSCOPES** JexiusZoom (EVO) • StereoBlue • DZ series Series • P series

## IFE 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

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

#### INDUSTRY | DIGITAL SOLUTIONS

Digital microscopes • 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 • Pathology Scanner

## about euromex

**Euromex Microscopen bv** 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 Arnhem, The Netherlands. A facility with a 2,000 m<sup>2</sup> conditioned 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 Euromex Microscopen bv is a subsidiary of **Euromex Optics Group bv**, a group holding company with active subsidiaries in the field of optical instruments and high level optical and opto-mechanical components

The broad product offering of Euromex can be found in this grand catalog and online at **www.euromex.com** 

**Physix Photonics bv** is also a subsidiary of the Euromex Optics Group. Physix manufactures optical components and optical assemblies for OEM customers. The offering varies from plan optics, curved optics, specials optics to optical coatings. Detailed information about Physix Photonics can be found on **www.physix.com** 

# 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 398

At the end of the catalog you'll also find an index page, listing the products featuring in this catalog alphabetically

**SEE PAGE 406** 

3

# education biological microscopes



## biological microscopes

The Euromex biological BlueLine educational product range is the product of many years of experience and the extensive knowledge of our optical engineers. Input from practice teachers, professors and students in combination with the high-level design and manufacturing capabilities of Euromex have resulted in these high quality instruments

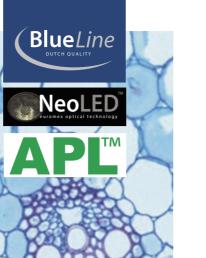
The outstanding optical performance of the ergonomic Euromex BlueLine microscopes enables long productive working sessions for initiation, intermediate and advanced science teaching classes

MICROBLUE	•	PAG	Е	10
ECOBLUE •	•	PAG	E	16
BIOBLUE	•	PAG	Е	22
BIOBLUE.LAB	•	PAG	Е	28
BSCOPE •	•	PAG	Е	32
ISCOPE •	•	PAG	Е	38

#### 8 **@euromex**



## BIOLOGICAL MICROSCOPES





Binocular model MB.1152

## SPECIFICATIONS

#### EYEPIECE(S)

Wide field WF 10x/18 mm secured eyepiece with pointer. The eyepieces of the binocular models are supplied without pointer

#### HEAD

Monocular models have a 45° inclined tube. Binocular and trinocular models have 45° inclined tubes, adjustable interpupillary distance between 48 and 75 mm and a  $\pm$  5 diopter adjustment on left tube. All heads are 360° rotatable. Models with an integrated USB-2.0 camera are supplied with a 5.0 MP 1/2.8" CMOS sensor with 2560 x 1920 pixels resolution. The trinocular head has a fixed light path beam splitter (50:50) and generates an erect image. The MicroBlue can also be equipped with an LCD screen

#### NOSEPIECE

Revolving nosepiece for three or four reversed objectives on ball bearings

#### OBJECTIVES

HIGHLIGHTS

•

**Entry-level microscopes** 

Cordless operation Ergonomic carrying grip 5 Years warranty

Monocular and binocular models

Revolving reversed nosepiece Integrated X-Y mechanical stage LED and NeoLED™ illumination

Achromatic 4x/0.10, 10x/0.25 and S40x/0.65. Models with S60X or S100x oil immersion are also available

The 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, 15 µm per graduation, 3 mm per rotation, total travel range is approximately 15 mm. Supplied with an adjustable rack stop to prevent damage to sample and objectives. The coarse adjustments are equipped with friction control

#### STAGE

All models are supplied with a 115 x 100 mm stage with integrated 55 x 20 mm X-Y mechanical stage, except for the basic model MB.1001(-LCD), which is supplied with a 105 x 105 mm stage and two non-removable clamps

## MicroBlue

MONOCULAR MODEL MB.1001

298 (h) x 151 (w) x 202 mm (d) | 2.0 kg

298 (h) x 151 (w) x 202 mm (d) | 2.8 kg

**MONOCULAR, MECHANICAL STAGE MB.1151** 

**BINOCULAR MODEL, MECHANICAL STAGE MB.1152** 

The modern MicroBlue is an entry-level microscope, especially appreciated when budgets are limited. The basic model comes with a fixed lens condenser and a plain stage

All models with an integrated mechanical stage are supplied with an Abbe condenser. All models are equipped with 35 mm achromatic objectives. The built-in rechargeable batteries enable cordless operation

Monocular model MB.1051

 O
 OO
 Bino
 Image: Constraint of the second sec



Height adjustable Abbe condenser N.A. 1.25 with iris diaphragm and filter holder, except for the MB.1001(-LCD) model, which is equipped with a single N.A. 0.65 condenser with built-in iris diaphragm

#### ILLUMINATION

All monocular versions are supplied with an adjustable 1 W LED illumination system. The binocular versions are supplied with a replaceable 1 W NeoLED<sup>™</sup> illumination system for increased light output. All models have internal rechargeable batteries with an external 100-240 V battery charger/ mains adapter

#### **CAMERA AND SOFTWARE\***

Models with an integrated 5.0 MP CMOS USB-2.0 camera are supplied with the ImageFocus Plus software. Besides capturing of images and videos this software allows measurements on still and live images and annotations on captured images. Compatible with Windows 7, 8 and 10, both 32 and 64 bits configurations

#### LCD SCREEN\*

All the MicroBlue LCD microscopes are equipped with a 7" LCD screen. Images can be saved directly to a micro SD card in JPEG format. Screen resolution 1920 x 1080 @ 30 fp, image resolution upto 1844 x 1080 pixels. Videos can be shot in AVI format, resolution 1280 x 720. Basic measurement function (line) with calibration

#### PACKAGE CONTENT

Supplied with mains adapter-charger, dust cover, user manual and 5 ml immersion oil for models with an S100x objective. Supplied with a white filter. All packed in a polystyrene box



Check out the product video on YouTube and learn more about the BlueLine. YouTube channel: **Euromex Optics Group B.V.** 

MODELS	Mono	Bino	Trino	Digital mono*	Digital LCD*	Maximum objectives	4/10/S40x objectives	S60x objective	S100x objective	Mechanical X-Y stage	LED	NeoLED™	Batteries
MB.1001	•					3	•				•		•
MB.1051	•					4	•			•	•		•
MB.1651	•					4	•	•		•	•		•
MB.1151	•					4	•		•	•	•		•
MB.1052		•				4	•			•		•	•
MB.1652		•				4	•	•		•		•	•
MB.1152		•				4	•		•	•		•	•
MB.1053			•			4	•			•		•	•
MB.1653			•			4	•	•		•		•	•
MB.1153			•			4	•		•	•		•	•
MB.1001-LCD					•	3	•				•		•
MB.1051-LCD					•	4	•			•	•		•
MB.1055				•		4	•			•		•	•
MB.1655				•		4	•	•		•		•	•
MB.1155				•		4	•		•	•		•	•

\* See chapter 3 for more information







Monocular head
Binocular head

Trinocular head

Digital monocular head
 Digital LCD head



## ACCESSORIES AND SPARE PARTS

#### EYEPIECES

 AE.5571
 Wide field eyepiece WF 5x/18 mm

 MB.6010
 Wide field WF 10x/18 mm eyepiece with pointer

 MB.6010-P
 Wide field 10x/18 mm eyepiece with pointer

 MB.6010-W
 Wide field 10x/18 mm eyepiece with pointer

 micrometer scale
 micrometer scale

- MB.6015Wide field WF 15x/11 mm eyepieceMB.6020Wide field WF 20x/9 mm eyepiece
- MB.6099 Pair of eyecups

#### OBJECTIVES

MB.7004	Achromatic 4x/0.10 objective, 35 mm parfocal
MB.7010	Achromatic 10x/0.25 objective, 35 mm parfocal
MB.7020	Achromatic 20x/0.40 objective, 35 mm parfocal
MB.7040	Achromatic S40x/0.65 objective, 35 mm parfocal
MB.7060	Achromatic S60x/0.85 objective, 35 mm parfocal
MB.7000	Achromatic S100x/1.25 objective,
	35 mm parfocal
MB.7000	Achromatic S100x/1.25 objective,

#### CAMERA ACCESSORIES

- 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

MB.9710	Frosted filter
MB.9975	External mains adapter-charger
	100-240 Vac/5 Vdc (50/60 Hz)
MB.9981	1 W LED replacement unit
MB.9991	1 W NeoLED™ replacement unit
AE.5202	Blue filter, diameter 32 mm
AE.5203	Yellow filter, diameter 32 mm
AE.5204	Neutral gray filter, diameter 32 mm
AE.5205	Green filter, diameter 32 mm
AE.5207	Blue filter plexiglass, diameter 32 mm
MB 9900	Aluminum transport caso

**MB.9900** Aluminum transport case

AE.9918 Nylon microscope bag (25 x 39 x 19 cm)

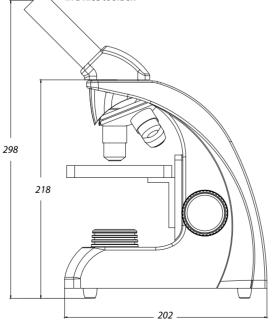
#### DISPOSABLES

- 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.

   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.5165** Cover glasses 18 x 18 mm,
- thickness 0.13-0.17 mm, 100 pieces

   **PB.5168** Cover glasses 22 x 22 mm,
- thickness 0.13-0.17 mm, 100 pieces **PB.5245** Lens cleaning paper, 100 sheets per pack
- **PB.5255** Immersion oil, n = 1.482 (25 ml)
- PB.5274 Isopropyl alcohol 99% (200 ml)
- **PB.5275** Cleaning kit: lens cleaning fluid, lint free lens tissue, brush, air blower, cotton swabs
- PB.5276 Microscope maintenance and servicing kit, 16 pcs: 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





## about **objectives**

Most common microscope objectives come in different types:

Achromatic objectives	Usually contain one or a pair of lenses and correct for color and have a good flat field.
	If there are aberrations they occur in the outer area of the image
Semi plan objectives	Contain one or more (achromatic) lens elements and have an extended flat field.
	Semi plan objectives have an improved resolution
Plan objectives	Correct even better for color and spherical aberration than semi plan objectives.
	Plan objectives have an excellent flat field and produce superb image quality
Apochromatic objectives	Designed for color and spherical aberration correction on a minimum of three wavelengths.
	These objectives offer the best flat field correction



#### ANTI-FUNGUS TREATED

Fungus spores are parasitic, travel in the air and can settle inside lenses. High temperatures, humidity and environments that are dark and unventilated encourage fungus growth

The optical components are anti-fungus treated. Nevertheless it is best to minimize the possibility of fungus by storing the microscopes in well-ventilated rooms with moderate temperatures and low humidity

## **BIOLOGICAL MICROSCOPES**

## 

## HIGHLIGHTS

- Monocular, binocular and trinocular models with WF 10x/18 mm eyepiece(s)
- Models with integrated 5 MP CMOS camera
- Models for polarization applications
- Revolving nosepiece with four achromatic objectives
- Models with integrated mechanical stage available
- Coaxial coarse and fine adjustments with rack stop
- Height adjustable Abbe condenser with iris diaphragm and filter holder
- 1 W LED illumination with integrated power supply
- 1 W NeoLED<sup>™</sup> illumination with rechargeable batteries and external 100-240 Vac mains/charger adapter
- Ergonomic stand
- Warranty 5 years

## SPECIFICATIONS

#### EYEPIECE(S)

Wide field WF 10x/18 mm eyepiece with pointer. The eyepieces of the binocular and trinocular models are supplied without pointer

#### HEAD

Monocular models with 45° inclined tubes. Binocular and trinocular models have 30° inclined tubes. The interpupillary distance is adjustable between 48 and 75 mm. All binocular and trinocular models have a ± 5 diopter adjustment on left tube. All heads are 360° rotatable. Models with an integrated USB-2.0 camera are supplied with a 5.0 MP 1/2.8" CMOS sensor with a resolution of 2560 x 1920 pixels. The trinocular head has a fixed light path beam splitter (50:50) and generates an erect image. The EcoBlue can also be supplied with a discussion head

#### NOSEPIECE

Revolving nosepiece for four objectives on ball bearings. Models for polarization are supplied with swing-out analyzer



#### OBJECTIVES

Achromatic 4x/0.10, 10x/0.25 and S40x/0.65 objectives. Models EC.1151, EC.1152 and EC.1153 also have an S100x oil immersion objective. The S40x, S60x and S100x oil immersion objectives are spring loaded. *All optics are anti-fungus treated and anti-reflection coated for* 

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

#### FOCUSING

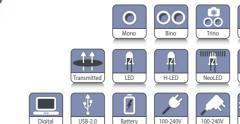
Coaxial coarse and fine adjustments, 200 graduations, 12.5 µm per graduation, 2.5 mm per rotation, total travel range is approximately 15 mm. Supplied with an adjustable rack stop to prevent damage to sample and objectives

#### STAGE

Plain 123 x 119 mm stage with two non-removable object clamps (optional EC.9500 attachable 51 x 26 mm X-Y mechanical stage available). Plain 123 x 128 mm stage with integrated 70 x 27 mm X-Y mechanical stage. The models for polarization are supplied with 129 mm circular stage, 360° rotatable, two object clamps and swing-out analyzer mounted on the lamp house

## EcoBlue

The modern microscopes of the EcoBlue series are especially developed for educational purposes with primary focus on ergonomics and excellent price/quality ratio. These microscopes are supplied with secured eyepieces and adjustable rack stop to prevent damage to sample and objectives



POLARIZATION MODEL EC.1001-P-HLED

**MONOCULAR MODEL EC.1001** 

355 (h) x 170 (w) x 220 (d) | 2.48 kg

360 (h) x 170 (w) x 214 (h) | 3.35 kg

**BINOCULAR MODEL EC.1152** 360 (h) x 170 (w) x 214 (d) | 2.95 kg

ec.1001

4 color

#### CONDENSER

Height adjustable Abbe condenser N.A. 1.25 with iris diaphragm and filter holder. The models for polarization have a rack & pinion adjustment, all other models carry a helicoidal adjustment

#### ILLUMINATION

Monocular models are supplied with a 1 W LED illumination with integrated power supply. Binocular and trinocular models are supplied with an adjustable 1 W NeoLED<sup>™</sup> illumination system for increased light output. Models EC.1x51, EC.1x52 and EC.1x53 (x=0, 6 or 1) are supplied with rechargeable batteries and an external 100-240 V battery charger/mains adapter

The models for polarization are supplied with H-LED illumination for correct color rendering (very similar to the halogen light spectrum) and an integrated 100-240 V power supply. However 20 W halogen illumination is also available on special request

#### CAMERA AND SOFTWARE

Models with integrated 5 MP CMOS USB-2.0 camera are supplied with the ImageFocus Plus capture and measurement software. Besides capturing of images and videos, this software allows measurements on still and live images and annotations on captured images. Compatible with Windows 7, 8 and 10, both 32 and 64 bits configurations

#### PACKAGE CONTENT

Supplied with power cord or mains adapter-charger, dust cover, spare fuse, user manual and 5 ml immersion oil for models with an S100x objective. Models for polarization with halogen illumination are supplied with blue filter, models with LED illumination are supplied with a white filter. All packed in a polystyrene box



Check out the product video on YouTube and learn more about the BlueLine. YouTube channel: **Euromex Optics Group B.V.** 

MODELS	Mono	Bino	Trino	Digital (1)	S60x objective	S100x objective	Mechanical X-Y stage <sup>(2)</sup>	LED	NeoLED™	Batteries	Polarization (4)
EC.1001	•							•			
EC.1101	•					•		•			
EC.1601	•				•			•			
EC.1051	•						•	•		•	
EC.1151	•					•	•	•		•	
EC.1651	•				•		•	•		•	
EC.1052		•					•		•	•	
EC.1152		•				•	•		•	•	
EC.1652		•			•		•		•	•	
EC.1053			•				•		•	•	
EC.1153			•			•	•		•	•	
EC.1653			•		•		•		•	•	
EC.1005	•			•				•			
EC.1105	•			•		•		•			
EC.1605	•			•	•			•			
EC.1001-P-HLED	•							• (4)			•
EC.1601-P-HLED	•				•			• (4)			•
EC.1002-P-HLED		•						• (4)			•
EC.1602-P-HLED		•			•			• (4)			•
EC.1003-P-HLED			•					• (4)			•
EC.1603-P-HLED			•		•			• (4)			•

<sup>(1)</sup> See chapter 3 for more information

<sup>(2)</sup> Integrated mechanical stage with 70 x 27 mm X-Y travel range

<sup>(3)</sup> With an external 100-240 V battery charger/mains adapter

(4) Polarization models can also be supplied with S60x or S100x objectives; replace second digit of model number with resp. 6 or 1, e.g. EC.1602-P-HLED, EC.1103-P-HLED, etc

## ACCESSORIES AND SPARE PARTS

#### EYEPIECES

AE.5571	Wide field eyepiece WF 5x/18 mm
EC.6010	WF 10x/18 mm eyepiece
EC.6010-M	WF 10x/18 mm eyepiece with micrometer scale
EC.6010-C	WF 10x/18 mm eyepiece with crosshairs
EC.6015	WF 15x/12 mm eyepiece
EC.6110	WF 10x/18 mm eyepiece with micrometer 10/100
EC.6099	Pair of eyecups

#### OBJECTIVES

EC.7004	Achromatic 4x/0.10 objective. WD 37.5 mm
EC.7010	Achromatic 10x/0.25 objective. WD 6.8 mm
EC.7020	Achromatic 20x/0.40 objective. WD 2.0 mm
EC.7040	Achromatic S40x/0.65 objective. WD 0.6 mm
EC.7060	Achromatic S60x/0.85 objective. WD 0.185 mm
EC.7000	Achromatic S100x/1.25 oil immersion objective.
	WD 0.195 mm

#### **MISCELLANEOUS**

EC.9500	Attachable mechanical X-Y stage, translation
	range 51 x 26 mm, with double Vernier and
	separate horizontal adjustments knobs
EC.9710	Frosted white filter
EC.9981	1 W LED replacement unit
EC.9991	1 W NeoLED™ replacement unit
EC.9994	1 W H-LED rep lacement unit
EC.9975	External mains/charger adapter
	100-240 Vac/5 Vdc (50/60 Hz)
AE.5511	Discussion head
AE.5202	Blue filter, Ø 32 mm
AE.5203	Yellow filter, Ø 32 mm
AE.5204	Neutral gray filter, Ø 32 mm
AE.5205	Green filter, Ø 32 mm
AE.5207	Blue filter plexiglass, Ø 32 mm
SL.1379	Spare halogen 20 W 12 V bulb
	for polarization models
AE.9918	Nylon microscope bag (25 x 39 x 19 cm)

WF = Wide field

WD = Working distance

#### POLARIZATION ATTACHMENTS

AE.5150	Simple polarization attachment. Analyzer
	Ø 18 mm mounted in eyepiece (rotatable),
	polarizer Ø 32 mm placed in filter holder
AE.5152	Simple polarization attachment.
	Analyzer mounted over eyepiece (rotatable)
	and polarizer Ø 32 mm in filter holder
AE.5153	Polarization attachment. Analyzer mounted
	over eyepiece and small (100 x 65 mm) 360°
	rotatable stage with built-in polarizer to place
	on plain stage
AE.5154	Polarizer in mount, to be placed over eyepiece



#### CAMERA ACCESSORIES

AE.5130	Universal SLR camera adapter with 2x projection	PE
	lens for 23.2 mm tubes. Needs T2 adapter	
AE.5025	T2 adapter for Nikon D digital SLR cameras	PE
AE.5040	T2 adapter for Canon EOS digital SLR cameras	PE
Other T2 ad	lapters on request	PE
		PF

#### 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. 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.5165
   Cover glasses 18 x 18 mm, thickness 0.13-0.17 mm, 100 pieces

- **\*B.5168** Cover glasses 22 x 22 mm, thickness 0.13-0.17 mm, 100 pieces
- PB.5245 Lens cleaning paper, 100 sheets per pack
- **PB.5255** Immersion oil, n = 1.482 (25 ml)
- PB.5274 Isopropyl alcohol 99% (200 ml)
- **PB.5275** Cleaning kit: lens cleaning fluid, lint free lens tissue, brush, air blower, cotton swabs
- PB.5276 Microscope maintenance and servicing kit, 16 pcs: 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

170

## about microscope basics

A compound microscope consists of a group of lenses (called objective) which focuses a real image of the object inside the microscope. A second group of lenses (called eyepiece) magnifies this image and projects it on the retina of the eye. This compound optical system (objective - eyepiece) together with other mechanical components are the basics of a modern microscope

#### HEAD

The 30° inclined trinocular viewing head is equipped with a 23.2 mm photo port. The Siedentopf head corrects interpupillary distances to the users preference. A beam splitter inside the head divides the light between the eyepieces and the camera with diopter settings

#### THE NOSEPIECE

A rotatable metal turret holding four microscope objectives for precise switching of magnifications. The revolver is mounted reversed for more workspace

#### STAGE

Move the specimen slide in the X or Y direction. Low positioned stage controls prevent fatigue

#### COARSE AND FINE FOCUSING SYSTEM

The full metal mechanical system moves the specimen in focus. With rack stop to prevent damage to prepared microscopy slides and objectives

## MICROSCOPE BASE

A large base guarantees the necessary stability of the microscope. The arm includes an integrated carrying grip for easy and safe transportation

#### CORDED AND CORDLESS USE

The built-in rechargeable batteries enable the microscope to be used both corded and cordless

#### DIGITAL MICROSCOPY

TECHNICAL

FACTS

Modern microscopy uses CMOS, CCD or HD cameras for digital output to computer or HDMI displays. Users can use ImageFocus analysis software to capture, edit, analyze and share microscopy images

#### TRINOCULAR TUBE

The trinocular tube connects cameras used for digital microscopy

#### EYEPIECES

The WF 10x/18 mm are Wide Field eyepieces with 10x magnification and 18 mm field number

#### OBJECTIVES

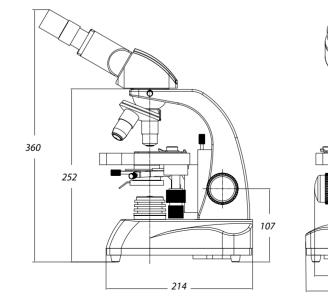
Microscope objectives are crucial for determining magnification and resolution of the image. International standards are used during production. Typical objective magnifications are 4x/10x/40x/100x

#### CONDENSER

The 1.25 NA condenser's diaphragm maximizes the resolution of the optical system and also allows adjustment of contrast. Color or density filters can be placed in the filter holder

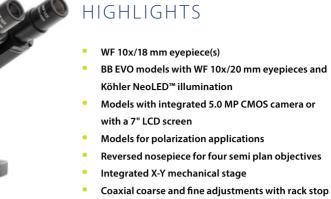
#### COLLECTOR LENS SYSTEM AND NEOLED™ LIGHT SOURCE

This lens system maximizes light output. The innovative NeoLED™ design increases the light output even more, while less energy is required. The total system enables higher resolutions, very close to the theoretical diffraction limit of the optics









- Height adjustable Abbe condenser with iris diaphragm and filter holder
- Monocular models with 1 W LED illumination
- Binocular and trinocular models supplied with 1 W NeoLED<sup>™</sup> illumination for increased light output
- LED models with rechargeable batteries and integrated power supply
- **Ergonomic stand**
- Warranty 10 years

#### **OBJECTIVES**

All models are supplied with semi plan 4x/0.10, 10x/0.25 and S40x/0.65 objectives. Models with an S60x/0.85 or S100x/1.25 oil immersion objective are also available. The 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 with 200 graduations. Precision 2 µm per graduation, 0.4 mm per rotation





## **BioBlue**

The modern microscopes of the BioBlue series are especially developed for educational purposes with primary focus on ergonomics and today's quality standards. These microscopes are supplied with secured eyepieces and adjustable rack stop to prevent damage to sample and objectives





POLARIZATION MODEL BB.4200-P-HLED 360 (h) x 176 (w) x 227 mm (d) | 4.4 kg

## SPECIFICATIONS

#### EYEPIECE(S)

Wide field WF 10x/18 mm secured eyepiece with pointer for monocular models. The eyepieces of the binocular and trinocular models are supplied without pointer. The BioBlue EVO models are supplied with WF 10x/20 mm eyepieces

#### HEAD

Monocular models with 45° inclined tubes. Binocular and trinocular models have 30° inclined tubes, interpupillary distance is adjustable between 48 and 75 mm and equipped with a ± 5 diopter adjustment on the left tube. All heads are 360° rotatable and secured with a screw. The BioBlue microscope can also be supplied with a discussion head. The trinocular head has a fixed light path beam splitter (50:50) and generates an erect image. Models with an integrated USB-2.0 camera are supplied with a 5.0 MP 1/2.8" CMOS sensor with a resolution of 2560 x 1920 pixel

#### NOSEPIECE

Reversed quadruple nosepiece on ball bearings. Models for polarization are supplied with a swing-out analyzer

#### STAGE

130 x 130 mm with mechanical 70 x 28 mm X-Y translation stage except for models BB.4200 and BB.4205. These models have a 120 x 120 mm plain stage supplied with two non-removable object clamps. The models for polarization are supplied with 129 mm circular stage, 360° rotatable and two object clamps

> 360° rotatable circular stage for polarization



POLARIZATION EQUIPMENT

The swing-out analyzer is mounted in a slider under the head. The rotatable 360° polarizer fits on the collector lamp

#### CONDENSER

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

#### ILLUMINATION

Binocular and trinocular models are supplied with an adjustable 1 W NeoLED<sup>™</sup> illumination system for increased light output. Monocular models have a standard adjustable 1 W LED illumination. The models for polarization are supplied with H-LED illumination for correct color rendering (very similar to the halogen light spectrum) and an integrated 100-240 V power supply. However 20 W halogen illumination is also available for polarization models on special request. The EVO models are equipped with Köhler NeoLED<sup>™</sup> illumination. All BioBlue microscopes – except halogen models – are supplied with rechargeable batteries and integrated power supply for cordless operation

#### CAMERA AND SOFTWARE

Models with an integrated 5 MP CMOS USB-2.0 camera are supplied with the ImageFocus Plus software. Besides capturing images and videos, this software also allows measurements on still and live images and annotations on captured images. Compatible with Windows 7, 8 and 10, both 32 and 64 bits configurations

#### PACKAGE CONTENT

Monocular head

Trinocular head

Digital heads

Supplied with power cord, dust cover, a spare fuse, user manual and 5 ml immersion oil for models with S100x objective. Models for polarization with halogen illumination are supplied with a blue filter, models with LED illumination are supplied with a white filter. All models are supplied with a crosshairs eyepiece for centering. All packed in a polystyrene box



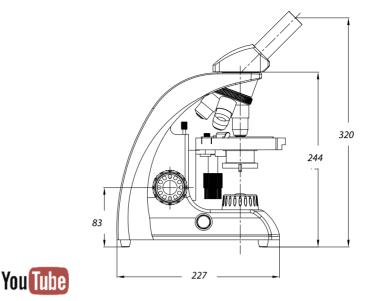
💛 Binocular head

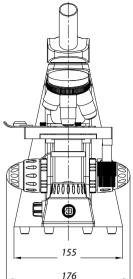


Discussion head



🗕 LCD head





Check out the product video on YouTube and learn more about the BlueLine. YouTube channel: **Euromex Optics Group B.V.** 

MODELS	Mono	Bino	Trino	Digital	4/10/40x SMP objectives	S60x SMP objective	S100x SMP objective	Mechanical X-Y stage	LED	Neo- LED™	Köhler illumination <sup>(1)</sup>	Polarization
BB.4200	•				•				•			
BB.4220	•				•			•	•			
BB.4240	•				•	•		•	•			
BB.4250	•				•		•	•	•			
BB.4260		•			•		•	•		•		
BB.4260-E		•			•		•	•		•	•	
BB.4263		•			•	•		•		•		
BB.4243			•		•	•		•		•		
BB.4253			•		•		•	•		•		
BB.4253-E			•		•		•	•		•	•	
BB.4205	•			•	•				·			
BB.4225	•			•	•			•	•			
BB.4245	•			•	•	•		•	•			
BB.4255	•			•	•		•	•	•			
BB.4267		•		•	•		•	•		•		
BB.4269		•		•	•	•		•		•		
BB.4200-LCD				•(3)	•				•			
BB.4220-LCD				•(3)	•			•	•			
BB.4220-P-HLED	•				•				•			•
BB.4240-P-HLED	•				•	•			•			•
BB.4261-P-HLED		•			•					•		•
BB.4263-P-HLED		•			•	•				•		•
BB.4260-P-HLED		•			•		•			•		•
BB.4241-P-HLED			•		•					•		•
BB.4243-P-HLED			•		•	•				•		•
BB.4253-P-HLED			•		•		•			•		•

<sup>(1)</sup> EVO models are supplied with WF 10x/20 mm eyepieces and Köhler NeoLED(tm) illumination

<sup>(2)</sup> Polarization models are supplied with H-LED illumination - very similar light spectrum to the halogen illumination - and an eyepiece with crosshairs for centering. 20 W halogen illumination is also available for polarization models on special request

<sup>(3)</sup>Models with a 7" LCD screen

## ACCESSORIES AND SPARE PARTS

#### EYEPIECES

AE.5571	Wide field eyepiece WF 5x/18 mm
AE.5572	Wide field eyepiece WF 10x/18 mm
AE.5572-E	Wide field eyepiece WF 10x/20 mm
AE.5573	Wide field eyepiece WF 15x/12 mm
AE.5573-E	Wide field eyepiece WF 15x/12 mm for BB EVO
AE.5574	Wide field micrometer eyepiece 10 mm/100
AE.5581	Wide field eyepiece WF 10x/18 mm with pointer
AE.5581-E	Wide field eyepiece WF 10x/20 mm with pointer
	for BB EVO
AE.5582	Wide field eyepiece WF 20x/11.5 mm
AE 5503 E	Wide field evenings WE 20x/12 5 mm for PP EVO

- **AE.5582-E** Wide field eyepiece WF 20x/12.5 mm for BB EVO
- AE.5365 Eyecup for eyepiece
- **AE.5365-E** Pair of eyecups for eyepieces
- AE.1110 Stage micrometer 1 mm/ 100 parts

#### OBJECTIVES

- AE.5591
   Semi plan objective 4x/0.10. WD 37.5 mm

   AE.5593
   Semi plan objective 10x/0.25. WD 6.54 mm
- AE.5594 Semi plan objective 20x/0.40. WD 1.2 mm
- AE.5597 Semi plan objective S40x/0.65. WD 0.68 mm
- AE.5599 Semi plan objective S60x/0.75. WD 0.2 mm
- AE.5601 Semi plan objective S100x/1.25 oil immersion. WD 0.22 mm

#### MISCELLANEOUS

AE.5511	Discussion head
AE.5202	Blue filter, Ø 32 mm
AE.5203	Yellow filter, Ø 32 mm

#### BioBlue microscope with polarization kit



- AE.5204 Neutral gray filter, Ø 32 mm
- AE.5205 Green filter, Ø 32 mm
- AE.5207 Blue filter plexiglass, Ø 32 mm
- BB.4300 Aluminum case
- AE.9918Nylon microscope bag (25 x 39 x 19 cm)BB.9602Analyzer in slider
- AE.9981 1 W LED replacement unit
- AE.9991 1 W NeoLED<sup>™</sup> replacement unit
- SL.1379 Spare halogen 20 W 12 V bulb for BioBlue polarization models
- AE.5227 Glass fuses 1 A 250 V, 10 pieces

#### **CAMERA ACCESSORIES**

- 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.5040T2 adapter for Canon EOS digital SLR camerasOther T2 adapters on request

#### DISPOSABLES

- PB.5155 Microscope slides 76 x 26 mm, ground edges, 50 pieces
- PB.5165 Cover glasses 18 x 18 mm, thickness 0.13-0.17 mm, 100 pieces
- PB.5168 Cover glasses 22 x 22 mm, thickness 0.13-0.17 mm, 100 pieces
- **PB.5245** Lens cleaning paper, 100 sheets per pack
- PB.5255
   Immersion oil, n = 1.482 (25 ml)

   PB.5274
   Isopropyl alcohol 99% (200 ml)
- **PB.5275** Cleaning kit: lens cleaning fluid, lint free lens
  - tissue, brush, air blower, cotton swabs
- PB.5276 Microscope maintenance and servicing kit, 16 pcs: 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

#### POLARIZATION ATTACHMENTS

Not suitable for the BioBLue EVO models **AE.5150** Simple polarization attachment. Polarizer Ø 18 mm mounted in eyepiece, analyzer 32 mm diameter placed in filter holder

- AE.5151 Simple polarization attachment. Polarizer mounted over eyepiece and analyzer 32 mm diameter in filter holder
- AE.5152 Polarization attachment. Analyzer mounted over eyepiece and small (75 x 50 mm) 360° rotatable stage with built-in polarizer to be mounted on X-Y stage
- AE.5153 Polarization attachment. Analyzer mounted over eyepiece and small (100 x 65 mm) 360° rotatable stage with built-in polarizer to be mounted on plain stage
- AE.5154 Polarizer in mount, to place over eyepiece
- AE.5155 Polarization kit with analyzer in slider and small rotatable (75 x 50 mm) stage with two clamps to be mounted on X-Y stage. Polarization filter to be mounted on lamphouse
- **AE.5155-P** Polarization kit with analyzer in slider and small rotatable (100 x 65 mm) stage with two clamps to be mounted on plain stage. Polarization filter to be mounted on lamphouse
- AE.5156 Simple polarization kit with analyzer in slider and polarization filter to be mounted on lamphouse
- AE.5158 Polarization kit with analyzer in slider and small rotatable (75 x 50 mm) stage with two clamps to be mounted on X-Y stage. Rotatable 360° polarization filter to be mounted on lamphouse
- AE.5158-P Polarization kit with analyzer in slider and small rotatable (100 x 65 mm) stage with two clamps to be mounted on plain stage. 360° Rotatable polarization filter to be mounted on lamphouse



BB.4300

AE.9918



## HIGHLIGHTS

- WF 10x/20 mm eyepieces
- Binocular and trinocular models
- Reversed quadruple nosepiece
- Plan objectives
- Infinity and non-infinity optical system
- Integrated rackless mechanical stage

integrated rackless X-Y stage with 75 x 30 mm travel range

An important feature of the BioBlue.Lab is the rackless stage,

highly precise positioning. This plays an integral part in most

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

BioBlue.Lab microscopes can also be supplied with IOS plan phase contrast objectives 10x / 20x / S40x / S100x, which are

This enhancement is suitable for a wide variety of routine

which provides a smooth translation of the specimen and

demanding cytology and histopathology applications

- 3 W NeoLED™ illumination
- Ergonomic carrying grip
- 10 Years warranty



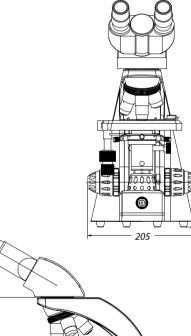
😑 BioBlue

377 276

- 32.5

260

🗕 BioBlue.Lab



# **BioBlue.Lab** These ergonomic easy-to-use microscopes have been designed specifically for laboratory and university applications. The 150 x 140 mm mechanical stage has an

The BlueLine flagship BioBlue.Lab is an instrument that precisely matches the highest expectations of microscopy users. All models are equipped with a NeoLED<sup>™</sup> illumination system and are available in binocular and trinocular versions



**BB.1152-PLi** 377 (h) x 205 (w) x 260 mm (d) | 5.4 kg **BB.1153-PLi** 448 (h) x 205 (w) x 260 mm (d) | 5.6 kg

28 **a euromex** 



applications in laboratories and field microscopy

infinity corrected

Check out the product video on YouTube and learn more about the BlueLine. YouTube channel: **Euromex Optics Group B.V.** 

euromex 29

## SPECIFICATIONS

#### 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  $\pm 5$  diopter adjustment on left tube. All heads are 360° rotatable and secured with a screw. The trinocular head has a fixed light path beam splitter (50:50) and generates an erect image

#### NOSEPIECE

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

#### **OBJECTIVES**

BioBlue.Lab microscopes are equipped with plan, plan IOS and plan phase IOS 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

MODELS	Binocular	Trinocular	4x/10x/S40x/S100x plan objectives	4x/10x/S40x/S100x plan IOS objectives	10x/20x/S40x/S100x plan phase IOS objectives	Rackless mechanical stage	NeoLED™
BB.1152-PL	•		•			•	•
BB.1153-PL		•	•			•	•
BB.1152-PLi	•			•		•	•
BB.1153-PLi		•		•		•	•
BB.1152-PLPHi	•				•	•	•
BB.1153-PLPHi		•			•	•	•

#### 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 a white filter. · Height adjustable Zernike N.A. 1.25 phase contrast condenser with filter holder. Additionally the condenser includes a BF position for brightfield microscopy. Supplied
- ILLUMINATION

with a green filter

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

#### PACKAGE CONTENT

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

## ACCESSORIES AND SPARE PARTS

#### **EYEPIECES**

BB.6010	WF 10x/20 mm eyepiece, 30 mm tube
BB.6110	WF 10x/20 mm eyepiece, 30 mm tube
	with micrometer reticle
BB.6015	WF 15x/15 mm eyepiece, 30 mm tube
BB.6020	WF 20x/11 mm eyepiece, 30 mm tube
BB.6099	Pair of eyecups

#### **OBJECTIVES**

BB.8804	Plan 4x/0.10 objective. WD 17.92 mm
BB.8810	Plan 10x/0.25 objective. WD 2.04 mm
BB.8820	Plan 20x/0.40 objective. WD 1.20 mm
BB.8840	Plan S40x/0.65 objective. WD 0.65 mm
BB.8860	Plan S60x/0.80 objective. WD 0.19 mm
BB.8800	Plan S100x/1.25 oil immersion objective.
	WD 0.18 mm
BB.7204	Plan 4x/0.10 IOS objective. WD 7.18 mm
BB.7210	Plan 10x/0.25 IOS objective. WD 4.80 mm
BB.7220	Plan 20x/0.40 IOS objective,. WD 5.27 mm
BB.7240	Plan S40x/0.65 IOS objective. WD 0.68 mm

- Plan S60x/0.85 IOS objective. WD 0.50 mm BB.7260
- BB.7200 Plan S100x/1.25 oil immersion IOS objective. WD 0.20 mm

- BB.7720 Plan Phase 20x/0.40 IOS objective,. WD 1.75 mm
- BB.7740 Plan Phase S40x/0.65 IOS objective. WD 0.72 mm
- BB.7700 Plan Phase S100x/1.25 oil immersion IOS objective. WD 0.5 mm

#### **MISCELLANEOUS**

- BB.9602 Analyzer in slider, Ø 25 mm. Fits in nosepiece Polarization filter, Ø 32 mm. Fits in filter holder BB.9732 BB.9880 Köhler attachment BB.9900 Aluminum case BB.9993 3 W NeoLED<sup>™</sup> replacement unit
- AE.5227 Glass fuses 1 A 250 V, 10 pieces

#### **CAMERA ACCESSORIES**

AE.5130	Universal SLR camera adapter with 2x projection
	lens for 23.2 mm tubes. Needs T2 adapter
AE.5040	T2 adapter for Canon EOS SLR digital camera
AE.5025	T2 adapter for Nikon D 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.
	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.5165	Cover glasses 18 x 18 mm,
	thickness 0.13-0.17 mm, 100 pieces
PB.5168	Cover glasses 22 x 22 mm,
	thickness 0.13-0.17 mm, 100 pieces
PB.5245	Lens cleaning paper, 100 sheets per pack
PB.5255	Immersion oil, n = 1.482 (25 ml)
PB.5274	lsopropyl alcohol 99% (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, 16 pcs:
	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

For phase contrast attachments and accessories see chapter 4

bottle of oil, packed in a nice toolbox

tissue sheets, tube of maintenance grease, 10 ml

- E-plan, plan, E-plan IOS and plan IOS objectives
- E-plan phase, E-plan phase IOS, plan phase IOS objectives

Versatile and evolutive microscopes

Reversed ball-bearing quadruple or

Monocular, binocular and trinocular models

- Integrated rackless X-Y mechanical stage
- 3 W NeoLED<sup>™</sup> adjustable illumination system
- Integrated carrying grip

HIGHLIGHTS

Digital models available HWF 10x/20 mm eyepieces

quintuple nosepiece

- Cable Storage System and anti-theft system
- 10 Years warranty

#### NOSEPIECE

Revolving and reversed ball-bearing quadruple or quintuple nosepiece

#### OBJECTIVES

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

Brightfield models: E-plan, 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 objectives Phase contrast models: E-plan phase, E-plan phase IOS infinity corrected, plan phase IOS infinity corrected 10x/0.25, 20x/0.40, S40x/0.65 and S100x/1.25 oil immersion objectives

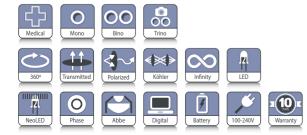
All S40x, S60x and S100x oil immersion objectives are spring loaded. All optics are anti-fungus treated and anti-reflection coated for maximum light throughput

## **bScope**<sup>®</sup>

The well-equipped, versatile and evolutive microscopes of the bScope® series are intensively used in secondary schools, universities, small to mid-sized laboratories and for veterinary applications

BIOLOGICAL MICROSCOPES

Besides an excellent ergonomic design, these robust and attractively priced microscopes are available in several configurations for brightfield and phase contrast observation with HWF 10x/20 mm eyepieces





bscope

**FEATURED** 

Neo

Medical Device

BS.1152-PLi

EYEPIECE(S)

HEAD

SPECIFIC ATIONS

models is supplied with pointer

High wide field HWF 10x/20 mm secured eyepiece(s) with

20 mm field of view (Ø 23.2 mm tube). Eyepiece of monocular

The bScope® is available with a monocular head (45° inclined

equipped with a Siedentopf type head, 360° rotatable and

Ø 23.2 mm tube) or with binocular or trinocular heads,

equipped with 30° inclined Ø 23.2 mm tubes. Binocular

and trinocular models have a diopter  $\pm$  5 adjustment on

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 the eyepieces in a high and in a low position. The trinocular

head comes with a Ø 23.2 mm tube, ensuring a maximum

of flexibility. The prisms inside the heads are designed to

minimize the light absorption for perfect digital imaging.

Only for IOS modelsModels with an integrated USB-2.0

resolution of 2592 x 1944 pixels (see chapter 3)

A unique rotating system allows the ergonomic positioning of

both tubes in a high (431 mm) and in a low position (377 mm).

camera are supplied with a 5.0 MP 1/2.5" CMOS sensor with a

the left eyepiece. The interpupillary distance is adjustable

BS.1151-EPL

😑 BS.1153-EPLi

MONOCULAR MODEL BS.1151-XXX 385 (h) x 195 (w) x 235 (d) | 6.3 kg BINOCULAR MODEL BS.1152-XXX 409 (h) x 195 (w) x 235 (d) | 6.5 kg TRINOCULAR MODEL BS.1153-XXX 459 (h) x 195 (w) x 235 (d) | 6.6 kg

#### FOCUSING

Double coaxial, low-positioned coarse and fine adjustments with 180 graduations. Precision 1.1 µm, 200 µm per rotation, total travel range 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 and soft-close removable specimen holder. The rackless stage has no protruding parts, enables 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 swing-out filter holder

#### POLARIZATION

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

#### **NEOLED<sup>™</sup> ILLUMINATION**

The 3 W adjustable Köhler NeoLED<sup>™</sup> 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<sup>™</sup> is the low energy consumption, no heating and a long operating lifetime

#### **KÖHLER ILLUMINATION**

A Köhler illumination 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 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





Ergonomic carrying grip for easy transportation

Swing-out

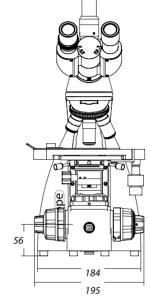
0.9/1.25 NA

#### 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

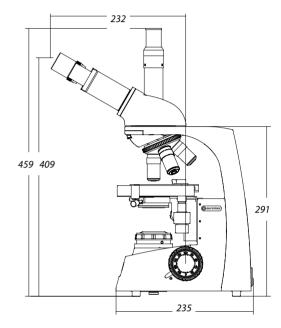
#### PACKAGE CONTENT

Smart Styrofoam packaging ensures a low environmental footprint while maintaining a maximum of 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 alianment telescope



#### **BSCOPE® FOR BRIGHTFIELD**

MODELS	Mono	Bino	Trino	HWF 10x/20 mm eyepieces	Quadruple nosepiece Plan 4/10/ S40/S100x	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.1151-EPL	•			•		•					•	
BS.1152-EPL		•		•		•					•	
BS.1153-EPL			•	•		•					•	
BS.1152-EPLi		•		•				•		•		•
BS.1153-EPLi			•	•				•		•		•
BS.1151-PL	•			•	•							
BS.1152-PLi		•		•					•	•		•
BS.1153-PLi			•	•					•	•		•
BS.1152-PLi/4N		•		•			•			•		•
BS.1153-PLi/4N			•	•			•			•		•

Rechargeable batteries is optional

All models are equipped with a 152/197 x 131 mm stage with integrated 75 x 36 mm X-Y rackless mechanical stage All models are medical devices class I

## 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-CM 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 for BS.6010
- **BS.6099-S** Pair of eyecups for BS.6012 and BS.6015

#### OBJECTIVES

BS.7104	E-plan EPL 4x/0.10 objective. WD 37.0 mm
BS.7110	E-plan EPL 10x/0.25 objective. WD 6.61 mm
BS.7120	E-plan EPL 20x/0.40 objective. WD 1.85 mm
BS.7140	E-plan EPL S40x/0.65 objective. WD 0.64 mm
BS.7160	E-plan EPL S60x/0.85 objective. WD 0.20 mm
BS.7100	E-plan EPL S100x/1.25 objective. WD 0.19 mm
55.7100	E-plan El E 5100x/ 1.25 Objective. WD 0.15 min

- BS.7510E-plan phase EPLPH 10x/0.25 objective.<br/>WD 5.95 mmBS.7520E-plan phase EPLPH 20x/0.40 objective.<br/>WD 2.61 mmBS.7540E-plan phase EPLPH S40x/0.65 objective.<br/>WD 0.66 mm
- BS.7500 E-plan phase EPLPH S100x/1.25 objective. WD 0.36 mm
- BS.8204 E-plan EPLi 4x/0.10 IOS objective. WD 18.9 mm
- BS.8210 E-plan EPLi 10x/0.25 IOS objective. WD 5.95 mm
- BS.8220 E-plan EPLi 20x/0.40 IOS objective. WD 2.61 mm
- BS.8240 E-plan EPLi S40x/0.65 IOS objective. WD 0.78 mm
- BS.8200
   E-plan EPLi S100x/1.25 IOS objective.

   WD 0.36 mm
- BS.8404
   Plan PLi 4x/0.10 IOS objective. WD 21.0 mm

   BS.8410
   Plan PLi 10x/0.25 IOS objective. WD 5.0 mm

   BS.8420
   Plan PLi 20x/0.40 IOS objective. WD 8.8 mm

   BS.8440
   Plan PLi S40x/0.65 IOS objective. WD 0.66 mm

BS.8460 Plan PLi S60x/0.85 infinity corrected IOS objective. WD 0.46 mm
 BS.8400 Plan PLi S100x/1.25 IOS objective. WD 0.36 mm

#### 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

#### ATTACHMENTS

- **BS.9647** Polarizer for polarization Ø 16 mm for slider under bScope head
- **BS.9651** Polarization attachment for lamphouse of bScope with 360° scale
- **BS.9660** Polarization kit: analyzer under head and polarizer on lamphouse
- BS.9880 Köhler attachment

#### CAMERA ACCESSORIES

- 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 camera

#### MISCELLANEOUS

- BS.9900 Aluminum transport case
- BS.9993 NeoLED<sup>™</sup> replacement unit
- AE.1370 Set of rechargeable batteries, 3 pieces

#### DISPOSABLES

- **PB.5155**Microscope slides 76 x 26 mm, ground edges,<br/>50 pieces per pack
- **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.5165 Cover glasses 18 x 18 mm, thickness 0.13-0.17 mm, 100 pieces

PB.5168	Cover glasses 22 x 22 mm, thickness
	0.13-0.17 mm, 100 pieces
PB.5245	Lens cleaning paper, 100 sheets per pack

- **PB.5255** Immersion oil (25 ml). n = 1.482
- PB.5274 Isopropyl alcohol 99% (200 ml)
- PB.5275
   Cleaning kit: lens cleaning fluid, lint free lens tissue/paper, brush, air blower, cotton swabs
- PB.5276 Microscope maintenance and servicing kit, 16 pcs: 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

For phase contrast attachments and accessories see chapter 4



CSS – Cable Storage System

## BIOLOGICAL MICROSCOPES

## FEATURED

Medical Device

**iscope** 



IS.1152-PLPHi

## 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)

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)

#### 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

## HIGHLIGHTS

- Medical device class I EU MDR 2017-745
- EWF 10x/22 mm and EWF10x/20 mm eyepieces
- Binocular and trinocular models
- Optional multiheads
- Optional tilting head
- Quintuple reversed nosepiece
- E-plan, plan and plan phase objectives
- E-plan, plan and plan phase infinity corrected IOS objectives
- 156 x 138 mm stage or 187/230 x 140 mm rackless stage
- Intensity adjustable 3 W NeoLED™ Köhler illumination
- iCare sensor for energy saving
- CSS Cable Storage System
- 10 Years warranty

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**

Optional: the 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<sup>®</sup> 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. The main binocular head has one diopter adjustment, the second head has two diopter adjustments. Only available for the model with plan infinity corrected objectives (IS.1154-PLi). The face-to-face head is equipped with a 2-color laser pointer

## iScope®

The iScope® microscopes exceed today's standard, as they provide more comfort and convenience for microscopists with ergonomic features such as height adjustable eye tubes and a large rackless stage with double slide holder. The modern design and compact size of the iScope® microscopes allow more working space, safer operation and enable easy storage

The iScope<sup>®</sup> series is available in various configurations, suitable for high schools, universities, and Life and Biomedical Sciences. Observation methods such as brightfield, phase contrast, cardioid mirror darkfield, basic polarization and fluorescence are available





**IS.1153-PLi** 408 (h) x 210 (w) x 255 (d) mm | 9.0 kg

#### MULTIHEAD SYSTEM

The iScope<sup>®</sup> can be extended with a unique multihead system for in total 2, 3 or 5 heads, allowing simultaneous observation of specimens. The central attachment is equipped with a joystick to move a green and red laser pointer across the entire field of 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. Each extra viewing binocular head is equipped with extended wide field plan EWF 10x/22 mm eyepieces (references: IS.1156-PLi-x, x = total number of heads)

#### OBJECTIVES

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	20x/0.40*	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 quintuple reversed nosepiece for a maximum of five objectives

#### STAGE

The iScope<sup>®</sup> 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
- 220 x 157 mm ceramic stage with integrated 75 x 50 mm X-Y mechanical stage is protected against marks and scratches with a very tough ceramic surface. The surface also ensures stray light not to be reflected from the stage into the objective

The iScope<sup>®</sup> 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

#### 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

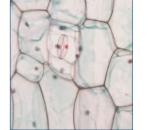
#### ILLUMINATION

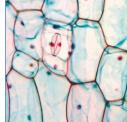
3 W adjustable Köhler NeoLED<sup>™</sup> diascopic illumination with internal 100-240 V power supply. The innovative NeoLED<sup>™</sup> design offers larger apertures, allowing the optical system of the iScope<sup>®</sup> microscope to produce images at higher resolutions, very close to the theoretical diffraction limit of the optics. Other benefits of the NeoLED<sup>™</sup> 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

#### **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







Normal LED

● NeoLED™

#### CSS - CABLE STORAGE SYSTEM

iScope<sup>®</sup> 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. All packed in polystyrene boxes



Check out the product video on YouTube and learn more about this microscope. YouTube channel: **Euromex Optics Group B.V.** 



#### ISCOPE<sup>®</sup> FOR LIFE SCIENCE (FINITY MODELS)

MODELS	Binocular	Trinocular	Phase contrast	EWF 10x20 mm	E-plan objectives	Plan phase objectives	Mechanical stage	iCare Sensor
IS.1152-EPL	•			•			•	•
IS.1153-EPL		•		•	•		•	•
IS.1152-PLPH	•		•	•		•	•	•
IS.1153-PLPH		•	•	•		•	•	•

#### **ISCOPE® FOR LIFE SCIENCE (INFINITY MODELS)**

MODELS	Binocular	Trinocular	Phase contrast	EWF 10x22 mm	E-plan IOS objectives	Plan IOS objectives	Plan phase IOS objectives	Mechanical stage	iCare Sensor	Köhler LED
IS.1152-EPLi	•			•	•			•	•	
IS.1153-EPLi		•		•	•			•	•	
IS.1152-PLi	•			•*		•		•	•	•
IS.1153-PLi		•		•*		•		•	•	•
IS.1152-PLPHi	•		•	•*			•	•	•	•
IS.1153-PLPHi		•	•	•*			•	•	•	•

\*Two tubes with diopter adjustments

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

MODELS	Bino	Photo attachment	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	iCare Sensor	Köhler LED
IS.1158-EPLi	•			•	•			•	•	
IS.1159-EPLi	•	•		•	•			•	•	
IS.1158-PLi	•			•		•		•	•	•
IS.1159-PLi	•	•		•		•		•	•	•
IS.1158-PLPHi	•		•	•			•	•	•	•
IS.1159-PLPHi	•	•	•	•			•	•	•	•

#### ISCOPE<sup>®</sup> FOR LIFE SCIENCE (MULTIHEAD SYSTEMS)

MODELS	Total users	Binocular	Trinocular	EWF 10x20 mm	Plan IOS objectives	Mechanical rackless stage	iCare sensor	Köhler LED
IS.1156-PLi2	2	1x	•	•	•	•	•	•
IS.1156-PLi3	3	2x	•	•	•	•	•	•
IS.1156-PLi5	5	4x	•	•	•	•	•	•
IS.1156-PLi9	9	8	•	•	•	•	•	•

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

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





IS.115x-EPL stage

EYEPIECES

IS.115x-PLi rackless stage

## ACCESSORIES AND SPARE PARTS

#### OBJECTIVES

IS.6010-PEWF 10x/02 mm eyepiece with pointerIS.7110E-plan EPL 10x/0.25 objective. WD 5.5 mm(Ø 23.2 mm tube)IS.7120E-plan EPL 20x/0.40 objective. WD 0.45 mm(Ø 23.2 mm tube)IS.7160E-plan EPL 560x/0.85 objective. WD 0.19 mm(Ø 23.2 mm tube)IS.7160E-plan EPL 560x/0.85 objective. WD 0.19 mm(Ø 23.2 mm tube)IS.7100E-plan EPL 500x/1.25 objective. WD 0.13 mm(Ø 23.2 mm tube)IS.7100Plan PLPH 10x/0.25 phase contrast objective.(Ø 23.2 mm tube)IS.7700Plan PLPH 10x/0.25 phase contrast objective.(Ø 20.2 mmWF 15x/16 mm eyepiece (Ø 23.2 mm tube)WD 12.2 mm(Ø 20.4 mm eyepiece (Ø 23.2 mm tube)WD 12.2 mm(Ø 20.4 mm eyepiece (Ø 30mm tube)WD 5 mm(Ø 20.4 mm eyepiece (Ø 30mm tube)WD 5 mm(Ø 30 mm tube)VD 0.37 mm(Ø 30 mm tube)VD 0.37 mm(Ø 30 mm tube)IS.7700(Ø 30 mm tube)VD 0.37 mm(Ø 30 mm tube)IS.8040(Ø 30 mm tube)IS.8041(Ø 12.5 x/17 mm eyepiece (Ø 30 mm tube)(Ø 30 mm tube)IS.8041(Ø 30 mm tube)IS.8041(Ø 30 mm tube)IS.8041(Ø 12.5 x/17 mm eyepiece (Ø 30 mm tube)(Ø 30 mm tube)IS.8041(Ø 41.5 x/16 mm eyepiece (Ø 30 mm tube)(Ø 41.5 x/16 mm eyepiece (Ø 30 mm tube)(Ø 41.5 x/17 mm eyepiece (Ø	IS.6010	EWF 10x/20 mm eyepiece (Ø 23.2 mm tube)	IS.7104	E-plan EPL 4x/0.10 objective. WD 15.2 mm
IS.6010-CEWF 10x/20 mm eyepiece with crosshairs (∅ 23.2 mm tube)IS.7140E-plan EPL S40x/0.65 objective. WD 0.45 mm (∅ 23.2 mm tube)IS.6010-CMEWF 10x/20 mm eyepiece with 10/100 micrometer and cross (∅ 23.2 mm tube)IS.7160E-plan EPL S60x/0.85 objective. WD 0.19 mmIS.6015EWF 10x/20 mm eyepiece (∅ 23.2 mm tube)IS.7100E-plan EPL S100x/1.25 objective. WD 0.13 mm micrometer and cross (∅ 23.2 mm tube)IS.6015WF 15x/16 mm eyepiece (∅ 23.2 mm tube)IS.7710Plan PLPH 10x/0.25 phase contrast objective. WD 0.12 mmIS.6019Pair of eyecups, ∅ 23.2 mm tube)IS.7710Plan PLPH 20x/0.40 phase contrast objective. WD 12.2 mmIS.6210EWF 10x/22 mm eyepiece (∅ 30mm tube)WD 5 mmIS.6210-CEWF 10x/22 mm eyepiece with crosshairs (∅ 30 mm tube)IS.7700Plan PLPH 540x/0.65 phase contrast objective. WD 0.37 mmIS.6210-CMEWF 10x/22 mm eyepiece with pointer (∅ 30 mm tube)IS.7700Plan PLPH S100x/1.25 oil phase contrast objective. WD 0.13 mmIS.6210-CMEWF 10x/22 mm eyepiece with 10/100 micrometer and crosshairs (∅ 30 mm tube)IS.8804E-plan EPLi 4x/0.10 IOS objective. WD 15.4 mmIS.6212WF 10x/21 mm eyepiece (∅ 30 mm tube)IS.8810E-plan EPLi 10x/0.25 IOS objective. WD 0.43 mmIS.6215WF 15x/16 mm eyepiece (∅ 30 mm tube)IS.8800E-plan EPLi 10x/0.25 IOS objective. WD 0.43 mmIS.6215-CMWF 15x/16 mm eyepiece (∅ 30 mm tube)IS.8800E-plan EPLi 10x/1.25 IOS objective. WD 0.13 mmIS.6215WF 15x/16 mm eyepiece (∅ 30 mm tube)IS.8800E-plan EPLi 10x/1.25 IOS objective. WD 0.13	IS.6010-P	EWF 10x/20 mm eyepiece with pointer	IS.7110	E-plan EPL 10x/0.25 objective. WD 5.5 mm
(Ø 23.2 mm tube)IS.7160E-plan EPL S60x/0.85 objective. WD 0.19 mmIS.6010-CMEWF 10x/20 mm eyepiece with 10/100 micrometer and cross (Ø 23.2 mm tube)IS.7100E-plan EPL S100x/1.25 objective. WD 0.13 mmIS.6015WF 15x/16 mm eyepiece (Ø 23.2 mm tube)IS.7710Plan PLPH 10x/0.25 phase contrast objective.IS.6099Pair of eyecups, Ø 23.2 mm tube)IS.7720Plan PLPH 10x/0.25 phase contrast objective.IS.6210EWF 10x/22 mm eyepiece (Ø 30mm tube)IS.7720Plan PLPH 20x/0.40 phase contrast objective.IS.6210-CEWF 10x/22 mm eyepiece with crosshairs (Ø 30 mm tube)IS.7740Plan PLPH S40x/0.65 phase contrast objective.IS.6210-FEWF 10x/22 mm eyepiece with pointer (Ø 30 mm tube)IS.7700Plan PLPH S100x/1.25 oil phase contrastIS.6210-CMEWF 10x/22 mm eyepiece with 10/100 micrometer and crosshairs (Ø 30 mm tube)IS.8804E-plan EPLi 4x/0.10 IOS objective. WD 15.4 mmIS.6212WF 12.5x/17 mm eyepiece (Ø 30 mm tube)IS.8810E-plan EPLi 10x/0.25 IOS objective. WD 0.43 mmIS.6215WF 15x/16 mm eyepiece (Ø 30 mm tube)IS.8800E-plan EPLi S100x/1.25 IOS objective. WD 0.43 mmIS.6215-CMWF 15x/16 mm eyepiece (Ø 30 mm tube)IS.8800E-plan EPLi S100x/1.25 IOS objective. WD 0.13 mmIS.6213-CMWF 15x/16 mm eyepiece (Ø 30 mm tube)IS.8800E-plan EPLi S100x/1.25 IOS objective. WD 0.43 mmIS.6215WF 15x/16 mm eyepiece (Ø 30 mm tube)IS.8800E-plan EPLi S100x/1.25 IOS objective. WD 0.13 mmIS.6220WF 20x/12 mm eyepiece (Ø 30 mm tube)IS.8800E-plan EPLi S100x/1.25 IOS objec		(Ø 23.2 mm tube)	IS.7120	E-plan EPL 20x/0.40 objective. WD 3.5 mm
IS.6010-CMEWF 10x/20 mm eyepiece with 10/100 micrometer and cross (Ø 23.2 mm tube)IS.7100E-plan EPL S100x/1.25 objective. WD 0.13 mmIS.6015WF 15x/16 mm eyepiece (Ø 23.2 mm tube)IS.7710Plan PLPH 10x/0.25 phase contrast objective. WD 12.2 mmIS.6099Pair of eyecups, Ø 23.2 mm tubeIS.7720Plan PLPH 20x/0.40 phase contrast objective. WD 5 mmIS.6210EWF 10x/22 mm eyepiece (Ø 30mm tube)IS.7740Plan PLPH S40x/0.65 phase contrast objective. WD 0.37 mmIS.6210-CEWF 10x/22 mm eyepiece with crosshairs (Ø 30 mm tube)IS.7700Plan PLPH S100x/1.25 oil phase contrast objective. WD 0.37 mmIS.6210-MEWF 10x/22 mm eyepiece with pointer (Ø 30 mm tube)IS.7700Plan PLPH S100x/1.25 oil phase contrast objective. WD 0.13 mmIS.6210-MEWF 10x/22 mm eyepiece with 10/100 micrometer and crosshairs (Ø 30 mm tube)IS.8804E-plan EPLi 4x/0.10 IOS objective. WD 15.4 mmIS.6212WF 10x/22 mm eyepiece (Ø 30 mm tube)IS.8810E-plan EPLi 10x/0.25 IOS objective. WD 5.8 mmIS.6215WF 15x/16 mm eyepiece (Ø 30 mm tube)IS.8800E-plan EPLi 10x/0.25 IOS objective. WD 0.43 mmIS.6215-CMWF 15x/16 mm eyepiece (Ø 30 mm tube)IS.8800E-plan EPLi S100x/1.25 IOS objective. WD 0.13 mmIS.6215WF 15x/16 mm eyepiece (Ø 30 mm tube)IS.8800E-plan EPLi 10x/0.25 IOS objective. WD 0.43 mmIS.6215WF 15x/16 mm eyepiece (Ø 30 mm tube)IS.8800E-plan EPLi S100x/1.25 IOS objective. WD 0.13 mmIS.6220WF 20x/12 mm eyepiece (Ø 30 mm tube)IS.7202Plan PLi 2x/0.05 IOS objective, WD 18.3 mm.Best <th>IS.6010-C</th> <th>EWF 10x/20 mm eyepiece with crosshairs</th> <th>IS.7140</th> <th>E-plan EPL S40x/0.65 objective. WD 0.45 mm</th>	IS.6010-C	EWF 10x/20 mm eyepiece with crosshairs	IS.7140	E-plan EPL S40x/0.65 objective. WD 0.45 mm
<ul> <li>micrometer and cross (Ø 23.2 mm tube)</li> <li>IS.6015 WF 15x/16 mm eyepiece (Ø 23.2 mm tube)</li> <li>IS.6099 Pair of eyecups, Ø 23.2 mm tube</li> <li>IS.6099 Pair of eyecups, Ø 23.2 mm tube</li> <li>IS.7710 Plan PLPH 10x/0.25 phase contrast objective.</li> <li>WD 12.2 mm</li> <li>IS.7720 Plan PLPH 20x/0.40 phase contrast objective.</li> <li>IS.6210 EWF 10x/22 mm eyepiece (Ø 30mm tube)</li> <li>IS.6210-C EWF 10x/22 mm eyepiece with crosshairs (Ø 30 mm tube)</li> <li>IS.6210-P EWF 10x/22 mm eyepiece with pointer (Ø 30 mm tube)</li> <li>IS.6210-CM EWF 10x/22 mm eyepiece with pointer (Ø 30 mm tube)</li> <li>IS.6210-CM EWF 10x/22 mm eyepiece with 10/100</li> <li>IS.6212 WF 10x/22 mm eyepiece (Ø 30 mm tube)</li> <li>IS.6213 WF 15x/17 mm eyepiece (Ø 30 mm tube)</li> <li>IS.6215 WF 15x/16 mm eyepiece (Ø 30 mm tube)</li> <li>IS.6215 WF 15x/16 mm eyepiece (Ø 30 mm tube)</li> <li>IS.6215 WF 15x/16 mm eyepiece (Ø 30 mm tube)</li> <li>IS.6215 WF 15x/16 mm eyepiece (Ø 30 mm tube)</li> <li>IS.8800 E-plan EPLi 10x/0.25 IOS objective. WD 0.43 mm</li> <li>IS.6215 WF 15x/16 mm eyepiece (Ø 30 mm tube)</li> <li>IS.8800 E-plan EPLi 5100x/1.25 IOS objective. WD 0.43 mm</li> <li>IS.6215 WF 15x/16 mm eyepiece (Ø 30 mm tube)</li> <li>IS.8800 E-plan EPLi 5100x/1.25 IOS objective. WD 0.43 mm</li> <li>IS.6215 WF 15x/16 mm eyepiece (Ø 30 mm tube)</li> <li>IS.8800 E-plan EPLi 5100x/1.25 IOS objective. WD 0.43 mm</li> <li>IS.6215 WF 15x/16 mm eyepiece (Ø 30 mm tube)</li> <li>IS.8800 E-plan EPLi 5100x/1.25 IOS objective. WD 0.43 mm</li> <li>IS.6215 WF 15x/12 mm eyepiece (Ø 30 mm tube)</li> <li>IS.8800 E-plan EPLi 5100x/1.25 IOS objective. WD 0.43 mm</li> <li>IS.6215 WF 15x/12 mm eyepiece (Ø 30 mm tube)</li> <li>IS.8800 E-plan EPLi 5100x/1.25 IOS objective. WD 0.13 mm</li> </ul>		(Ø 23.2 mm tube)	IS.7160	E-plan EPL S60x/0.85 objective. WD 0.19 mm
IS.6015       WF 15x/16 mm eyepiece (Ø 23.2 mm tube)       IS.7710       Plan PLPH 10x/0.25 phase contrast objective.         IS.6099       Pair of eyecups, Ø 23.2 mm tube       WD 12.2 mm         IS.6210       EWF 10x/22 mm eyepiece (Ø 30mm tube)       IS.7720       Plan PLPH 20x/0.40 phase contrast objective.         IS.6210       EWF 10x/22 mm eyepiece (Ø 30mm tube)       IS.7740       Plan PLPH 540x/0.65 phase contrast objective.         IS.6210-C       EWF 10x/22 mm eyepiece with crosshairs (Ø 30 mm tube)       IS.7700       Plan PLPH S100x/1.25 oil phase contrast objective.         IS.6210-P       EWF 10x/22 mm eyepiece with pointer (Ø 30 mm tube)       IS.7700       Plan PLPH S100x/1.25 oil phase contrast         IS.6210-P       EWF 10x/22 mm eyepiece with 10/100 micrometer and crosshairs (Ø 30 mm tube)       IS.8804       E-plan EPLi 4x/0.10 IOS objective. WD 15.4 mm         IS.6215       WF 15x/16 mm eyepiece (Ø 30 mm tube)       IS.8810       E-plan EPLi 10x/0.25 IOS objective. WD 0.43 mm         IS.6215-CM       WF 15x/16 mm eyepiece (Ø 30 mm tube)       IS.8800       E-plan EPLi S100x/1.25 IOS objective. WD 0.13 mm         IS.6215       WF 15x/16 mm eyepiece (Ø 30 mm tube)       IS.8800       E-plan EPLi S100x/1.25 IOS objective. WD 0.13 mm         IS.6215       WF 15x/16 mm eyepiece (Ø 30 mm tube)       IS.8800       E-plan EPLi S100x/1.25 IOS objective. WD 0.13 mm         IS.6215       WF 15x/16	IS.6010-CM	EWF 10x/20 mm eyepiece with 10/100	IS.7100	E-plan EPL S100x/1.25 objective. WD 0.13 mm
IS.6099Pair of eyecups, Ø 23.2 mm tubeWD 12.2 mmIS.6210EWF 10x/22 mm eyepiece (Ø 30 mm tube)IS.7720Plan PLPH 20x/0.40 phase contrast objective.IS.6210-CEWF 10x/22 mm eyepiece (Ø 30 mm tube)WD 5 mmIS.6210-CEWF 10x/22 mm eyepiece with crosshairs (Ø 30 mm tube)IS.7740Plan PLPH S40x/0.65 phase contrast objective. WD 0.37 mmIS.6210-PEWF 10x/22 mm eyepiece with pointer (Ø 30 mm tube)IS.7700Plan PLPH S100x/1.25 oil phase contrast objective. WD 0.13 mmIS.6210-CMEWF 10x/22 mm eyepiece with 10/100 micrometer and crosshairs (Ø 30 mm tube)IS.8804E-plan EPLi 4x/0.10 IOS objective. WD 15.4 mmIS.6212WF 12.5x/17 mm eyepiece (Ø 30 mm tube)IS.8810E-plan EPLi 10x/0.25 IOS objective. WD 0.43 mmIS.6215-CMWF 15x/16 mm eyepiece (Ø 30 mm tube)IS.8800E-plan EPLi S40x/0.65 IOS objective. WD 0.43 mmIS.6215-CMWF 15x/16 mm eyepiece (Ø 30 mm tube)IS.8800E-plan EPLi S100x/1.25 IOS objective. WD 0.13 mmIS.6220WF 20x/12 mm eyepiece (Ø 30 mm tube)IS.7202Plan PLi 2x/0.05 IOS objective, WD 18.3 mm. Best		micrometer and cross (Ø 23.2 mm tube)		
IS.6210EWF 10x/22 mm eyepiece (Ø 30mm tube)IS.7720Plan PLPH 20x/0.40 phase contrast objective.IS.6210-CEWF 10x/22 mm eyepiece (Ø 30mm tube)WD 5 mmIS.6210-CEWF 10x/22 mm eyepiece with crosshairs (Ø 30 mm tube)IS.7740Plan PLPH S40x/0.65 phase contrast objective.IS.6210-PEWF 10x/22 mm eyepiece with pointer (Ø 30 mm tube)IS.7700Plan PLPH S100x/1.25 oil phase contrast objective. WD 0.13 mmIS.6210-CMEWF 10x/22 mm eyepiece with 10/100 micrometer and crosshairs (Ø 30 mm tube)IS.8804E-plan EPLi 4x/0.10 IOS objective. WD 15.4 mmIS.6212WF 12.5x/17 mm eyepiece (Ø 30 mm tube)IS.8810E-plan EPLi 10x/0.25 IOS objective. WD 0.43 mmIS.6215WF 15x/16 mm eyepiece (Ø 30 mm tube)IS.8840E-plan EPLi S40x/0.65 IOS objective. WD 0.43 mmIS.6215-CMWF 15x/16 mm eyepiece (Ø 30 mm tube)IS.8800E-plan EPLi S100x/1.25 IOS objective. WD 0.43 mmIS.6220WF 20x/12 mm eyepiece (Ø 30 mm tube)IS.7202Plan PLi 2x/0.05 IOS objective, WD 18.3 mm. Best	IS.6015	WF 15x/16 mm eyepiece (Ø 23.2 mm tube)	IS.7710	Plan PLPH 10x/0.25 phase contrast objective.
IS.6210EWF 10x/22 mm eyepiece (Ø 30mm tube)WD 5 mmIS.6210-CEWF 10x/22 mm eyepiece with crosshairs (Ø 30 mm tube)IS.7740Plan PLPH S40x/0.65 phase contrast objective. WD 0.37 mmIS.6210-PEWF 10x/22 mm eyepiece with pointer (Ø 30 mm tube)IS.7700Plan PLPH S100x/1.25 oil phase contrast objective. WD 0.13 mmIS.6210-CMEWF 10x/22 mm eyepiece with 10/100 micrometer and crosshairs (Ø 30 mm tube)IS.8804E-plan EPLi 4x/0.10 IOS objective. WD 15.4 mmIS.6212WF 12.5x/17 mm eyepiece (Ø 30 mm tube)IS.8810E-plan EPLi 10x/0.25 IOS objective. WD 5.8 mmIS.6215WF 15x/16 mm eyepiece (Ø 30 mm tube)IS.8840E-plan EPLi 10x/0.25 IOS objective. WD 0.43 mmIS.6215-CMWF 15x/16 mm eyepiece (Ø 30 mm tube)IS.8800E-plan EPLi 10x/0.25 IOS objective. WD 0.43 mmIS.6215WF 15x/16 mm eyepiece (Ø 30 mm tube)IS.8800E-plan EPLi 5100x/1.25 IOS objective. WD 0.43 mmIS.6216WF 15x/16 mm eyepiece (Ø 30 mm tube)IS.8800E-plan EPLi 5100x/1.25 IOS objective. WD 0.13 mmIS.6216WF 15x/16 mm eyepiece (Ø 30 mm tube)IS.8800E-plan EPLi 5100x/1.25 IOS objective. WD 0.13 mmIS.6220WF 20x/12 mm eyepiece (Ø 30 mm tube)IS.7202Plan PLi 2x/0.05 IOS objective, WD 18.3 mm. Best	IS.6099	Pair of eyecups, Ø 23.2 mm tube		WD 12.2 mm
IS.6210-CEWF 10x/22 mm eyepiece with crosshairs (Ø 30 mm tube)IS.7740Plan PLPH S40x/0.65 phase contrast objective. WD 0.37 mmIS.6210-PEWF 10x/22 mm eyepiece with pointer (Ø 30 mm tube)IS.7700Plan PLPH S100x/1.25 oil phase contrast objective. WD 0.13 mmIS.6210-CMEWF 10x/22 mm eyepiece with 10/100 micrometer and crosshairs (Ø 30 mm tube)IS.8804E-plan EPLi 4x/0.10 IOS objective. WD 15.4 mmIS.6212WF 12.5x/17 mm eyepiece (Ø 30 mm tube)IS.8810E-plan EPLi 10x/0.25 IOS objective. WD 5.8 mmIS.6215WF 15x/16 mm eyepiece (Ø 30 mm tube)IS.8840E-plan EPLi 10x/0.25 IOS objective. WD 0.43 mmIS.6215-CMWF 15x/16 mm eyepiece with 10/100 micrometer and crosshairs (Ø 30 mm tube)IS.8800E-plan EPLi S40x/0.65 IOS objective. WD 0.13 mmIS.6220WF 20x/12 mm eyepiece (Ø 30 mm tube)IS.7202Plan PLi 2x/0.05 IOS objective. WD 0.13 mm			IS.7720	Plan PLPH 20x/0.40 phase contrast objective.
(Ø 30 mm tube)         WD 0.37 mm           IS.6210-P         EWF 10x/22 mm eyepiece with pointer (Ø 30 mm tube)         IS.7700         Plan PLPH 5100x/1.25 oil phase contrast objective. WD 0.13 mm           IS.6210-CM         EWF 10x/22 mm eyepiece with 10/100         EWF 10x/22 mm eyepiece with 10/100         EVF 10x/22 mm eyepiece (Ø 30 mm tube)           IS.6212         WF 12.5x/17 mm eyepiece (Ø 30 mm tube)         IS.8804         E-plan EPLi 4x/0.10 IOS objective. WD 15.4 mm           IS.6215         WF 15x/16 mm eyepiece (Ø 30 mm tube)         IS.8810         E-plan EPLi 4x/0.05 IOS objective. WD 0.43 mm           IS.6215         WF 15x/16 mm eyepiece (Ø 30 mm tube)         IS.8840         E-plan EPLi 540x/0.65 IOS objective. WD 0.43 mm           IS.6215         WF 15x/16 mm eyepiece (Ø 30 mm tube)         IS.8800         E-plan EPLi 5100x/1.25 IOS objective. WD 0.13 mm           IS.6215         WF 15x/16 mm eyepiece (Ø 30 mm tube)         IS.8800         E-plan EPLi 5100x/1.25 IOS objective. WD 0.13 mm           IS.6220         WF 20x/12 mm eyepiece (Ø 30 mm tube)         IS.7202         Plan PLi 2x/0.05 IOS objective, WD 18.3 mm. Best	IS.6210	EWF 10x/22 mm eyepiece (Ø 30mm tube)		WD 5 mm
IS.6210-PEWF 10x/22 mm eyepiece with pointer (Ø 30 mm tube)IS.7700Plan PLPH S100x/1.25 oil phase contrast objective. WD 0.13 mmIS.6210-CMEWF 10x/22 mm eyepiece with 10/100 micrometer and crosshairs (Ø 30 mm tube)IS.8804E-plan EPLi 4x/0.10 IOS objective. WD 15.4 mmIS.6212WF 12.5x/17 mm eyepiece (Ø 30 mm tube)IS.8810E-plan EPLi 10x/0.25 IOS objective. WD 5.8 mmIS.6215WF 15x/16 mm eyepiece (Ø 30 mm tube)IS.8840E-plan EPLi 540x/0.65 IOS objective. WD 0.43 mmIS.6215-CMWF 15x/16 mm eyepiece with 10/100 micrometer and crosshairs (Ø 30 mm tube)IS.8800E-plan EPLi S40x/0.65 IOS objective. WD 0.13 mmIS.6220WF 20x/12 mm eyepiece (Ø 30 mm tube)IS.7202Plan PLi 2x/0.05 IOS objective, WD 18.3 mm. Best	IS.6210-C	EWF 10x/22 mm eyepiece with crosshairs	IS.7740	Plan PLPH S40x/0.65 phase contrast objective.
IS.6210-CMEWF 10x/22 mm eyepiece with 10/100objective. WD 0.13 mmIS.6212EWF 10x/22 mm eyepiece with 10/100E-plan EPLi 4x/0.10 IOS objective. WD 15.4 mmIS.6212WF 12.5x/17 mm eyepiece (Ø 30 mm tube)IS.8810E-plan EPLi 10x/0.25 IOS objective. WD 5.8 mmIS.6215WF 15x/16 mm eyepiece (Ø 30 mm tube)IS.8840E-plan EPLi 10x/0.25 IOS objective. WD 0.43 mmIS.6215-CMWF 15x/16 mm eyepiece with 10/100IS.8800E-plan EPLi S40x/0.65 IOS objective. WD 0.43 mmIS.6220WF 20x/12 mm eyepiece (Ø 30 mm tube)IS.7202Plan PLi 2x/0.05 IOS objective, WD 18.3 mm. Best		(Ø 30 mm tube)		WD 0.37 mm
IS.6210-CM       EWF 10x/22 mm eyepiece with 10/100         micrometer and crosshairs (Ø 30 mm tube)       IS.8804       E-plan EPLi 4x/0.10 IOS objective. WD 15.4 mm         IS.6212       WF 12.5x/17 mm eyepiece (Ø 30 mm tube)       IS.8810       E-plan EPLi 10x/0.25 IOS objective. WD 5.8 mm         IS.6215       WF 15x/16 mm eyepiece (Ø 30 mm tube)       IS.8840       E-plan EPLi 540x/0.65 IOS objective. WD 0.43 mm         IS.6215-CM       WF 15x/16 mm eyepiece with 10/100       IS.8800       E-plan EPLi \$100x/1.25 IOS objective. WD 0.13 mm         is.6220       WF 20x/12 mm eyepiece (Ø 30 mm tube)       IS.7202       Plan PLi 2x/0.05 IOS objective, WD 18.3 mm. Best	IS.6210-P	EWF 10x/22 mm eyepiece with pointer	IS.7700	Plan PLPH S100x/1.25 oil phase contrast
<ul> <li>micrometer and crosshairs (Ø 30 mm tube)</li> <li>IS.8804 E-plan EPLi 4x/0.10 IOS objective. WD 15.4 mm</li> <li>IS.6212 WF 12.5x/17 mm eyepiece (Ø 30 mm tube)</li> <li>IS.8810 E-plan EPLi 10x/0.25 IOS objective. WD 5.8 mm</li> <li>IS.6215 WF 15x/16 mm eyepiece (Ø 30 mm tube)</li> <li>IS.8840 E-plan EPLi 540x/0.65 IOS objective. WD 0.43 mm</li> <li>IS.6215-CM WF 15x/16 mm eyepiece with 10/100 IS.8800 E-plan EPLi S100x/1.25 IOS objective. WD 0.13 mm</li> <li>micrometer and crosshairs (Ø 30 mm tube)</li> <li>IS.6220 WF 20x/12 mm eyepiece (Ø 30 mm tube)</li> <li>IS.7202 Plan PLi 2x/0.05 IOS objective, WD 18.3 mm. Best</li> </ul>		(Ø 30 mm tube)		objective. WD 0.13 mm
IS.6212         WF 12.5x/17 mm eyepiece (Ø 30 mm tube)         IS.8810         E-plan EPLi 10x/0.25 IOS objective. WD 5.8 mm           IS.6215         WF 15x/16 mm eyepiece (Ø 30 mm tube)         IS.8840         E-plan EPLi \$40x/0.65 IOS objective. WD 0.43 mm           IS.6215-CM         WF 15x/16 mm eyepiece with 10/100         IS.8800         E-plan EPLi \$100x/1.25 IOS objective. WD 0.13 mm           IS.6220         WF 20x/12 mm eyepiece (Ø 30 mm tube)         IS.7202         Plan PLi 2x/0.05 IOS objective, WD 18.3 mm. Best	IS.6210-CM	EWF 10x/22 mm eyepiece with 10/100		
IS.6215       WF 15x/16 mm eyepiece (Ø 30 mm tube)       IS.8840       E-plan EPLi S40x/0.65 IOS objective. WD 0.43 mm         IS.6215-CM       WF 15x/16 mm eyepiece with 10/100       IS.8800       E-plan EPLi S100x/1.25 IOS objective. WD 0.13 mm         micrometer and crosshairs (Ø 30 mm tube)       IS.7202       Plan PLi 2x/0.05 IOS objective, WD 18.3 mm. Best		micrometer and crosshairs (Ø 30 mm tube)	IS.8804	E-plan EPLi 4x/0.10 IOS objective. WD 15.4 mm
IS.6215-CM       WF 15x/16 mm eyepiece with 10/100 micrometer and crosshairs (Ø 30 mm tube)       IS.8800       E-plan EPLi S100x/1.25 IOS objective. WD 0.13 mm         IS.6220       WF 20x/12 mm eyepiece (Ø 30 mm tube)       IS.7202       Plan PLi 2x/0.05 IOS objective, WD 18.3 mm. Best	IS.6212	WF 12.5x/17 mm eyepiece (Ø 30 mm tube)	IS.8810	E-plan EPLi 10x/0.25 IOS objective. WD 5.8 mm
micrometer and crosshairs (Ø 30 mm tube)IS.6220WF 20x/12 mm eyepiece (Ø 30 mm tube)IS.7202Plan PLi 2x/0.05 IOS objective, WD 18.3 mm. Best	IS.6215	WF 15x/16 mm eyepiece (Ø 30 mm tube)	IS.8840	E-plan EPLi S40x/0.65 IOS objective. WD 0.43 mm
IS.6220         WF 20x/12 mm eyepiece (Ø 30 mm tube)         IS.7202         Plan PLi 2x/0.05 IOS objective, WD 18.3 mm. Best	IS.6215-CM	WF 15x/16 mm eyepiece with 10/100	IS.8800	E-plan EPLi S100x/1.25 IOS objective. WD 0.13 mm
		micrometer and crosshairs (Ø 30 mm tube)		
<b>IS.6299</b> Pair of eyecups for infinity models (Ø 30 mm tube) to be used together with swing-out condenser	IS.6220	WF 20x/12 mm eyepiece (Ø 30 mm tube)	IS.7202	Plan PLi 2x/0.05 IOS objective, WD 18.3 mm. Best
	IS.6299	Pair of eyecups for infinity models (Ø 30 mm tube)		to be used together with swing-out condenser



IS.7204 Plan PLi 4x/0.10 IOS objective. WD 15.4 mm IS.7210 Plan PLi 10x/0.25 IOS objective. WD 10 mm IS.7220 Plan PLi 20x/0.40 IOS objective. WD 5.1 mm Plan PLi S40x/0.65 IOS objective. WD 0.54 mm IS.7240 IS.7260 Plan PLi S60x/0.85 IOS objective. WD 0.14 mm IS.7200 Plan PLi S100x/1.25 IOS objective. WD 0.13 mm

IS.8910	Plan PLPHi 10x/0.25 phase contrast IOS.
	WD 10.2 mm
IS.8920	Plan PLPHi 20x/0.40 phase contrast IOS.
	WD 5.1 mm
IS.8940	Plan PLPHi S40x/0.65 phase contrast IOS.
	WD 0.5 mm
IS.8900	Plan PLPHi S100x/1.25 oil phase contrast IOS.

#### CONDENSERS

WD 0.13 mm

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.9170	Slider with darkfield stop

#### 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 23.2 mm tube
- IS.9190 Slider with phase contrast annuli for 10x and S40x phase contrast objective
- IS.9192 Slider with phase contrast annuli for 20x and S100x phase contrast objective
- IS.9194 Slider with phase contrast annuli for S40x phase contrast objective

#### FILTERS

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

#### MISCELLANEOUS

IS.4300 Aluminum transport case for iScope IS.9880 Köhler attachment AE.3684 Glass fuses 500 mA 250 V, 10 pieces SL.5500 NeoLED<sup>™</sup> replacement unit

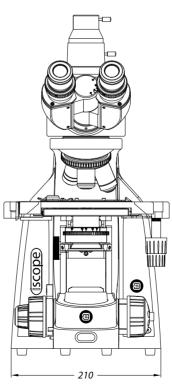
#### **CAMERA ACCESSORIES**

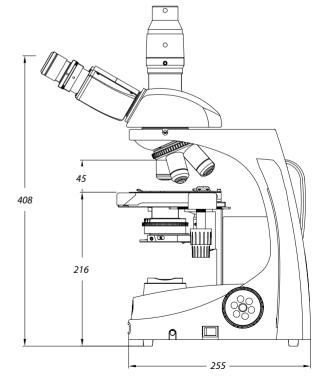
AE.5130 Universal SLR adapter with built-in 2x lens for standard 23.2 mm tube. Needs T2 adapter AE.5025 T2 adapter for Nikon D SLR digital camera AE.5040 T2 adapter for Canon EOS SLR digital camera

- 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.5165 Cover glasses 18 x 18 mm, 0.13-0.17 mm, 100 pieces PB.5168
  - Cover glasses 22 x 22 mm, 0.13-0.17 mm, 100 pieces

Lens cleaning paper, 100 sheets per	pack
Lens cleaning paper, 100 sneets per	ра

- PB.5255 Immersion oil, 25 ml. Refraction index n = 1.482
- PB.5274 Iso propyl 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, 16 pcs: 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







# education

## stereo microscopes





Euromex stereo microscopes are ideal instruments for most demanding teaching classes. The high-resolution three-dimensional images generated by these robust, student-friendly microscopes make them highly appreciated by both teachers and students

Digital models with built-in camera and measuring software are also available

EDUBLUE • PAGE 48 STEREOBLUE • PAGE 52 NEXIUSZOOM • PAGE 58 AP SERIES • PAGE 68



## STEREO MICROSCOPES

## BlueLine

## HIGHLIGHTS

- **Designed for education**
- Robust and sturdy, with secured eyepieces
- WF 10x/20 mm eyepieces
- Dual or triple magnifications
- Available in ergonomic rack & pinion and pillar stands
- Double 1 W LED illumination
- With rechargeable batteries for cordless use
- Digital models with 5.0 MP camera available
- Ergonomic carrying grip
- 5 Years warranty

•



The EduBlue microscopes are ideal for educational purposes and available from 5x up to 80x magnifications

The two parallel optical trains allow the three-dimensional observation of small insects, plants, stones and minerals

#### TRIPLE MAGNIFICATION OBJECTIVES

Pillar stand model ED.1302-P

- Revolving nosepiece with triple 1x/2x/3x and 1x/2x/4x magnifications objectives, which can provide standard magnifications of 10x, 20x and 30x or 10x, 20x and 40x
- Working distance 60 mm
- Fields of view of 20/10/6.7 mm or 20/10/5mm
- Magnifications can be altered using optional eyepieces

Rack & pinion stand model ED.1402-S

EduBlue



#### ED.1302-P / ED.1402-P

ED.1302-S / ED.1402-S 260 (h) x 175 (w) x 220 mm (d) | 2.1 kg ED.1505-S / ED.1805-S 260 (h) x 175 (w) x 220 mm (d) | 2.3 kg

## SPECIFICATIONS

#### **EYEPIECES**

Pair of secured WF 10x/20 mm eyepieces supplied with eyecups

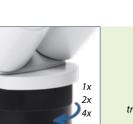
#### HEAD

- Binocular head with 45° inclined tube. Diopter adjustment of  $\pm$  5 on one side
- Digital head is supplied with a •
- A maximum of resolution of 2560 x 1920 pixels

#### **DUAL MAGNIFICATION OBJECTIVES**

- Revolving nosepiece with dual 1x/3x and 2x/4x magnifications objectives, which can provide standard magnifications of 10x and 30x or 20x and 40x
- Working distance 60 mm
- Field of view of 20/6.7 mm or 10/5 mm
- · Magnifications can be altered using optional eyepieces

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



Revolving nosepiece with triple magnification

- Interpupillary distance adjustable between 55 and 75 mm
- 5.0 MP USB-2.0 1/2.8" CMOS camera



STAND

hardened coating

# • ED.1505-S

The rack & pinion and pillar stands of the EduBlue 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 stands are alloy metal casted with

#### ILLUMINATION

The transmitted and incident 1 W LED illuminations can be used simultaneously and the light intensities can be adjusted separately. Supplied with an external 100-240 V mains adapter/charger and three rechargeable batteries for corded and cordless use

#### **DIGITAL MODELS**

Digital models are equipped with a 5 MP USB-2.0 1/2.8 inch sensor CMOS camera. Maximum resolution is 2560 x 1920 pixels, smaller resolutions are selectable. Delivered with ImageFocus Plus for capturing of images and videos. This software also allows a full range of analyzing tools such as measurements on still and live images and annotations on captured images.

For more information see chapter 3: Digital solutions

#### PACKAGE CONTENT

Supplied with 100-240 V mains adapter/charger, dust cover, eyecups and user manual. All packed in a polystyrene box

## You Tube

Check out the product video on YouTube and learn more about the BlueLine. YouTube channel: Euromex Optics Group B.V.

MODELS	Digital head	1x/3x objectives	2x/4x objectives	1x/2x/3x objectives	1x/2x/4x objectives	Pillar stand	Rack & pinion stand
ED.1302-P		•				•	
ED.1302-S		•					•
ED.1305-S	•	•					•
ED.1402-P			•			•	
ED.1402-S			•				•
ED.1405-S	•		•				•
ED.1502-S				•			•
ED.1505-S	•			•			•
ED.1802-S					•		•
ED.1805-S	•				•		•

## ACCESSORIES AND SPARE PARTS

#### **EYEPIECES**

ED.6005	Pair of HWF 5x/22 mm eyepieces
ED.6010	Pair of HWF 10x/20 mm eyepieces
ED.6015	Pair of HWF 15x/12 mm eyepieces
ED.6020	Pair of HWF 20x/10 mm eyepieces
ED.6110	HWF 10x/20 mm eyepiece
	with 10 mm/100 micrometer
ED.6099	Pair of eyecups

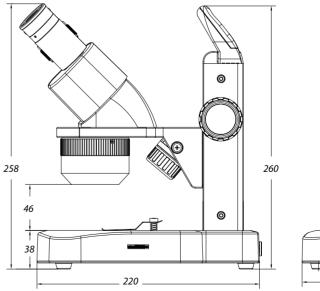
#### MISCELLANEOUS

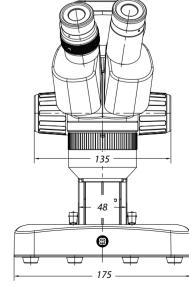
ED.9570	Pair of object clamps for stage
ED.9950	Stage plate frosted glass, opaque, Ø 60 mm
ED.9956	Stage plate black/white, Ø 60 mm
ED.4300	Aluminum transport case for EduBlue microscopes
AE.9918	Nylon microscope bag (25 x 39 x 19 cm)
AE.1112	Micrometer 76 x 26 mm slide, 50 mm/50 divisions
SL.5504	LED replacement unit, incident illumination
SL.5505	LED replacement unit, transmitted illumination

#### 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
- PB.5276 Microscope maintenance and servicing kit, 16 pcs: 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





50 **a euromex** 

## N

## SPECIFICATIONS

HIGHLIGHTS

Robust and sturdy WF 10x/21 mm eyepieces

5 Years warranty

٠

•

٠

•

Designed for professional use

Double 3 W LED illumination Also available with batteries Ergonomic carrying grip

Dual magnifications or zoom models

Available in ergonomic rack & pinion, pillar, universal and boom stands

#### EYEPIECES

Pair of WF 10x/21 mm 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 splitter (50:50)

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/5.2 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



#### 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 a black/white stage plate. The coarse adjustment is equipped with tension control

The ergonomically designed universal (single arm) and boom stand (dual arm) are ideal for looking at large samples or working under the microscope. They come without illumination. Suitable for e.g. ring illuminators LE.1973 and LE.1974. The stands are alloy metal casted with hardened coating



Built-in ring light with 30 intensity adjustable LED's

#### applications, education, and are greatly appreciated by biologists, entomologists, geologists, mechanical and electronic engineers

and other professionals such as jewelers and dental technicians

330 (h) x 220 (w) x 266 mm (d) | 4.4 kg

299 (h) x 220 (w) x 266 mm (d) | 4.7 kg

SB.1903

SB.1903-P

SB.1302/SB.1402

SB.1302-P/SB.1402-P

**StereoBlue** 

StereoBlue microscopes are

developed especially for laboratory

BlueLine

SB.1903



STEREO MICROSCOPE

#### 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)

#### CAMERAS

Euromex offers a wide range of cameras, see chapter 3 (Digital Solutions)

#### PACKAGE CONTENT

Models with illumination are supplied with power cord, dust cover, eyecups, a spare fuse, Ø 60 mm transparent and black/ white stage plates and user manual. All packed in a polystyrene box



Check out the product video on YouTube and learn more about the BlueLine. YouTube channel: Euromex Optics Group B.V.



SB.1302

MODELS	Bino	Trino	1x/3x objective	2x/4x objective	0.7 - 4.5x zoom	Rack & pinion stand 3 W LED	Pillar stand 3 W LED	Universal stand	Boom stand on heavy base plate	30 LED right light	Weight (kg)
SB.1302	•		•			•					3.3
SB.1302-P	•		•				•				4.2
SB.1402	•			•		•					3.3
SB.1402-P	•			•			•				4.2
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

## MAGNIFICATIONS

#### WORKING DISTANCES AND FIELD OF VIEW SPECIFICATIONS

#### EYEPIECES - 10X/21 MM

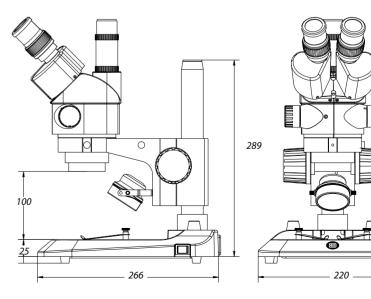
Magnification additional lens	Working distance	Minimum magnification	Maximum magnification	Maximum field of view	Minimum field of view
0.5	179	3.5	22.5	59.9	9.3
0.75	105	5.3	33.8	40.0	6.2
Standard	100	7.0	45.0	30.0	4.6
1.5	53	10.5	67.5	19.9	3.1

#### EYEPIECES - 15X/15 MM

Magnification additional lens	Working distance	Minimum magnification	Maximum magnification	Maximum field of view	Minimum field of view
0.5	179	5.3	33.8	42.9	6.7
0.75	105	7.9	50.6	28.6	4.4
Standard	100	10.5	67.5	21.4	3.3
1.5	53	15.8	101.3	14.3	2.2

#### EYEPIECES - 20X/10 MM

Magnification additional lens	Working distance	Minimum magnification	Maximum magnification	Maximum field of view	Minimum field of view
0.5	179	7.0	45.0	28.6	4.4
0.75	105	10.5	67.5	19.0	3.0
Standard	100	14.0	90.0	14.3	2.2
1.5	53	21.0	135.0	9.5	1.5





## ACCESSORIES AND SPARE PARTS

#### **EYEPIECES**

Pair of HWF 10x/21 mm eyepieces SB.6210 **SB.6210-C** WF 10X/21 mm evepiece with crosshairs **SB.6210-M** WF 10X/21 mm evepiece 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. Only suitable for SB.1902-P, SB.1903-P, SB.1902-U, SB.1903-U, SB.1902-B and SB.1903-B
- 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

#### **MISCELLANEOUS**

- SB.8950 Protection glass window for StereoBlue 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.9040 Darkfield attachment for StereoBlue, only for -S and -P models SB.9520 Polarization kit for StereoBlue: 360° rotatable
- circular stage with built-in polarization filter (SB.9524) and analyzer in mount to be screwed under the head (SB.9525)
- SB.9524 360° rotatable circular stage with built-in polarization filter for StereoBlue
- SB.9525 360° rotatable analyzer in mount to be screwed under the head of StereoBlue
- SB.9570 Pair of object clamps for stage

56 **Beuromex** 

- 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 for StereoBlue. incident illumination
- SB.9983 3 W LED replacement unit for StereoBlue, 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 adapters 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





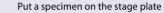
## how to set up a stereo microscope

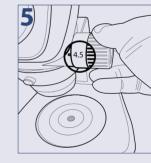
#### ουιςκ INSTALLATION

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





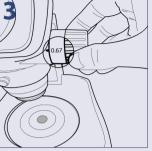




to the highest magnification



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



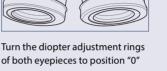
Rotate the focus adjustment knob to bring the specimen into focus

#### 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

**Beuromex** 57







Rotate the focus adjustment knob to bring the specimen into focus



Turn the zoom adjustment knob to the lowest magnification

Turn the zoom adjustment knob



# nexiuszoom

## the new standard in stereo microscopy



The NexiusZoom stereo microscopes of Euromex enable examining your specimen with high-performance precision and they generate two- and three -dimensional images, which make them highly suitable for your demanding microscopy applications

These top level zoom microscopes are perfect for analyzing all kinds of material surfaces or to observe and prepare biological samples

## NexiusZoom 🌌

## FEATURED

## NexiusZoom (EVO)

STEREO MICROSCOPES

The NexiusZoom and NexiusZoom EVO stereo microscopes of Euromex allow you to examine your specimen with high precision, generating three-dimensional images, suitable for your highest demanding applications. These top level zoom microscopes are perfect for analyzing all kinds of material surfaces or observing and preparing biological samples

6

These stereo microscopes can be supplied with a large choice of stands, with or without LED illumination. Ideal for a wide variety of educational and life science applications. With additional lenses and objectives magnifications from 3.3 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** 299 (h) x 256 (w) x 311 mm (d) | 5.2 kg For weight of other products see table

## 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
- 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 with  $\pm$  5 diopter adjustments. Interpupillary distance adjustable between 54 mm and 75 mm. The 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. WD 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 NexiusZoom in chapter 6



#### 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

#### STAND

• 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 gooseneck 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, -B and BC stands)
- Articulated arm stand for table mounting or with heavy base plate, both without head holder, without illumination (-A and -AP stands)

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 55 mm 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 in accessories)

#### ILLUMINATION

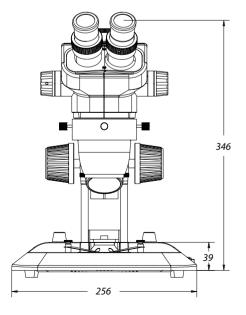
3 W transmitted and incident LED illuminators with internal power supply 100-240 V. Both illuminators can be used simultaneously and the light intensities can be adjusted separately. The universal single or double arm stands and the articulated stands can be equipped with the ring illuminators LE.1974 and LE.1973 with respectively 72 or 144 power LEDs controlled in segments, ideal for creating or lifting shades

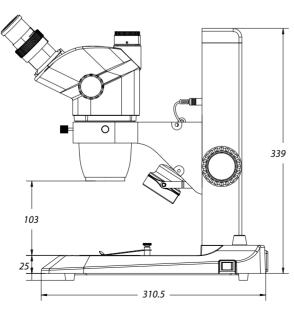
#### PACKAGE CONTENT

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



Check out the product video on YouTube and learn more about this microscope. YouTube channel: Euromex Optics Group B.V.





#### NEXIUSZOOM 0.67-4.5 (WF 10X/22MM)

MODELS	Bino	Trino	Pillar stand	Rack & pinion stand	Universal stand	Boom stand on heavy base plate	Boom stand on table clamp	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-M	•		•								•	4.9
NZ.1902-S	•			•								4.9
NZ.1902-U	•				•							15.6
NZ.1902-B	•					•						22.1
NZ.1902-BC	•						•					10.5
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-BC		•					•					10.6
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	Boom stand on table clamp	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-BC	•						•					10.5
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-BC		•					•					10.6
NZ.1703-A		•						•				8.7
NZ.1703-AP		•							•			20.8

The NexiusZoom EVO models are now equipped with click-stops



## ACCESSORIES AND SPARE PARTS

#### HEADS & EYEPIECES

NZ.5302	NZ binocular head 0.67-4.5x*					
NZ.5303	NZ trinocular head 0.67-4.5x*					
NZ.5312	NZ EVO binocular head 0.65-5.5x*					
NZ.5313	NZ EVO trinocular head 0.65-5.5x*					
* without head holder						

NZ.6010	Pair of HWF 10x/22 mm eyepieces
NZ.6010-C	HWF 10x/22 mm eyepiece only with crosshairs
NZ.6010-CM	HWF 10x/22 mm eyepiece only with 10/100
	micrometer and crosshairs
NZ.6015	Pair of HWF 15x/16 mm eyepieces for NZ
NZ.6020	Pair of HWF 20x/12 mm eyepieces for NZ
NZ.6099	Pair of eyecups for NZ
NZ.6110	HWF 10x/22 mm eyepiece with crosshairs and
	10/100 micrometer for NZ
NZ.6210	Pair of HWF 10x/23 mm eyepieces for NZ EVO
NZ.6210-C	HWF 10x/22 mm eyepiece only with crosshairs
	for NZ EVO
NZ.6210-CM	HWF 10x/22 mm eyepiece only with 10/100
	micrometer and crosshairs for NZ EVO

#### AUXILIARY LENSES

NZ.8903	Additional 0.3x lens for NZ. WD 287 mm.
	Only suitable for A, AP, U, B, BC and M stands
NZ.8904	Additional 0.4x lens for NZ. WD 220 mm.
	Only suitable for P, PG, A, AP, U, B, BC nd M stands
NZ.8905	Additional 0.5x lens for NZ. WD 183 mm.
	Only suitable for P, PG, A, AP, U, B, BC nd M stands
NZ.8907	Additional 0.75x lens for NZ. WD 105 mm. Only
	suitable for P, PG, A, AP, U, B, BC nd M stands
NZ.8915	Additional 1.5x lens for NZ. WD 53 mm
NZ.8920	Additional 2.0 lens for NZ. WD 34 mm

#### STANDS

NZ.9000	Ergo pillar stand without illumination	
NZ.9005	Ergo pillar stand with adjustable transmitted	
	3 W LED illumination	
NZ.9010	Ergo rack & pinion stand with incident and	
	transmitted 3 W LED illuminators	
NZ.9015	Ergo pillar stand with incident and transmitted	
	3 W LED illuminators	
NZ.9018	Ergonomic pillar stand with two 3 W gooseneck	
	type incident LED illuminations on each side and	
	a 3 W transmitted LED illumination	
NZ.9020	Universal one-arm stand without NZ head holder	
NZ.9025	Black universal stand with table clamp without	
	NZ head holder	
NZ.9027	Black universal stand with heavy baseplate	
	without NZ head holder	
NZ.9030	Universal double-arm boom stand without NZ	
	head holder	
NZ.9032	Universal two-arm stand with table clamp	
	without NZ head holder	
NZ.9042	Stand with rotating mirror and indirect	
	transmitted LED illumination	
NZ = Nexius	Zoom	

NZ.9000



NZ.9005

#### **HEAD HOLDERS**

- NZ.9081
   Head 76 mm holder for NZ and black universal stand NZ.9025/NZ.9027

   NZ.9090
   NZ head holder for NZ.9020/9030/9032
- pillar stands NZ.9095 NZ head holder with fine and coarse adjustment for NZ.9020/9030/9032 pillar stands.

Only available with new microscopes

0

• NZ.9095

#### 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
- .E.5212 Euromex illumination station with two independently controlled goosenecks, a ring light and a transmitted stage illuminator (see photos on opposite page)
- LE.5260 Interchangeable high power (standard) white 6,500K 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 halogen. 110 V and 230 V models available
- LE.5211Euromex cold light illuminator, 150 W halogen.110 V and 230 V models available
- LE.5211-LED Euromex cold light illuminator LED, 30 W high power LED
- LE.5214Dual arm light conductor, gooseneck self-<br/>sustaining, 50 cm long, Ø 4 mm coreLE.5215Triple arm light conductor, gooseneck self-
- sustaining, 50 cm long, Ø 4 mm coreLE.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.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.1960 Circular positioning stage
- AE.5168-NZ Heating stage for NZ microscope stage



NZ.9505

#### CAMERA ACCESSORIES

- NZ.9833 C-mount adapter with 0.33x lens for 1/3 inch cameras
   NZ.9850 C-mount adapter with 0.5x lens for 1/2 inch cameras
   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

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.9570 Pair 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

#### DISPOSABLES

- PB.5245 Lens cleaning paper, 100 sheets per pack
- PB.5274
   Iso propyl 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, 16 pcs: 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





## **AP** series

The microscopes of the AP series are designed specifically for educational purposes. The models are compact, robust and come with dual magnification revolvers and interchangeable objectives mounted in sliders



AP-1 250 (h) x120 (w) x 170 mm (d) | 1.4 kg AP-2 / AP-4 220 (h) x 120 (w) x 170 mm (d) | 2.0 kg AP-5 286 (h) x 120 (w) x 190 mm (d) | 2.5 kg AP-7 / AP-7 LED / AP-8 / AP-8 LED 286 (h) x120 (w) x 190 mm (d) | 2.4 kg

## HIGHLIGHTS

- Small and robust
- Binocular heads with vertical or 45° inclined tubes
- Secured WF 10x/20 mm eyepieces
- Magnifications from 10 to 120x
- Pillar stands with and without illumination
- LED illumination for cordless use



## SPECIFICATIONS

#### EYEPIECES

Pair of secured wide field eyepieces WF 10x/20 mm. Supplied with eyecups

#### HEAD

Binocular head with vertical or 45° inclined tubes. One tube is supplied with diopter adjustment. Interpupillary distance from 55 to 75 mm

#### OBJECTIVES

- The AP-1, AP-2, AP-4 and AP-5 models come with a 2x magnification objective in slider. This objective is interchangeable with optional 1x, 3x, 4x and 6x magnification objectives
- The AP-7 and AP-7 LED models are supplied with revolving 1x/3x objectives for total magnification of 10 and 30x with fields of view from 20 to 6.7 mm
- The AP-8 and AP-8 LED models are supplied with revolving 2x/4x objectives for total magnification of 20 and 40x with fields of view from 10 to 5 mm

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

#### STAND

Pillar stand with a 40 mm coarse adjustment. Supplied with a black/white object plate and two object clamps

#### ILLUMINATION

- The AP-1 is supplied without illumination
- The AP-2 and AP-4 are supplied with an incident 10 W 12 V tungsten illumination and internal power supply
- The AP-5, AP-7 and AP-8 models are supplied with a transmitted and incident 10W 12V tungsten illumination and internal power supply
- The AP-7 LED and AP-8 LED models are supplied with a transmitted and incident LED illumination with three rechargeable batteries for a maximum of 35 hours cordless operation. With external mains adapter/charger

#### CAMERAS

## PACKAGE CONTENT

Euromex offers a wide range of industrial and education grade cameras, see chapter 3 (Digital Solutions). The camera replaces one of the eyepieces

Supplied with power cord/adapter, dust cover, a spare fuse and user manual. 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	
Suitable for AP-1, AP-2, AP-4 and AP-5:		

#### **OBJECTIVES**

50.831	Paired achromatic objectives 1x. WD 57 mm
50.832	Paired achromatic objectives 2x. WD 80 mm
50.833	Paired achromatic objectives 3x. WD 61 mm
50.834	Paired achromatic objectives 4x. WD 57 mm
50.836	Paired achromatic objectives 6x. WD 40 mm

#### MISCELLANEOUS

50.871	Black/white stage plate Ø 94 mm for
	AP-7, AP-7 LED, AP-8 and AP-8 LED models
50.873	Glass stage plate Ø 94 mm for AP-7, AP-7 LED,
	AP-8 and AP-8 LED models
50.874	Black/white stage plate Ø 60 mm
	(AP-1, 2, 3 and 4)
50.875	Adjustable GEM object clamp for AP series
50.876	Darkfield attachment Ø 94 mm for AP-7, AP-7
	LED, AP-8 and AP-8 LED models
50.884	Spare bulb 10 W 12 V for AP series
50.975	External 100-240 V mains adapter
AE.1112	Micrometer slide, 50 mm/50 divisions

EDUCATION STEREO MICROSCOPES

#### DISPOSABLES

PB.5245	Lens cleaning paper, 100 sheets per pack
PB.5274	lsopropyl alcohol 99% (200 ml)
PB.5275	Cleaning kit: lens cleaning fluid, lint free lens
	tissue, brush, air blower and cotton swabs



• Transparent stage plate for transmitted illumination



MODELS Vertical 1x/3x 2x/4x Incident Transn objective objective tungstei LED LED tungst illuminatio illuminatio 50.890 AP-1 . 50.900 AP-2 • • . 50.915 AP-4 • . 50.920 AP-5 . . 50.925 AP-7 • . • • 50.926 AP-7 LED . • 50.930 AP-8 • . . . 50.931 AP-8 LED • • •



# education

## digital solutions

m

DIGITAL

EDUCATION L SOLUTIONS

Û



DIGITAL MICROSCOPES • PAGE 74 MACROZOOMS • PAGE 86 USB CAMERAS • PAGE 88 HD CAMERAS • PAGE 92 WiFi CAMERA • PAGE 96 COOLED CAMERA • PAGE 97 TABLET CAMERAS • PAGE 98 SOFTWARE • PAGE 102 ADAPTERS • PAGE 104

Get ready to discover the digital world of microscopy with the newest Euromex digital educational products. The broad Euromex product range of digital cameras and digital microscopes with built-in camera offer the best matching solutions for your specific application needs

Euromex digital educational products incorporate all the latest available technology in this field, such as WiFi, HDMI, CMOS, HD-CMOS and sCMOS

72 **Beuromex** 



EDUCATION DIGITAL SOLUTIONS

## ω

• The LCD-head

#### LCD SCREEN

All the MicroBlue LCD microscopes are equipped with 7" IPS LCD screen

- Screen resolution 1920 x 1080 @ 30 fp
- · Save images and videos directly to micro SD card
- Image resolution upto 1844 x 1080 in .JPEG format
- Video resolution 1280 x 720 .AVI format
- Basic measurement function (line) with calibration. Calibration slide available as option
- Warranty for the screen is 2 years

MODELS	Digital LCD	Digital mono	Maximum objectives	4/10/S40x objectives	S60x objective	S100x objective	Mechanical X-Y stage	Abbe condenser	LED	NeoLED™	Batteries
MB.1001-LCD	•		3	•					•		•
MB.1051-LCD	•		4	•			•	•	•		•
MB.1055		•	4	•			•	•		•	•
MB.1655		•	4	•	•		•	•		•	•
MB.1155		•	4	•		•	•	•		•	•

## HIGHLIGHTS

- Economic microscopes for education •
- Built-in digital 5.0 MP USB-2.0 camera ٠
- 7 inch LCD screen
- Ergonomic carrying grip
- 5 Years warranty (2 years on camera)

## SPECIFICATIONS

#### CAMERA

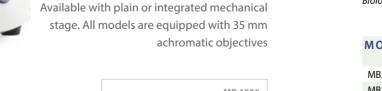
- All the MicroBlue build-in digital camera microscopes are equipped with a 5.0 MP 1/2.8" CMOS USB-2.0 camera
- A maximum resolution of 2560 x 1920, 24 bits color depth, up to 30 frames per second
- Supplied with ImageFocus Plus software, USB-2.0 cable, an 8 MB SD memory card and a micrometer 1mm/100 slide
- · Warranty for the camera is two years

#### 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 7, 8 and 10, both 32 and 64 bits configurations. A Mac OS version is also available
- · Free updates can be downloaded on our website

For full microscope specifications and accessories see chapter 1:

**Biological microscopes** 



BlueLine

**MicroBlue** 

built-in 5.0 MP

USB-2.0 camera

The modern MicroBlue is an entry-level

There are two versions of the digital MicroBlue;

microscope, especially appreciated

one with a built-in digital camera,

the other with an LCD screen

when budgets are limited

digital microscopes with

MB.1055 320 (h) x 151 (w) x 202 mm (d) | 2.4 kg MB.1051-LCD 378 (h) x 179 (w) x 202 mm (d) | 2.48 kg



MB.1055

MicroBlue

DIGITAL MICROSCOPES

Warranty

## HIGHLIGHTS

- Economic microscopes for education
- Monocular and binocular models
- Built-in digital 5.0 MP USB-2.0 camera
- LED illumination
- Built-in 100-240 V power supply
- Ergonomic carrying grip
- 5 Years warranty (2 years on camera)



## SPECIFICATIONS

#### CAMERA

All the EcoBlue digital microscopes are provided 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 the ImageFocus Plus software, USB-2.0 cable and a micrometer 1mm/100 slide • EcoBlue supplied with achromatic objectives

#### SOFTWARE

The capture and analysis ImageFocus Plus software allows you 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 7, 8 and 10, both 32 and 64 bits configurations. A Mac OS version is also available. Free updates can be downloaded from our website

For full microscope specifications and accessories see chapter 1: Biological microscopes

MODELS	Monocular	Binocular	4x, 10x, S40x objectives	S60x objective	S100x objective	Mechanical X-Y stage	LED
EC.1005	•		•				•
EC.1105	•		•		•		•
EC.1605	•		•	•			•
EC.1007		•	•				•
EC.1107		•	•		•		•
EC.1607		•	•	•			•
EC.1055	•		•			•	•
EC.1155	•		•		•	•	•
EC.1655	•		•	•		•	•
EC.1057		•	•			•	•
EC.1157		•	•		•	•	•
EC.1657		•	•	•		•	•

## EcoBlue

## digital microscopes with built-in 5.0 MP USB-2.0 camera

Monocular microscopes are equipped with WF 10x/18mm eyepieces, a quadruple nosepiece, achromatic objectives, a 123 x 119 mm stage with two clamps, Abbe condenser and a 1 W LED illumination with integrated 100-240 V power supply. The EcoBlue microscopes can optionally be equipped with a 50 x 30 mm X-Y mechanical stage





**EC.1105 / EC.1605** 55 (h) x 270 (w) x 220 mm (d) | 2.6 kg

BlueLine

# BIGITAL

## **BioBlue**

## digital microscopes with built-in 5.0 MP USB-2.0 camera

The WF 10x/18 eyepieces and the semi plan achromatic corrected 45 mm objectives of the BioBlue models generate a crisp high-resolution image

The 120 x 120 mm plain stage and 130 x 130 mm stage with double layered 70 x 28 mm mechanical X-Y stage enable precise and stable positioning of the specimen. With Abbe condenser, NeoLED™ or LED illumination and with built-in rechargeable batteries for corded and cordless use

**BB.4225 / BB.4245 / BB.4255** 340 (h) × 155 (w) × 230 mm (d) | 3.4 kg **BB.4267 / BB.4269** 360 (h) × 155 (w) × 230 mm (d) | 4.1 kg

## HIGHLIGHTS

BlueLine

NeoLED

BB.4225

- 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<sup>™</sup> illumination
- Cordless operation
- 10 Years warranty (2 years on camera)

## SPECIFICATIONS

#### 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 ImageFocus Plus software, USB-2.0 cable and a micrometer 1mm/100 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 7, 8 and 10, both 32 and 64 bits configurations. A Mac OS version is also available. Free updates 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

e BR.4220-LCD

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 upto 1844 x 1080 in JPG and video resolution 1280 x 720 AVI format For full microscope specifications and accessories see chapter 1: Biological microscopes



The digital heads

MODELS	Mono	Bino	LCD	4/10/40x SMP objectives	Semi plan S60x objective	Semi plan S100x objective	Integrated X-Y stage	1 W LED	NeoLED	Weight (kg)
BB.4205	•			•				•		2.9
BB.4225	•			•			•	•		3.4
BB.4245	•			•	•		•	•		3.4
BB.4255	•			•		•	•	•		3.4
BB.4267		•		•		•	•		•	4.1
BB.4269		•		•			•		•	4.1
BB.4200-LCD			•	•				•		2.9
BB.4220-LCD			•	•			•	•		3.4

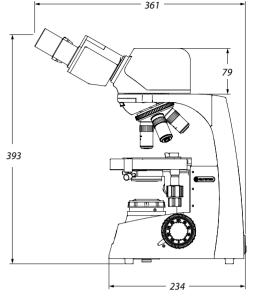


8

ω

## 

- 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)



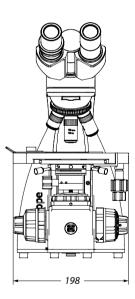
## SPECIFICATIONS

#### 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 ImageFocus Alpha software, USB-2.0 cable and a micrometer 1mm/100 calibration slide

#### SOFTWARE

The capture and analysis ImageFocus Alpha 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 7, 8 and 10, both 32 and 64 bits configurations. A Mac OS version is also available. Free updates can be downloaded from our website. For full microscope specifications and accessories see chapter 1: 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 AA rechargeable batteries

## **bScope**<sup>®</sup>

Warranty

Marranty

## digital microscopes with built-in 5.0 MP USB-2.0 camera

The versatile and evolutive bScope® microscopes are well-equipped and intensively used in universities, small to mid-sized laboratories and for veterinary applications

The bScope<sup>®</sup> comes with WF 10x/20 mm eyepieces and is available in binocular models. Complete with E-plan IOS and Plan IOS infinity corrected objectives for brightfield observations

.21. NeoLED

• BS.1157-PLi

oscope

**DUCATION** 

**BS.1157-PLi** 409 (h) x 195 (w) x 235 (d) | 7.1 kg



ω

BlueLine

## HIGHLIGHTS

- Economical binocular models
- Dual and triple magnification objectives
- Cordless operation
- Built-in digital 5.0 MP USB-2.0 camera
- LED illuminators

1x 2x 4x

- Ergonomic carrying grip
- 5 Years warranty (2 years on camera)

EDUCATION DIGITAL SOLUTIONS

## ω

Triple magnification

## SPECIFICATIONS

#### CAMERA

All the EduBlue digital microscopes are provided 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 the ImageFocus Plus software, USB-2.0 cable and a micrometer 1mm/100 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 7, 8 and 10, both 32 and 64 bits configurations. A Mac OS version is also available. Free updates can be downloaded from our website

For full microscope specifications and accessories see chapter 2: Stereo microscopes

MODELS	Binocular	1x/ 3x objectives	2x/ 4x objectives	1x/ 2x/ 3x objectives	1x/ 2x/ 4x objectives	Rack & pinion stand
ED.1305-S	•	•				•
ED.1405-S	•		•			•
ED.1505-S	•			•		
ED.1805-S	•				•	

## **EduBlue**

## digital microscopes with built-in 5.0 MP USB-2.0 camera

The EduBlue stereo microscopes are designed specifically for educational purposes and are equipped with WF 10x/20 mm eyepieces, a revolving nosepiece with double or triple magnification objectives

With transmitted and incident 1 W LED illuminations, 60 mm working distance. With three internal rechargeable batteries for corded and cordless operation. Supplied with an external power supply





**euromex** 83

EduBlue

• ED.1505-S



## EduBlue LCD digital microscope with built-in 2.0 MP camera

The EduBlue LCD microscope is built around one 1 to 4 times zoom objective and enables observation of all kinds of objects directly on a 9" LCD screen. These kinds of microscopes are well-suited for education

The EduBlue LCD is equipped with a built-in 2 MP high definition CMOS camera with 1920 x 1080 pixels

425/475 (h) x 180 (w) x 230 mm (d) | 2.3 kg

ED.3000



Adjustable screen

## SPECIFICATIONS

#### CENTRAL ZOOM OBJECTIVE

The EduBlue LCD ED.3000 features a single optical zoom objective with a 1 to 4x zoom magnification. Zoom adjustments engravings on 1, 1.5, 2, 3 and 5x. The working distance is 91 mm. A digital zoom up to 10x is available within the software

#### STAND

The central Zoom Objective with attached screen and LED ring light is mounted on a rack and pinion system that sits on a 30 x 180 mm metal stand

#### ILLUMINATION

Two types of illumination are available;

- An integrated 21 LED incident ring light illumination
   (5.500 K) with five intensity positions
- A 7 LED transmitted illumination (5.785 K) with two intensity positions, integrated in the base

## HIGHLIGHTS

- MonoZoom stand-alone digital microscope
- Zoom 1x up to 4x
- 91 mm working distance
- Built-in 21 LED incident ring light, five intensity positions
- Built-in 7 LED transmitted, two intensity positions
  - Built-in 2 MP HD camera
  - HD 9-inch screen

•

•

- Removable 8 GB SD card
  - Metal stand
- 3 years warranty (2 years on camera)

## ω

EDUCATION DIGITAL SOLUTIONS

#### **BUILT-IN CAMERA**

Built-in HD 2 MP CMOS high speed camera with attached 9" screen. There is one USB port for a max. 16 GB SD storage card for captured images. The operator can take and save images to the SD card by pressing on a capture button at the left side of the screen. Images are saved in the .jpg format and videos are saved in .avi format

#### **BUILT-IN SOFTWARE**

The built-in on screen software is driven by the supplied computer mouse and features functions such as Capture image, Freeze image, Automatic white balance, Automatic exposition, File manager, Grids. Also camera settings such as Exposure time, Gain, Saturation, Contrast, Sharpness and HDR

#### PACKAGE CONTENT

Supplied with 16 GB SD card, black/white object plate, a glass transparent object plate and two external 12V / 3.3 A power supplies

 Incident
 Image: Constraint of the second s

EduBlue

ED.3000

## MZ series

- Stand-alone
- Zoom semi-apochromatic objective
- Zoom up to 0.7x to 4.5x
- C-mount with 0.4x objective
- 105 mm working distance
- Without illumination
- Metal stand
- 3 years warranty





## SPECIFICATIONS

#### **CENTRAL ZOOM OBJECTIVE**

The MacroZoom MZ.4500 features a single optical zoom objective with a 0.7x to 4.5x zoom magnification. Zoom adjustments engravings on 1, 1.5, 2, 3 and 4.5x. The working distance is 105 mm

#### STAND

The MacroZoom is mounted on a 230 mm height pillar (Ø 32 mm) and holder (Ø 39/50 mm) that sits on a metal 320 x 260 x 16/25 mm metal stand

#### **CAMERA SYSTEMS**

Any of our digital C-mount cameras (in this chapter) can be used together with the MacroZoom

**PACKAGING** Supplied with dust cover and packed in styrofoam

EDUCATION DIGITAL SOLUTIONS

 $\mathbf{M}$ 

MACROZOOMS

## MZ.4500 macrozoom

The high-end MacroZoom is built around one 0.7 to 4.5 times optical zoom objective and must be used in combination with C-mount types of cameras with a HD screens or computer screens. With a working distance of 105 mm it is highly suitable for repairs, tooling engineers and visual inspections

> A standard heavy metal base makes the whole system very stable for adding all kinds of illumination systems and camera systems

> > MZ.4500

• MZ.4500



86 **a euromex** 

EDUCATION DIGITAL SOLUTIONS

ω



**CAMERA FOR** 

EDUCATION

100

EDUCATION

ω

**CAMERAS FOR** 

EDUCATION

## CMEX entry level USB-2.0 cameras with CMOS sensor

The CMEX-1 is equipped with a CMOS sensor. Supplied with ImageFocus 4 software

**USB CAMERAS** 

Besides capturing images and videos, the software allows measurements on still and live images and annotations on captured images. Compatible with Windows 7, 8 and 10, both 32 and 64 bits configurations. A Mac OS Light version is also available for capturing images only



CMEX-1

MODEL	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-1	1.3	1/2.5" CMOS	2.2 x 2.2	1272 x 952	15	10 bits	24 bits	55	72	1.3	DC.1300c
				632 x 472	30						

The CMEX-1 (DC.1300c) camera is supplied with a 0.45x C-mount objective

## CMEX USB-2.0 cameras with fast CMOS sensor

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 and supplied with ImageFocus Plus software

**USB CAMERAS** 

Besides capturing images and videos, the software allows measurements on still and live images and annotations on captured images. Compatible with Windows 7, 8 and 10, both 32 and 64 bits configurations. A Mac OS version is also available. Free updates can be downloaded from our website

MODELS	Number of pixels (MP)	Sensor	Pixels size (µm)	Resolutions	Max. frames (p/sec)	•	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-2.0 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

**USB CAMERAS** 

## **Advanced CMEX USB-3.0 cameras** with CMOS sensor

The CMEX-3 Pro, -5 Pro, -10 Pro and -18 Pro cameras are equipped with a 3.1, 5.1, 10 or 18 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 and are supplied with ImageFocus Alpha software

Besides capturing images and videos, the software allows measurements on still and live images and annotations on captured images. Compatible with Windows 7, 8 and 10, 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 updates can be downloaded from our website

ADVANCED

**CAMERAS FOR** 

EDUCATION

**FEATURED** 

CMEX-18 Pro

MODELS	Sensor	Sensor size (inch)	Pixels size (µm)	Exposure time	Resolutions	Max. frames (p/sec)	Signal/ Noise (db)	Dynamic (db)	Sensitivity V/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	DC.3000-PRO
CMEX-5 Pro	CMOS	1/2.5″	2.2 x 2.2	1 ms ~ 2000 ms	2560 x 1922 1270 x 960 640 x 480	14 39 100	39	68.	1.76	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	DC. 10000-PRO
CMEX-18 Pro	CMOS	1/2.3″	1.25 x 1.25	1 ms ~ 2000 ms	4912 x 3684 2456 x 1842 1228 x 922	6 18 32	42	65	1.3	DC. 18000-PRO

The CMEX-3 Pro, -5 Pro, -10 Pro and -18 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, -10 Pro and -18 Pro are supplied with a 0.5x C-mount objective. The CMEX-3 Pro is supplied with a 0.37x C-mount objective

## with scientific grade sCMOS sensor

USB CAMERAS

The sCMEX-3, sCMEX-6 and sCMEX-20 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 supplied with ImageFocus Alpha software

Besides capturing images and videos, the software allows measurements on still and live images and annotations on captured images. Compatible with Windows 7, 8 and 10, 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 updates can

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	8.1 30 30	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 µm/division) calibration slide. The DC.3000s and DC.6000s are supplied with a 0.5x objective, the DC.20000s and DC.32000s are supplied with a 1.0x adapter

## sCMEX USB-3.0 cameras

be downloaded from our website

ω

SCIENTIFIC

**GRADE CAMERAS** 

FOR EDUCATION

**FEATURED** 

sCMEX

100

## HD AND HD-AUTOFOCUS CAMERAS

## 

## High definition HD1080p and 720p CMOS color cameras with HDMI and USB-2.0/3.0 interfaces

The Euromex UHD-4K, HD-Ultra, HD-Lite, HD-Mini and HD-Autofocus 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

The cameras are equipped with high sensitive sensors for low and intense light conditions and are also suitable for coaxial illumination and machine vision applications. The real-time images generated with this camera provide excellent color rendering with frame speeds up to 60 fps

#### 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" HD screen, TV-HD or HD-beamer with a HDMI input and the system is ready to go. The UHD-4K camera can also be connected to a GbE ethernet and DHCP enabled network router and has also a WiFi interface. The mouse driven built-in software of the camera enables captured images and recorded videos\* to be saved on the integrated SD memory card

HIGH DEFINITION

CAMERAS

FOR EDUCATION

With the UHD-4K, HD-Ultra, HD-Lite and HD-Autofocus cameras, the captured images or recorded video's\* can be very easily reviewed or replayed on the HD screen. The UHD-4K and HD-Ultra even offer a full range of measuring functions on live and captured images. The HD-Autofocus offers measuring functions on live image only \* video function only available with UHD-4K (.mp4), HD-Ultra (.avi) and HD-Lite (.avi)cameras

#### 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

## HIGHLIGHTS

- UHD 2160p, HD 1080p or 720p high definition color 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
- C-mount interface
- HDMI, USB-2.0/3.0, GbE and WiFi interface(s)
- Autofocus model available
- Compatible with ImageFocus software

on Windows 7, 8 and 10, both 32 and 64 bits. Euromex supplies free software updates on www.euromex.com. 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. Specific functions for fluorescence - such

#### PACKAGE CONTENT



EDUCATION **3** 

• VC.3036-HDS on stereo microscope

as histogram adjustments and combinsing captured fluorescence images - are also available with the ImageFocus software

MODELS	UHD-4K	HD-Ultra	HD-Lite	HD-Mini	HD-Mini +HDS	HD-Autofocus	HD-Pro
Software	ImageFocus Alpha	ImageFocus Plus	ImageFocus Plus				ImageFocus Alpha
Software languages	15 <sup>(2)</sup>	13 <sup>(1)</sup>	13 (1)			15 <sup>(2)</sup>	15 <sup>(2)</sup>
Compatible	Win 7, 8 and 10 Mac OS	Win 7, 8 and 10 Mac OS	Win 7, 8 and 10 Mac OS				Win 7, 8 and 10
C-mount with objective	0.5x	0.37x	0.45x	0.5x	0.5x	0.5x	0.37x
Interface(s)	•	•	•	Only HDMI	Only HDMI	•	•
30 and 30.5 mm adapters	•	•	•	•	•	•	•
SD card	16 GB	16 GB	8 GB	4 GB	4 GB	16 GB	16 GB
Cailbration slide 10mm/100	•	•	•	•	•	•	•
External power supply	12V 1A	12V 2A	12V 2A	12V 1A	12V 1A	12V 1A	12V 1A
Dimensions (w x d x h)	78 x 65 x 98	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
Weight (grams)	555	440	280	50	130	500	500
Product number	VC.3040	VC.3036	VC.3031	VC.3023		VC.3034	VC.3038
With 11.6" HD screen	VC.3040-HDS	VC.3036-HDS	VC.3031-HDS		VC.3024-HDS	VC.3034-HDS	VC.3038-HDS

<sup>(1)</sup> English, Chinese Simplified, Traditional Chinese, Thai, German, Italian, French, Korean, Japanese, Russian, Polish and Portugese <sup>(2)</sup> English, Catalan, Indonesian, Polish, Chinese Simplified, Traditional Chinese, Thai, German, Italian, French, Korean, Japanese, Russian, Turkish, Spanish

#### ALL HD-CAMERAS

	MODELS	UHD-4K	HD-Ultra	HD-Lite	HD-Mini	HD-Mini + HDS	HD-Autofocus	HD-Pro HDMI
	Sensor	Sony 4K	Sony	Aptina	Sony	Sony	Sony	Sony
SNC	Format	1/1.8", HDTV 2160p	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
EDUCATION DIGITAL SOLUTIONS	Pixels	3840 x 2160 <sup>(1)</sup> HDMI 60 fps USB 30 fps	3264 x 1836 <sup>(1)</sup> 1920 x 1080 <sup>(2)</sup> HDMI 60 fps USB 30 fps	2592 x 1944 <sup>(1)</sup> 1920 x 1080 <sup>(2)</sup> HDMI 15 fps, USB 15fps	1920 x 1080 <sup>(1)</sup> 1920 x 1080 <sup>(2)</sup> HDMI 60 fps	1920 x 1080 <sup>(1)</sup> 1920 x 1080 <sup>(2)</sup> HDMI 60 fps	1920 x 1080 <sup>(1)</sup> HDMI 60 fps	1920 x 1080 <sup>(1)</sup> 1920 x 1080 <sup>(2)</sup> HDMI 60 fps, USB 26 fps
EDU	Pixel size	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)	2.9 x 2.9 (μm)
m	Video recording	2160p	1080p	1080p	1080p	1080p	1080p	1080p
	Video output	HDMI, USB-3.0 <sup>(5)</sup> , GbE ethernet, WiFi <sup>(5)</sup>	HDMI, USB-2.0	HDMI, USB-2.0	HDMI	HDMI	HDMI, USB-C <sup>(3)</sup>	HDMI, USB-2.0
	Scan mode	Progressive	Progressive	Progressive	Progressive	Progressive	Progressive	Progressive
	Exposure	Automatic/ manual	Automatic/ manual	Automatic/ manual	Automatic/ manual	Automatic/ manual	Automatic/ manual	Automatic/ manual
	White balance	Automatic/ manual/ROI	Automatic/ manual	Automatic/ manual	Automatic/ manual	Automatic/ manual	Automatic/ manual	Automatic/ manual/ROI
	Sensitivity lux-sec	505 mV	510 mV	1 V	1300 mV	1300 mV	1.12 V (1/30s)	1.3 V (1/30s)
	Color rendering (bits)	36	36	24	12	12	24	24
	Signal/Noise (db)	44	55	40.5	42	42	50	38
	Dynamic (db)		69	60	69	69	65	66
	Storage	16 GB SD card (max. 32 GB)	16 GB SD card (max. 32 GB)	8 GB SD card (max. 32 GB)	4 GB SD card (max.8 GB)	4 GB SD card (max.8 GB)	16 GB SD card (max. 32 GB)	16 GB SD card (max. 32 GB)
	Camera buttons	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
	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/1A	100-240 Vac to 12Vdc/1A	100-240 Vac to 12Vdc/2A	100-240 Vac to 12Vdc/2A
	Relative humidity	10-60 %	45-85 %	45-85 %	30-80 %	30-80 %	45-85%	30~80%
	Temperature Operation Storage	-10 – 50° C -20 to 60° C	0 – 60° C -20 to 70° C	0 – 60° C -20 to 70° C	-10 – 50° C -20 to 60° C	-10 – 50° C -20 to 60° C	–10-40° C -20°C to 60° C	-10~ 50° C -20°C to 60° C
	Product number	VC.3040 VC.3040-HDS <sup>(4)</sup>	VC.3036 VC.3036-HDS <sup>(4)</sup>	VC.3031 VC.3031-HDS <sup>(4)</sup>	VC.3023	 VC.3024-HDS <sup>(4)</sup>	VC.3034 VC.3034-HDS <sup>(4)</sup>	VC.3038 VC.3038-HDS <sup>(4)</sup>

<sup>(1)</sup> capture mode <sup>(2)</sup> live view <sup>(3)</sup> USB-2.0 compatible <sup>(4)</sup> model with attached high definition screen <sup>(5)</sup> available from November 2019

#### **BUILT-IN SOFTWARE FEATURES (HDMI MODE)**

MODELS Image capturing (JPEG) Video recording Browse saved images Browse saved video's SD card storage Mouse driven Auto exposure Exposure time Gain RGB & white balance Gamma Sharpness	UHD-4K 3840 x 2160 3840 x 2160 MP4 • 16 GB • 0.04 ~ 1000 ms • •	HD-Ultra 3261 x 1840 1920 x 1080 AVI • 16 GB • • 0.001s ~ 10 s	HD-Lite 2592 x 1944 1920 x 1080 AVI • • 8 GB • • 0.001s ~ 10 s	HD-Mini 1920 x 1080 1920 x 1080 MP4 • • 4 GB • • 0.01 ~ 1000 ms	HD-Mini + HDS 1920 x 1080 1920 x 1080 MP4 • • 4 GB • • • •	HD-Autofocus 1920 x 1080 1920 x 1080 ASF • • 16 GB • • • •	HD-Pro HDMI 1920 x 1080 ASF • 16 GB • •
Video recording Browse saved images Browse saved video's SD card storage Mouse driven Auto exposure Exposure time Gain RGB & white balance Gamma	3840 x 2160 MP4 • 16 GB • 0.04 ~ 1000 ms •	1920 x 1080 AVI • 16 GB • • 0.001s ~ 10 s	1920 x 1080 AVI • 8 GB • • 0.001s ~ 10 s	1920 x 1080 MP4 • 4 GB • • 0.01 ~	1920 x 1080 MP4 • 4 GB •	1920 x 1080 ASF no 16 GB •	1920 x 1080 ASF • 16 GB •
Browse saved images Browse saved video's SD card storage Mouse driven Auto exposure Exposure time Gain RGB & white balance Gamma	MP4 • 16 GB • 0.04 ~ 1000 ms •	AVI • 16 GB • 0.001s ~ 10 s	AVI • 8 GB • • 0.001s ~ 10 s	MP4 • 4 GB • • 0.01 ~	MP4 • 4 GB •	ASF • no 16 GB •	ASF • 16 GB •
Browse saved video's SD card storage Mouse driven Auto exposure Exposure time Gain RGB & white balance Gamma	• 16 GB • • 0.04 ~ 1000 ms •	• 16 GB • • 0.001s ~ 10 s •	• 8 GB • 0.001s ~ 10 s	• 4 GB • • 0.01 ~	• 4 GB •	no 16 GB •	• 16 GB •
SD card storage Mouse driven Auto exposure Exposure time Gain RGB & white balance Gamma	16 GB • 0.04 ~ 1000 ms •	16 GB • 0.001s ~ 10 s •	8 GB • • 0.001s ~ 10 s	4 GB • • 0.01 ~	4 GB •	16 GB •	•
Mouse driven Auto exposure Exposure time Gain RGB & white balance Gamma	• 0.04~ 1000 ms •	• 0.001s~ 10 s	• • 0.001s ~ 10 s	• • • 0.01 ~	•	•	•
Auto exposure Exposure time Gain RGB & white balance Gamma	• 0.04 ~ 1000 ms •	• 0.001s ~ 10 s •	• 0.001s ~ 10 s	• 0.01 ~	•	•	•
Exposure time Gain RGB & white balance Gamma	0.04 ~ 1000 ms •	0.001s ~ 10 s	0.001s ~ 10 s	0.01 ~	•		•
Gain RGB & white balance Gamma	1000 ms •	10 s	10 s		0.01~	0.06	0.026
RGB & white balance Gamma	•			1000 1115	1000 ms	0.06 ~ 918 ms	0.036 ~ 8000 ms
Gamma			•	•	•	•	•
		•	•	•	•	•	•
Sharpness	•	•	•	•	•	•	•
	•	•	•	•	•	•	•
Noise reduction	3D algorithm	3D algorithm	3D algorithm	3D algorithm	3D algorithm	Standard	Standard
Saturation & contrast	•	•	•	•	•	•	•
Horiz. & vert. flip	•	•	•	•	•	•	•
Grids	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	live image only	captured & live images
Calibration table	•	•				•	•
Line & free curve	•	•				•	•
Polygon & rectangle	•	•				•	•
Angle	•	•				•	•
Circle 3 points	•	•				•	•
Circle radius	•	•				•	•
Export function	CSV	CSV, Txt				CSV	CSV
Languages	10 (4)	9 <sup>(3)</sup>	9 <sup>(3)</sup>	10 (4)	10 (4)	10 (4)	10 (4)
Product number	VC.3040 VC.3040-HDS	VC.3036 VC.3036-HDS	VC.3031 VC.3031-HDS	VC.3023	 VC.3024-HDS	VC.3034 VC.3034-HDS	VC.3038 VC.3038-HDS

#### HDMI mode

<sup>(3)</sup> English, Chinese Simplified, Traditional Chinese, German, Italian, French, Korean, Japanese, Spanish <sup>(4)</sup> English, Chinese Simplified, Traditional Chinese, Thai, German, Italian, French, Korean, Japanese, Russian  $\mathbf{M}$ 

## WFi Free software magefocus USB-2.0 Windows Apple Apple

## **CMEX-5 WiFi-2 5.0 MP** digital WiFi camera with 1/2.5 inch CMOS sensor

The CMEX-5 WiFi-2 camera is equipped with a 5.0 MP CMOS sensor with 12 bits grayscale conversion and a 24 bits color rendering

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

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

WIFI

CAMERAS

**FEATURED** 

Android app for this camera is supplied on cd-rom and 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

The camera is powered by the included USB charger or a computers USB port. Standard 0.37x C-mount objective is included

MODEL	Sensor	Sensor size (inches)	Pixels size (µm)	Resolutions	Grayscale conversion		•	•	•	Product number
CMEX-5 WiFi-2	CMOS	1/2.5″	2.2 x 2.2	1280 x 720	12 bits	24 bits	60	66.5	0.53	DC.5000-WiFi-2

The CMEX-5 WiFi-2 camera is supplied in a box with USB-2.0 cable, 30.0 and 30.5 mm adapters to use with stereo microscopes, and a 0.37x C-mount objective

DC.20000i and DC.6000i

## **Cooled color camera** with CCD or CMOS sensor

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

COOLED CAMERAS

All cameras are supplied with ImageFocus Alpha software. The 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 7, 8 and 10, both 32 and 64 bits configurations. A Mac OS version is also supplied (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	·

EDUCATION

COOLED

CAMERAS FOR

S

## Û

EDUCATION

## HIGHLIGHTS

- 8" Tablet with microscope camera
- 1280 x 800 pixels touch screen
- Full Windows 10 Home •
  - ImageFocus Plus software for PC
- ImageFocus Alpha for WiFi enabled PC and Android devices
- Tablet can be fully detached from camera

Processor

• EduPad, detachable, take it anywhere

**SPECIFICATIONS** 

## EduPad tablet with microscope camera

TABLET CAMERAS

The EduPad tablet with a 8 inch display can be supplied with a 2.1 MP, 5.1 MP, 12.0 MP or a WiFi camera. Together with the ImageFocus Plus or ImageFocus Alpha software it offers a state-of-theart solution for modern microscopy for education





EduPad

EduPad

#### SOFTWARE

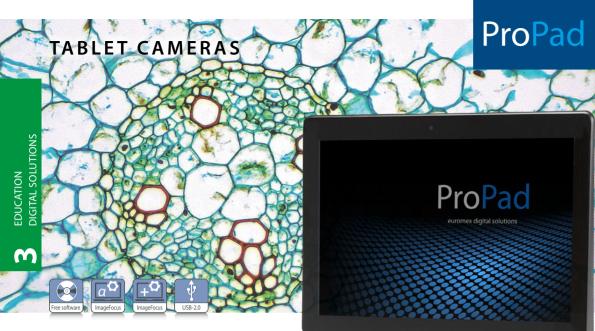
EduPad USB camera is supplied with ImageFocus Plus software and EduPad with WiFi camera is supplied with ImageFocus Alpha. The WiFi camera can also be operated through IOS and Android apps

#### Quad Core 1.33 GHz with HD graphics processor screen 1920 x 1200 touchscreen, 16:10, LED backlight Screen 2 GB DDR3 RAM Memory Storage 32 GB flash SDD, Micro SD/SDHC cards up to 64 GB Webcam Front and rear cameras USB-C, Wi-Fi 802.11 b/g/n and Bluetooth 4.0 Connectivity Audio Stereo with 3.5 mm audio jack and built-in microphone and speaker Battery Lithium Housing approx. 21 x 12 x 9 cm Weight approx. 0.4 kg Windows 10 Home System

Specifications can be changed by Euromex microscopen by without notice

MODELS	Camera (MP)	Sensor size	Resolution	Pixels size (µm)	ADC	Color rendering	Dynamic (db)	Sensitivity V/lux-sec	Interface	Product number
EduPad-2	2.1	1/2.9″	1920 x 1080	2.8 x 2.8	12 bits	24 bits		0.51	2.0	EP.2000f
EduPad-5	5.1	1/2.8″	2592 x 1920	2.0 x 2.0	12 bits	24 bits	72 db	2.0	¥ 2.0	EP.5000f
EduPad-12	12.0	1/2.3″	4072 x 3176	1.33 x 1.33	8 bits	24 bits	60 db		<b>1</b> 2.0	EP.12000f
EduPad-WiFi	5	1/2.5″	1280 x 720	2.2 x 2.2	12 bits	24 bits	61 db	1.0	<b>ii é</b> 🤶 🗰	EP.5000-WiFi

All EduPad models are supplied with a C-mount objective that fits the standard 23.2 mm trinocular tubes. The EP.2000f, EP.5000f and EP.12000f are supplied with ImageFocus Plus software. The EP.5000-WiFi is supplied with ImageFocus Alpha. Only suitable for straight photo tubes



## **ProPad tablet** with microscope camera and keyboard-docking station

The ProPad Full HD (1280x800) display reveals bright colors and crisp images. The ProPad consists of a high quality microscope camera system and a fully detachable tablet running the latest ImageFocus version. You can take it anywhere

Together with the included attachable keyboard, you can use it as a microscope imaging system, tablet and laptop. The keyboard connects to the tablet using magnets to provide a latchless docking solution that lets you smoothly remove and re-attach the keyboard to the ProPad

#### SOFTWARE

ProPad-2, ProPad-5 and ProPad-12 are supplied with ImageFocus Plus. ProPad-WiFi is supplied with ImageFocus Alpha. The WiFi camera can also be operated through IOS and Android apps



## HIGHLIGHTS

- 10.1" Tablet with microscope camera
- 1280 x 800 pixels HD touch screen
- Windows 10 Home
- ImageFocus Plus software for PC
- ImageFocus Alpha for WiFi enabled PC and Android devices
- Tablet can be fully detached from camera
- Including keyboard
- The snap-on keyboard uses a magnetic docking system

ProPad and keyboard-docking station

## SPECIFICATIONS

Processor	Quad Core 1.92 GHz with HD graphics processor
Screen	10.1 inch, 1280 x 800 (WGXA) touchscreen, 16:10, LED backlight
Memory	2 GB DDR RAM, 2 MB cache
Storage	32 GB Flash HDD, micro SD/SDHC up to 64 GB
Webcam	2 MP, 1600 x 1200 pixels front and rear cameras
Connectivity	Micro USB 2.0, WiFi 802.11 b/g/n and Bluetooth 4.0
Audio	Stereo with 3.5 mm audio jack, internal microphone and speaker
Battery	Lithium
Housing	246.9 x 174.2 x 9.4 mm (tablet), 246.9 x 174.2 x 8.2 mm (keyboard)
Weight	588 grams (tablet), 551 grams (keyboard)
System	Windows 10 Home
Supplied with	Keyboard-docking station

*Specifications can be changed by Euromex microscopen by without prior notice* 

MODELS	Camera (MP)	Sensor size	Resolution	Pixels size (µm)	ADC	Color rendering	Dynamic (db)	Sensitivity V/lux-sec	Interface	Product number
ProPad-2	2.1	1/2.9″	1920 x 1080	2.8 x 2.8	12 bits	24 bits		0.51	<b>1</b> 2.0	PP.2000f
ProPad-5	5.1	1/2.8″	2592 x 1920	2.0 x 2.0	12 bits	24 bits	72 db	2.0	<b>1</b> 2.0	PP.5000f
ProPad-12	12.0	1/2.3″	4072 x 3176	1.33 x 1.33	8 bits	24 bits	60 db		2.0	PP.5000f
ProPad-WiFi	5.0	1/2.5″	1280 x 720	2.2 x 2.2	12 bits	24 bits	61 db	1.0	<b># *</b> ? #	PP.5000-WiFi

All ProPad models are supplied with a C-mount objective that fits the standard 23.2 mm trinocular tubes. The PP.1300c is supplied with ImageFocus 4, the PP.2000f, PP.5000f and PP.12000f are supplied with ImageFocus Plus software. The PP.5000-WiFi is supplied with ImageFocus Alpha. Only suitable for straight photo tubes

## SOFTWARF

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

m

DC.1300C					
IMAGE FOCUS PLUS					
DC.2000f	VC.3036				
DC.5000f	VC.3031				
DC.12000f					

**IMAGE FOCUS 4** 

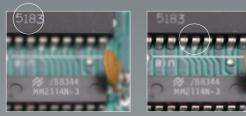
IMAGE FOCUS ALPHA				
DC.3000-Pro	DC.5000-WiFi			
DC.5000-Pro	DC.3000s			
DC.10000-Pro	DC.6000s			
DC.18000-Pro	DC.20000s			
VC.3038				

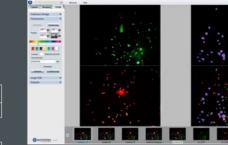
#### IMAGE STITCHING

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)





#### ImageFocus 4 40 software

FREE UPDATES AVAILABLE ON

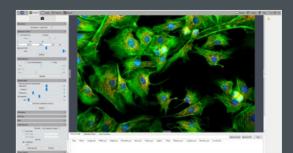
EUROMEX.COM

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 7, 8 and 10, 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 and Russian





#### ImageFocus Plus software ImageFocus

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 7, 8 and 10, both 32 and 64 bits configuration. A Mac OS version is also available
- 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
- 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 7, 8 and 10, 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





AE.5130

**ADAPTERS** 

NZ.9850

## adapter guide

#### microscope and camera

Most Euromex cameras are supplied with a photo port c-mount adapterto connected 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 \* Except for the Oxion, Oxion Inverso and Delphi-X Inverso series. These microscopes need an additional adapter. See next page

Should you want to connect one of our cameras to another microscope brand, see adapter references below:

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) AE.9812-L (1.2x)
Olympus <sup>(2)</sup>	AE.9835-O (0.35x)	AE.9850-O (0.50x)	AE.9863-O (0.63x) AE.9880-O (0.80x)	AE.9810-O (1x) AE.9812-O (1.2x)
Zeiss (3)	AE.9835-Z (0.35x)	AE.9850-Z (0.50x)	AE.9865-Z (0.65x)	AE.9810-Z (1x) AE.9812-Z (1.2x)
Zeiss ZA (4)		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 <sup>(5)</sup>	AE.9835-N (0.35x)	AE.9855-N (0.55x)	AE.9870-N (0.70x) AE.9880-N (0.80x)	AE.9810-N (1x) AE.9812-N (1.2x)

<sup>(1)</sup>Leica DM, 35 mm to 25.4 mm C-mount, stainless steel

<sup>(2)</sup> Olympus CX, CX2, BX, BX2, IX, MX, GX, SZX, STM, 42 mm to 25.4 mm C-mount, anodized aluminum <sup>(3)</sup> Zeiss PrimoStar, PrimoStar Vert, 30 mm to 25.4 mm C-mount, anodized aluminum

- <sup>(4)</sup> 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

<sup>(5)</sup> Nikon E100, E200, 50i, 55i, 80i, 90i, Ni series, Ti Series, SMZ800, SMZ1000, SMZ15000, 38 mm to 25.4 mm C-mount, stainless steel



FOR ALL MICROSCOPE

CAMERAS

Nount Adapter 0.5X

#### 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

#### **DIGITAL SLR ADAPTERS**

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, together with a brand-specific T-2 adapter

AE.5130 Universal SLR camera adapter for 23.2 mm tube with built-in 2x magnification lens. Needs T2 adapter

T2 adapter for Nikon D digital SLR cameras AE.5025 T2 adapter for Canon EOS digital SLR cameras AE.5040 Other T2 adapters on request

IGITAL

EDUCATION





#### PHOTO PORT ADAPTERS

Suitable for Euromex microscopes with a photo port such as Oxion, NexiusZoom, StereoBlue, Delphi-X Observer and Delphi-X Inverso

- AE.5120-2Standard 23.2 mm diameter tube for Oxion photo port DI.9840 C-mount with high resolution 0.40x objective for 1/3 inch C-mount camera **DI.9850** C-mount with high resolution 0.50x objective for 1/2
- inch C-mount camera
- DI.9810 C-mount with 1x 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
- DX.9810 C-mount with 1 magnification for C-mount camera

- NZ.9833 C-mount adapter with 0.33x objective for NexiusZoom microscopes and 1/3" cameras
- NZ.9850 C-mount adapter with 0.5x objective for NexiusZoom microscopes and 1/2" cameras
- **OX.9810** C-mount adapter with 1x magnification for 1" cameras
- **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
- SB.9850 C-mount adapter with 0.5x objective for StereoBlue microscopes and 1/2" cameras





for microscopy





ILLUMINATION SOLUTIONS • PAGE 354 DISSECTION INSTRUMENTS • PAGE 362 DISSECTION KITS • PAGE 364 MICROSCOPE PREPARED SLIDES • PAGE 366 DISPOSABLES • PAGE 378 STAINS • PAGE 379

ACCESSOIRES FOR MICROSCO

## illumination solutions

for stereo microscopy

## illumination solutions

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 or LE.5240 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

Model	LE.5211	LE.5211-LED
Weight	3,9 kg	2.8 kg
Dimensions	(h) 150 x (w) 150 x (d) 230 mm	150 (h) x 150 (w) x 230 mm (d)
Operating voltage	100 and 240 V AC / 12 V DC (50/60 Hz)	100-240 V AC / 12 V DC (50/60 Hz)
Color temperature	3,000 K	6,500 K
Luminous flux	21,000 lux max <sup>1)</sup>	30,000 lux max.*
Power	150 W halogen	30 W PowerLED (equivalent to 120 W halogen)

\* with LE.5214 dual arm light conductor



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 or LE.5240 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
*	liebet een duurten

\* 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

Nodel	LE.5209
Weight	2.0 kg
Dimensions	80 (h) x 110 (w) x 165 mm (d)
Operating voltage	110 V AC and 230 V AC versions (50/60 Hz)
Color temperature	3,000 K
Power	20 W halogen

#### 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

[			
	Ш.	1	1
		9	
	0 eurona	-	-

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

R

C

F N

**Ring illumination** 

**Color temperature** Illuminance

working distance:

External diameter

Mounting

Model

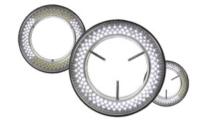
Power supply

LED ring light source with high illuminance and segment illumination for all kinds of demanding applications

COMPACT 72 LEDS • LE.1974

Compact 20,000 lux LED

ring light source



Aodel	LE.1973
external diameter	100 mm
ower supply	100-240 V AC / 12 V DC (50/60 Hz) / 4.5 Watt
Nounting	for stereo head with diameter from 25 to 61 mm
vorking distance:	from 55 to 200 mm
lluminance	23,000 lux at 100 mm distance
Color temperature	6,500 K
	4 segment illumination
Ring illumination	144 LEDs with adjustable intensity and

72 LEDs with adjustable intensity and

for stereo head with diameter from 25 to 61 mm

100-240 V AC / 12 V DC (50/60 Hz) / 4 Watt

4 segment illumination

from 50 to 180 mm

21,000 lux at 100 mm distance

6,500 K

100 mm

LE.1974

#### **PROFESSIONAL HIGH POWERLED RING LIGHT SOURCES** 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.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

3 W gooseneck guide LED

White LED, 6,500 K

365 nm, monochrome

395 nm, monochrome

420 nm, monochrome

MODELS

LE.5212-365 LE.5212-395

LE.5212-420

LE.5212

4 W white LED

ring light



# PROFESSIONAL HIGH POWER LED RING LIGHT SOURCES • LE.1980/ LE.1981

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

FOR
P P
< ũ
_
_

#### 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



<b>Ring illumination</b>	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

## 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,
	gooseneck self-sustaining,
	50 cm long, 4 mm diameter
LE.5214	Dual arm fiber light conductor,
	gooseneck self-sustaining,
	50 cm long, 4 mm diameter
LE.5215	Triple arm fiber light conductor,
	gooseneck self-sustaining,
	50 cm long, 4 mm diameter
LE.5219	Dual arm fiber light conductor,
	gooseneck self-sustaining,
	70 cm long, 4 mm diameter
LE.5239	Slit ring-shaped fiber light conductor
	60 cm long, 8 mm diameter
LE 5240	Slit ring shaped fiber light conductor

 LE.5241
 Flexible fiber light conductor,

 curved 90°, 60 cm long, 4 mm diameter

 LE.5216
 Single arm flexible fiber light conductor,

## 100 cm long, 4 mm diameter

- LE.5235 Dual arm flexible fiber light conductor, 100 cm long, 4 mm diameter
- LE.5235-3 Dual arm flexible fiber light conductor, 300 cm long, 4 mm diameter
- LE.5217 Triple arm flexible fiber light conductor, 100 cm long, 4 mm diameter
- LE.5218 Single arm flexible fiber light conductor, 100 cm long, 8 mm diameter
- LE.5220 Single arm flexible fiber light conductor, 200 cm long, 8 mm diameter
- LE.5222 Focusing head for focusing lens LE.5224, LE.5228 or filters LE.5229 and LE.5231 (for fiber light conductors)
- LE.5224 Focusing lens. Requires LE.5222 or LE.5228 for mounting on LE.5213, LE.5214 and LE.5215
- LE.5228 Focusing head with iris diaphragm (for fiber light conductors)
- **LE.5229** Polarization filter
- LE.5231 Conversion KB12/80B filter

#### HALOGEN BULBS AND FUSES

SL.5208	Halogen 20 W 12 V bulb with reflector
	(3,000 hrs nominal), GU4 fits LE.5209
SL.5219	Halogen 100 W 12 V bulb with reflector
	(50 hrs nominal), MR16 fits LE.5210
SL.5230	Halogen 100 W 12 V 'Long Life' bulb
	(1,000 hrs nominal), MR16 fits LE.5210
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
AE.5227	Spare fuses 1A/250 V, 10 pieces

#### 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 Diffusing filter, for WD from 40 to 300 mm LE.1984 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%

#### 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%

#### 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)
- 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

## **PREPARATION ACCESSORIES**

Euromex offers the right tools for sample preparing. Before using a microscope good samples are essential to get the most accurate results



PB.5050	Dissecting needle, straight tip	PB.5050 PB.5054
	with plastic handle	PB
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,	
FD.3000	5	
	length 13 mm	
PB.5062	Dressing forceps with blunt tips,	
	length 13 cm	
PB.5064	Dressing forceps with blunt tips,	
	length 20 cm	
PB.5067	Dissecting forceps with sharp tips,	
	length 13 cm	
PB.5069	Dissecting forceps with finely	
	curved sharp tips, length 13 cm	
PB.5077	Cover glass forceps, length 11 cm	
	5 17 5	
		• PB.50
		PB 5077 PB.5069
		PB.5077 PB.5069



#### 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
- Scalpel blades with blunt tip, 5 pieces per set PB.5096
- 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 With fixed handle, length 17 cm

PB.5103

#### 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



## PREPARATION ACCESSORIES



## 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



364

### **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 Hard bone grinding, human, section
SH.1045 Skeletal muscle, dog, l.s and c.s
SH.1072 Skin section through hair follicle, human
SH.1078 Stratified flat epithelium, dog, section
SH.1150 Blood smear, human, Giemsa stained

#### ZOOLOGY

SZ.1510 Amoeba proteus, w.m
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

#### 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 sporangiaSB.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.1001Loose connective tissue, rabbitSH.1005Hyaline cartilage rabbit, sectionSH.1160Lymph node, rabbit, sectionSH.1230Small intestine, dog, c.sSH.1250Liver, pig, sectionSH.1430Cerebrum section, dog

#### ZOOLOGY

- SZ.1520 Paramecium, w.m
  SZ.1625 Schistosoma Japonicum, fluke eggs, bilharziose
  SZ.1630 Taenia, tapeworm cattle, mature proglottid, w.m
  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.2095Monocot/dicot stem, zea mays/pumpkin, c.sSB.2105Hibiscus, young stem, c.sSB.2110Cucurbita, pumpkin, stem, l.sSB.2115Sambucus, elderberry or Morus Alba, mulberry,<br/>stem with cork cambium + lenticels, c.sSB.2160Lilium, lily leaf, c.sSB.2225Zea mays, corn, corn seed with embryo, l.sSB.2240Triticum aestivum, wheat, kernel, l.sSB.2305Cyrtomium, holly fern, c.s of rhizomSB.2310Cyrtomium, holly fern, section
- SB.2386 Oscillatoria, blue-green algae

USED ABBREVIATIONS					
c.s	cross section				
l.s	longitudinal section				
w.m	whole mount				

## 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.1040 Smooth muscle, teased preparation, rabbit, l.s+c.s
SH.1110 Lung with injected blood vessels, rabbit, c.s

SH.1130 Artery and vein, rabbit, c.sSH.1410 Nerve, rabbit, c.s and l.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

- SB.2011 Zea mays, corn root tip with hairs, l.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.2075** Tilia, lime tree, one year stem, c.s
- SB.2091 Hydrilla stem, c.s
- **SB.2100** Pelargonium hortorum, geranium, stem c.s
- SB.2337 Mnium, antheridial branch, l.s
- SB.2339 Mnium, archegonial branch, l.s
- SB.2373 Coprinus, ink caps mushroom, section of pleusSB.2380 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,	ZOO	logy	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

c.s

l.s

w.m

- SZ.1610 Planaria, flat worm, injected intestinal tube, w.m
- SZ.1636 Ascaris megalocephala, horse roundworm, mitosis eggs
- **SZ.1760** Ctenocephalus canis, dog flea, w.m
- **SZ.1770** Tetranychus, red spider mite, w.m
- **SZ.1930** Bird, wing and down feather, section
- SZ.1940 Chicken, embryo 48 hours, sagittal section

USED ABBREVIATIONS

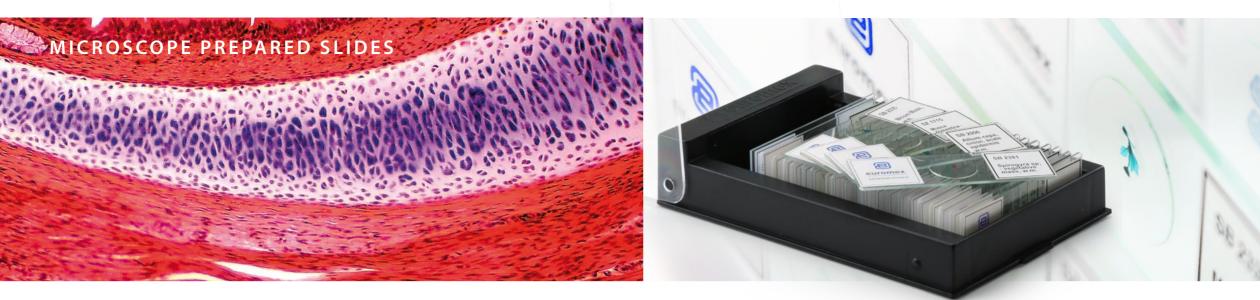
cross section

longitudinal section

whole mount

#### BOTANY

- SB.2090 Hydrilla verticillata, hydrilla stem tip, l.s
- **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



## 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, humanSH.1078 Stratified flat epithelium, dog, section

#### RESPIRATORY, BLOOD CIRCULATION AND ENDOCRINE SYSTEM

SH.1120 Trachea rabbit, c.sSH.1130 Artery and vein, rabbit, c.sSH.1150 Blood smear, human, Giemsa stained

#### **DIGESTIVE SYSTEM**

SH.1210Stomach wall, dog, sectionSH.1230Small intestine, dog, c.sSH.1250Liver, 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

#### RESPIRATORY, BLOOD CIRCULATION AND ENDOCRINE SYSTEM

SH.1080 Ciliated epithelium, trachea, rabbit

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

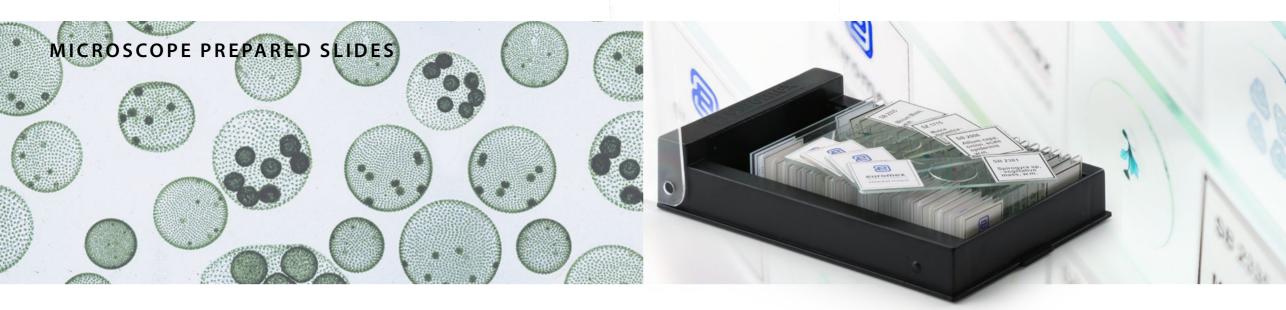
#### URINARY AND GENITAL SYSTEM

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.mSH.1420 Cerebellum section, dogSH.1480 Eyeball section, rabbit, sagittal section

370 **a euromex** 



## 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, l.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

#### ΒΟΤΑΝΥ

 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

## 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 ZO

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.2009Allium cepa, onion, mitosis root tip, l.sSB.2055Zea mays, corn, stem, csSB.2075Tilia, lime tree, one year stem, c.sSB.2100Pelargonium hortorum, geranium, stem c.sSB.2112Cucurbita, pumpkin, stem, c.sSB.2130Helianthus, sunflower, leaf, c.sSB.2135Nerium oleander, leaf with sunken stomata, c.sSB.2101Lilium, lily, anther with mature pollen, c.sSB.2225Zea 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

USED ABBREVIATIONS					
c.s	cross section				
l.s	longitudinal section				
w.m	whole mount				

372 **a euromex** 

### MICROSCOPE PREPARED SLIDES



## 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

- 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 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, l.s and c.s
SH.1045	Skeletal muscle, dog, l.s and c.s
SH.1049	Muscle types, striated, smooth,

#### SH.1060 Tendon, dog, l.s

heart muscle, 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.sSH.1230 Small intestine, dog, c.sSH.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

## 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

#### PROTOZOA

- SZ.1510Amoeba proteus, w.mSZ.1520Paramecium, w.mSZ.1522Paramecium in conjugation w.m
- SZ.1535 Euglena virides, a flagellate with eyespotSZ.1540 Trachelomonas, a free swimming type euglena

#### 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

HOW TO ORDER INDIVIDUAL EUROSLIDES

· Minimum purchase quantity is 10 pieces of the same slide

**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
- **SZ.1730** Pieres brassicae, cabbage-white butterfly, mouth, w.m
- SZ.1733 Pieres brassicae, cabbage-white butterfly, part of wing
- SZ.1738 Locusta, grasshopper, mouth parts, w.m
- **SZ.1760** Ctenocephalus canis, dog flea, w.m
- **SZ.1780** Insects- four types of legs, honey bee, house fly, house modquito, spider

#### AMPHIBIANS

• The individual slides always have to be ordered together with a storage box (e.g. PB.5181 for 25 slides)

- 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, c.s

#### ROOTS

SB.2006 Allium cepa, onion, scale epidermis, w.m
SB.2009 Allium cepa, onion, mitosis root tip, l.s
SB.2015 Ranunculus, buttercup, root, c.s

SB.2020 Helianthus, sunflower, old root, c.sSB.2025 Monocot/dicot plant roots, zea mays/helantius, c.sSB.2040 Solanum tuberosum, potato, starch grains

#### 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, c.s
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, stem with crok cambium and lenticels. c.s

#### 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

#### FLOWERS, FRUITS AND SEEDS

- SB.2205 Monocot/dicot flower, zea mays/ranunculus, c.s
- 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

#### 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.2360Saccaromyces sp., yeast, budding, w.mSB.2365Penicillium sp., w.mSB.2373Coprinus, ink caps mushroom, section of pileusSB.2374Aspergillus, brown mold, w.m

#### ALGAE

 SB.2377
 Diatoms, w.m

 SB.2380
 Spirogyra sp. in conjugation

 SB.2384
 Volvox sp., w.m

#### BACTERIA

SB.2420 3 types of bacteria, cocci, bacilli, spirelli



PB.5180

aree

## disposables

#### MICROSCOPE SLIDES AND COVER GLASSES

PB.5150	Microscope slides 76 x 26 mm, half white glass,
	cut edges. 50 pieces
PB.5155	Microscope slides 76 x 26 mm white 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

9 EUROMEX HOLLAND

50pcs

- 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

PB.5168 / PB.5170

## 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 = 1.482. (25 ml)
- **PB.5265** Entellan, guick drying Canada balsam. In bottle (25 ml)
- PB.5274 Isopropyl alcohol 99%. In bottle (200 ml)

PB.5276

- 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

PB.5280 / PB.5274

#### (DISSOLVED) STAINS

Supplied in 25 ml bottles

- **PB.5280** Azo carmine-G. Biological stains for animal tissues. Also suitable for bacteria pigmentation
- **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 Astra Blue
- PB.5297 Methylene Blue. Biological and bacteriological stain
- PB.5300 Analin Blue, to be used as third color for Azo pigmentation
- PB.5305 Fuchsine. For staining bacilli in tissue



PB.5150

378

## other products

## optical instruments



## 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 • PAGE 382 REFRACTOMETERS • PAGE 386 POLARIMETERS • PAGE 393 SPECTROSCOPES • PAGE 394 PATHOLOGY SCANNER • PAGE 396

## MAGNIFIERS & MEASURING MICROSCOPES



## handheld magnifiers and magnifiers with handles



PB.5020

#### 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.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.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.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-LED

PB.5034-LUV

SNIFIERS LINSTRUMENTS

## **MAGNIFIERS & MEASURING MICROSCOPES**

Measuring microscopes are built with a microscope objective for magnifications from 20 to 100x times



N 0 8

## magnifiers & measuring microscopes

PB.5039 /

PB.xxxx

PB.5043 /

PB.5040

#### 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 MAGNIFIERS WITH RETICLE

- PB.5044 Measuring magnifier 7x. Eyepiece Ø 18 mm. Field of view 24 mm. Measuring scale 10-0-10 mm divided into 0.1 mm and crosshairs
- PB.5045 Measuring magnifier 7x. Evepiece Ø 18 mm. Field of view 24 mm. Measuring scale 10-0-10 mm divided into 0.1 mm and crosshairs. With 5 interchangeable scales for angle, thickness and linear measurements
- 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

- 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
- PB.5047 Measuring magnifier 10x. Eyepiece Ø 25 mm. Field of view 30 mm. Measuring scale 15-0-15 mm with 0.1, 0.2 and 0.5 mm graduations. White LED-illumination

#### 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

OTHER OPTICAL PRODUCTS MAGNIFIERS | INSTRUMENTS

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 374 ABBE REFRACTOMETER • PAGE 377



Analog refractometer

Digital refractometer

## 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

Application	Art no	Range		Accuracy	Remarks	ATC	Handheld model	Table model	Analog	Digital
Concentrations of sugar in marmalades,	RF.6190	0-90 B	rix	0.2	3 scales: 0-42 / 42-71 / 71-90 Brix		·		•	
fruits, syrups,	RF.6510	0-10 B	rix	0.1		•	•		•	
wine and monitoring	RF.6520	0-20 B	rix	0.1		•	•		•	
of oil emulsions	RF.6532	0-32 B	rix	0.2			•		•	
	RF.6562	28-62 B	rix	0.2						
	RF.6580	0-80 B	rix	0.5						
	RF.6582	45-82 B	rix	0.5			•		•	
	RF.6592	58-92 B	rix	0.2						
	RF.6635	0 - 150 °C	De	1	Oechsle units	•	•		•	
		0-35 B	rix	0.2	Sugar concentration					
		0-27 °H	KMW	0.2	Babo units					
		0-22 %	6	0.2	% volume					
		0-37 C	NM	0.5						
	RD.6735	0 - 150 °C	De	1		•	•			•
		0-35 B	rix	0.1						
		0-25 °ł	KMW	0.1						
		0-22 %	ó	0.1						
	RD.6645	0-45 B	rix	0.1		•	•			•
		1.33 - 1.41 R		0.0003						
	RD.6666	0-80 B		0.5		•	•			•
		1.33 - 1.51 R		0.0005						
	RD.6667	58-92 B		0.2		•	•			•
		1.43 - 1.52 R		0.0003						
loney	RF.6642	13 - 25 %	6	0.1	Honey moisture	•	•		•	
	RF.6644	58-92 B		0.5		•	•		•	
		38 - 43 °E		0.5						
		12 - 27 %		1	Water					
Concentration of	RF.6627	0-25 %		0.2	% volume	•	•		•	
sugar/alcohol %		0-40 B		0.2						
		0-20 B		0.2						
Salinity and	RF.6610	0 - 100 %		1		•	•		•	
concentration of sugar		0-10 B		0.1						
	DECCOO	1.00 - 1.07 R		0.005						
	RF.6628	0-28 %	0	0.2		•	·		·	
	RD.6728	0-28 %	6	0.1	% NaCl		•			
		0-45 B	rix	0.1						
		1.33 - 1.41 R	.I.	0.0003	Only for sugar/salt					

Application	Art no	Range	Accuracy	Remarks	АТС	Handheld model	Table model	Analog	Digital
<b>Clinical applications</b>	RF.6612	0-12 g/dl	0.2	Proteins in serum	•	•		•	
Proteins		1.00 - 1.05 sg	0.002	Urine specific gravity					
		1.333 - 1.360 R.I	0.0003						
	RF.6614	2 - 14 g/dl	0.1	Proteins in serum	•	•		•	
		1.00 - 1.06 sg	0.001	Urine specific gravity (dog)					
		1.00 - 1.06 sg	0.001	Urine specific gravity (cat)					
	RD.6712	0-12 g/dl	0.1	Proteins in serum	•	•			•
		1.00 - 1.05 sg	0.001	Urine specific gravity					
		1.33 - 1.39 R.I.	0.0001						
	RD.6714	0-14 g/dl	0.1	Proteins in serum (dog)	•	•			•
		0-14 g/dl	0.1	Proteins in serum (cat)					
		1.00 - 1.06 sg	0.001	Urine specific gravity (dog)					
		1.00 - 1.06 sg	0.001	Urine specific gravity (cat)					
		1.33 - 1.39 R.I.	0.0001						
Battery Acid/Coolant	RF.6650	1.10 - 1.40 sg	0.01	Battery fluids	•	•		•	
		-50/0 °C	5	Ethylene glycol G13					
		-50/0 °C	5	Propylene glycol G11/12					
		-40/0 °C	10	windshield washer fluid					
	RD.6730	1.0 - 1.50 sg	0.01	Battery fluids	•	•			•
		-50/0 °C	0.5	Ethylene glycol G13					
		-50/0 °C	0.5	Propylene glycol G11/12					
		-40/0 °C	0.5	windshield washer fluid					
Identification of	RF.6381	1.30 - 1.81 R.I.	0.01				•	•	
precious stones									

## ACCESSORIES AND SPARE PARTS



**RF.5295** Test slide 78.8 Brix for calibration of RF.5190

 **RF.5384** 5 ml immersion nD 1.79 liquid for RF.5381

- LE.5209 20 W 12 V cold light source with single fiber light conductor (for Abbe refractometer 98.490)
- SL.5208 Spare 20 W 12 V halogen bulb
- **98.492** Thermometer 0-50° C (for Abbe refractometer 98.490)
- 98.496 Calibration slide nD 1.5163 (for Abbe refractometer 98.490)



98.490

## Abbe laboratory refractometer substance identification

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

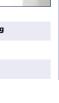
The Abbe refractometer can be connected to a water bath for measuring at a controlled temperature. During the use of this type of refractometer the use of a cold light source such as the LE.5209 is recommended. This Abbe table refractometer has

scales for measurement of sugar concentrations and refractive indices. Delivered with carrying case, digital thermometer, calibration plate and adjusting tool



#### Substance identification of sugar concentration

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		



390 **Beuromex** 

## 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



## polarimeter

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

Scales

± 180 °

± 180 °

MODEL

99.400-LED

99,400

Accuracy

 $\pm 0.1^{\circ}$  polar scale

 $\pm$  0.1 ° polar scale



Observation tubes

100 and 200 mm

ACCES	SORIES	FOR	99.400
99.410	Measuring	tube, '	100 mm long

or high-power LED with 589.3 nm filter

99.415 Measuring tube, 200 mm long

HIGHLIGHTS

observation tubes

Fast and accurate

99.430 Cover glass for measuring tube Ø 15 mm

• The polarimeters are delivered with 100 and 200 mm

• Equipped with a built-in 230 V 589.3 nm sodium lamp

- 99.431 Rubber ring (for 99.430)
- 99.197 Spare sodium 589.3 nm lamp

230 V sodium lamp

vith 589.3 nm filte

230 V High power LED

with 589.3 nm filter

## **SPECTROSCOPES**

Euromex handheld spectroscopes are used for optical experiments in natural sciences, industry and education



## 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



### 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



MODEL	Dimensions	Weight (grams)	Adjustable slit	Comparison prism	Angle dispersion	Linear dispersion	Wavelength scale	589 nm indication	With 5 glass cuvettes
SP.5155	h45x l105xd23	125	0-1 mm	•	C-F 7°	60 mm			•

## SP.5150

Handheld spectroscope with adjustable slit from 0 tot 1 mm

Weight

92

Adjustable

0-1 mm

- Direct vision type
- Adjustable eye lens
- Adjustable slit 0 - 1 mm
- Angle dispersion C - F 7°
- Linear dispersion 60 mm •

Dimensions

90 x18 mm Ø



a euromex

60 mm

### SP.5100

MODEL

SP.5150

#### Handheld spectroscope with fixed slit

- Direct vision type
- . Adjustable eye lens
- Fixed slit

With

- Angle dispersion C - F 6°
- Linear dispersion 40 mm

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			

C-F 7°

euromex 394

SP.5100



PS.1001

## PathoScan 10,000 DPI slide scanner

In pathology, histology and other medical fields, medical professionals look at tissue slides under a microscope. Often the tissues are stained to highlight certain structures enabling the specialists to perform their analysis. Euromex offers a digital solution for these specialists

The PathoScan digital microscope slide scanner produces quick, reliable and high-resolution digital images of cells. Once the slides are digitized there are numerous advantages against classic microscopy The users now have the ability to upload the scanned images onto a network for sharing and collaboration among colleagues, resolving in better and faster diagnostics. The scanned slides can also be used for education purposes. Digitized slides also can be analyzed using the specialists own dedicated software. The software can be used to automate the manual counting of structures, or for classifying the condition of tissue such as is used for grading tumors

#### PATHOVIEW SCANNING SOFTWARE

- Easy Preview and Scan Slide
- Quick setting exposure time
- Scan resolution from 1,000~10,000 dpi
- File format: TIF and JPEG
- Images can also be used with microscopy analysis software

## HIGHLIGHTS

- Supports standard microscopy slide 76 x 26 mm
- From basic histology research to Life science education
- Scans full slide
- Simple user interface
- Superior quality, 3-line CCD sensor
- 48-bit, 10,000 dpi, 5 μm resolution
- Industry-leading scanning speeds
- Holder for two slides included
- Polarization attachment available



PS.1001 / PS.3001

#### SPECIFICATION

Resolution	10,000 x 10,000 dpi
Scan mode	Color
Dynamic Range	3.8
Scanning Area	24.3 x 36.5 mm (H x W)
Scanning medium	76 x 26 mm slides
File Format	Saving in JPG, TIFF format
Light Source	Transmission white LED
Operating System	Windows 7/8/10 Intel-based Mac OS X 10.5/10.6 /10.7/10.8
Power supply	100- 240 AC Adapter, 12 V 1.5 A
Supplied with	Double slide holder, 100-240 V power supply, USB-2.0 cable,
Supplied with	PathoView scanning software and user manual
Model	PS.1001

#### MODELS

PS.1001	PathoScan 10,000 DPI slide scanner
PS.3001	Double slide holder

PS.1001

70 (h) x 150 (w) x 260 mm (d) | 1.0 kg

# 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	
<ul> <li>anatomopathology</li> </ul>	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	and CMEX cameras, CCD cameras, HD camera 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	

#### UNIVERSITY LABS FIELD OF APPLICATION

#### **RECOMMENDED MODELS**

• 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
<ul> <li>food and beverages</li> </ul>	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)
<ul> <li>histopathology</li> </ul>	Microscopic examination of tissue, diagnosis of diseases	iScope <sup>®</sup> , 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

#### UNIVERSITY LABS FIELD OF APPLICATION

#### **RECOMMENDED MODELS**

• mining	Extraction of minerals for identification, quantitative and qualitative evaluation of minerals	iScope <sup>®</sup> (materials and polarization), Oxion (materials and polarization), Oxion Inverso (materials), bScope <sup>®</sup> (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
<ul> <li>phytopathology</li> </ul>	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** 

• agronomy & forestry	Selective breeding of plants, fruit and production of food from plants, wood from trees, fuel. Plant physiology and genetics research	BioBlue.Lab, b5cope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series, MacroZoom	
<ul> <li>anatomopathology</li> </ul>	Diagnosis of diseases of organs or tissues. Cytopathology and forensic pathology	Delphi-X Observer, iScope®, bScope®, BioBlue.Lab, Oxion, StereoBlue, NexiusZoom, DZ series	
<ul> <li>bacteriology</li> </ul>	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 camera 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	

#### LIFE SCIENCE FIELD OF APPLICATION LABORATORIES

**RECOMMENDED MODELS** 

<ul> <li>food and beverages</li> </ul>	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
<ul> <li>histopathology</li> </ul>	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
<ul> <li>histopathology</li> </ul>	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
<ul> <li>neuropathology</li> </ul>	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		
• 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

402 **a euromex** 

#### INDUSTRY

#### FIELD OF APPLICATION RECOMMENDED MODELS

INDUSTRY

FIELD OF APPLICATION

**RECOMMENDED MODELS** 

• aerospace	Manufacturing and quality inspection of rockets and space vehicles related parts	iScope <sup>®</sup> (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 <sup>®</sup> (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 <sup>®</sup> , bScope <sup>®</sup> (materials), iScope <sup>®</sup> , iScope <sup>®</sup> (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 <sup>®</sup> (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

• 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 <sup>®</sup> (materials and polarization), Oxion (materials and polarization), Oxion Inverso (materials), bScope <sup>®</sup> (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

## index

**BE-50 Series** 

**BioBlue digital** 

**Biological microscopes** 

bScope biological

bScope fluorescence

CMEX Pro USB-3.0 cameras

Delphi-X Inverso biological

CMEX USB-2.0 cameras

CMEX-WIFI camera

Cold light sources

Cooled camera

bScope materials

bScope digital

BioBlue.Lab

BioBlue

		7	щ
	OTHER	EDUCATION	LIFE SCIENC
PRODUCT	Ρ	Α	G
Abbe refractometer	391		
About -			
- differential interference contrast			
- field of view			253
- fluorescence			183
- microscope basics		21	
- microscope optics			233
- objectives		15	
- petrological microscopy			
- stereo microscopes			
Accessories for microscopy	352		
Adapter guide		104	258
AP series		68	
Asbestos research microscopes			
Autofocus cameras		92	248

78 236

28 142

8 106

32 118

80 238

90 246

88 245

96 244

97 252

152

342

166

MATERIALS SCIENCE	
Е	PRODUCT
	Delphi-X Inverso fluorescence
	Delphi-X Observer fluorescense
319	Delphi-X Observer biological
345	Delphi-X Observer fluorescense
	Delphi-X Observer materials
	Differential interference contrast
	Digital MacroZoom
	Digital microscopes
327	Digital solutions
287	Disposables
	Dissection instruments
350	Dissection kits
	DZ series
294	EcoBlue
340	Ecoblue digital
294	EduBlue
	EduBlue digital
	EduBlue LCD
	EduPad
	EduZoom
	Eyepiece cameras
330	Field of view
	Fluorescense filter sets
308	Fluorescense LED light sources
338	Fluorescense microscopes
337	Handheld magnifiers
336	Handheld refractometers
	Handheld spectroscopes
344	High definition cameras
	How to keep the optics clean

EDUCATION	LIFE SCIENCE	MATERIALS SCIENCE
-----------	--------------	-------------------

OTHER

Р	Α	G	Е
		190	
		170	
		126	
		172	
			312
			311
	86	240	332
	74	236	330
	72	234	328
378			
362			
364			
		218	282
	16		
	76		
	48		
	82		
	84		
	98		
	84		
	86		
		245	331
		198	
		196	
		158	
382			
372			
348			
	92	248	340
			299

PRODUCT
How to match camera resolution
How to set up a stereo microscope
Illumination solutions
ImageFocus software
Inverted biological
Inverted fluorescence
Inverted materials
iScope biological
iScope fluorescence
iScope materials
LED cold light sources
LED ring light sources
LED light sources fluorescence
Light sources
MacroZoom
Magnifiers
Measuring microscopes
MicroBlue
MicroBlue digital
Microscope basics
Microscope optics
NexiusZoom ESD
NexiusZoom and -EVO
NexiusZoom for gemology
Objectives
Other products
Optical instruments
Oxion biological
Oxion fluorescence
Oxion Inverso biological

EDUCATION	LIFE SCIENCE	MATERIALS SCIENCE
Α	G	Е
	243	
57	213	273
102	256	348
	144	
	182	
		316
38	108	
	160	
		302
	196	
86	240	332

262

274

58 204 262

OTHER

Ρ

354

344

344

340

382

384

380

380

	OTHER	EDUCATION	LIFE SCIENCE	MATERIALS SCIENCE
PRODUCT	Р	Α	G	Е
Oxion Inverso materials				324
Oxion Inverso fluorescence			184	
Oxion materials				320
P series			230	296
PathoScan	396			
Petrological microscopy				319
Polarimeters	392			
Polarization microscopes			106	294
Polarization microscopes advanced				304
Preparation accessories	362			
Prepared slides	366			
Prepared slides Individual	360			
ProPad		100	254	346
Refractometers	386			
Ring lights	344			
sCMEX USB-3.0 camera		91	247	339
Software		102	256	348
Spectroscopes	392			
Stains	379			
StereoBlue		52	214	278
Stereo microscopes		46	202	260
Stereo microscopes (about)				279
Tablet camera		98	254	346
USB 2 cameras		88	245	337
USB 3 cameras		90	246	338
WiFi camera		96	244	336
Z series			224	288

406 **a euromex** 

## Since 1966! **MICROSCOPE COLLECTION** 2020



The Euromex Quality System is certified according to ISO 9001:2015 and supports our pursuit of continuous improvement and our on-going commitment to provide our world-wide customers assurance of product quality

#### DISCLAIMER

All information and materials contained in this catalog have been prepared solely for the purpose of providing general information about the products offered by Euromex Microscopen bv. The content of and all information published in this catalog are provided in good faith as a convenience to you and may be used for information purposes only and at all times in accordance with these terms of access

Euromex Microscopen by does not warrant the completeness or accuracy of information obtained from its catalog and does not undertake to update or correct its content or the information and/or materials contained on it on a regular basis

Euromex Microscopen by reserves the right to make improvements and/or changes to (including the removal of) the products described or referred to in the catalog and to delete and/or move any such information at any time and without notice

Euromex is a registered trademark of Euromex Microscopen by

© 2019 Copyright Euromex Microscopen bv

#### HEADQUARTERS

#### **EUROPEAN SALES OFFICE**

Euromex Microscopen bv **Euromex Microscopen Spain, S.L** Papenkamp 20 6836 BD Arnhem The Netherlands Tel: +31 (0) 26 323 22 11 info@euromex.com

Carretera de Barcelona 88, Entresuelo Esc. B - Local 9 08302 Mataró, Spain Tel: +34 (0) 937 415 609 info@euromex.com

#### www.euromex.com