



CATALOG 2020

PART 3

euromex

euromex

eur

MICROSCOPES FOR EDUCATION, LIFE SCIENCE AND INDUSTRY

PART 1 MICROSCOPES FOR EDUCATION

PART 2 MICROSCOPES FOR LIFE SCIENCE

PART 3 MICROSCOPES FOR INDUSTRY



contents

euromex MICROSCOPE COLLECTION 2020

PART 1	EDUCATION biological microscopes	1
	EDUCATION stereo microscopes	2
	EDUCATION digital solutions	3
PART 2	LIFE SCIENCE biological microscopes	4
	LIFE SCIENCE fluorescence microscopes	5
	LIFE SCIENCE stereo microscopes	6
	LIFE SCIENCE digital solutions	7
	INDUSTRY stereo microscopes	8
PART 3	INDUSTRY materials science microscopes	9
	INDUSTRY digital solutions	10
OTHER	ACCESSORIES for microscopy	11
	OTHER OPTICAL PRODUCTS magnifiers instruments	12



about euromex

1

EDUCATION | BIOLOGICAL MICROSCOPES

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

2

EDUCATION | STEREO MICROSCOPES

EduBlue • StereoBlue
NexiusZoom • AP series

3

EDUCATION | DIGITAL SOLUTIONS

Digital microscopes • MacroZoom • USB cameras • HD cameras • WiFi cameras
Cooled cameras • Tablet cameras • Software • Adapters

4

LIFE SCIENCE | BIOLOGICAL MICROSCOPES

iScope • bScope • Delphi-X Observer • Oxion
BioBlue.Lab • Oxion Inverso • Delphi-X Inverso

5

LIFE SCIENCE | FLUORESCENCE MICROSCOPES

iScope • bScope • Delphi-X Observer • Oxion • Oxion Inverso
Delphi-X Inverso • LED light sources (fluorescence) • Fluorescence filter sets

6

LIFE SCIENCE | STEREO MICROSCOPES

NexiusZoom (EVO) • StereoBlue • DZ series
Z series • P series

7

LIFE SCIENCE | DIGITAL SOLUTIONS

Digital microscope • MacroZoom • WiFi camera • USB cameras
HD cameras • Cooled cameras • Tablet camera • Software • Adapters

8

INDUSTRY | STEREO MICROSCOPES

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

9

INDUSTRY | MATERIALS SCIENCE MICROSCOPES

iScope (materials & polarization) • bScope
Delphi-X Observer • Oxion • Oxion Inverso

10

INDUSTRY | DIGITAL SOLUTIONS

Digital microscopes • MacroZoom • WiFi camera • USB cameras
HD cameras • Cooled cameras • Tablet cameras • Software • Adapters

11

ACCESSORIES | FOR MICROSCOPY

Illumination solutions • Preparation accessories • Dissection kits
Microscope prepared slides • Disposables • Stains

12

OTHER OPTICAL PRODUCTS

Magnifiers & measuring microscopes • Refractometers
Polarimeters • Spectroscopes • Pathology Scanner

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 m² 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

industry

stereo microscopes



stereo microscopes



Stereo microscopes of Euromex are designed to provide high resolution three-dimensional images.

These high-end microscopes are robust, ergonomic and enable long, fatigue-free working sessions in both laboratory and industrial environments

ESD safe versions as well as long working distance set-ups are available

- NEXIUSZOOM, -EVO AND -ESD • PAGE 262**
- NEXIUSZOOM FOR GEMOLOGY • PAGE 274**
- STEREOBLUE • PAGE 278**
- DZ SERIES • PAGE 282**
- Z SERIES • PAGE 288**
- BE-50 SERIES • PAGE 294**
- P SERIES • PAGE 296**

nexiuszoom

the new standard in stereo microscopy



The NexiusZoom stereo microscopes of Euromex enable you to examine your specimen with high-performance precision and generate two and three-dimensional images allowing observation for your highest demanding microscopy applications

These top level zoom microscopes are perfect for analyzing all kinds of material surfaces or for observing larger objects

STEREO MICROSCOPES

NexiusZoom

FEATURED

NexiusZoom, -EVO and -ESD

The NexiusZoom, -EVO and NexiusZoom ESD stereo microscopes are supplied with a large choice of objectives and stands, with or without illumination. Ideal for all kinds of industrial applications. Magnifications from 3.3 up to 220 times can be achieved with auxiliary lenses and eyepieces. ESD safe microscopes for the electronics industry complete this series



NZ.1903-U ESD

NZ.1903-S
339 (h) x 256 (w) x 311 mm (d) | 5.1 kg
NZ.1903-P
299 (h) x 256 (w) x 311 mm (d) | 5.3 kg
For weight of other products see table



HIGHLIGHTS

- Binocular and trinocular heads with HWF 10x/22 or HWF 10x/23 mm eyepieces
- Zoom 1:6.7 ratio, 6.7x to 45x or 1:8.4, 6.5x to 55x
- Ergonomic stands
- 3 W LED illuminations
- Configurations up to 220x magnification
- ESD safe models available
- 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 ± 5 diopter adjustments. Interpupillary distance adjustable between 54 mm and 75 mm. Trinocular head is supplied with a fixed light path beam splitter. The NexiusZoom EVO models are now equipped with click-stops

OBJECTIVES

The standard NexiusZoom is supplied with a 1:6.7 zoom objective with 0.67x to 4.5x magnifications, a field of view from 33 mm to 4.9 mm. Working distance 110 mm



NZ.1902-PG

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. Working distance 110 mm

AUXILIARY LENSES

For extra working distances the following auxiliary lenses are available for both the standard NexiusZoom and NexiusZoom EVO: 0.3x, 0.4x, 0.5x, 0.75x, 1.5x and 2.0x. For fields of view and working distances, see table magnifications

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



NZ.1902-AP

NZ.1902-A

INDUSTRY STEREO MICROSCOPES

INDUSTRY STEREO MICROSCOPES

8

8

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 desktop stand, 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.

More illumination options see chapter 10 (Accessories)

STAGE

180 x 155mm X-Y mechanical stage with 76 x 55mm translation stage and transparent glass plate for NexiusZoom, fixed on stage of microscope. Only available with new microscopes (due to fixing), so it has to be ordered with the purchase of a microscope (see picture: NZ.9505)



● NZ.9505

ILLUMINATION

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

ESD SAFE MICROSCOPES

For inspection and assembly applications. Electrostatic discharge (ESD) is the unwanted sudden flow of electricity between two electrically charged objects. ESD can cause a range of harmful effects as well as permanent damage to solid state electronic components

Euromex therefore introduces electrostatic protected microscopes in the NexiusZoom range. The body and stand of the microscope are coated with a special static dissipative paint, eliminating harmful electrostatic discharges, making the microscopes suitable for all static-sensitive environments

PACKAGE CONTENT

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

Electrostatic discharge (ESD)

To select an ESD safe microscope model, please find them in the table on the next page marked with suffix ESD

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

ESD SAFE

MODELS	Binocular	Trinocular	Pillar stand (-P)	Rack & pinion stand (-S)	Universal stand (-U)	Boom stand (-B)	Weight (kg)
NZ.1902-P-ESD	•		•				5.0
NZ.1902-S-ESD	•			•			4.9
NZ.1902-U-ESD	•				•		15.6
NZ.1902-B-ESD	•					•	22.1
NZ.1903-P-ESD		•	•				5.3
NZ.1903-S-ESD		•		•			5.1
NZ.1903-U-ESD		•			•		15.7
NZ.1903-B-ESD		•				•	22.2

MAGNIFICATIONS

NexiusZoom and NexiusZoom ESD: working distance and field of view with standard high wide field (HWF) 10x / 22 eyepieces

Zoom indication	Auxiliary lens 0.3x WD 287 mm		Auxiliary lens 0.4x WD 220 mm		Auxiliary lens 0.5x WD 183 mm		Auxiliary lens 0.75x WD 105 mm		Without auxiliary lens WD 110 mm		Auxiliary lens 1.5x WD 53 mm		Auxiliary lens 2x WD 34 mm	
	Total mag.	F.o.v. in mm	Total mag.	F.o.v. in mm	Total mag.	F.o.v. in mm	Total mag.	F.o.v. in mm	Total mag.	F.o.v. in mm	Total mag.	F.o.v. in mm	Total mag.	F.o.v. in mm
0.67	2.0	109.5	2.7	82.1	3.35	65.7	5.0	43.8	6.7	32.8	10.1	21.9	13.4	16.4
0.7	2.1	104.8	2.8	78.6	3.5	62.9	5.3	41.9	7.0	31.4	10.5	21.0	14.0	15.7
0.8	2.4	91.7	3.2	68.8	4.0	55.0	6.0	36.7	8.0	27.5	12.0	18.3	16.0	13.8
1.0	3.0	73.3	4.0	55.0	5.0	44.0	7.5	29.3	10.0	22.0	15.0	14.7	20.0	11.0
1.5	4.5	48.9	6.0	36.7	7.5	29.3	11.3	19.6	15.0	14.7	22.5	9.8	30.0	7.3
2.0	6.0	36.7	8.0	27.5	10.0	22.0	15.0	14.7	20.0	11.0	30.0	7.3	40.0	5.5
3.0	9.0	24.4	12.0	18.3	15.0	14.7	22.5	9.8	30.0	7.3	45.0	4.9	60.0	3.7
4.0	12.0	18.3	16.0	13.8	20.0	11.0	30.0	7.3	40.0	5.5	60.0	3.7	80.0	2.8
4.5	13.5	16.3	18.0	12.2	22.5	9.8	33.8	6.5	45.0	4.9	67.5	3.3	90.0	2.4

NexiusZoom EVO: working distance and field of view with standard high wide field (HWF) 10x / 23 eyepieces

Zoom indication	Auxiliary lens 0.3x WD 287 mm		Auxiliary lens 0.4x WD 220 mm		Auxiliary lens 0.5x WD 183 mm		Auxiliary lens 0.75x WD 105 mm		Without auxiliary lens WD 110 mm		Auxiliary lens 1.5x WD 53 mm		Auxiliary lens 2x WD 34 mm	
	Total mag.	F.o.v. in mm	Total mag.	F.o.v. in mm	Total mag.	F.o.v. in mm	Total mag.	F.o.v. in mm	Total mag.	F.o.v. in mm	Total mag.	F.o.v. in mm	Total mag.	F.o.v. in mm
0.65	1.95	117.9	2.6	88.5	3.25	70.8	4.9	47.2	6.5	35.4	9.8	23.6	13.0	17.7
1.0	3.0	76.7	4.0	57.5	5.0	46.0	7.5	30.7	10.0	23.0	15.0	15.3	20.0	11.5
1.5	4.5	51.1	6.0	38.3	7.5	30.7	11.3	20.4	15.0	15.3	22.5	10.2	30.0	7.7
2.0	6.0	38.3	8.0	28.8	10.0	23.0	15.0	15.3	20.0	11.5	30.0	7.7	40.0	5.8
2.5	7.5	30.7	10.0	23.0	12.5	18.4	18.8	12.3	25.0	9.2	37.5	6.1	50.0	4.6
3.0	9.0	25.6	12.0	19.2	15.0	15.3	22.5	10.2	30.0	7.7	45.0	5.1	60.0	3.8
3.5	10.5	21.9	14.0	16.4	17.5	13.1	26.3	8.8	35.0	6.6	52.5	4.4	70.0	3.3
4.0	12.0	19.2	16.0	14.4	20.0	11.5	30.0	7.7	40.0	5.8	60.0	3.8	80.0	2.9
4.5	13.5	17.0	18.0	12.8	22.5	10.2	33.8	6.8	45.0	5.1	67.5	3.4	90.0	2.6
5.0	15.0	15.3	20.0	11.5	25.0	9.2	37.5	6.1	50.0	4.6	75.0	3.1	100.0	2.3
5.5	16.5	13.9	22.0	10.5	27.5	8.4	41.3	5.6	55.0	4.2	82.5	2.8	110.0	2.1

WD = working distance, FoV = Field of view, Total mag. = total magnification



ACCESSORIES AND SPARE PARTS

HEADS & EYEPIECES

- NZ.5302** NexiusZoom binocular head with eyepieces
- NZ.5303** NexiusZoom trinocular head with eyepieces
- 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
- NZ.6020** Pair of HWF 20x / 12 mm eyepieces
- NZ.6110** HWF 10x / 22 mm eyepiece with micrometer
- 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
- NZ.6099** Pair of eyecups



● NZ.5302 / NZ.5303

AUXILIARY LENSES

- NZ.8903** Additional 0.3x lens for NZ. WD 287 mm. Only suitable for A, AP, U, B and BC stands
- NZ.8904** Additional 0.4x lens for NZ. WD 220 mm. Only suitable for A, AP, U, B and BC stands
- NZ.8905** Additional 0.5x lens for NZ. WD 183 mm. Not suitable for S stands

- NZ.8907** Additional 0.75x lens for NZ. WD 105 mm
- NZ.8915** Additional 1.5x lens for NZ. WD 53 mm
- NZ.8920** Additional 2.0 lens for NZ. WD 34 mm. Not suitable for S stands

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** Ergo 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.9090** NexiusZoom head holder (for NZ.9020, NZ. 9030 and NZ. 9032)

HEAD HOLDERS

- NZ.9081** NZ head holder 76 mm 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

WD = Working distance

NZ = NexiusZoom

ILLUMINATION

- LE.5207** Multi-functional dual 3 W LED adjustable light source. Equipped with two flexible gooseneck arms with LED illuminator
- LE.5212** Euromex illumination station with two independently controlled goosenecks, a ring light and a transmitted stage illuminator
- 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 arm 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. 110 V and 230 V models available
- LE.5211** Euromex cold light illuminator, 150 W halogen. 110 V and 230 V models available
- LE.5211-LED** Euromex cold light illuminator LED, 30 W high power LED
- LE.5214** Dual arm light conductor, gooseneck self-sustaining, 50 cm long, 4 mm diameter core
- LE.5215** Triple arm light conductor, gooseneck self-sustaining, 50 cm long, 4 mm diameter core
- LE.5222** Focusing head suitable for focusing lens LE.5214 and LE.5215. Needs LE.5224

- LE.5224** Aspherical focusing lens for mounting in LE.5222
More illumination options, see chapter 11

POLARIZATION ATTACHMENTS

- NZ.9520** Polarization kit for NexiusZoom: 360° rotatable circular stage with built-in polarization filter (NZ.9524) + analyzer in mount to be screwed under the head (NZ.9525). Not suitable with auxiliary lenses
- NZ.9524** 360° rotatable circular stage with built-in polarization filter for NexiusZoom
- NZ.9525** 360° rotatable analyzer in mount to be screwed under the head of NexiusZoom. Not suitable for use in combination with auxiliary lenses

DARKFIELD ATTACHMENT

- NZ.9040** Darkfield attachment (for -S and -P stands)

STAGES

- NZ.9505** Mechanical 180 x 155 mm X-Y stage with 75 x 55 mm translation and transparent glass plate
- AE.5168-NZ** Heating stage with PID controller up to 50°C. Only with the purchase of a new microscope

CAMERA ACCESSORIES

- 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
Other T2 adapters on request

MISCELLANEOUS

- NZ.8950** Protection glass for NexiusZoom head
- NZ.9570** Pair of object clamps for stage
- NZ.9572** Adjustable GEM object clamp for -P, -PL and -S stands
- NZ.9950** Standard opaque stage plate

how to set up a stereo microscope

Setting up your stereo microscope properly is essential to getting parfocal images during the entire zoom range. It also prevents head aches, stressful eyes and fatigue. Below you will find a setup guide that will help get the best out of your microscope

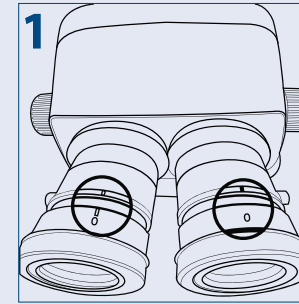
- NZ.9950** Standard opaque stage plate
- NZ.9956** Black/white stage plate
- NZ.9958** Standard glass object plate, opaque
- NZ.9983-R** 3 W LED replacement unit for NZ, incident illumination
- NZ.9983** 3 W LED replacement unit for NZ, transmitted illumination
- AE.1112** Object micrometer 50 mm (divided in 500 parts on glass slide 76 x 26 mm)

DISPOSABLES

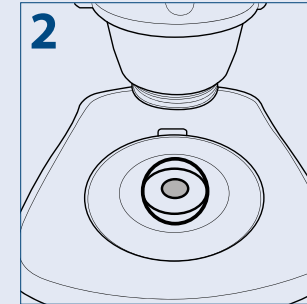
- PB.5245** Lens cleaning paper, 100 sheets per pack
- PB.5274** Isopropyl alcohol 99%, 200 ml
- PB.5275** Cleaning kit: lens fluid, lint free lens tissue/paper, brush, air blower, cotton swabs
- PB.5276** Microscope maintenance and servicing kit, 16pcs: cleaning brush, 6 pcs screwdriver set, air blower, 3 pcs Allen key 1.5, 2, 2.5 mm, lens cleaning fluid 20 ml, cleaning cloth 140 x 140 mm, 100 pcs lens tissue sheets, tube of maintenance grease, 10 ml bottle of oil, packed in a toolbox



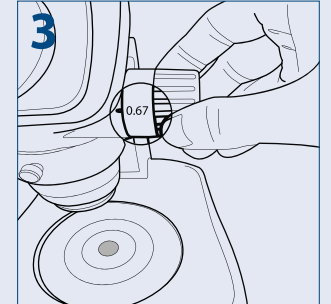
● The LE.5212 in two different configurations



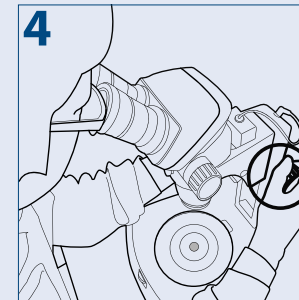
1 Turn the diopter adjustment rings of both eyepieces to position "0"



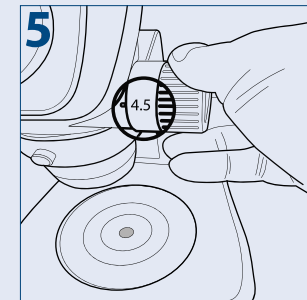
2 Put a specimen on the stage plate



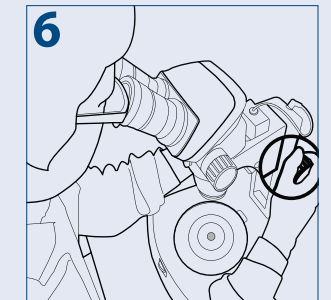
3 Turn the zoom adjustment knob to the lowest magnification



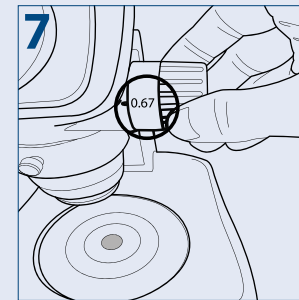
4 Rotate the focus adjustment knob to bring the specimen into focus



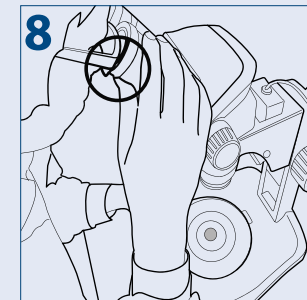
5 Turn the zoom adjustment knob to the highest magnification



6 Rotate the focus adjustment knob to bring the specimen into focus



7 Turn the zoom adjustment knob to the lowest magnification



8 Rotate the diopter adjustment rings of the left and right eyepiece 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

MICROSCOPES FOR GEMOLOGY

NexiusZoom

FEATURED



● NZ.1902-GEML

NexiusZoom for gemology

The specialized backwards tilting stand of the NexusZoom and NexusZoom EVO stereo microscopes for gemology applications offers 30 W halogen transmitted illumination towards the specimen at oblique angles. This enables the examination of your gems in perfect darkfield conditions. The stand is also available with 1 W LED or a 7 W fluorescent incident illumination for brightfield contrast



NZ.1903-GEML
510 (h) x 260 (w) x 310 mm (d) | 8.4 kg
NZ.1903-GEMF
510 (h) x 260 (w) x 310 mm (d) | 8.4 kg



● NZ.1902 with backwards tilting stand

SPECIFICATIONS

EYEPIECES

The standard NexusZoom is supplied with a pair of HWF 10x/22 mm eyepieces

The NexusZoom EVO is supplied with a pair of HWF 10x/23 mm eyepieces

HEAD

Binocular or trinocular heads with 45° inclined tubes. Both eyepieces with ± 5 diopter adjustments. Interpupillary distance adjustable between 54 mm and 75 mm

OBJECTIVES

The standard NexusZoom is supplied with a 1:6.7 zoom objective with 0.67x to 4.5x magnifications, a field of view from 33 mm to 4.9 mm. Working distance 110 mm

The NexusZoom 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. Working distance approx. 110 mm

Auxiliary lenses 0.75x, 1.5x and 2.0x are available

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

HIGHLIGHTS

- Binocular and trinocular heads
- Standard HWF 10x eyepieces with 22 mm or 23 mm field of view
- Zoom objectives with 0.7 to 4.5x or 0.65 to 5.5x magnification
- Ergonomic backwards tilting stand
- 30 Watt halogen transmitted illumination
- 1 W LED or 7 W fluorescent incident illumination
- Configurations up to 220x magnification



STAND

Ergonomic stand with backwards 0 to 45° tilting arm with 76 mm head holder for darkfield and brightfield. Built-in 100-240 V power supply

STAGE

Flat darkfield stage with clamp object holder - which can be placed either on the right or on the left side - iris diaphragm and incident illumination

ILLUMINATION

30 Watt halogen transmitted illumination, adjustable intensity. 1 Watt LED, adjustable intensity, or 7 Watt fluorescent incident illumination, intensity not adjustable. Both illuminators can be used simultaneously

PACKAGE CONTENT

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

MODELS	Binocular	Tinocular	Objective 0.67-4.5	Objective 0.65-5.5	1 W LED incident illumination	7 W fluorescent incident illumination	30 W halogen transmitted illumination	Working distance (mm)
NZ.1902-GEML	•		•		•		•	110
NZ.1902-GEMF	•		•			•	•	110
NZ.1702-GEML	•			•	•		•	110
NZ.1702-GEMF	•			•		•	•	110
NZ.1903-GEML		•	•		•		•	110
NZ.1903-GEMF		•	•			•	•	110
NZ.1703-GEML		•		•	•		•	110
NZ.1703-GEMF		•		•		•	•	110

MAGNIFICATIONS

NexiusZoom WD and field of view with standard HWF 10x / 22 high wide field eyepieces

Zoom indication	Without auxiliary lens WD 110 mm		Auxiliary lens 0.75x WD 105 mm		Auxiliary lens 1.5x WD 53 mm		Auxiliary lens 2x WD 34 mm	
	Total magnification	Field of view in mm	Total magnification	Field of view in mm	Total magnification	Field of view in mm	Total magnification	Field of view in mm
0.67	6.7	32.8	5.0	43.8	10.1	21.9	13.4	16.4
0.7	7.0	31.4	5.3	41.9	10.5	21.0	14.0	15.7
0.8	8.0	27.5	6.0	36.7	12.0	18.3	16.0	13.8
1.0	10.0	22.0	7.5	29.3	15.0	14.7	20.0	11.0
1.5	15.0	14.7	11.3	19.6	22.5	9.8	30.0	7.3
2.0	20.0	11.0	15.0	14.7	30.0	7.3	40.0	5.5
3.0	30.0	7.3	22.5	9.8	45.0	4.9	60.0	3.7
4.0	40.0	5.5	30.0	7.3	60.0	3.7	80.0	2.8
4.5	45.0	4.9	33.8	6.5	67.5	3.3	90.0	2.4

NexiusZoom EVO WD and field of view with standard HWF 10x/23 high wide field eyepieces

Zoom indication	Without auxiliary lens WD 110 mm		Auxiliary lens 0.75x WD 105 mm		Auxiliary lens 1.5x WD 53 mm		Auxiliary lens 2x WD 34 mm	
	Total magnification	Field of view in mm	Total magnification	Field of view in mm	Total magnification	Field of view in mm	Total magnification	Field of view in mm
0.65	6.5	35.4	4.9	47.2	9.8	23.6	13.0	17.7
0.7	7.0	32.9	5.3	43.4	10.5	21.9	14.0	16.4
0.8	8.0	28.8	6.0	38.3	12.0	19.2	16.0	14.4
1.0	10.0	23.0	7.5	30.7	15.0	15.3	20.0	11.5
1.5	15.0	15.3	11.3	20.4	22.5	10.2	30.0	7.7
2.0	20.0	11.5	15.0	15.3	30.0	7.7	40.0	5.8
3.0	30.0	7.7	22.5	10.2	45.0	5.1	60.0	3.8
4.0	40.0	5.8	30.0	7.7	60.0	3.8	80.0	2.9
4.5	45.0	5.1	33.8	6.8	67.5	3.4	90.0	2.6
5.5	55.0	4.2	41.3	5.6	82.5	2.8	110	2.1

ACCESSORIES AND SPARE PARTS

HEADS & EYEPIECES

- NZ.5302** NexiusZoom binocular head with eyepieces
- NZ.5303** NexiusZoom trinocular head with eyepieces
- NZ.5312** NexiusZoom EVO binocular head with eyepieces
- NZ.5313** NexiusZoom EVO trinocular head with eyepieces
- NZ.6010** Pair of HWF 10x / 22 mm eyepieces
- NZ.6210** Pair of HWF 10x / 23 mm eyepieces. Only suitable for NexiusZoom EVO
- NZ.6015** Pair of HWF 15x / 16 mm eyepieces
- NZ.6020** Pair of HWF 20x / 12 mm eyepieces
- NZ.6110** HWF 10x / 22 mm eyepiece with micrometer
- NZ.6099** Pair of eyecups

AUXILIARY LENSES

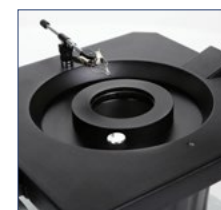
- NZ.8907** Auxiliary lens 0.75x. WD 105 mm]
- NZ.8915** Auxiliary lens 1.5x. WD 53 mm
- NZ.8920** Auxiliary lens 2.0x. WD 34 mm
Not suitable for NZ.1902-S and NZ.1903-S

CAMERA ACCESSORIES

- NZ.9850** C-mount adapter with 0.5x lens for 1/2" cameras Suitable for trinocular models
- AE.5130** Universal SLR camera adapter with 2x projection lens for 23.2 mm tubes. Needs T2 adapter
- AE.5020** T2 adapter for Nikon D digital SLR cameras
- AE.5040** T2 adapter for Canon EOS digital SLR cameras
Other T2 adapters on request

MISCELLANEOUS

- NZ.8950** Protection glass for NexiusZoom head
Not suitable with auxiliary lenses
- NZ.9525** 360° rotatable analyzer in mount to be screwed under head of NexiusZoom
- NZ.9572-G** Adjustable GEM object clamp for NexiusZoom with tilting stand for gemology
- AE.1112** Object micrometer 50 mm (divided in 500 parts on glass slide 76 x 26 mm)



- The clamp holder allows precise positioning of objects



- The variable iris diaphragm is used for maximizing contrast



- Brightfield/darkfield switch for transmitted illumination for maximum flexibility



NZ.5302 / NZ.5303 ●

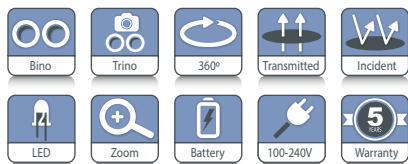
STEREO MICROSCOPES



StereoBlue

Stereo microscopes of the StereoBlue series are especially developed for industrial applications and are greatly appreciated by geologists, mechanical and electronic engineers and other professionals such as jewelers and dental technicians

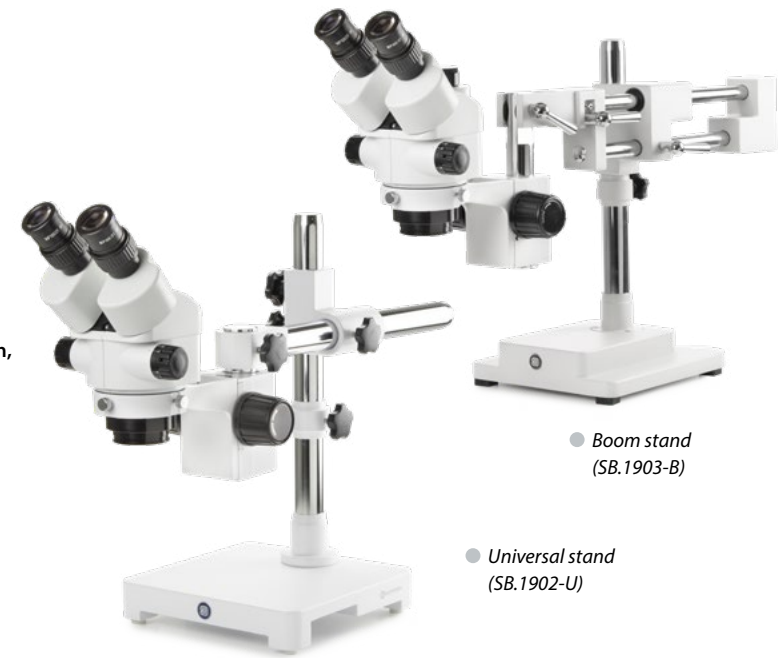
SB.1903 ●



SB.1903
330 (h) x 220 (w) x 266 mm (d) 4.4 kg
SB.1903-P
299 (h) x 220 (w) x 266 mm (d) 5.1 kg
SB.1302/SB.1402
330 (h) x 220 (w) x 266 mm (d) 4.0 kg
SB.1302-P/SB.1402-P
299 (h) x 220 (w) x 266 mm (d) 4.7 kg

HIGHLIGHTS

- Binocular and trinocular models
- WF 10x/21 mm eyepieces
- Dual 1x/3x or 2x/4x magnification objectives
- Zoom stereo 0.7x to 4.5x objective
- Ergonomic stands
- Available in ergonomic rack & pinion, pillar, universal and boom stands
- 3 W LED illuminators
- Also available with batteries
- Built-in ring light
- Ergonomic carrying grip
- 5 Years warranty



SPECIFICATIONS

EYEPIECES

Pair of WF 10x/21 mm secured eyepieces supplied with eyecups

HEAD

- Binocular or trinocular 45° inclined tubes
- Diopter adjustment on both eyepieces, except the models SB.1302-P/1402-P and SB.1302-S/1402-S, which have diopter adjustment on one eyepiece
- Interpupillary distance adjustable between 55 mm and 75 mm
- Trinocular head is supplied with a fixed light path beam splitter

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

DUAL MAGNIFICATION OBJECTIVES

- Nosepiece with dual 1x/3x or 2x/4x revolving objectives
- Magnifications 10x/30x or 20x/40x
- Field of view 21 mm/6.9 mm or 10.5 mm/5.25 mm
- Working distance 100 mm

ZOOM OBJECTIVE

- Zoom stereo 0.7x to 4.5x parfocal objective
- Magnification from 7x to 45x
- Field of view 29.9 mm to 4.6 mm
- Working distance 100 mm

STAND

The rack & pinion and pillar stands of the StereoBlue are equipped with ergonomic flat bases, complete with two object clamps and Ø 60 mm transparent and black/white stage plates. The coarse adjustment is equipped with tension control.

The ergonomic universal single arm stand is ideal for viewing large samples or working under the microscope. Comes without illumination. The universal single arm stand 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. The stands are alloy metal casted with hardened coating.

More illumination options see chapter 11 (Accessories)

ILLUMINATION

3 W transmitted and incident LED illuminators which can be used simultaneously. Model SB.3903 and SB.3903-P are equipped with 3 W transmitted and incident LED illuminators and a built-in 30 LED ring light incident illuminator. The light intensities can be adjusted separately. Also available with batteries (add "B" after article number, e.g. SB.1302-PB)

PACKAGE CONTENT

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



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



● SB.1302

● SB.1402-P

● SB.1903

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

ACCESSORIES AND SPARE PARTS

EYEPIECES

- SB.6210** Pair of HWF 10x/21 mm eyepieces
- SB.6210-C** WF 10X/21 mm eyepiece with crosshairs
- SB.6210-M** WF 10X/21 mm eyepiece with micrometer scale
- SB.6015** Pair of HWF 15x/15 mm eyepieces
- SB.6015-C** WF 15X/15 mm eyepiece with crosshairs
- SB.6015-M** WF 15X/15 mm eyepiece with micrometer scale
- SB.6020** Pair of HWF 20x/10 mm eyepieces
- SB.6020-C** WF 20/10 mm eyepiece with crosshairs
- SB.6020-M** WF 20/10 mm eyepiece with micrometer scale
- SB.6099** Pair of eyecups

- SB.9090** Head holder for SB.9020
- SB.9040** Darkfield attachment, only for -S and -P models
- SB.9570** Pair of object clamps for stage
- SB.9952** Stage plate transparent, Ø 60 mm
- SB.9956** Stage plate black/white, Ø 60 mm
- SB.9983-R** 3 W LED replacement unit, incident illumination
- SB.9983** 3 W LED replacement unit, transmitted illumination
- AE.1112** Micrometer 76 x 26 mm slide, 50 mm/50 divisions

AUXILIARY LENSES

- SB.8903** Auxiliary 0.3x lens for zoom models, working distance 287 mm. Only suitable for boom and articulated stands
- SB.8905** Auxiliary 0.5x lens for zoom models, working distance 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 working distance 105 mm
- SB.8915** Auxiliary 1.5x lens for zoom models working distance 53 mm. Not suitable for SB.39xx

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

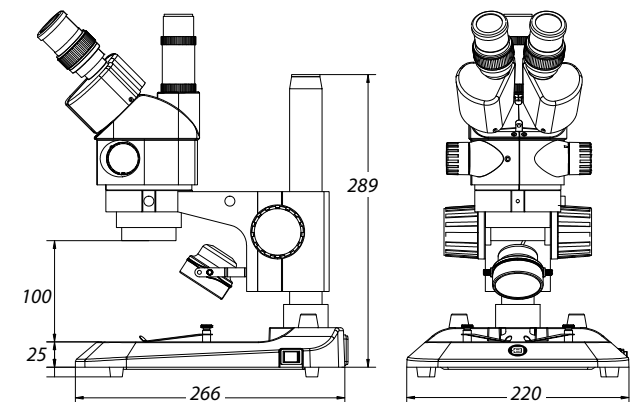
- PB.5245** Lens cleaning paper, 100 sheets per pack
- PB.5274** Isopropyl alcohol 99% (200 ml)
- PB.5275** Cleaning kit: lens cleaning fluid, lint free lens tissue, brush, air blower, cotton swabs

POLARIZATION ATTACHMENT

- SB.9520** Polarization kit: 360° rotatable circular stage with built-in polarization filter (SB.9524) + analyzer in mount to be screwed under the head (SB.9525)
- SB.9524** 360° rotatable circular stage with built-in polarization filter
- SB.9525** 360° rotatable analyzer in mount to be screwed under the head

MISCELLANEOUS

- SB.8950** Protection glass window
- SB.9020** Universal single-arm stand without head holder and without illumination
- SB.9030** Universal double-arm stand without head holder and without illumination



STEREO MICROSCOPES

DZ series



DZ series

The modular stereo microscopes of the DZ series can be built around no less than three different central zoom units with respectively zoom ratios from 0.8 to 5 times, 0.8 to 6.4 times or 0.8 to 8 times. Thanks to the modular design of this series, you can adapt the instrument to your individual needs. To build your own microscope just select a central zoom unit, a pair of eyepieces, one of the available objectives, stands and other accessories

● *customized configuration model DZ.0800, 2x DZ.3010, DZ.2025, DZ.4010 and DZ.5040*



DZ.1100 / DZ.1600 / DZ.1800

305 (h) x 330 (w) x 285 mm (d) | 6.0 kg

DZ.1105 / DZ.1605 / DZ.1805

305 (h) x 330 (w) x 285 mm (d) | 5.2 kg

For weight of other products see table 'Models'



HIGHLIGHTS

- Binocular and trinocular models
- Six standard configurations or customized configuration
- Ergonomic tilting head from 0 to 35° tilting or fixed 20° inclined head, EWF 10x/22mm eyepieces,
- Three central zoom units from 4 to 320x
- Fields of view from 55 to 1.4 mm
- Working distances from 126 to 33 mm
- Ergonomic rack and pinion stands, universal stand or articulated arm stand
- Transmitted and incident LED illumination
- 100 W epi-fluorescence mercury vapor illuminator
- 10 Years warranty

SPECIFICATIONS

EYEPIECES

Pair of EWF 10x/22 mm eyepieces

HEAD

- Ergonomic binocular 0-35° tilting head
- Binocular 20° tilted head
- Diopter ± 5 adjustment on both eyepieces
- Interpupillary distance from 55 to 75 mm
- Photo ports for one or two cameras
- Click-stops

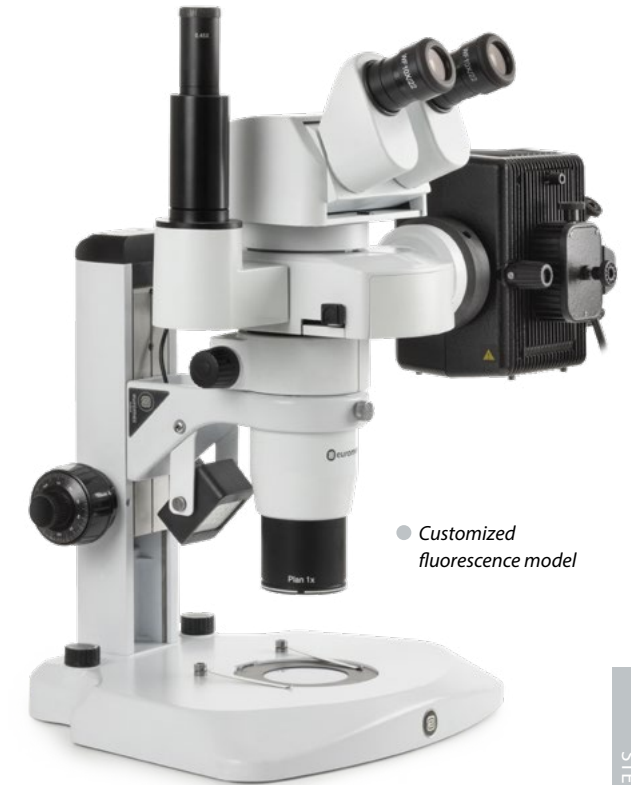
CENTRAL ZOOM UNIT

Three central zoom units are available:

- 1:6.3 for total magnifications from 8 to 50x
- 1:8 for total magnifications from 8 to 64x
- 1:10 for total magnifications from 8 to 80x

COMMON MAIN OBJECTIVE

Standard configurations are supplied with a plan apochromatic common main objective (CMO) 1x, working distance 78 mm. Other plan apochromatic common main objectives 0.5x (working distance 126 mm) and 2x (WD 33 mm) are also available



● Customized fluorescence model

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

STAND

Large ergonomic stand with Ø 100 mm object plate and two object clamps. Coarse adjustment with adjustable friction. A universal stand and an articulated arm stand without illumination are also available for configurations built to customer's specifications

ILLUMINATION

The transmitted and incident 3 W LED illuminations are supplied with a built-in 100-240 V power supply. Both illuminators can be used simultaneously and the light intensities can be adjusted separately

PACKAGE CONTENT

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

STANDARD CONFIGURATIONS

All six standard configurations are equipped with EWF 10x/22mm eyepieces, plan achromatic common main objective 1x and rack & pinion stand with incident and transmitted LED illumination

DZ SERIES STANDARD

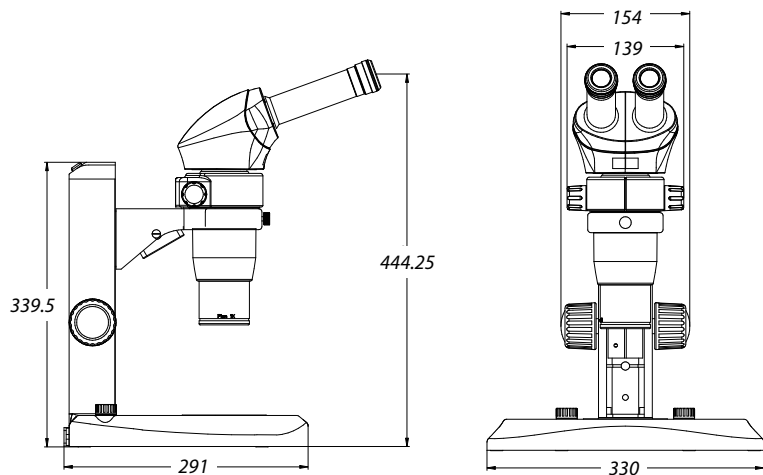
MODELS	Binocular 20° head	Binocular Ergo 0 to 35° tilting	Magnifications from 8 to 50x	Magnifications from 8 to 64x	Magnifications from 8 to 80x
DZ.1100		•			•
DZ.1105	•				•
DZ.1800		•		•	
DZ.1805	•			•	
DZ.1600		•	•		
DZ.1605	•		•		

All equipped with EWF 10x/22 mm eyepieces

MAGNIFICATIONS AND FIELDS OF VIEW FOR STANDARD CONFIGURATIONS

MODELS	Zoom indication	0.5x Objective WD 126 mm		1.0x Objective WD 78 mm		2.0x Objective WD 33 mm	
		Total magnification	Field of view	Total magnification	Field of view	Total magnification	Field of view
DZ1100 / DZ1105 DZ1800 / DZ1805 DZ1600 / DZ1605	0.8x	4x	55	8x	27.5	16x	13.7
	1.0x	5x	44	10x	22	20x	11
	1.5x	7.5x	29.3	15x	14.6	30x	7.3
	2.0x	10x	22	20x	11	40x	5.5
	3.0x	15x	14.6	30x	7.3	60x	3.6
	4.0x	20x	11	40x	5.5	80x	2.7
	5.0x	25x	8.8	50x	4.4	100x	2.2
	6.0x	30x	7.3	60x	3.6	120x	1.8
	6.4x	32x	6.8	64x	3.4	128x	1.7
	7.0x	35x	6.3	70x	3.1	140x	1.5
	8.0x	40x	5.5	80x	2.75	160x	1.4

All equipped with EWF 10x/22 mm eyepieces



BUILD YOUR OWN MICROSCOPE

A customized DZ series stereo microscope can be configured to customer's specifications by choosing one of the three central zoom units DZ.0630, DZ.0800 or DZ.1000 and adding the necessary components for the application. A pair of eyepieces, an ergonomic 0 to 35° tilting head or fixed 20° inclined head, a 0.5x, 1x or 2x common main objective (CMO), a large ergonomic LED stand, a universal or an articulated arm stand. Other accessories such as a photo/camera unit or dual iris diaphragm can complete the configuration

CENTRAL ZOOM UNITS

- DZ.0630** Central zoom unit 1:6.3 unit with magnifications from 8 to 50 times
- DZ.0800** Central zoom unit 1:8 unit with magnifications from 8 to 64 times
- DZ.1000** Central zoom unit 1:10 unit with magnifications from 8 to 80 times

- DZ.4020** Plan apochromatic common main objective 2.0x. WD 33 mm
All optics are anti-fungus treated and anti-reflection coated for maximum light throughput

STANDS

- DZ.5020** Universal stand without illumination. Dimensions 460(h) x 280 (l) x 400 (d) mm
- DZ.5040** Ergonomic stand with transmitted and incident LED illumination. Coaxial coarse and fine adjustments, 100 graduations, 0.015 mm per graduations
- 65.980** Articulated arm stand for mounting on table without head holder (65.981)
- 65.981** Head holder 76 mm for DZ series and black articulated arm stand (65.980)
- NZ.9025** Articulated arm stand with table clamp (without DZ head holder 65.981)
- NZ.9027** Articulated arm stand with heavy stand (without DZ head holder 65.981)
- NZ.9042** Stand with rotating mirror and transmitted LED illumination
- NZ.9030** Boom (double arm) stand with heavy stand (without head holder NZ.9090)
- NZ.9032** Boom (double arm) stand with table clamp (without head holder NZ.9090)
- NZ.9090** Head holder (for NZ.9020, NZ. 9030 and NZ.9032)

HEADS

- DZ.2020** Ergonomic binocular 0-35° tilting head without eyepieces
- DZ.2025** Binocular 20° tilted head without eyepieces Interpupillary distance from 55 to 75 mm

EYEPIECES

- DZ.3010** EWF 10x/22 eyepiece, 1 piece
- DZ.3012** EWF 10x/22 eyepiece with crosshairs, 1 piece
- DZ.3015** WF 15x/16 eyepiece, 1 piece
- DZ.3020** WF 20x/12 eyepiece, 1 piece



Eyepieces ●

IRIS DIAPHRAGMS

- DZ.9010** Double iris diaphragms for increased depth of field

OBJECTIVES

- DZ.4003** Plan common main objective 0.3x. WD 276 mm
- DZ.4005** Plan apochromatic common main objective 0.5x. WD 126 mm
- DZ.4010** Plan apochromatic common main objective 1.0x. WD 78 mm

FLUORESCENCE ATTACHMENT

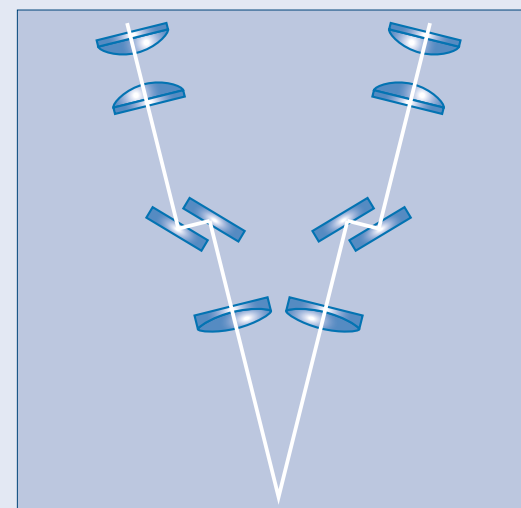
- DZ.9050** Attachment for fluorescence with 100 W mercury vapor illumination with GFP-B and GFP-LP filter sets and one 23.2 mm photo port. Supplied with power supply

about stereo microscopes

Most modern stereo microscopes are built according to two concepts: the Greenough and the common main objective (CMO). The Greenough system is named after the American instrument designer, Horatio S. Greenough, who introduced this concept in the early 1890's; it is a system that became the workhouse for biological dissection in the 20th century. Much later, in 1957, a stereo zoom microscope with a common main objective was introduced in the United States by the American Optical Company

greenough

principle



Two optical trains with their optical axes under a small angle generate two images of the object

- Low cost
- Compact
- Magnifications⁽¹⁾ up to approximately 100x
- Good quality
- Production environment

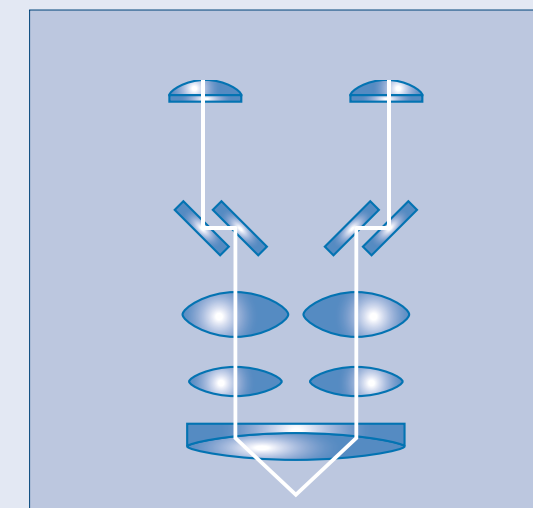
⁽¹⁾ Objective without auxiliary lenses and with 10x eyepieces

⁽²⁾ With 10x eyepieces

⁽³⁾ The parallel system allows many accessories such as photo and epi-fluorescence attachments, iris diaphragms, beam splitters to be added

common main objective (CMO)

principle



Two parallel optical trains share a common main objective and generate two images under a small angle

- Allows modular systems (infinity optical system)
- Enables higher magnifications⁽²⁾, up to 300x
- Upgradeable⁽³⁾
- High imaging quality
- Research and development labs

ACCESSORIES/SPARE PARTS

POLARIZATION ATTACHMENTS

- DZ.9045** Polarizer, 360° rotatable, to be mounted on common main objectives of DZ series
- DZ.9047** Polarizer, 360° rotatable, to be placed on the stage

CAMERA ACCESSORIES

- DZ.9005** Photo port attachment with one 23.2 mm tube
- DZ.9007** Photo port attachment with two 23.2 mm tubes
- DZ.9013** C-mount 1x objective for insertion into photo port attachments
- AE.5130** Universal SLR camera adapter with 2x projection lens for 23.2 mm tubes. Needs T2 adapter
- AE.5025** T2 adapter for Nikon D digital SLR cameras
- AE.5040** T2 adapter for Canon EOS digital SLR cameras
- Other T2 adapters on request*

MISCELLANEOUS

- DZ.9020** Large 185 x 145 mm stage with mechanical X-Y 50 x 50 mm stage, to be moved by hand
- DZ.9040** Darkfield attachment for DZ.5040
- AE.1112** Micrometer slide, 50 mm/50 divisions
- AE.1900** Glass object plate, Ø 100mm
- AE.1903** Acrylic white/black object plate
- 50.875** Adjustable GEM clamp
- SL.5520** LED replacement for incident LED illumination of DZ.5040 stand

DISPOSABLES

- AE.1385** 100 W HBO mercury vapor bulb for fluorescence
- PB.5245** Lens cleaning paper, 100 sheets per pack
- PB.5274** Isopropyl alcohol 99% (200 ml)
- PB.5275** Cleaning kit: lens cleaning fluid, lint free lens tissue, brush, air blower, cotton swabs

- DZ.9060** Filter cube with GFP-B band-pass filter set for blue excitation, EX 460-500, DM 505, EM 510-560
- DZ.9061** Filter cube with GFP-L long-pass filter set for blue excitation, EX 460-500, DM 505, EM 510
- DZ.9049** Empty filter cube

Other fluorescence filters available on request

- customized configuration model DZ.0800, 2x DZ.3010, DZ.2025, DZ.9005, DZ.9010, DZ.4010 and DZ.5040



Z series

STEREO MICROSCOPES

INDUSTRY STEREO MICROSCOPES 8

These versatile high-end stereo microscopes are highly appreciated by the professional research teams and industry for the excellent optical and mechanical characteristics. Indispensable for a reliable quality inspection of industrial products. Certain components are also integrated in machines.

Depending on the application, the microscopes can be configured with different zoom heads, together with other components such as eyepieces, additional lenses, stands, stages, filters, etc



● ST.1720, ZE.1654 and LE.5210, LE.5239

ZE.1654

210 (h) x 155 (w) x 210 mm (d) | 2.5 kg

ST.1720

780 (h) x 270 (w) x 740 (max) mm (d) | 19 kg



HIGHLIGHTS

- Modular system
- Binocular and trinocular models
- Standard SWF 10x/23 mm eyepieces
- Stereo zoom heads with a fixed 45° inclined tubes
- Zoom magnification objectives
- Superior resolution optics
- Multiple stands
- 10 Years warranty



● ZE.1671, AE.1950, ST.1770, LE.5210 and LE.5218

SPECIFICATIONS

EYEPIECES

Pair of SWF 10x/23 mm eyepieces

HEAD

- Binocular or trinocular heads with a 45° inclined tubes
- Diopter ± 6° adjustment on both tubes for Z series
- Interpupillary distance from 55 to 75 mm
- Optional click-stops

ZOOM MAGNIFICATION OBJECTIVES

- Zoom objective with magnifications from 0.4x to 2.5x
 - Zoom objective with magnifications from 0.7x to 4.5x
 - Zoom objective with magnifications from 1x to 7x
- Zoom objectives with click stops are also available on request*

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

STANDS WITHOUT ILLUMINATION

- ST.1710** Pillar stand with ST.1790 head holder.
Pillar height 210 mm, diameter Ø 20 mm
Dimensions 250 (h) x 150 (w) x 240 mm (d)

- ST.1718** Pillar ergonomically flat stand with ST.1790 head holder. Pillar height 213 mm, diameter Ø 20 mm.
Dimensions 258 (h) x 330 (w) x 306 (d)

STANDS WITH ILLUMINATION

- ST.1740** Rack & pinion stand with 10 W halogen illumination. Supplied with frosted filter for transmitted illumination and a blue filter for incident illumination. Both illuminations are adjustable and can be used simultaneously. With integrated power supply.
Dimensions: 290 (h) x 160 (w) x 240 mm (d)
min/max height 240-290 mm



Stand with 3 W LED illumination and rotatable double-sided coated mirror

INDUSTRY STEREO MICROSCOPES 8

BOOM STANDS

- ST.1720** Articulated one arm boom stand with a 270 x 270 mm base, 610 mm and Ø 29 mm pillar, with orientable stereo head holder ST.1794. Vertical post 780 mm. Weight 19.5 kg
- 65.980** Articulated one arm stand to be mounted on table without 83 mm head holder. Depth positioning of stereo head between 33 and 100 cm. Working distance: 0 - 295 mm
- 65.983** Head holder 85 mm diameter for 65.980

HEAD HOLDERS

Other optional head holders for boom stands

- ST.1790** Head holder with coarse adjustment*
- ST.1796** Head holder with coarse and fine adjustment* Head holder with coarse adjustment and opening for one fiber light guide*
- ST.1792** Head holder with coarse adjustment and opening for one fiber light guide*[
- ST.1794** Orientable head holder with coarse adjustment and opening for one fiber light guide**
- ST.1798** Orientable head holder with coarse and fine adjustment and opening for one fiber light guide**

* Not suitable for boom stands ST.1720 and 65.980/65.983

** Only suitable for boom stand ST.1720

All head holders have an internal diameter of 84 mm and a friction adjustment

STAGE

- AE.1950** Large sliding X-Y stage, 350 x 270 mm, manual operation

FOCUSING

Coarse adjustment and friction adjustment for head holders for ST.1790, ST.1794, ST.1796. The head holders ST.1796 and ST.1798 are also equipped with a fine focusing adjustment

PACKAGE CONTENT

Models with illumination are supplied with power cord, dust cover, a spare fuse and user manual. All packed in a polystyrene box

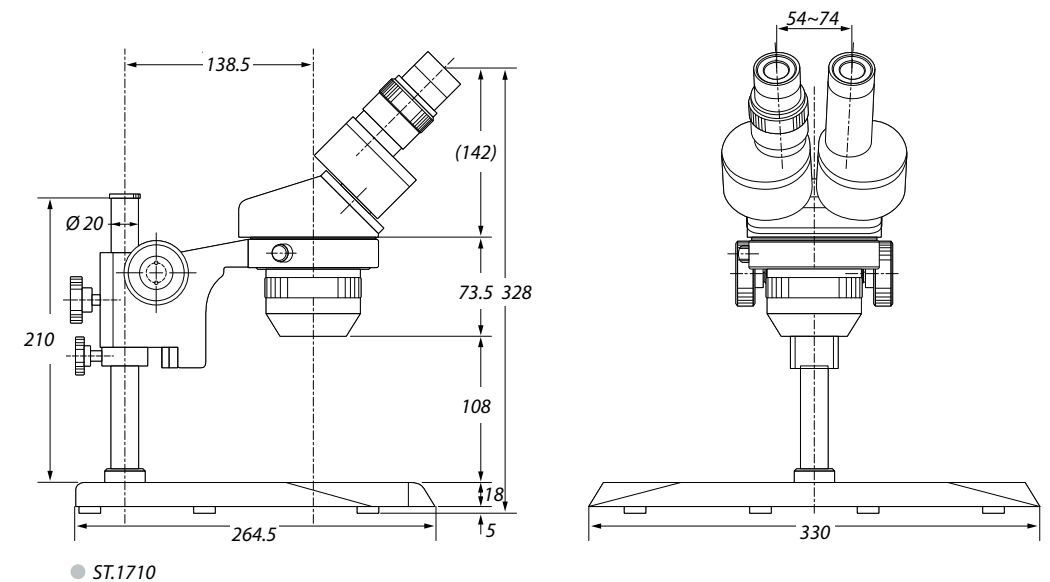


ST.1718 ●

STANDS

MODELS	Column (mm)	Diameter (mm)	Rack & pinion	Base (w x d mm)	Height (mm)	Head holder	Illumination
ST.1710	210	20		240 x 150	258	ST.1790	
ST.1718	213	20		330 x 306	285	ST.1790	
ST.1720	610	29		780 x 270	650	ST.1794	
ST.1735			•	240 x 160	290		3 W LED
ST.1740			•	240 x 160	290		10 W Hal
ST.1770	360	29		500 x 580	400	ST.1790	
65.980/65.983			•	Ø 1000 *	0/295	65.983	

* Length with the two arms totally extended



● ST.1710

ZOOM STEREO HEADS

MODELS	Binocular	Trinocular	Tilt tubes	Objective zoom	Magnification	WD (mm)	Field of view (mm)
ZE.1624	•		45°	0.7 - 4.5x	7 - 45x	93	32/5.1
ZE.1654		•	45°	0.7 - 4.5x	7 - 45x	93	32/5.1
ZE.1657		•*	45°	0.7 - 4.5x	7 - 45x	104	32/5.1
ZE.1670	•		45°	1 - 7x	10 - 70x	104	23/3.3
ZE.1671		•*	45°	1 - 7x	10 - 70x	104	23/3.3

* When the trinocular tube is engaged, the image is still available in both eyepieces
All zoom stereo heads are supplied with SWF 10x/23 mm eyepieces without eyecups

ACCESSORIES AND SPARE PARTS

EYEPIECES (without eyecups)

- AE.1835** Pair of SWF 5x/26 mm eyepieces
- AE.1836** Pair of SWF 10x/23 mm eyepieces
- AE.1834** Pair of SWF 12.5x/20 mm eyepieces
- AE.1837** Pair of SWF 15x/16 mm eyepieces
- AE.1838** Pair of SWF 20x/11.5 mm eyepieces
- AE.1840** Pair of SWF 30x/7.5 mm eyepieces
- AE.5439** Pair of eyecups
- AE.5425** Pair of eyecups, suitable when wearing glasses

MICROMETER EYEPIECES (with adjustable lens)

- AE.1839** SWF 10x/21 mm with 10 mm/100 micrometer reticle and crosshairs
- AE.1841** SWF 10x/21 mm with 10 x 10 mm reticle, 400 squares
- AE.1842** SWF 10x/21 mm with photo corners marks

MICROMETER SLIDE

AE.1112 Object slide 76 x 26 mm with micrometer
50mm/500, 100 µm/division

ADDITIONAL LENSES

(for ZE.1659)

AE.1850 Additional 0.7x lens. WD 233 mm

AE.1822 Additional 0.57x lens. WD 300 mm

ADDITIONAL LENSES

(for ZE.1624, ZE.1654, ZE.1670, ZE.1671, ZE.1626)

AE.1855 Additional 0.3x lens. WD 250 mm.
Suitable with ST.1720, ST.1770, ST.1780, ST.1785
and 65.980 stands

AE.1870 Additional 0.44x lens. WD 180 mm.
Suitable with ST.1715, ST.1720, ST.1770, ST.1780,
ST.1785 and 65.980 stands

AE.1856 Additional 0.5x lens. WD 150 mm.
Suitable with ST.1740. Maximum object size
is 15 mm

AE.1857 Additional 0.75x lens. WD 97 mm

AE.1858 Additional 1.5x lens. WD 50 mm

AE.1859 Additional 2.0x lens. WD 34 mm

ADDITIONAL LENSES

(for ZE.1629)

AE.1805 Additional 0.3x lens. WD 330 mm.
Suitable with ST.1720, ST.1770, ST.1780, ST.1785
and 65.980 stands

AE.1806 Additional 0.5x lens. WD 198 mm.
Suitable with ST.1715, ST.1720, ST.1770, ST.1780,
ST.1785 and 65.980 stands

AE.1807 Additional 0.75x lens. WD 125 mm

AE.1808 Additional 1.5x lens. WD 62 mm

AE.1809 Additional 2.0x lens. WD 42 mm

ADDITIONAL LENSES

(for ZE.1657)

AE.1816 Additional 0.35x lens. WD 250 mm

AE.1817 Additional 0.5x lens. WD 174 mm

AE.1818 Additional 1.5x lens. WD 57 mm

PROTECTION WINDOWS

(to be screwed under the objectives)

AE.1845 Protection window for all heads of ZE series
except ZE.1659

AE.1825 Protection window for ZE.1659.
Not suitable with additional lenses

DARKFIELD

AE.1878 Darkfield attachment for ST.1740

AE.1879 Iris diaphragm suitable with AE.1878

AE.1871 Object table for AE.1878 with ST.1760 stand.
Suitable to observe contact lenses or gems
with an object slide

POLARIZATION

AE.1890 Analyzer, in rotatable mount.
Not suitable with ZE.1659

AE.1891 Polarizer in mount.
Suitable with ST.1740 and ST.1760

AE.1892 Retardation plate gypsum 1st order red.
Suitable with polarizer AE.1891

MECHANICAL STAGES

AE.1876 Plain stage 145 x 115 mm with 75 x 50 mm
X-Y mechanical stage on ball bearings.
Horizontal coaxial adjustment.

Double Vernier with 0.1 mm graduations.
Only with ST.1710, ST.1715 and ST.1740

AE.1896 Stage 145 x 115 mm with central glass object
plate and 75 x 50 mm X-Y mechanical stage on
ball bearings. Horizontal coaxial adjustments.
Double Vernier with 0.1 mm graduations.
Only with ST.1740 and ST.1760

AE.1877 Large stage 170 x 155 mm with 100 x 105 mm
X-Y mechanical stage on ball bearings.
For ST.1710, ST.1715 and ST.1740

AE.1950 Large 390 x 390 mm stage with 360 x 360 mm
X-Y mechanical stage.
Only for ST.1720, ST.1770, ST.1780 and ST.1785

OBJECT STAGES

AE.1884 Round object high-profile table with frosted
glass filter. Interchangeable with darkfield
ST.1760

AE.1885 Round object low-profile table with frosted
glass filter. Interchangeable with darkfield
ST.1740

OBJECT PLATES - Ø 94 MM

AE.1881 Glass transparent object plate

AE.1882 Acrylic black/white object plate

FILTERS - Ø 40 MM

AE.1897 Frosted glass filter

AE.1898 Blue filter

OBJECT HOLDER

AE.5446 Orientable clamp for gems.
Interchangeable with object plate clamp

SPARE BULB AND FUSES

SL.1868 30 W 230 V incandescent bulb for ST.1750 stand

SL.1869 10 W 6 V halogen bulb for ST.1740 illumination

AE.5252 Fuses for ST.1740 stand. Per 10 pieces

CAMERA ACCESSORIES

AE.5059 Projection 0.45x objective with C-mount for
cameras with 1/2" sensor. To be placed over a
23.2 mm ZE series photo tube.
Optional reticle available

AE.5063 Projection 0.7x objective with C-mount for
cameras with 2/3" sensor. To be placed over
a 23.2 mm ZE series photo tube.
Optional reticle available

DC.1320 Projection 1x objective with C-mount
DC.1324 Projection 0.5x objective with C-mount
for cameras with 1/2" sensor.
To be inserted into a 23.2 mm tube

DC.1326 Projection 0.33x objective with C-mount
for cameras with 1/3" sensor.
To be inserted into a 23.2 mm tube

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

AE.5025 T2 adapter for Nikon D digital SLR cameras

AE.5040 T2 adapter for Canon EOS digital SLR cameras

Other T2 adapters on request

WD = working distance

STEREO MICROSCOPES

BE series

INDUSTRY STEREO MICROSCOPES 8



● BE.1812

BE-50 series

Stereo microscopes of the BE-50 series with interchangeable objectives mounted in a slider are intensively used in the industry. The high depth of field and the extra large working distance are the main characteristics of this stereo microscope

These characteristics allow users to work under the microscope with ease. Ideal for jewelers, watchmakers, soldering, quality inspection and so on

A 44 cm flexible arm LED light source makes sure the object can be illuminated from any angle. The heavy metal base makes this system very stable. Magnifications vary from 2.5x to 40x

BE-50
345 (h) x 130 (w) x 410 mm (d) | 7.0 kg



HIGHLIGHTS

- Professional stereo microscopes for extra long working distances
- Interchangeable magnifications from 2.5x up to 40x
- Overhanging stand
- Large working area
- LED illumination
- 5 Years warranty



● BE.7405 / BE.7410 / BE.7420

SPECIFICATIONS

EYEPIECES

Pair of WF 10x/20 mm

HEAD

Binocular 45° inclined tube. Interpupillary distance adjustable between 55 and 75 mm

STAND

Stable overhanging heavy base stand with pillar

FOCUSING ADJUSTMENT

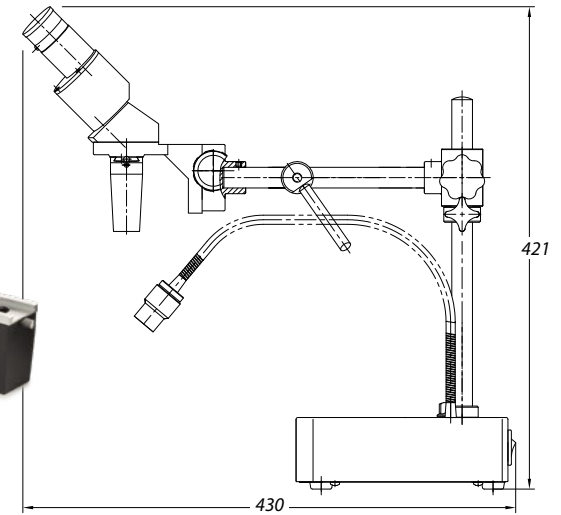
Coarse adjustment with tension control

ILLUMINATION

Incident 1 W LED illumination 44 cm on flexible arm. Intensity is adjustable

ACCESSORIES AND SPARE PARTS

- | | | | |
|----------------|----------------------------------------|----------------|-----------------------------------------|
| BE.6005 | Pair of HWF 5x/22 mm eyepieces | BE.7405 | 0.5x objective for BE-50 LED. WD 250 mm |
| BE.6010 | Pair of HWF 10x/20 mm eyepieces | BE.7410 | 1.0x objective for BE-50 LED. WD 230 mm |
| BE.6015 | Pair of HWF 15x/12 mm eyepieces | BE.7420 | 2.0x objective for BE-50 LED. WD 119 mm |
| BE.6020 | Pair of HWF 20x/10 mm eyepieces | AE.1112 | Micrometer slide, 50 mm/50 divisions |
| BE.6110 | HWF 10x/20 mm eyepiece with micrometer | | |
| BE.6099 | Pair of eyecups | | |



OBJECTIVES

- Comes with 0.5x fixed magnification objective, magnification 5x, field of view 40 mm. Working distance 250 mm
- Additional 1x fixed magnification objective available, magnification 10x, field of view 20 mm. Working distance 230 mm
- Additional 2x fixed magnification objective available, magnification 20x, field of view 10 mm. Working distance 119 mm

Other magnifications available with optional eyepieces up to 40x. All optics are anti-fungus treated and anti-reflection coated for maximum light throughput

INDUSTRY STEREO MICROSCOPES 8

MODELS	Binocular	0.5x objective	1.0x objective	2.0x objective	WD	LED illumination
BE.1802	•	•			250 mm	•
BE.1812	•		•		230 mm	•
BE.1820	•			•	119 mm	•

STEREO MICROSCOPES

P series



P series

The microscopes of the P series are specifically designed for industrial purposes and come in 10/30x or 20x/40x magnification versions. By using optional eyepieces magnifications from 5x to 80x can be achieved

These microscopes are equipped with a rack & pinion stand and a 360° rotatable head

The P series are compact and lightweight, ideal microscopes for industrial applications either in a workshop or for field work



● P-20 (60.200)



60.100 / 60.200
315 (h) x 120 (w) x 190 mm (d) | 2.5 kg

HIGHLIGHTS

- Binocular models
- Easy to use
- 360° Revolving rotatable head with 45° Inclined tubes
- Secured WF 10x/20 mm eyepieces
- 10x/30x and 20x/40x magnification in revolving nosepiece
- Robust rack & pinion stand with powerful halogen or LED illumination
- LED illumination with rechargeable batteries for cordless use
- Incident and transmitted illuminations can be used simultaneously
- Lightweight; easy to carry to any location
- 5 Years warranty



● P-10 (60.100)

SPECIFICATIONS

EYEPIECES

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

HEAD

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

OBJECTIVES

- The P-10 and P-10 LED models are supplied with revolving 1x/3x objectives for total magnification of 10 and 30 times with a field of view from 20 to 6.7 mm
- The P-20 and P20-8 LED models are supplied with revolving 2x/4x objectives for total magnification of 20 and 40 times with a field of view from 10 to 5 mm
- Magnifications of 5 to 80x can be achieved by using 5x, 15x or 20x eyepieces

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

STAND

Robust pillar stand with 35 mm coarse adjustment. Supplied with black/white object plate and two object clamps

ILLUMINATION

The P-10 and P-20 models are supplied with 10 W 12 V halogen transmitted and incident illumination and internal power supply. Both illuminators can be operated independently or simultaneously

The P-10 LED and P-20 LED models are supplied with high power LED transmitted and incident illumination. With three rechargeable batteries for maximum 35 hours continuous cordless operation. Both illuminators can be operated independently or simultaneously. Supplied with external mains adapter

CAMERAS

Euromex offers a wide range of industrial and laboratory grade cameras, see chapter 10 (Digital solutions).

For P series, the camera replaces one of the eyepieces

PACKAGE CONTENT

Supplied with power cord, dust cover, a spare fuse and user manual (and spare bulb for halogen models).

All packed in a polystyrene box

ACCESSORIES AND SPARE PARTS

EYEPIECES

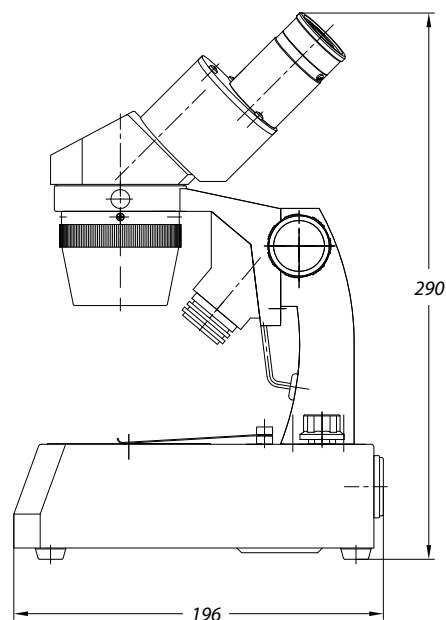
- 50.805** Pair of wide field eyepieces WF 5x/22 mm
- 50.810** Pair of wide field eyepieces WF 10x/20 mm
- 50.811** Micrometer eyepiece WF 10x/20 mm, 10 mm/100
- 50.815** Pair of wide field eyepieces WF 15x/16 mm
- 50.820** Pair of wide field eyepieces WF 20x/10 mm
- 50.840** Pair of eyecups

MISCELLANEOUS

- 50.871** Black/white stage plate Ø 94 mm
- 50.873** Glass stage plate Ø 94 mm
- 50.875** Adjustable GEM object clamp for P series
- 50.876** Darkfield attachment
- 50.882** Spare halogen bulb 12 V 10 W for P series (transmitted illumination)
- 50.961** Plastic case for P series

DISPOSABLES

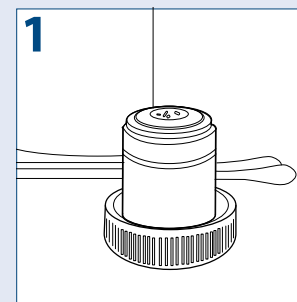
- AE.1112** Micrometer slide, 50 mm/50 divisions
- PB.5245** Lens cleaning paper, 100 sheets per pack
- PB.5274** Isopropyl alcohol 99% (200 ml)
- PB.5275** Cleaning kit: lens cleaning fluid, lint free lens tissue, brush, air blower and cotton swabs



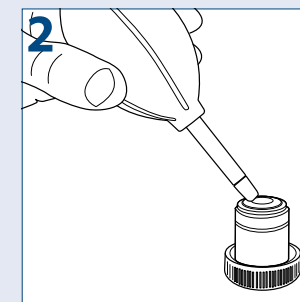
MODELS	45° head	1x/3x objective	2x/4x objective	Transmitted halogen illumination	Incident halogen illumination	Transmitted LED illumination	Incident LED illumination
P-10 60.100	•	•		•	•		
P-10 LED 60.110	•	•				•	•
P-20 60.200	•		•	•	•		
P-20 LED 60.210	•		•			•	•

how to keep the optics clean PB.5275 cleaning kit

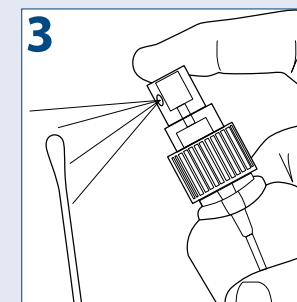
Dust and dirt particles have a negative affect on image quality. Keeping the optical system of your microscope clean is essential for the best image quality and overall lifetime of your microscope. Dust and dirt on optical elements such as lenses, prisms and filters that are left unattended can become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



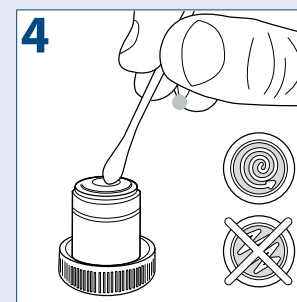
Place your objective or eyepiece on a secure location. One can use the objective's cap or eyepieces can be placed in the cut-outs within the storage box. Condensers and collector lenses can remain on the microscope



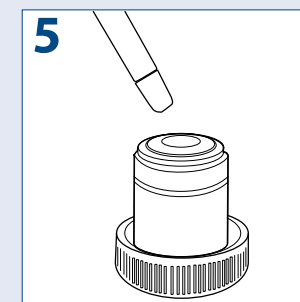
To prevent scratches on coatings and optical glass, first try to remove dirt and dust that sticks to the optical surface with an air-blower or pressurized dry air (oil-free and under moderate pressure version only)



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



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



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

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



● PB.5275

PLEASE NOTE

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

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



materials science



Microscopes for materials science applications have specific objectives and other tools such as incident illuminations, polarization and compensation filters. This allows precise observation of materials such as metals, plastics, minerals, asbestos, glass, wood and chemical materials

Euromex offers a range of metallurgical microscopes, microscopes with rotatable stages and strain-free objectives for polarized light observation, microscopes for asbestos identification and inverted materials science microscopes

- ISCOPE (MATERIALS & POLARIZATION) • PAGE 302**
- BSCOPE (MATERIALS) • PAGE 308**
- DELPHI-X OBSERVER (MATERIALS) • PAGE 312**
- OXION (MATERIALS) • PAGE 320**
- OXION INVERSO (MATERIALS) • PAGE 324**

MATERIALS SCIENCE MICROSCOPES

iScope®

FEATURED

NeoLED™
euromex optical technology

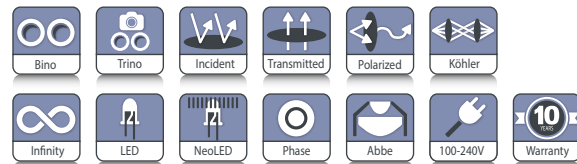


● IS.1053-PLMi

iScope® for materials science

The iScope® microscopes are supplied with specific attachments that turn the iScope® into a state-of-the-art materials science microscope, suitable for various applications

There are three types of materials science microscopes. Metallurgical microscopes, polarization microscopes and microscopes specifically designed for asbestos identification



IS.1053-PLMi
585 (h) x 210 (w) x 480 mm (d) | 10.5 kg

IS.1053-PLPOLRi
590 (h) x 210 (w) x 475 mm (d) | 12.3 kg

HIGHLIGHTS

- EWF 10x/20 mm and EWF 10x/22 mm eyepieces
- Binocular and trinocular models
- Reversed revolving nosepiece
- Infinity corrected IOS objectives for material observation, polarization and asbestos research
- 150 x 140 mm rackless stage equipped with metal and glass inserts
- Ø 160 mm rotatable circular stage for polarization models
- Diascopic 3 W NeoLED™ Köhler illumination
- Epi-NeoLED™ illumination for metallurgical models
- 50 W Epi-illumination for polarization models
- iCare sensor for energy saving
- CSS - Cable Storage System
- 10 Years warranty

SPECIFICATIONS

EYEPIECES

The metallurgical models are supplied with extended EWF 10x/20 mm (Ø 30 mm tube) eyepieces. Polarization models are supplied with a pair of EWF 10x/22 mm or EWF 10x/20 mm (Ø 30 mm tube) eyepieces, one eyepiece with crosshairs and one eyepiece with crosshairs and micrometer reticle

Specific models for asbestos identification are supplied with HWF 12.5x/15 mm (Ø 30 mm tube) eyepieces and a Walton-Beckett reticle

HEAD

Binocular and trinocular Siedentopf type heads with 30° inclined tubes. Interpupillary distance from 48 to 76 mm. Two ± 5 diopter adjustments. A unique rotating system allows ergonomic positioning of both tubes in a high (431 mm) and in a low position (397 mm).

Optional photo C-mount adapters with built-in 0.33x or 0.5x objective fits the trinocular head with 23.2 mm tube



● IS.1053-PLPOLRi

NOSEPIECE

Models for polarization are supplied with reversed revolving quadruple nosepiece. Other models have a reversed quintuple nosepiece on ball bearings

STAGE

- 150 x 140 mm rackless stage equipped with double slide holder and integrated 78 x 53 mm mechanical stage. Supplied with a plain metal and plain glass inserts
 - Ø 160 mm circular stage for polarization models, 360° rotatable with Vernier and two object clamps; an optional 30 x 40 mm X-Y mechanical stage is available
- A ceramic stage is also available on request*

STANDARD CONDENSER

Metallurgical models are equipped with height adjustable Abbe N.A. 1.25 condenser with iris diaphragm. Suitable for slider with darkfield stop for magnifications up to maximum 400x. Optional height adjustable Abbe N.A. 0.9/1.25 swing-out condenser with iris diaphragm

CONDENSER FOR POLARIZATION MICROSCOPES

Height adjustable Abbe N.A. 1.25 condenser with iris diaphragm and 360° rotatable polarizer

CONDENSER FOR ASBESTOS RESEARCH MICROSCOPES

Height adjustable Abbe 1.25 phase contrast condenser supplied with slider with 10/40 annuli, green filter and alignment telescope

FOCUSING

Coaxial coarse and fine adjustments, 200 graduations, 1 µm per graduation, 200 µm per rotation, total travel range is approximately 24 mm (20 mm for metallurgical versions) and is supplied with an adjustable rack stop to prevent damage to sample and objectives. The coarse adjustment is equipped with friction control

DIASCOPIIC ILLUMINATION

Intensity adjustable 3 W Köhler NeoLED™ illumination with internal 100-240 V power supply. The larger aperture of NeoLED™ allows the optical systems of the iScope® microscope to produce images at higher resolutions, very close to the theoretical diffraction limit of the optics. Other benefits for choosing NeoLED™ are low energy consumption, no heating and a long operating life span.

The Köhler setting provides homogeneous illumination and high contrast

OBJECTIVES

Model	5x	10x	20x	50x	S100x
Plan PLMi IOS ⁽¹⁾	5x/0.12	10/0.25	20x/0.40	50x/0.70	S100x/0.80 (6)
Plan PLPOLi IOS ⁽²⁾	5x/0.12	10/0.25	20x/0.40	S40x/0.65	S60x/0.80 (6) S100x/1.25 (6)
Plan PLPOLRi IOS ⁽³⁾	5x/0.12	10/0.25	20x/0.40 (6)	50x/0.70	S100x/0.80 (6)
Plan PLi IOS ⁽⁴⁾	4x/0.10	10/0.25	20x/0.40	S40x/0.65 (5)	S60x/0.85 (6) S100x/1.25 (6)

⁽¹⁾ Plan PLMi Infinity corrected objectives for observation of materials. No cover glass correction

⁽²⁾ Plan PLPOLi strain free infinity corrected objectives for polarization applications. With 0.17 mm cover glass correction. For transmitted illumination

⁽³⁾ Plan PLPOLRi strain free Infinity corrected objectives for polarization applications. No cover glass correction. For reflected illumination attachment

REFLECTED ILLUMINATION FOR METALLURGICAL MODELS

Metallurgical models are equipped with a reflected NeoLED™ illumination and external 100-240 V power supply. Supplied with a 0-90° polarization filter in slider, fixed analyzer in slider, white, green, blue and yellow filters

REFLECTED ILLUMINATION FOR POLARIZATION MODELS

Polarization models are equipped with a 50 W 12 V halogen epi-illumination and external 100-240 V power supply. Supplied with 360° rotatable polarization filter, analyzer, Bertrand lens, 1 λ first red plate, 1/4 λ retardation plate, a quartz wedge, sliders with green/blue and whiter/polarizer filter

ICARE SENSOR

The unique iCare Sensor is developed to avoid unnecessary loss of energy. The illumination of the microscope automatically switches off shortly after microscopists step away from their position

CSS – CABLE STORAGE SYSTEM

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

PACKAGE CONTENT

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

⁽⁴⁾ Plan PLi infinity corrected objectives for asbestos research. With 0.17 mm cover glass correction

⁽⁵⁾ The S40x objective for asbestos research is a plan phase PLPHi infinity corrected objective. With 0.17 mm cover glass correction

⁽⁶⁾ Optional objectives
All optics are anti-fungus treated and anti-reflection coated for maximum light throughput

ISCOPE® POLARIZATION MODELS

MODELS	Bino	Trino	EWf 10x/20 mm ⁽⁴⁾	EWf 10x/22 mm ⁽⁴⁾	Plan PLPOLi 5x/10x/20x/ S40x IOS objectives ⁽¹⁾	Plan PLPOLRi 5x/10x/20x/ S50x IOS objectives ⁽²⁾	Ø160 mm stage, 360° rotatable	Polarization condenser with gratuated 360° polarizer	Transmitted illumination Köhler LED	50W 12V halogen epi-illumination ⁽³⁾
IS.1052-PLPOLi	•			•	•		•	•	•	
IS.1053-PLPOLi		•		•	•		•	•	•	
IS.1052-PLPOLRi	•		•			•	•	•	•	•
IS.1053-PLPOLRi		•	•			•	•	•	•	•

⁽¹⁾ Strain free objectives with 0.17 mm cover glass correction

⁽²⁾ Strain free objectives without 0.17 mm cover glass correction

⁽³⁾ The reflected 50 W illumination attachment of the IS.1052-PLPOLRi and IS.1053-POLRi models are equipped with a 360° rotatable polarization filter, analyzer, Bertrand lens, 1 λ first red plate, 1/4 λ retardation plate, a quartz wedge, slider with green and blue filter. External 240 or 115 Vac/ 12 Dc 4.16 A power supply

⁽⁴⁾ The iScope® polarization models are supplied with one eyepiece with crosshairs and one eyepiece with crosshairs and 10/100 micrometer

ISCOPE® METALLURGICAL MODELS

MODELS	Bino	Trino	EWf 10x/20 mm	Plan PLMi 5x/10x/20x/ S50x IOS objectives *	Mechanical rackless stage	Abbe condenser	Köhler 3 W LED	Metallurgical attachment with NeoLED™ epi-illumination
IS.1052-PLMi	•		•	•	•	•	•	•
IS.1053-PLMi		•	•	•	•	•	•	•

*Objectives without cover glass correction

The reflected illumination attachment is supplied with a 0-90° polarizer mounted in a slider, a fixed analyzer in slider, a white, yellow and blue filter, all mounted in a slider. External 100-240 Vac/ 7.5 Dc power adapter

ISCOPE® ASBESTOS RESEARCH MODELS

MODELS	Binocular	Trinocular	HWF 12.5x/15 mm	HWF 12.5x/15 mm, with Walton-Bracket	Plan PLi 4/10x objectives *	Plan phase PLPHi S40x objectives	Phase contrast condenser	Mechanical rackless stage	iCare Sensor	Köhler LED
IS.1052-PLAi	•		•	•	•	•	•	•	•	•
IS.1053-PLAi		•	•	•	•	•	•	•	•	•

*Objectives with cover glass correction

Note: the iScope® asbestos research model is equipped with a 87/230 x 140 mm rackless stage with double slide holder and integrated 79 x 52 mm mechanical stage. The iScope® rackless stage has no protruding parts, enables more smooth movements and is safer to work with (see photo on the right)



ACCESSORIES AND SPARE PARTS

EYEPIECES

- IS.6210** EWF 10x/22 mm eyepiece*
- IS.6210-C** EWF 10x/22 mm eyepiece with crosshairs*
- IS.6210-P** EWF 10x/22 mm eyepiece with pointer*
- IS.6210-CM** EWF 10x/22 mm eyepiece with 10/100 micrometer and crosshairs*
- IS.6212** WF 12.5x/17 mm eyepiece*
- IS.6212-W** WF 12.5x/17 mm eyepiece with Walton Beckett reticle*
- IS.6215** WF 15x/16 mm eyepiece*
- IS.6215-CM** EWF 15x/16 mm eyepiece with 10/100 micrometer and crosshairs*
- IS.6220** WF 20x/12 mm eyepiece*
- IS.6299** Pair of eyecups for infinity corrected iScope® models
- IS.6310** EWF 10x/20 mm eyepiece*
- IS.6310-C** EWF 10x/20 mm eyepiece with crosshairs*
- IS.6310-CM** EWF 10x/20 mm eyepiece with 10/100 micrometer and crosshairs*

* Ø 30 mm tube

PLAN PLMI INFINITY CORRECTED IOS OBJECTIVES FOR MATERIALS SCIENCE

- IS.8105** Plan PLMi 5x/0.12 IOS objective. * WD 15.5 mm
- IS.8110** Plan PLMi 10x/0.25 IOS objective. * WD 10 mm
- IS.8120** Plan PLMi 20x/0.40 IOS objective. * WD 4.3 mm
- IS.8150** Plan PLMi S50x/0.70 IOS objective. * WD 0.32 mm
- IS.8100** Plan PLMi S100x/0.80 IOS objective. * WD 2 mm

* No cover glass correction

PLAN PLI INFINITY CORRECTED IOS OBJECTIVES FOR ASBESTOS RESEARCH

- IS.7202** PPlan PLi 2x/0.05 IOS objective. ** WD 20.2 mm
- IS.7204** PPlan PLi 4x/0.12 IOS objective. ** WD 15.4 mm
- IS.7210** PPlan PLi 10x/0.25 IOS objective. ** WD 10 mm
- IS.7220** PPlan PLi 20x/0.40 IOS objective. ** WD 5.1 mm
- IS.7210** PPlan phase PLPHi 40x/0.65 IOS objective. ** WD 0.54 mm
- IS.7260** PPlan PLi 60x/0.85 IOS objective. ** WD 0.14 mm
- IS.7200** PPlan PLi 100x/1.25 IOS objective. ** WD 0.19 mm

** With 0.17 mm cover glass correction

PLAN PLPOLI INFINITY CORRECTED IOS OBJECTIVES FOR POLARIZATION

without reflected illumination attachment

- IS.7905-T** Plan PLPOLi 5x/0.12 IOS objective. * WD 15.5 mm
- IS.7910-T** Plan PLPOLi 10x/0.25 IOS objective. * WD 10 mm
- IS.7920-T** Plan PLPOLi 20x/0.40 IOS objective. ** WD 5.1 mm
- IS.7940-T** Plan PLPOLi S40x/0.65 IOS objective. ** WD 0.54 mm
- IS.7960-T** Plan PLPOLi S60x/0.80 IOS objective. ** WD 0.14 mm
- IS.7900-T** Plan PLPOLi S100x/1.25 IOS oil immersion objective. ** WD 0.13 mm

* No cover glass correction

** With 0.17 mm cover glass correction

PLAN PLPOLRI INFINITY CORRECTED IOS OBJECTIVES FOR POLARIZATION

with reflected illumination attachment

- IS.7905-R** Plan PLPOLi 5x/0.12 IOS objective. * WD 15.5 mm
- IS.7910-R** Plan PLPOLi 10x/0.25 IOS objective. * WD 10 mm
- IS.7920-R** Plan PLPOLi 20x/0.40 IOS objective. * WD 5.8 mm
- IS.7950-R** Plan PLPOLi S50x/0.75 IOS objective. * WD 0.92 mm
- IS.7900-R** Plan PLPOLi S100x/0.80 IOS objective. * WD 2 mm

* No cover glass correction

TRANSMITTED KÖHLER ILLUMINATION SYSTEM

- 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
- SL.5503** 3 W NeoLED™ replacement unit

POLARIZATION ATTACHMENT

without reflected illumination

- IS.9604** Quartz wedge in slider
- IS.9608** Analyzer 0-360° rotatable
- IS.9610** Lambda plate first red 530 nm in slider
- IS.9612** Lambda/4 retardation plate in slider

POLARIZATION ATTACHMENT

with reflected 50W/12V halogen illumination

- IS.9602-R** Polarizer
- IS.9604-R** Quartz wedge in slider
- IS.9608-R** 360° Rotatable analyzer in slider
- IS.9610-R** Lambda plate first red 530 nm
- IS.9612-R** Lambda/4 retardation plate in slider
- AE.3679** Halogen spare bulb 12 V 50 W

MATERIALS SCIENCE ATTACHMENT

with reflected NeoLED™ epi-illumination

- IS.9230** Reflected NeoLED™ epi-illumination attachment with for materials science with 5x, 10x, 20x and 550x objectives. Supplied with a 0-90° polarizer mounted in a slider, a fixed analyzer in slider, a white, yellow and blue filter, all mounted in a slider. With external 100-240 Vac/ 7.5 Vdc power adapter
- IS.9720** Blue filter in slider
- IS.9722** Green filter in slider
- IS.9724** Yellow filter in slider
- IS.9726** White filter in slider
- IS.9727** Polarizer 0-90° in slider for materials science attachment (IS.9230)
- IS.9728** Analyzer 0-360° rotatable in slider for materials science attachment (IS.9230)
- IS.9731** Slider with green and blue filters
- IS.9515** Metal plain insert for mechanical stage
- IS.9518** Glass plain insert for mechanical stage
- SL.5500** 3 W NeoLED™ replacement unit

CAMERA ACCESSORIES

- AE.5130** Universal SLR adapter with built-in 2x lens without T2 adapter. For standard 23.2 mm tube
- AE.5040** T2 adapter for Canon EOS SLR digital camera
- AE.5025** T2 adapter for Nikon D SLR digital camera

MISCELLANEOUS

- IS.9522** Optional 30 x 40 mm X-Y mechanical stage for circular polarization stage

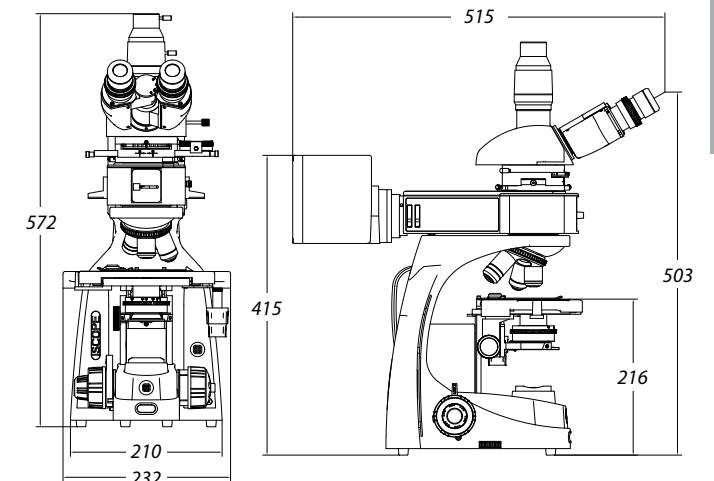
DISPOSABLES

- 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** Cleaning liquid, isopropanol alcohol 99% (200 ml)
- PB.5275** Cleaning kit: lens cleaning fluid, lint free lens tissue, brush, air blower and cotton swabs

WD = working distance



Ceramic stage



MATERIALS SCIENCE MICROSCOPES

bscope®

FEATURED

NeoLED™
euromex optical technology

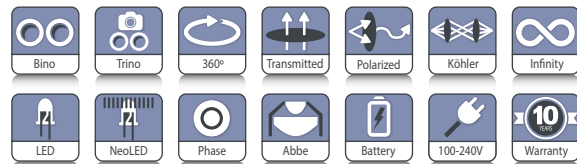


bScope® for materials science

The well-equipped microscopes of the bScope® for materials science are especially configured for observation of all kinds of materials such as metals, plastics, wood, glass, etc. These microscopes are extensively used in the materials research and quality assurance laboratories

The design of the bScope® is both ergonomic and evolutive. Wide field WF 10x/22 mm eyepieces and low focusing controls minimize fatigue during long working sessions and therefore provide more comfort for microscopists. The robust and compact size of the bScope® together with the Cable Storage System allow more working space, safer operation and easy storage

● BS.1053-PLMi



TRINOCULAR MODEL BS.1053-PLMi

515 (h) x 195 (w) x 431 mm (d) | 8.5 kg

HIGHLIGHTS

- Materials science microscopes
- Trinocular models
- WF 10x/22 mm eyepieces
- Reversed ball-bearing quintuple nosepiece with slot for polarization filter
- Plan M-IOS objectives
- Polarizer and analyzer filters
- Rackless integrated X-Y mechanical stage
- 3 W NeoLED™ adjustable transmitted and reflected NeoLED™ illumination
- Integrated carrying grip
- Cable Storage System and anti-theft system
- 10 Years warranty

SPECIFICATIONS

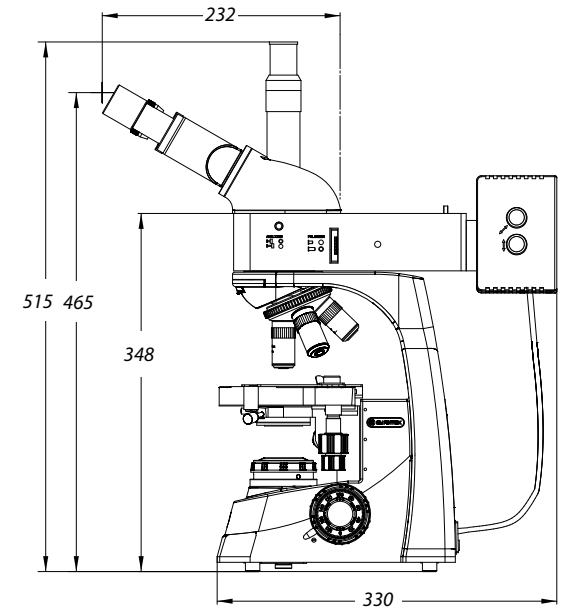
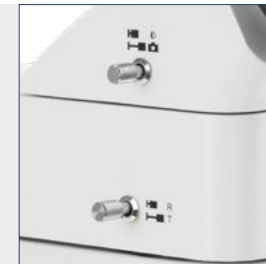
EYEPIECES

Wide field WF 10x/22 mm eyepieces with 22 mm field of view (Ø 30 mm tube)

HEAD

The bScope® is equipped with a Siedentopf type head, 360° rotatable and equipped with 30° inclined tubes, sporting a ± 5 diopter adjustment on left eyepiece. The interpupillary distance is adjustable between 48 to 76 mm. The trinocular head comes with a Ø 23.2 mm tube, ensuring maximum flexibility. The prisms inside the heads are designed to minimize the light absorption for perfect digital imaging. The trinocular head has a light path selector (100:0 / 0:100) and generates an erect image. Models with an integrated USB-2.0 camera are supplied with a 5.0 MP 1/2.5" CMOS sensor with a resolution of 2592 x 1944 pixels (see chapter 10)

Trinocular
light path selector
100-0/0-100



NOSEPIECE

Revolving and reversed ball-bearing quadruple nosepiece

OBJECTIVES

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

Infinity corrected achromatic DIN plan M-IOS 5x/0.12, 10x/0.25, 20x/0.40, 50x/0.70 IOS objectives. Optional plan M-IOS S80x/0.80 and S100x/0.85 DIN IOS objective are also available

*The S80x and S100x objectives are spring loaded
All optics are anti-fungus treated and anti-reflection coated for maximum light throughput*

FOCUSING

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

STAGE

The bScope® is equipped with a scratch resistant 185 x 140 mm stage with integrated 74 x 48 mm X-Y rackless mechanical stage, Vernier scale, soft-close removable specimen holder

The rackless stage has no protruding parts, enables more smooth movements and is safer in use. Low-positioned X-Y control knobs prevent fatigue during long working sessions

CONDENSER FOR BRIGHTFIELD

The standard height adjustable Abbe N.A. 1.25 condenser for brightfield comes with an iris diaphragm and swing-out filter holder

POLARIZATION

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

NEOLED™ REFLECTED ILLUMINATION

Reflected intensity adjustable 3 W NeoLED™ Köhler illumination with external power supply, push-pull type rotatable polarizer and push-pull analyzer, built-in condenser with iris diaphragm and field iris diaphragm. Integrated rotating filter disc with green, blue, yellow and white filters

NEOLED™ TRANSMITTED ILLUMINATION

The 3 W adjustable Köhler NeoLED™ diasopic illumination is powered by an internal 100-240 V power supply making it suitable for worldwide use. The innovative NeoLED™ design offers larger apertures, allowing the optical system of the bScope® microscope to produce images at higher resolutions, very close to the theoretical diffraction limit of the optics. Other benefits of the NeoLED™ is the low energy consumption, no heating and a long operating life span

KÖHLER ILLUMINATION

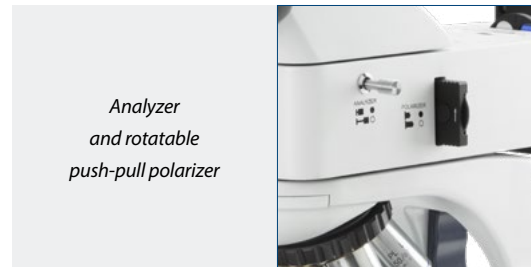
Köhler illumination ensures for all infinity corrected IOS models the highest possible contrast and the maximum achievable resolving power. Generates a uniform illumination of the sample and eliminates all interference from dust on lenses and side glare of the light source

CORDLESS USE

The optional rechargeable batteries turn the bScope® into a cordless system (only available for the transmitted illumination)

CSS – CABLE STORAGE SYSTEM

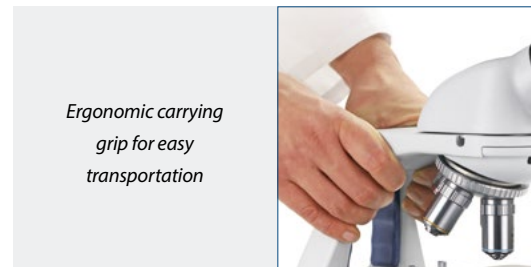
This system allows users to easily stow away excess cable length into the back of the instrument during operation and to roll up the power cable for easy storage



Analyzer and rotatable push-pull polarizer



Reflected illumination with rotating color filter disc



Ergonomic carrying grip for easy transportation

CARRYING GRIP

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

ANTI-THEFT SLOT

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

MODEL	Trinocular	WF 10x/22 mm eyepieces	PLMi 5x/10x/20x/50x IOS objectives	Transmitted NeoLED™ Köhler illumination	Reflected NeoLED™ Köhler illumination
BS.1053-PLMi	•	•	•	•	•

Optional: PLMi 100x IOS objective

ACCESSORIES AND SPARE PARTS

EYEPIECES

- BS.6310** WF 10x/22 mm eyepiece, \varnothing 30 mm tube
- BS.6310-M** WF 10x/22 mm eyepiece, \varnothing 30 mm tube with 10/100 micrometer
- BS.6315** WF 15x/12 mm eyepiece, \varnothing 30 mm tube
- BS.6399** Pair of eyecups, \varnothing 30 mm tube

OBJECTIVES

- BS.8105** Plan M-IOS DIN 5x/0.12 infinity corrected objective. WD 26.1 mm
- BS.8110** Plan M-IOS DIN 10x/0.25 infinity corrected objective. WD 20.20 mm
- BS.8120** Plan M-IOS DIN 20x/0.40 infinity corrected objective. WD 8.80 mm
- BS.8150** Plan M-IOS DIN 50x/0.70 infinity corrected objective. WD 3.68 mm
- BS.8180** Plan M-IOS DIN 80x/0.80 infinity corrected objective. WD 1.25 mm
- BS.8100** Plan M-IOS DIN 100x/0.85 infinity corrected objective. WD 0.40 mm

POLARIZATION

- BS.9602** Analyzer in mount for under nosepiece
- BS.9645** Polarizer, for lamphouse
- BS.9601-R** Polarizer in slider for reflected illumination attachment

PACKAGE CONTENT

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

MISCELLANEOUS

- AE.1370** Set of rechargeable batteries, three pieces
- BS.9515** Metal plain insert for mechanical stage
- BS.9518** Glass plain insert for mechanical stage

CAMERA ACCESSORIES

- AE.5130** Universal \varnothing 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

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 (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

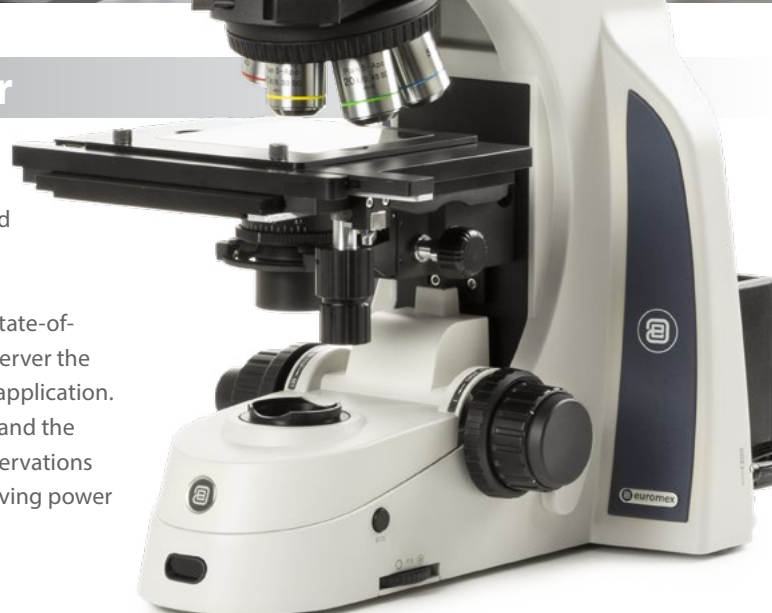
WD = working distance



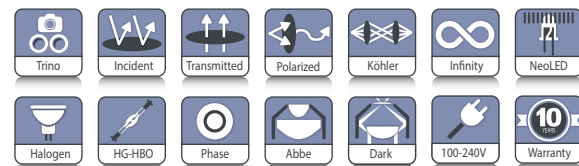
Delphi-X Observer for materials science

State-of-the-art microscopes for advanced materials science applications

The ergonomic design and outstanding state-of-the-art objectives make the Delphi-X Observer the ideal microscope for advanced materials application. The 25 mm field of view of the eyepieces and the plan apochromatic objectives enable observations with perfect color rendering at high resolving power



● DX.2053-PLMRi



BS.1053-PLMi
454 (h) x 261 (w) x 470 mm (d) | 21.6 kg

HIGHLIGHTS

- Brightfield and darkfield EPI illumination
- Polarization
- Nomarski DIC (optional)
- Enhanced infinity corrected EIS optical system
- High contrast objectives with minimal aberrations
- Full apo, semi-apo and plan EIS objectives
- Super wide field SWF 10x/25mm eyepieces
- 100 W halogen illumination
- Sextuple reversed nosepiece with slot for DIC
- Quintuple nosepiece for polarization models

SPECIFICATIONS

EYEPIECES

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

STANDARD HEAD

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

ERGONOMIC TILTING HEAD

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

NOSEPIECE

Revolving sextuple reversed nosepiece on ball-bearings with 25 mm objectives mounting threads except the models for polarization applications which are equipped with a quintuple nosepiece

ENHANCED INFINITY SYSTEM (EIS)

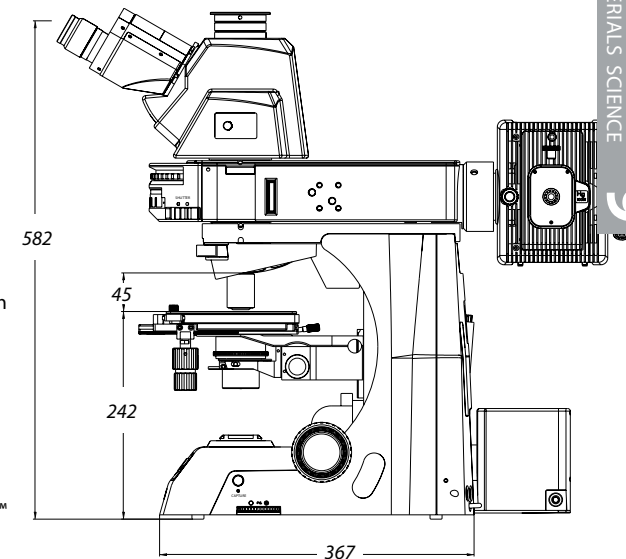
The enhanced infinity system (EIS) of the Delphi-X Observer™ consists of super wide field SWF 10x25 mm eyepieces, high



● Revolver with slot for Nomarski DIC slider

numerical aperture 45 mm parfocal objectives and a 200 mm focal length tube lens. This tube lens reduces the angle of the light rays passing through the optics and as a direct result significantly improves the chromatic aberration corrections and contrast. The objectives with larger diameter enable much higher numerical apertures improving the overall resolving power of the optical system

For all these reasons the Delphi-X Observer™ offers superior optical performance for the most demanding applications



OBJECTIVES

The following infinity corrected EIS objectives are supplied with or available for the Delphi-X Observer™:

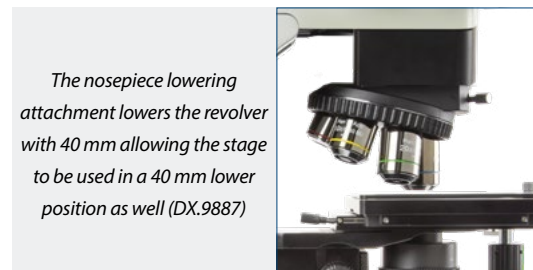
Plan semi-apo PLMi (BF/DF)	5x/0.15, WD 20 mm	10x/0.30, WD 11 mm	20x/0.45, WD 3.1 mm		
Plan apo PLMi (BF/DF)				50x/0.80, WD 1 mm	100x/0.90, WD 1 mm ⁽¹⁾
Plan semi-apo PLPOLRi ⁽²⁾ strain-free	5x/0.15, WD 20 mm	10x/0.30, WD 11 mm	20x/0.45, WD 3.0 mm	50x/0.80, WD 1 mm	
Plan PLPOLi (BF/POL) ⁽³⁾	2x/0.06, WD 7.5 mm	4x/0.10, WD 20 mm	10x/0.25, WD 10.2 mm	20x/0.45, WD 12 mm	40x/0.65, WD 0.7 mm
					60x/0.80, WD 0.3 mm ⁽¹⁾

¹⁾ Optional

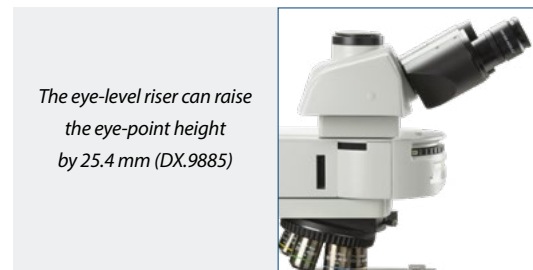
²⁾ For models for polarization applications with incident illumination. No cover glass correction

³⁾ For models for polarization applications without incident illumination. With 0.17 mm cover glass correction

All objectives are 45 mm parfocal and have a M25 x 0.7 mounting thread. All optics are anti-fungus treated and anti-reflection coated for maximum light throughput



The nosepiece lowering attachment lowers the revolver with 40 mm allowing the stage to be used in a 40 mm lower position as well (DX.9887)



The eye-level riser can raise the eye-point height by 25.4 mm (DX.9885)

STAGE

- Large 215 x 170 mm stage with 105 x 105 mm integrated right-handed mechanical stage, with glass and metal insert. Stage height can be lowered for large samples (1 to 28 mm standard sample size, lowered to 55 mm sample size)
- Diameter 190 mm circular stage for models for polarization applications. 360° Rotatable with Vernier and two object clamps and an optional 30 x 30 mm X-Y mechanical stage

CONDENSER FOR POLARIZATION

Height adjustable Abbe N.A. 1.25 condenser with iris diaphragm and 306° rotatable polarizer

FOCUSING

Coaxial coarse and fine adjustment, 100 graduations, 1 µm precision, 100 µm per rotation, total travel range is approximately 35 mm. Supplied with an adjustable rack stop to prevent damage to sample and objectives. The coarse

adjustments are equipped with friction control. The focusing knobs can be switched from left to right according to the user's preference

LONG WORKING DISTANCE CONDENSER

In height adjustable long working distance N.A. 0.65 condenser (10.2 mm) with numerical aperture identification marks allows easy setting

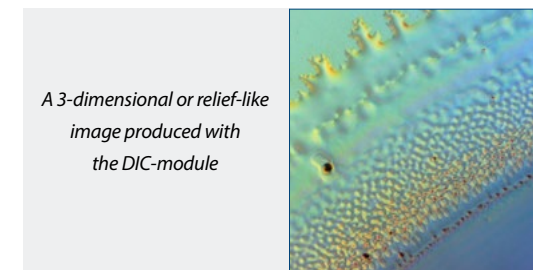
ILLUMINATION

The Delphi-X Observer materials science microscope is equipped with epi and diascope intensity adjustable 100 W halogen illumination with internal 100-240 Vac power supply. The diascope halogen illumination comes with two push-in/push-out neutral density filters for smooth attenuation of the light intensity for all kinds of samples

The microscope comes with an analyzer and a polarizer which can easily be inserted into the free slots of the Epi-Illuminator for high quality polarized images. Furthermore a rotating cassette is implemented for quick changing between darkfield, brightfield and dimmed brightfield

NOMARSKI DIC (OPTIONAL)

With the redesign of the DIC-module visualization of height differences which normally cannot be displayed using



A 3-dimensional or relief-like image produced with the DIC-module

brightfield techniques has greatly improved. These relief-like images are ideal for surface inspections of wafers, LCD screens, etc

ICARE SENSOR

The unique iCare Sensor is developed to avoid unnecessary loss of energy. The illumination of the microscope automatically switches off shortly after microscopists step away from their position

CARRYING GRIP

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

PACKAGE CONTENT

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

MODELS	Fixed 30 degree Siedentopf head	Ergonomic tilting head	Plan EIS 2x/0.06 objective*	Plan EIS 4x/0.10, 10x/0.25 and 40x/0.65 objectives*	Plan semi-apo EIS 5x/0.15, 10x/0.30 and 20x/0.45 objectives*	Plan apo EIS 50x/0.80 objective*	Plan apo EIS 100x/0.90 objective*	100 W 12 V transmitted halogen Köhler illumination	100 W 12 V reflected halogen Köhler illumination	(DIC)
DX.2053-PLMRi	•		o		•	•	o	•	•	o
DX.2058-PLMRi		•	o		•	•	o	•	•	o
DX.2053-PLMi	•		o		•	•	o		•	o
DX.2058-PLMi		•	o		•	•	o		•	o
DX.2053-PLPOLRi	•		o	•		o	o	•	•	o
DX.2058-PLPOLRi		•	o	•		o	o	•	•	o
DX.2053-PLPOLi	•		o	•		o	o	•		o
DX.2058-PLPOLi		•	o	•		o	o	•		o

* Infinity corrected
o = optional

ACCESSORIES AND SPARE PARTS

EYEPIECES

- DX.6010** Super wide field SWF 10x/25 mm eyepiece for \varnothing 30 mm tube
- DX.6010-CM** Super wide field SWF 10x/25 mm eyepiece with 10/100 micrometer and crosshairs for \varnothing 30 mm tube
- DX.6210** Super wide field SWF 10x/22 mm eyepiece for \varnothing 30 mm tube
- DX.6210-CM** Super wide field SWF 10x/22 mm eyepiece with micrometer and crosshairs for \varnothing 30 mm tube
- DX.6012** Wide field WF 12.5x/17.5 mm eyepiece for \varnothing 30 mm tube
- DX.6015** Wide field WF 15x/16 mm eyepiece for \varnothing 30 mm tube
- DX.6020** Wide field WF 20x/12 mm eyepiece for \varnothing 30 mm tube
- DX.6099-L** Eyecup for eyepiece

INFINITY CORRECTED OBJECTIVES

(all objectives below have a M26x0.7 thread)

- DX.8102** Infinity EIS 45 mm plan PLMi 2x/0.06 objective. WD 7.5 mm *
- DX.8105** Infinity EIS 45 mm plan semi-apochromatic SAMi 5x/0.15 objective. WD 20 mm *
- DX.8110** Infinity EIS 45 mm plan semi-apochromatic SAMi 10x/0.30 objective. WD 11 mm *
- DX.8120** Infinity EIS 45 mm plan semi-apochromatic SAMi 20x/0.45 objective. WD 3.0 mm *
- DX.8150** Infinity EIS 45 mm plan apochromatic PLAMi 50x/0.80 objective. WD 1 mm *
- DX.8100** Infinity EIS 45 mm plan apochromatic PLAMi 100x/0.90 objective. WD 1 mm

* No cover glass correction

- DX.7905-R** Infinity EIS 45 mm plan Semi-apochromatic PLPOLi 5x/0.15 strain-free objective. WD 20 mm. No cover glass correction
- DX.7910-R** Infinity EIS 45 mm plan Semi-apochromatic PLPOLi 10x/0.30 strain-free objective. WD 11 mm. No cover glass correction

- DX.7920-R** Infinity EIS 45 mm plan Semi-apochromatic PLPOLi 20x/0.45 strain-free objective. WD 3.0 mm. No cover glass correction
- DX.7950-R** Infinity EIS 45 mm plan apochromatic PLPOLi 50x/0.80 strain-free objective. WD 1 mm. No cover glass correction
- DX.7904-T** Infinity EIS 45 mm plan PLPOLi 4x/0.10 strain-free objective. WD 20 mm. With 0.17 mm cover glass correction
- DX.7910-T** Infinity EIS 45 mm plan PLPOLi 10x/0.25 strain-free objective. WD 10.2 mm. With 0.17 mm cover glass correction
- DX.7920-T** Infinity EIS 45 mm plan PLMi 20x/0.40 strain-free objective. WD 12 mm. With 0.17 mm cover glass correction
- DX.7940-T** Infinity EIS 45 mm plan PLPOLi 40x/0.65 strain-free objective. WD 0.7 mm. With 0.17 mm cover glass correction
- DX.7960-T** Infinity EIS 45 mm plan PLMi 60x/0.80 strain-free objective. WD 0.3 mm. With 0.17 mm cover glass correction
- DX.7900-T** Infinity EIS 45 mm plan PLPOLi S100x/1.25 strain-free oil-immersion objective. WD 0.2 mm. With 0.17 mm cover glass correction

WD = working distance

POLARIZATION ATTACHMENT

without incident illumination

- DX.9604** Slider with quartz wedge plate
- DX.9608** Slider with 0-360° rotatable analyzer, 0.1° divisions
- DX.9610** Slider with Lambda plate first red
- DX.9612** Slider with Lambda/4 plate



● DX.2058-PLPOLi

POLARIZATION ATTACHMENT

with incident illumination

- DX.9602-R** Slider with rotatable polarizer
- DX.9608-R** Slider with 0-360° rotatable analyzer, 0.1° divisions

MATERIALS SCIENCE STAGES

- DX.9502-R** Plain mechanical stage right handed
- DX.9502-L** Plain mechanical stage left handed
- DX.9501-R** Stage with Gorilla glass, hole and specimen holder. Right handed
- DX.9501-L** Stage with Gorilla glass, hole and specimen holder. Left handed
- DX.9504-R** Stage with Sapphire glass, hole and specimen holder. Right handed
- DX.9504-L** Stage with Sapphire glass, hole and specimen holder. Left handed

CAMERA ACCESSORIES

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

MISCELLANEOUS

- DX.9696** DIC attachment for materials sciences Delphi-X Observer models
- DX.9704** Yellow filter for lamphouse, diameter 45 mm
- DX.9885** 25.4 mm eye-level riser (1 inch)
- DX.9887** 40 mm nosepiece and stage lowering attachment
- DX.9961** 100 Watt 12 V halogen bulb for Delphi-X Observer (revision-2 models)

- AE.5216** Fuses 5A 250 V, per 10 pcs. models with 100 W halogen
- DX.9522** Optional 30 x 40 mm X-Y mechanical stage for polarization microscopes

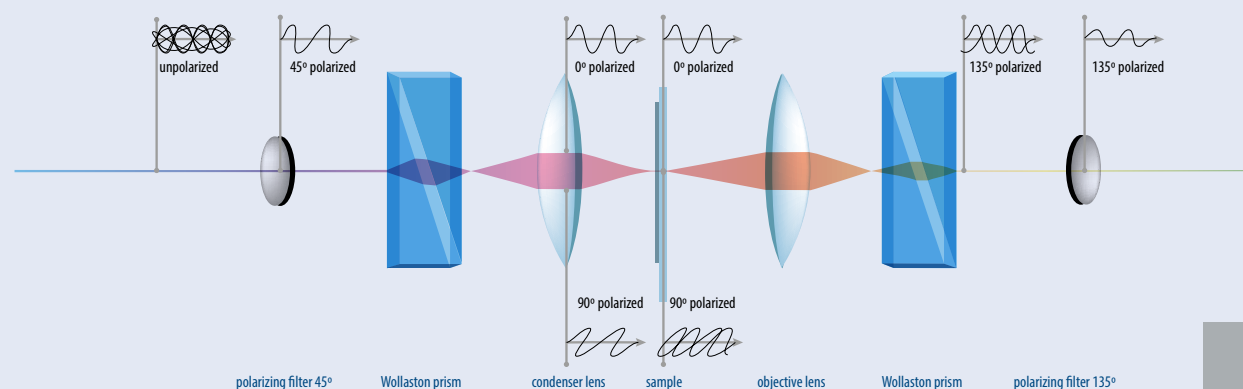
DISPOSABLES

- PB.5245** Lens cleaning paper, 100 sheets per pack
- PB.5255** Immersion oil, 25 ml. Refraction index $n = 1.482$
- PB.5274** Isopropyl alcohol 99%, 200 ml
- PB.5275** Cleaning kit: lens fluid, lint free lens tissue paper, brush, air blower, cotton swabs
- PB.5276** Microscope maintenance and servicing kit, 16pcs: cleaning brush, 6 pcs screwdriver set, air blower, 3 pcs Allen key, 1.5, 2, 2.5 mm, lens cleaning fluid 20 ml, cleaning cloth 140 x 140 mm, 100 pcs lens tissue sheets, tube of maintenance grease, 10 ml bottle of oil, packed in a nice toolbox

about differential interference contrast

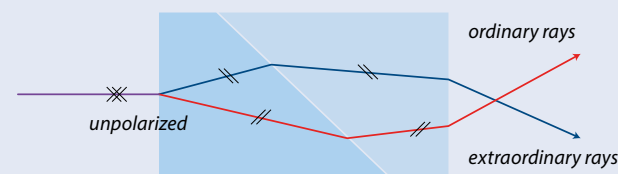
Differential interference contrast (DIC) technique helps in microscopy to enhance the contrast of samples

The technique is based on interferometry to obtain information about the small difference in optical path length between two orthogonally polarized light rays coming from the sample. This results in an image of the sample appearing as a three-dimensional physical relief. Polarized light is split into two orthogonally polarized coherent light rays by means of a Nomarski-modified Wollaston prism. Subsequently the sample spatially shifts the light rays slightly



By passing a second Nomarski-modified Wollaston prism, the spatially shifted polarized light is recombined. These recombined light rays pass through a second polarization filter that blocks useless direct transmitted light. The interference of the two rays is sensitive to the optical path difference and by introducing an adjustable offset, the contrast is proportional to the path length so that the heights

and depths of the sample appear as three-dimensional objects. Discontinuities on the surface, edges, lines and height differences on the sample create optical path differences that are turned into amplitude / intensity differences in the image, enhancing details in a topographically incorrect way but enables imaging of otherwise invisible details



The Nomarski prism consists of two birefringent crystal wedges cemented together at the hypotenuse. One wedge is a Wollaston wedge, the second wedge of the prism is modified by cutting the crystal so that the optical axis is oriented obliquely with respect to the flat surface of the prism



OX.3245

Oxion for materials science

Oxion microscopes for materials science are specifically designed for the observation of many types of materials in university and in industrial research laboratories and by professionals

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



OX.3245
430 (h) x 180 (w) x 430 mm (d) | 9.9 kg



OX.3245

SPECIFICATIONS

EYEPIECES

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

HEAD

Trinocular Siedentopf heads with 30° inclined tubes. Interpupillary distance from 48 to 75 mm. Diopter ± 5 diopter adjustment on both eyepieces. A unique rotating system allows ergonomic positioning of both tubes in an upper (431 mm) and in a lower position (397 mm)

HIGHLIGHTS

- Trinocular model
- HWF 10x/22 mm eyepieces
- Reversed quintuple nosepiece
- Plan M-IOS objectives
- Transmitted 3 W NeoLED™ illumination
- Reflected 3 W NeoLED™ illumination
- Polarization and analyzer filters
- 10 Years warranty

NOSEPIECE

Reversed nosepiece for a maximum of five objectives on ball bearings

OBJECTIVES

(IOS-infinity corrected system)
Standard configurations equipped with infinity corrected DIN long working distance LWD plan M-IOS 5x/0.14, 10x/0.25, 20x/0.40 and plan semi apochromatic LWD 50x/0.55 and 100x/0.80 objectives
All optics have an anti-reflection coating for maximum light throughput and are anti-fungus treated

FOCUSING

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



Reflected illumination unit
with oblique lighting feature

STAGE

180 x 145 mm stage with integrated mechanical 78 x 45 mm X-Y stage. Is supplied with plain metal and plain glass inserts

A ceramic stage is also available on request

CONDENSER FOR TRANSMITTED ILLUMINATION

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

TRANSMITTED ILLUMINATION

All models are supplied with 3 W adjustable NeoLed™ illumination with integrated 100-240 V power supply. Köhler illumination with field diaphragm

REFLECTED EPI-ILLUMINATION

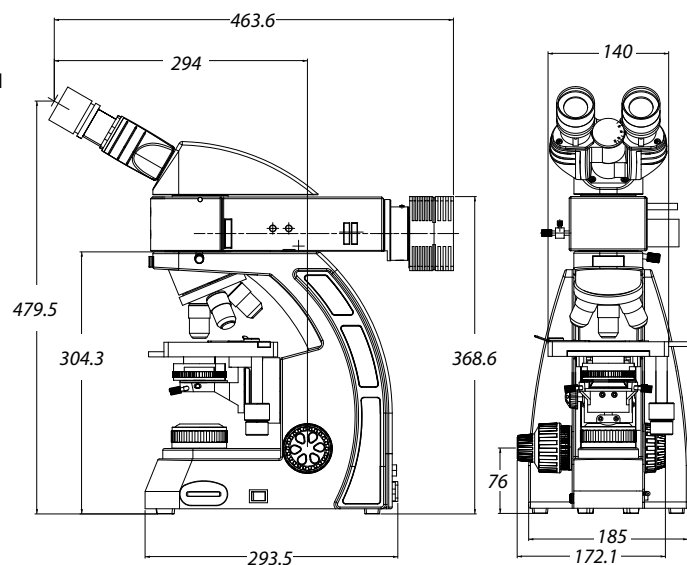
Intensity adjustable 3 W NeoLED™ Köhler illumination with external 110-240 Vac / 5 Vdc power supply. Push-pull type 90° rotatable polarizer and fixed analyzer. Built-in condenser with field and aperture iris diaphragm. Oblique lighting feature. Supplied with blue and green filter

PACKAGE CONTENT

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



Detail of reflected illumination



● OX.3240

MODELS	Trinocular	M-IOS 5x/10x/20x/50x objectives	M-IOS 100x objective	Transmitted illumination 3 W NeoLED™	Reflected illumination 3 W NeoLED™
OX.3240	•	•		•	•
OX.3245	•	•	•	•	•

ACCESSORIES AND SPARE PARTS**EYEPIECES**

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

OBJECTIVES

- AE.3172** Plan achromatic M-IOS DIN PL 5x/0.15 objective.* WD 10.8 mm
- AE.3173** Plan achromatic M-IOS DIN PL 10x/0.30 objective.* WD 12.2 mm
- AE.3175** Plan achromatic M-IOS DIN PL 20x/0.45 objective.* WD 4 mm
- AE.3177** Plan semi apochromatic M-IOS DIN 50x/0.55 objective.* WD 7.9 mm
- AE.3179** Plan semi apochromatic M-IOS DIN 100x/0.80 objective.* WD 2.1 mm

* No cover glass correction

POLARIZATION ATTACHMENTS

- AE.3190** Polarizer/analyzer set for transmitted illumination
- AE.3192** Polarizer slider for nosepiece
- AE.3194** Polarizer for lamphouse
- AE.3193** Analyzer for reflected illumination unit
- AE.3195** Polarizer, 360° rotatable (for reflected illumination unit)

FILTERS

- AE.3196** Frosted filter 45 mm, for lamphouse
- AE.3198** Blue filter 45 mm, for lamphouse
- AE.3200** Yellow filter 45 mm, for lamphouse
- AE.3202** Green filter 45 mm, for lamphouse
- AE.3205** Blue interference 480 nm filter (for reflected illumination unit)
- AE.3206** Green interference 520-570 nm filter (for reflected illumination unit)
- AE.3208** White color balance interference filter (for reflected illumination unit)

CAMERA ACCESSORIES

- AE.5120-2** Standard 23.2 mm diameter tube for Oxion photo port revision-2
- AE.5130** Universal SLR camera adapter with 2x projection lens for 23.2 mm tubes. Needs T2 adapter and AE.5120 or AE.5120-2
- AE.5025** T2 adapter for Nikon D digital SLR cameras
- AE.5040** T2 adapter for Canon EOS digital SLR cameras
- OX.9810** C-mount with 1.0x objective
- OX.9833** C-mount with 0.33x objective for 1/3" sensors cameras
- OX.9850** C-mount with 0.5x objective for 1/2" sensors cameras

MISCELLANEOUS

- OX.9515** Metal plain insert for mechanical stage
- OX.9518** Glass plain insert for mechanical stage
- AE.3185** Slider with darkfield stop for transmitted illumination (only for objectives 10x, 20x and S40x)
- AE.3199** Glass fuses 3.15 A 250 V, 10 pieces

DISPOSABLES

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

WD = working distance

- Plain stage



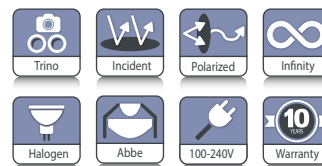
Oxion Inverso for materials science

The Oxion Inverso inverted microscopes for materials science are intensively used for observation of large pieces of material, made for example of metal, wood or plastics

The Oxion Inverso is available with a powerful 50 W halogen brightfield contrast illumination and a large mechanical stage. The polarization and color filters make this instrument suitable for a wide variety of applications



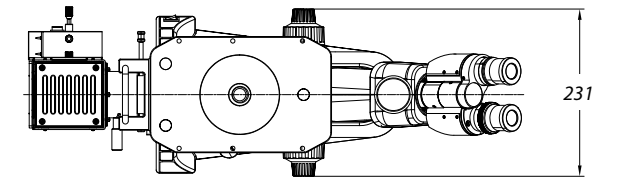
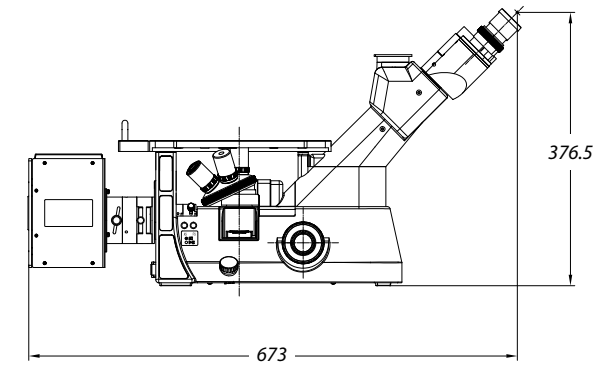
● OX.2153-PLM



OX.2153-PLM / OX.2653-PLM
376.5 (h) x 231 (w) x 673 mm (d) | 10.8 kg

HIGHLIGHTS

- Materials science applications
- Observation of all types of materials
- Brightfield with polarization options
- Long working IOS plan achromatic objectives
- Long working IOS plan semi apochromatic objectives
- Revolving quintuple nosepiece
- 50 W halogen Köhler illumination
- 10 Years warranty



SPECIFICATIONS

EYEPIECES

Pair of DIN HWF plan 10x/22 mm eyepieces

NOSEPIECE

Revolving quintuple nosepiece on ball-bearings

HEAD

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

OBJECTIVES

Infinity color corrected long working distance 5x/0.15, 10x/0.14, 20x/0.45 plan achromatic IOS objectives and a plan semi apochromatic S50x/0.55 IOS objective. Model OX.2153-PLM also has a plan semi apochromatic S100x/0.80 IOS objective. No cover glass correction
All optics are anti-fungus treated and anti-reflection coated for maximum light throughout

STAGE

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

- metallic insert with \varnothing 12 mm hole and \varnothing 25 mm hole
- metallic insert with hole for mechanical stage

FOCUSING

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

ILLUMINATION

Reflected Köhler 50 W halogen Intensity adjustable with internal 100-240 V power supply. Fuse holder 3.15 A / 250 V

POLARIZATION

Standard polarization filter and 360° rotating analyzer

FILTERS

Blue and green filter mounted in slider, that can be inserted at the back of the illumination attachment. Polarization filter in slider, to be inserted under nosepiece

PACKAGE CONTENT

Supplied with power cord, dust cover, blue and green filters and user manual. Microscope is supplied in an aluminum transport case

MODELS	LWD plan 5x/10x/20x objectives	LWD plan apochromatic 50x objective	LWD plan apochromatic 100x objective	Mechanical stage
OX.2653-PLM	•	•		•
OX.2153-PLM	•	•	•	•

LWD = long working distance

ACCESSORIES AND SPARE PARTS

EYEPIECES

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

OBJECTIVES

- OX.8205** Plan achromatic PLM 5x/0.15 IOS objective*.
WD 10.8 mm
- OX.8210** Plan achromatic PLM 10x/0.30 IOS objective*.
WD 12.2 mm
- OX.8220** Plan achromatic PLM 20x/0.45 IOS objective*.
WD 4 mm
- OX.8250** Plan semi apochromatic PLM S50x/0.55 IOS objective*. WD 7.9 mm
- OX.8200** Plan semi apochromatic PLM S100x/0.80 IOS objective*. WD 2.1 mm

*No cover glass correction

STAGE AND ACCESSORIES

- OX.9500** Mechanical coaxial X-Y 120 x 78 mm stage
- OX.9506** Transparent glass insert with hole
- OX.9508** Metal insert with Ø 12 mm hole
- OX.9509** Metal insert with Ø 25 mm hole
- OX.9535** Metal insert for Petri dish Ø 35 mm
- OX.9599** Universal culture-dish holder for translation stage



Large stage with
X-Y mechanical stage

FILTERS

- OX.9700** Blue filter in slider, for illumination attachment
- OX.9702** Green filter in slider, for illumination attachment
- OX.9710** Polarization filter in slider, fits under nosepiece

C-MOUNT ADAPTERS

- OX.9810** CS/C mount with 1.0x objective
- OX.9833** CS/C mount with 0.33x objective
for 1/3" sensor cameras
- OX.9850** CS/C mount with 0.5x objective
for 1/2" sensor cameras

MISCELLANEOUS

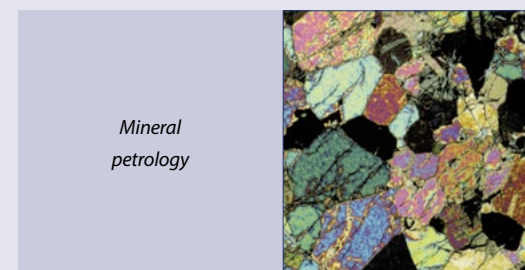
- AE.3199** Glass fuses 3.15 A 250 V, 10 pcs
- SL.3679** Halogen spare bulb 12 V 50 W
- AE.5120-2** Standard 23.2 mm diameter tube
for Oxion Inverso photo port revision-2
- AE.5130** Universal SLR camera adapter with 2x projection
lens for 23.2 mm tube. Needs T2 adapter and
AE.5120 or AE.5120-2
- AE.5025** T2 adapter for Nikon D digital SLR cameras
- AE.5040** T2 adapter for Canon EOS digital SLR cameras
- AE.3199** Glass fuses 3.15 A 250 V packed, per 10 pieces
- 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 and cotton swabs

about petrological microscopy

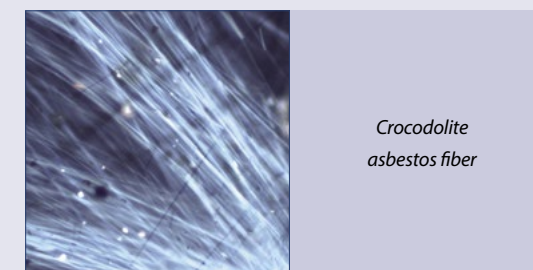
Euromex microscopes for polarization are intensively used in petrology and optical mineralogy to identify rocks, minerals in thin sections and asbestos fibers

Conventional brightfield microscopes are turned into a petrological microscope by:

- replacing the conventional rectangular stage with a circular 360° rotating stage
- adding strain free objectives for correct color rendering
- adding a removable polarization filter into the light path
- adding a second removable 360° rotating polarization filter - called analyzer - into the light path
- adding a Bertrand lens* for observation of conoscopic interference fringes
- adding compensation wave plates
- adding reflected illumination



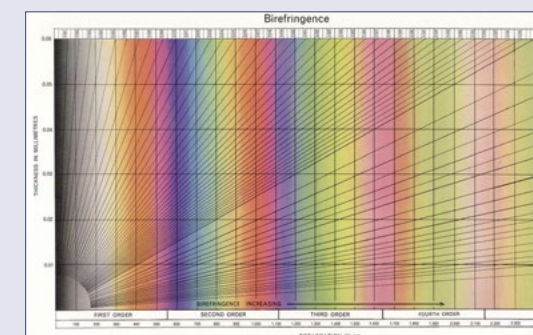
Mineral
petrology



Crocidolite
asbestos fiber

The most common compensators are:

- 1 λ Wave plate is often referred to as a first-order red plate or as a sensitive tint because it produces the interference color having a tint similar to the first-order red seen in the Michel-Levy chart. Introduce an optical path difference of circa 540-570 nm
- 1/4 λ Wave plate is often referred to as a mica plate and is usually made from quartz or muscovite crystals sandwiched between two glass windows. Introduce an optical path difference of circa 140 nm
- Quartz wedge is the simplest compensator, which is utilized to vary the optical path length difference to match that of the specimen
- Other attachments such as DSO (Dispersion Staining Objectives) and phase contrast equipment can be added for specific identification of asbestos fibers



Michel-Levy chart ●

* A so-called Bertrand lens - positioned between the analyzer and the eyepieces allows the microscopist to observe interference fringes. These images appear in the objective rear focal plane when an optically anisotropic specimen is viewed between crossed polarizers



digital solutions

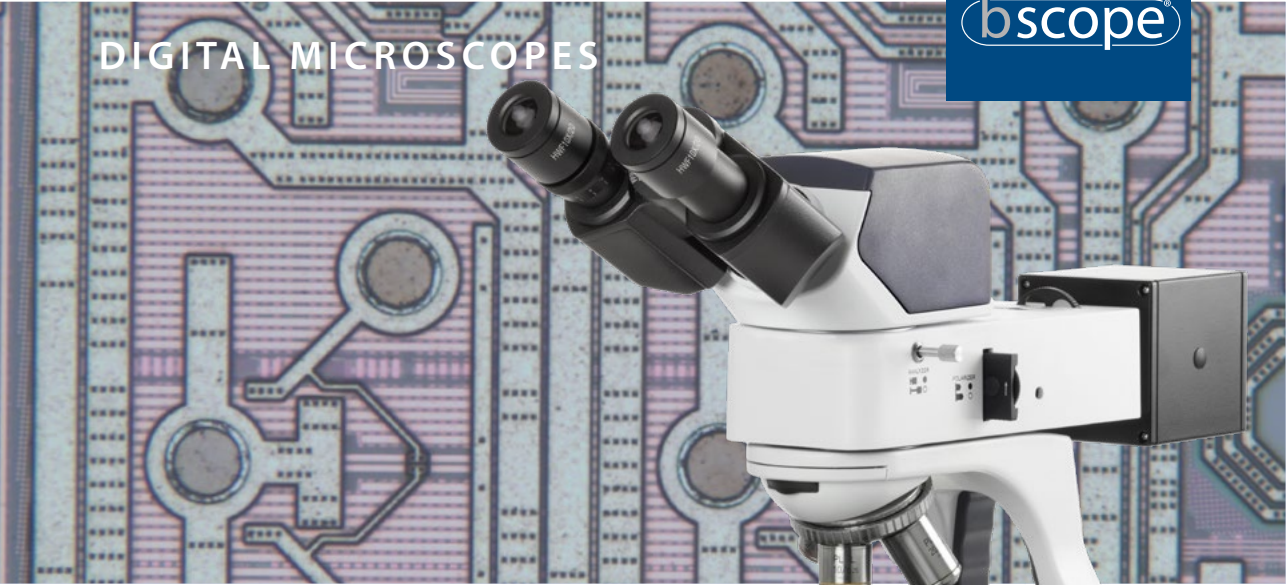


Get ready to discover the digital world of microscopy with the newest Euromex digital products. The broad Euromex product range of digital cameras and digital microscopes with a built-in camera offers the best suitable solutions for your specific application needs

Euromex digital products incorporate all the latest available technology in this field such as WiFi, HDMI and sCMOS sensors. Our digital solutions package includes the powerful ImageFocus software for image analysis

- DIGITAL MICROSCOPES • PAGE 330
- MACROZOOMS • PAGE 332
- WIFI CAMERA • PAGE 336
- USB CAMERAS • PAGE 337
- HD CAMERAS • PAGE 340
- COOLED COLOR CAMERAS • PAGE 344
- TABLET CAMERA • PAGE 346
- SOFTWARE • PAGE 348
- ADAPTERS • PAGE 350

DIGITAL MICROSCOPES



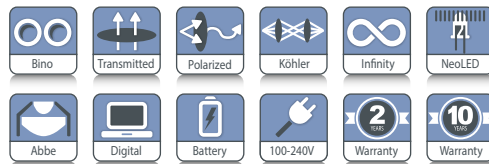
bScope®
digital microscopes
with built-in
5.0 MP USB-2.0 camera

The versatile and evolutive bScope® microscopes are well-equipped and intensively used in universities, small to mid-sized industrial laboratories and for all kinds of quality inspections

The bScope® comes with WF 10x/20 mm eyepieces and is available in a binocular configuration with quadruple nosepiece. Complete with plan M-IOS 5x/0.12, 10x/0.25, 20x/0.40, 50x/0.70 IOS objectives. Optionally plan M-IOS S80x/0.80 and S100x/0.85 DIN IOS objectives are also available



● BS.1057-PLMi



BS.1057-PLMi
515 (h) x 195 (w) x 431 mm (d) | 9.1 kg

HIGHLIGHTS

- Binocular model
- 2-position swiveling ergo head
- 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)

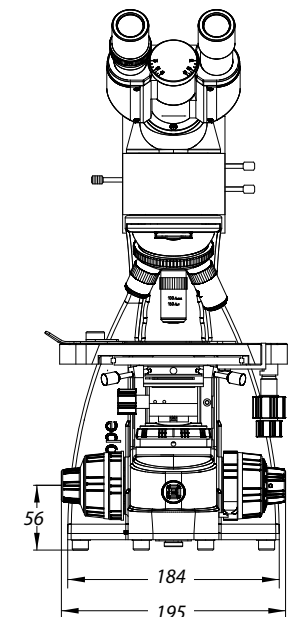
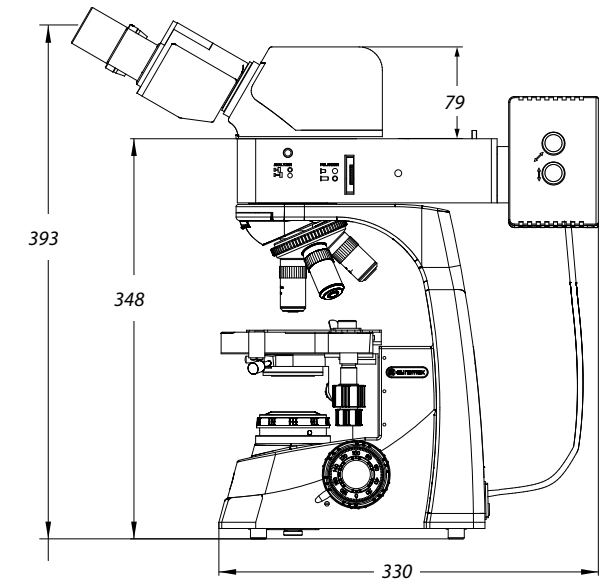
SPECIFICATIONS

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

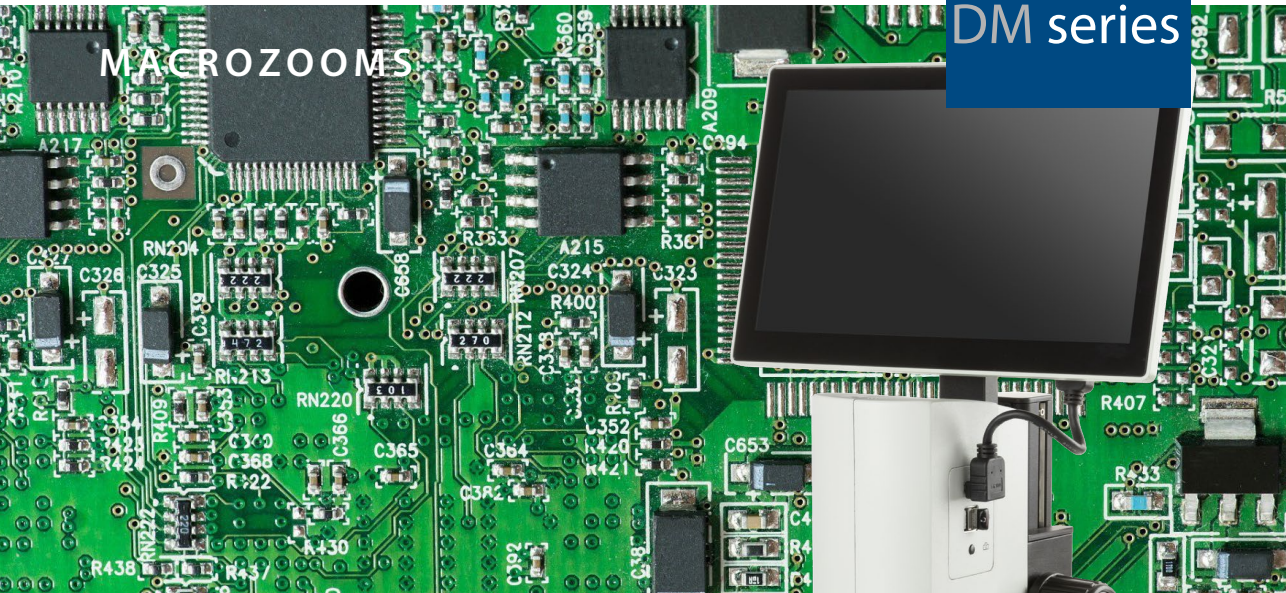
SOFTWARE

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 9: Materials science microscopes



MODEL	Binocular	WF 10x/18 mm eyepieces	PLMi 5x/10x/20x/50x IOS objectives	Transmitted NeoLED™ Köhler illumination	Reflected NeoLED™ Köhler illumination
BS.1057-PLMi	•	•	•	•	•

All models can optionally be supplied with three AA rechargeable batteries

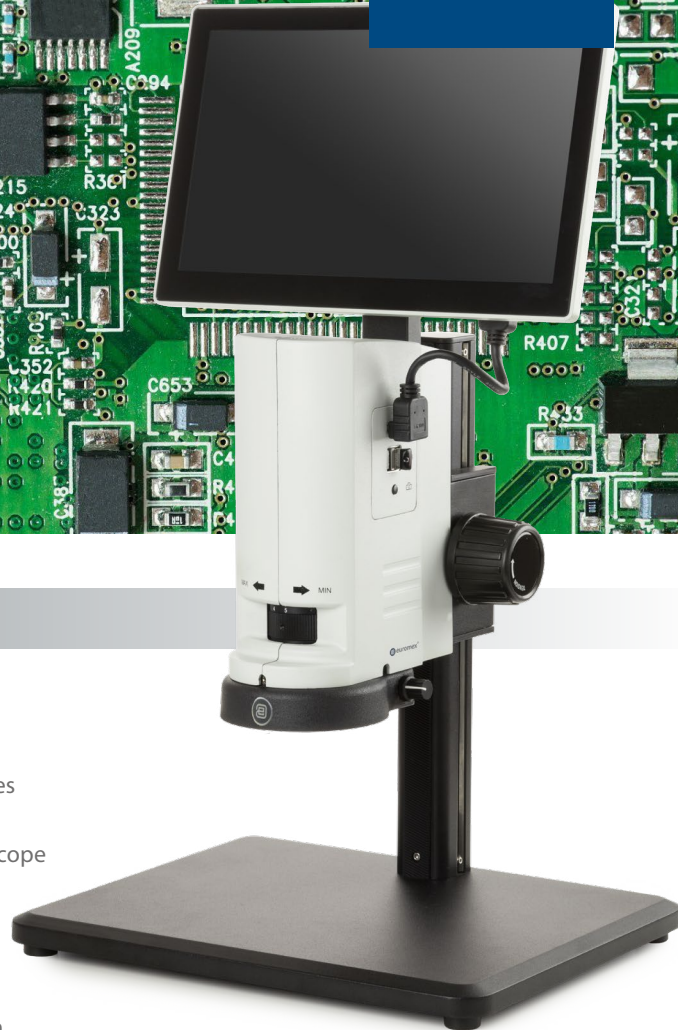


MZ.5000

digital macrozoom

The digital MacroZoom microscope is built around one 0.7 to 5x zoom objective and enables inspection of objects directly on an 11.6" LCD screen, -5° to 15° inclination. This kind of microscope is well-suited for inspection and quality control departments

The digital MacroZoom is equipped with a built-in full High Definition 1080p camera which can deliver up to 60 images per second and is connected either to the supplied and attached 11.6" screen or an external stand-alone HD screen



● MZ.5000



MZ.5000

445/635 (h) x 320 (w) x 260 mm (d) | 4.6 kg

HIGHLIGHTS

- MonoZoom stand-alone digital microscope
- Zoom from 0.7x up to 5x
- 105 mm working distance
- 170 mm working distance with 0.5x lens
- Built-in incident LED ring light
- Built-in 1080p 2 MP HD camera
- HD 11.6 inch screen, -5° to 15°
- Built-in mouse driven on-screen software
- Conveniently build-in capture button
- Removable 32 GB memory stick
- Metal stand
- 3 years warranty

SPECIFICATIONS

CENTRAL ZOOM OBJECTIVE

The Digital MacroZoom MZ.5000 features a single zoom objective with a 0.7 to 5x zoom magnification. Zoom adjustment engravings on 1, 1.5, 2, 3, 4 and 5x. The working distance is 105 mm. Supplied with a 0.5x additional lens with a working distance of 170 mm

STAND

The Central Zoom Objective with attached screen and LED ring light is mounted on a rack and pinion system that sits on a large 320 x 260 mm metal stand. Travel range is 225 mm

ILLUMINATION

A supplied 5,500 K LED ring light with 56 LED's can be mounted under the microscope body. The intensity is adjustable

BUILT-IN CAMERA

Built-in HD 1080p high definition 2 MP CMOS high speed camera, 1920 x 1080 pixels, 60 fps with attached 11.6" screen. The standard field of view is 29.8 to 4.18 and with the 0.5x additional lens from 59 to 8.35. The camera has one HDMI output that can be connected either to the attached screen or to an external HD screen



● Adjustable screen

Two other USB ports accept the supplied 32 GB USB memory stick (up to 128 GB) and a supplied wireless mouse that drives the built-in on-screen software. The operator can also take and save images to the SD card by pressing on a capture button at the right side of microscope body

BUILT-IN SOFTWARE

The built-in on-screen software is mouse driven and features functions such as Capture image, Freeze image, Automatic white balance, Automatic exposition, File manager, Grids and camera settings such as exposure time, gain, saturation, contrast, sharpness, HDR. Measurement functions are also available from the software such as line, area, angle. Images are saved in .jpg format and videos are saved in .avi format. With the digital zoom function, objects can be observed with a magnification up to 70 times

PACKAGE CONTENT

Supplied with 32 GB memory stick, mouse, short HDMI cable for attached screen, external 100-240 Vac / 12Vdc / 3 A power supply

MACROZOOMS

MZ series



● MZ.4500

MZ.4500 macrozoom

The high-end MacroZoom is built around one 0.7 to 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
31.3 (h) 32 (w) 28.5mm (d) | 3.06 kg



HIGHLIGHTS

- 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



● The MZ.4500 in combination with the VC.3036-HDS



WiFi CAMERA

WiFi CAMERA

FEATURED



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

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	Color rendering	Signal/ Noise(db)	Dynamic (db)	Sensitivity V/lux-sec	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

USB CAMERAS

CAMERAS FOR INDUSTRY



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

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)	Sony Sensor	Pixels size (µm)	Resolutions	Max. frames (p/sec)	Grayscale conversion	Color rendering	Dynamic (db)	Sensitivity V/lux-sec (at 550 nm)	Product number
CMEX-2f	2.0	1/2.9" CMOS	2.8 x 2.8	1920 x 1080	30	8 bits	24 bits	72	0.51	DC.2000f
CMEX-5f	5.0	1/2.8" CMOS	2.0 x 2.0	2560 x 1920 1600 x 1200	30 50	8 bits	24 bits	72	2.0	DC.5000f
CMEX-12f	12.0	1/2.3" CMOS	1.33 x 1.33	4000 x 3000 2592 x 1944	15 30	8 bits	24 bits	60	1.5	DC.12000f

The CMEX cameras are supplied with USB-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 cameras are supplied with a 0.45x C-mount objective

USB CAMERAS

ADVANCED
CAMERAS FOR
INDUSTRY

FEATURED



● CMEX-18 Pro

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

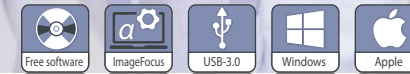
MODELS	Sensor	Sensor size (inch)	Pixels size (µm)	Exposure time	Resolutions	Max. frames (p/sec)	Signal/ Noise (db)	Dynamic (db)	Sensitivity V/lux-sec	Product number
CMEX-3 Pro	CMOS	1/3"	2.2 x 2.2	1 ms ~ 2000 ms	2048 x 1534 1024 x 770	28 53	39	100	1.9	DC.3000-PRO
CMEX-5 Pro	CMOS	1/2.5"	2.2 x 2.2	1 ms ~ 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

USB CAMERAS

SCIENTIFIC
GRADE CAMERAS
FOR INDUSTRY

FEATURED



● sCMEX

sCMEX USB-3.0 cameras with scientific grade sCMOS sensor

The sCMEX-3, sCMEX-6, sCMEX-20 and sCMEX-32 cameras are equipped with a scientific grade back illuminated Sony sCMOS sensor with 16 bits grayscale conversion and an outstanding 36 bits color rendering. Suitable for brightfield, darkfield and fluorescence. The sCMEX cameras are equipped with a USB-3.0 data interface and 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 be downloaded from our website

MODELS	Number of pixels (MP)	Sensor and size (inches)	Pixels size (µm)	Exposure time	Resolutions	Max. frames (p/sec)	Color rendering	Dynamic range (db)	S/N Ratio (db)	Sensitivity V/lux-sec	Product number
sCMEX- 3	3.1	1/2.8" sCMOS	2.5 x 2.5	0.244 ~ 15000 ms	2048 x 1536 1920 x 1080	50 58	36 bits	--	--	0.15	DC.3000s
sCMEX- 6	6.3	1/1.8" sCMOS	2.5 x 2.5	0.244 ~ 15000 ms	3072 x 2048 1536 x 1024	30 38	36 bits	66.8	44.51	0.15	DC.6000s
sCMEX-20	20	1" sCMOS	2.4 x 2.4	0.264 ~ 15000 ms	5440 x 3648 2736 x 1824 1824 x 1246	15 50 60	36 bits	66.3	44.74	0.21	DC.20000s
sCMEX-32	32	1.15" sCMOS	2.3 x 2.3	0.1 ~ 15000 ms	5600 x 5600 2800 x 2800 1400 x 1400	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

HD AND HD-AUTOFOCUS CAMERAS

HIGH DEFINITION
CAMERAS
FOR INDUSTRY

FEATURED



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

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



● VC.3036-HDS on stereo microscope

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

PACKAGE CONTENT

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 ⁽²⁾	13 ⁽¹⁾	13 ⁽¹⁾	--	--	15 ⁽²⁾	15 ⁽²⁾
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
Calibration 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

⁽¹⁾ English, Chinese Simplified, Traditional Chinese, Thai, German, Italian, French, Korean, Japanese, Russian, Polish and Portuguese

⁽²⁾ 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
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
Pixels	3840 x 2160 ⁽¹⁾ HDMI 60 fps USB 30 fps	3264 x 1836 ⁽¹⁾ 1920 x 1080 ⁽²⁾ HDMI 60 fps USB 30 fps	2592 x 1944 ⁽¹⁾ 1920 x 1080 ⁽²⁾ HDMI 15 fps, USB 15fps	1920 x 1080 ⁽¹⁾ 1920 x 1080 ⁽²⁾ HDMI 60 fps	1920 x 1080 ⁽¹⁾ 1920 x 1080 ⁽²⁾ HDMI 60 fps	1920 x 1080 ⁽¹⁾ HDMI 60 fps	1920 x 1080 ⁽¹⁾ 1920 x 1080 ⁽²⁾ HDMI 60 fps, USB 26 fps
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)
Video recording	2160p	1080p	1080p	1080p	1080p	1080p	1080p
Video output	HDMI, USB-3.0 ⁽⁵⁾ , GbE ethernet, WiFi ⁽⁵⁾	HDMI, USB-2.0	HDMI, USB-2.0	HDMI	HDMI	HDMI, USB-C ⁽⁴⁾	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 ⁽⁴⁾	VC.3036 VC.3036-HDS ⁽⁴⁾	VC.3031 VC.3031-HDS ⁽⁴⁾	VC.3023 --	-- VC.3024-HDS ⁽⁴⁾	VC.3034 VC.3034-HDS ⁽⁴⁾	VC.3038 VC.3038-HDS ⁽⁴⁾

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

BUILT-IN SOFTWARE FEATURES (HDMI MODE)

MODELS	UHD-4K	HD-Ultra	HD-Lite	HD-Mini	HD-Mini + HDS	HD-Autofocus	HD-Pro HDMI
Image capturing (JPEG)	3840 x 2160	3261 x 1840	2592 x 1944	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Video recording	3840 x 2160 MP4	1920 x 1080 AVI	1920 x 1080 AVI	1920 x 1080 MP4	1920 x 1080 MP4	1920 x 1080 ASF	1920 x 1080 ASF
Browse saved images	•	•	•	•	•	•	•
Browse saved video's	•	•	•	•	•	no	•
SD card storage	16 GB	16 GB	8 GB	4 GB	4 GB	16 GB	16 GB
Mouse driven	•	•	•	•	•	•	•
Auto exposure	•	•	•	•	•	•	•
Exposure time	0.04 ~ 1000 ms	0.001s ~ 10 s	0.001s ~ 10 s	0.01 ~ 1000 ms	0.01 ~ 1000 ms	0.06 ~ 918 ms	0.036 ~ 8000 ms
Gain	•	•	•	•	•	•	•
RGB & white balance	•	•	•	•	•	•	•
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 ⁽³⁾	9 ⁽³⁾	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

⁽³⁾ English, Chinese Simplified, Traditional Chinese, German, Italian, French, Korean, Japanese, Spanish

⁽⁴⁾ English, Chinese Simplified, Traditional Chinese, Thai, German, Italian, French, Korean, Japanese, Russian

COOLED CAMERAS

COOLED
CAMERAS FOR
INDUSTRY



● 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

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	•

about field of view

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

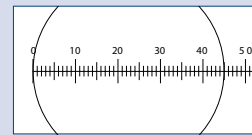
CALCULATING FOV OF AN EYEPIECE

The FOV through an eyepiece is equal to:

$$FOV = \frac{\text{Field Number}}{\text{Object Magnification}}$$

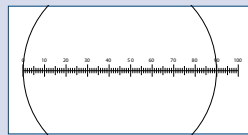
Field number (FN) is usually engraved on the eyepiece as a figure next to the magnification and expressed in mm, e.g. WF 10x/18. A 10x/18 eyepiece with a 40x objective will have a FOV = 18 mm / 40 = 0.45 mm or 450 nm

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



Micrometer stage 1 mm/100

900 nm FOV with 10x/18 eyepiece and S20x objective



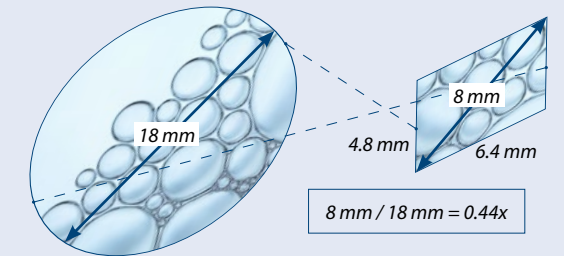
Micrometer stage 1 mm/100

TECHNICAL FACTS

EYEPIECE VERSUS CAMERA FOV

Circular FOV through a WF10x/18 eyepiece

1/2" camera sensor and its rectangular FOV



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

FIELD OF VIEW WITH CAMERA

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

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

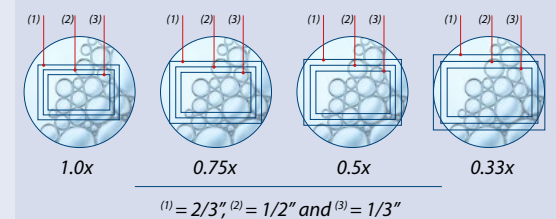
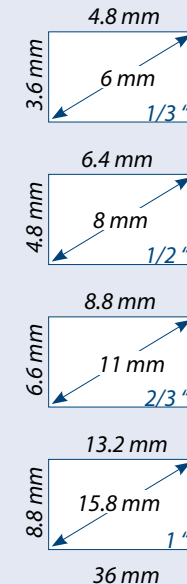


Figure: different camera sensor sizes (2/3, 1/2, 1/3 inch) with different "demagnifying" lenses (C-mount photo-adapters) 0.33x, 0.50x, 0.75x and 1.0x

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

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

TABLET CAMERAS



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

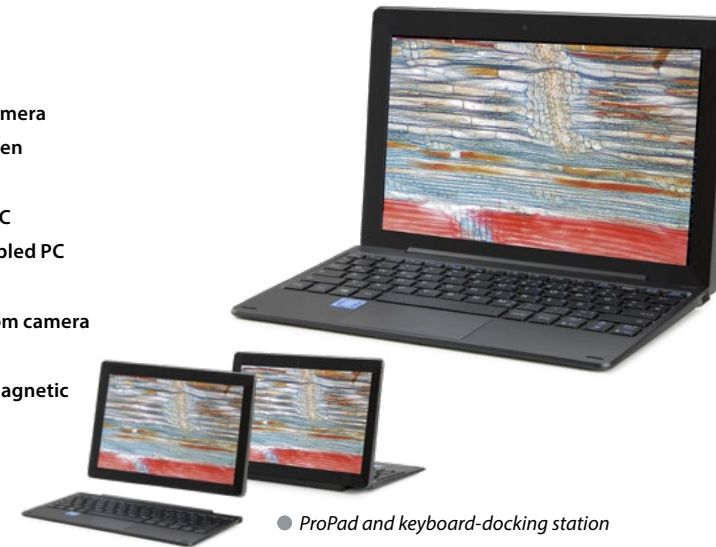
SOFTWARE

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 bv 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	Windows, USB 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	Windows, USB 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	--	Windows, USB 2.0	PP.12000f
ProPad-WiFi	5.0	1/2.5"	1280 x 720	2.2 x 2.2	12 bits	24 bits	61 db	1.0	Windows, Apple, WiFi, Android	PP.5000-WiFi

All ProPad models are supplied with a C-mount objective that fits the standard 23.2 mm trinocular tubes. 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

FREE UPDATES
AVAILABLE ON
EUROMEX.COM

SOFTWARE

The software is compatible with all cameras mentioned in table below. Besides live imaging the software captures images in various formats and video in .avi format

IMAGE FOCUS 4	
DC.1300c	

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

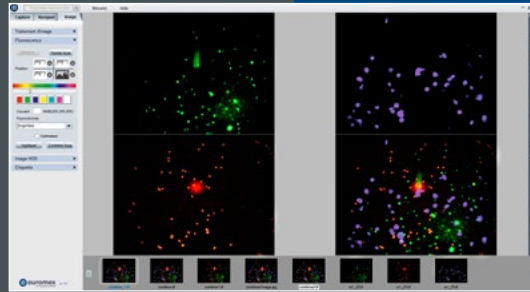
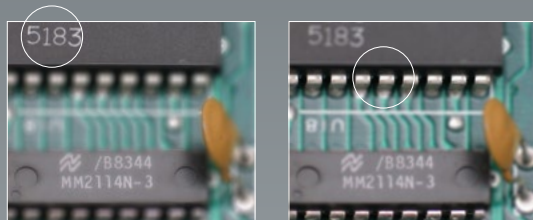
IMAGE FOCUS ALPHA	
DC.3000-Pro	DC.5000-WiFi
DC.5000-Pro	DC.3000s
DC.10000-Pro	DC.6000s
DC.18000-Pro	DC.20000s
VC.3038	

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)

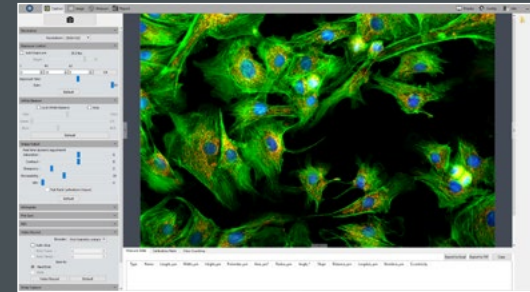
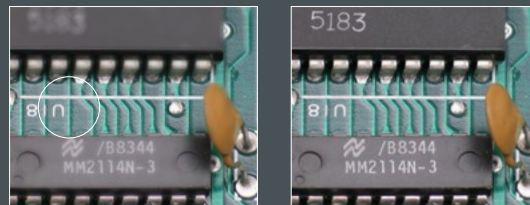


ImageFocus 4 software

ImageFocus 4 has a wide range of functions:

- Measurements can be done on still and live image
 - Images can be saved in .jpg, .tif, .or .bmp formats as well as .avi format videos
 - The brightness, contrast and saturation of captured images can be adjusted
 - Camera parameters for exposure time, white balance and color control are easily accessible
 - The software also has specific functions for fluorescence such as combining captured fluorescence images
 - Compatible with Windows 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

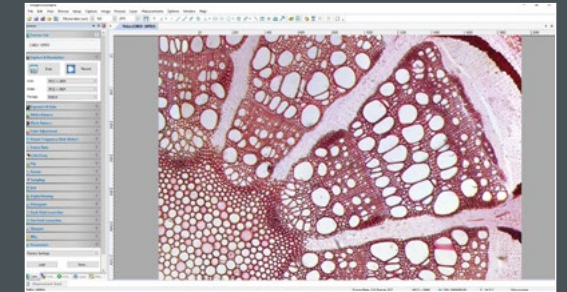


ImageFocus Plus software

ImageFocus 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
- 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 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

IMAGE
FOCUS

ADAPTERS

FOR ALL
MICROSCOPE
CAMERAS



AE.5130

● NZ.9850

adapter guide

microscope and camera

Most Euromex cameras are supplied with a photo port c-mount adapter to 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 ⁽²⁾	AE.9835-O (0.35x)	AE.9850-O (0.50x)	AE.9863-O (0.63x) AE.9880-O (0.80x)	AE.9810-O (1x) 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 ⁽⁵⁾	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)

⁽¹⁾ Leica DM, 35 mm to 25.4 mm C-mount, stainless steel

⁽²⁾ Olympus CX, CX2, BX, BX2, IX, MX, GX, SZX, STM, 42 mm to 25.4 mm C-mount, anodized aluminum

⁽³⁾ Zeiss PrimoStar, PrimoStar Vert, 30 mm to 25.4 mm C-mount, anodized aluminum

⁽⁴⁾ Zeiss 60N-C, 60N-T2 photo ports of Axio examiner, Axio Imager, Axio Lab, Axio Observer, Axio Scope, Axio Zoom, Stemy 508 and SteREO Discovery

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

● AE.9835-L



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



● DC.1355

● DC.1330/DC.1335

● DC.1324

● AE.5130

● AE.5120-2

PHOTO PORT ADAPTERS

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

- AE.5120-2** Standard 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.9850** C-mount adapter with 0.5x objective for NexusZoom 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

accessories

for microscopy



accessories



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



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

for stereo microscopy



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

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

* with LE.5214 dual arm light conductor

MULTIFUNCTIONAL 100 W HALOGEN • COLD LIGHT SOURCE

This popular multifunctional cold light source contains a 100 W halogen light source. The intensity is adjustable and it has a built-in forced air cooling. The LE.5210 light source requires a light fiber conductor such as the single LE.5213, dual LE.5214, triple LE.5215 or the LE.5239 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

* with LE.5214 dual arm light conductor

COMPACT SINGLE 20 W LIGHT SOURCE

Compact cold light source with single 40 cm, 6 mm diameter fiber light conductor. Equipped with a 20 W halogen lamp. Light intensity is factory preset and can not be adjusted



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

ECONOMICAL AND COMPACT DUAL 3 W LED • LIGHT SOURCE

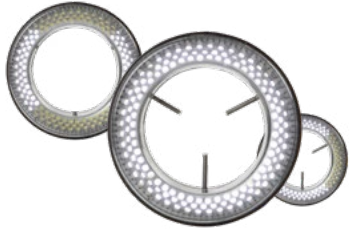
Economical dual LED intensity adjustable light source with two 44 cm flexible gooseneck arms, each mounted with a 3 W LED. Ideal for applications in life and materials sciences, various industrial applications and for stereo microscopy



Power	2x 3 W LED = 2x 28 W halogen equivalent
Luminous flux	25,000 lux
Color temperature	6,500 K
Operating voltage	100-240 V AC / 5 V DC (50/60 Hz)
Dimensions	70 (h) x 106 (w) x 140 mm (d)
Weight	1.5 kg
Model	LE.5207

144 LEDs RING LIGHT SOURCE • LE.1973

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



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

COMPACT 72 LEDs • LE.1974

Compact 20,000 lux LED ring light source



Ring illumination	72 LEDs with adjustable intensity and 4 segment illumination
Color temperature	6,500 K
Illuminance	21,000 lux at 100 mm distance
working distance:	from 50 to 180 mm
Mounting	for stereo head with diameter from 25 to 61 mm
Power supply	100-240 V AC / 12 V DC (50/60 Hz) / 4 Watt
External diameter	100 mm
Model	LE.1974

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



● LE.1992 ● LE.1993

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

PROFESSIONAL HIGH POWER LED 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



● LE.1992 ● LE.1993

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

MODELS	3 W gooseneck guide LED	4 W white LED ring light	2 W white LED transmitted light stage
LE.5212	White LED, 6,500 K	•	•
LE.5212-365	365 nm, monochrome	•	•
LE.5212-395	395 nm, monochrome	•	•
LE.5212-420	420 nm, monochrome	•	•



FLUORESCENCE 40 HZ RING LIGHT SOURCE FOR Z SERIES STEREO ZOOM MICROSCOPES

Suitable for Z series stereo zoom microscopes, except for ZE.1659. Integrated 240 V AC power supply

Ring illumination	Fluorescent 40 kHz ring, fixed intensity
Color temperature	5,200 K
Illuminance	6,500 lux at 100 mm distance
working distance:	35-160mm
Mounting	48 mm with adapter for ZE series microscopes
Power supply	230-250 V
External diameter	100 mm
Model	LE.1863



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 100 cm long, 8 mm diameter
- 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
- LE.1984** Diffusing filter, for WD from 40 to 300 mm
- LE.1985** Glass protection window
- LE.1987** Polarizing filter
- LE.1888** Rotatable polarizing filter
- LE.1992** 100-230 V power supply analog controller. Intensity adjustable from 0-100%
- LE.1993** 100-230 V power supply digital segment controller. Intensity adjustable from 0-100%

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



dissection instruments

- PB.5050** Dissecting needle, straight tip with plastic handle
- PB.5054** Dissecting needle, lancet-shaped with plastic handle
- PB.5056** Blunt-pointed probe, Ø 2 mm, length 140 mm
- PB.5058** Section lifter with wooden handle
- PB.5060** Serrated thumb dressing forceps, length 13 mm
- PB.5062** Dressing forceps with blunt tips, length 13 cm
- PB.5064** Dressing forceps with blunt tips, length 20 cm
- 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



SCISSORS AND BLADES

- PB.5080** Dressing scissors with blunt/sharp tip, length 14 cm
- PB.5084** Dissecting scissors, sharp tips, length 11 cm
- PB.5092** Scalpel with blunt tip, length 15 cm
- PB.5094** Scalpel handle no. 4 (for blades PB.5095 and PB.5096)
- PB.5095** Scalpel blades with sharp tip, 5 pieces per set
- PB.5096** Scalpel blades with blunt tip, 5 pieces per set
- PB.5103** Strop, double sided for stropping of scalpels, microtome knives. Includes stropping paste

- PB.5105** Razor plano/concave, for sectioning. With plastic handle
- PB.5106** Microtome knife plano/concave. With fixed handle, length 17 cm



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



● PB.5112

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



● PB.5114

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)



● PB.5115

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



● PB.5125



● PB.5110



● PB.5111

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 sporangia
- SB.2377** Diatoms, w.m
- SB.2381** Spirogyra sp., vegetative mass, w.m
- SB.2405** Dental plaque, smear

histology, zoology and botany set

PB. 5212 FOR EDUCATION

Set with 25 microscopy slides for education: histological samples of mammals, zoology and botany. All microscope slides are supplied in a plastic box for 25 slides. The set contains:

HISTOLOGY

- SH.1001** Loose connective tissue, rabbit
- SH.1005** Hyaline cartilage rabbit, section
- SH.1160** Lymph node, rabbit, section
- SH.1230** Small intestine, dog, c.s
- SH.1250** Liver, pig, section
- SH.1430** Cerebrum 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 megaloccephala, 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** Pieris brassicae, cabbage-white butterfly, mouth, w.m
- SZ.1750** Periplaneta, cockroach, spiracle of insect, w.m

BOTANY

- SB.2095** Monocot/dicot stem, zea mays/pumpkin, c.s
- SB.2105** Hibiscus, young stem, c.s
- SB.2110** Cucurbita, pumpkin, stem, l.s
- SB.2115** Sambucus, elderberry or Morus Alba, mulberry, stem with cork cambium + lenticels, c.s
- SB.2160** Lilium, lily leaf, c.s
- SB.2225** Zea mays, corn, corn seed with embryo, l.s
- SB.2235** Pirus, pear, stone cells, section
- SB.2240** Triticum aestivum, wheat, kernel, l.s
- SB.2305** Cyrtomium, holly fern, c.s of rhizom
- SB.2310** Cyrtomium, holly fern, section
- SB.2386** Oscillatoria, blue-green algae

USED ABBREVIATIONS

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.s
- SH.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 Mniium, antheridial branch, l.s
SB.2339 Mniium, archegonial branch, l.s
SB.2373 Coprinus, ink caps mushroom, section of pleus
SB.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 l.s (Dense connective tissue), dog
SH.1075 Skin section with sweat gland, human
SH.1330 Testis rabbit, c.s
SH.1340 Ovary rabbit with developed eggs
SH.1360 Sperm, human, smear
SH.1490 Retina, rabbit, sec

ZOOLOGY

- SZ.1522** Paramecium conjugation w.m
SZ.1524 Paramecium in fission, w.m
SZ.1540 Trachelomonas, a free swimming type euglena
SZ.1585 Hydra with endoderm + ectoderm, c.s
SZ.1710 Apis mellifica - honey bee compound eye, w.m
SZ.1720 Culex pipiens - house mosquito, larva w.m
SZ.1724 Giant chromosomes of salivary gland, w.m
SZ.1810 Mya arenaria, clam gill, c.s
SZ.1860 Lancelet, Section through gonads and gills, c.s

BOTANY

- SB.2015** Ranunculus, buttercup, root c.s
SB.2076 Tilia, lime tree, 1, 2 & 3 year stem, c.s on one slide
SB.2080 Pinus - pine tree, stem l.s
SB.2140 Triticum, wheat, leaf, c.s
SB.2150 Monocot/dicot leaves, zea mays/ligustrum lucidum, c.s
SB.2230 Pinus, pine tree, male (cone) globose fruit l.s
SB.2232 Pinus, pine tree, female (cone) globose fruit l.s
SB.2315 Fern, prothallium w. young sporophyte w.m
SB.2320 Cyrtomium, fern, leaf with sporangia
SB.2384 Volvox sp. w.m

histology, zoology and botany set

PB. 5215 FOR EDUCATION

Set with 25 microscopy slides for education: histological samples of mammals, zoology and botany.
All microscope slides are supplied in a plastic box for 25 slides. The set contains:

HISTOLOGY

- SH.1043** Cardiac muscle, dog, l.s
SH.1070 Squamous epithelium, human, isolated cells from mouth, smear
SH.1315 Kidney rat, sec. cortex & medulla
SH.1420 Cerebellum section, dog
SH.1450 Spinal cord, rabbit, c.s
SH.1470 Taste buds, rabbit, l.s

ZOOLOGY

- SZ.1610** Planaria, flat worm, injected intestinal tube, w.m
SZ.1636 Ascaris megalcephala, 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

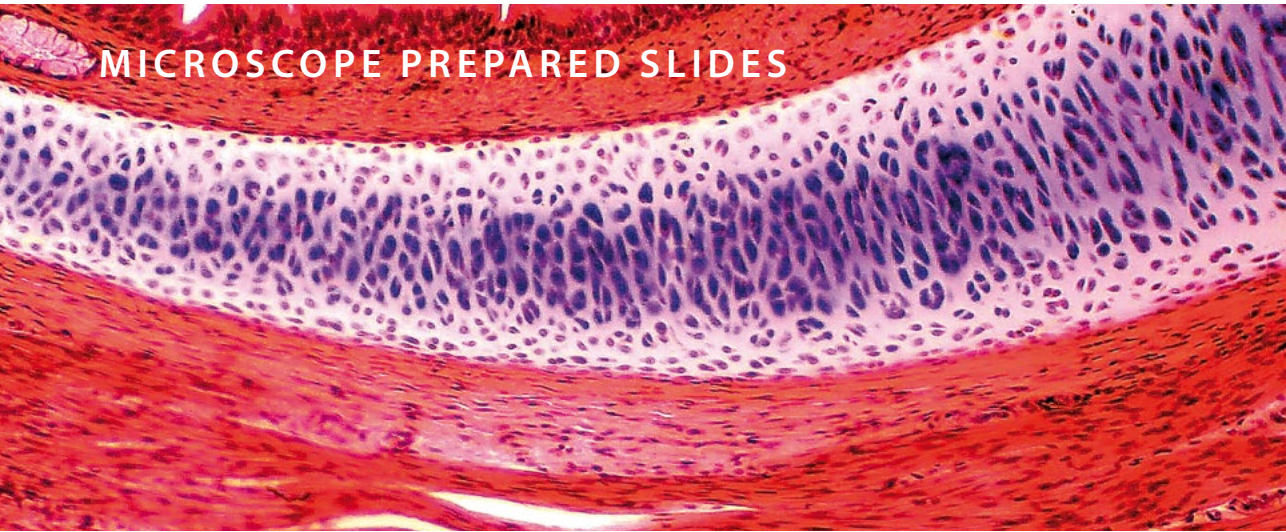
BOTANY

- 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 Streptococcus lactis, milk bacteria, smear
SB.2415 Bacillus subtilis, hay bacteria, smear

USED ABBREVIATIONS

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

MICROSCOPE PREPARED SLIDES



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:

EPITHELIUM AND CONNECTIVE TISSUES

- SH.1001** Loose connective tissue, rabbit
- SH.1005** Hyaline cartilage, rabbit, section
- SH.1011** Hard bone grinding, human, section
- SH.1049** Muscle types, striated, smooth, heart muscle, dog, l.s
- SH.1060** Tendon, dog, l.s
- SH.1070** Squamous epithelium, human, isolated cells from mouth, smear
- SH.1072** Skin section through hair follicle, human
- SH.1078** Stratified flat epithelium, dog, section

RESPIRATORY, BLOOD CIRCULATION AND ENDOCRINE SYSTEM

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

DIGESTIVE SYSTEM

- SH.1210** Stomach wall, dog, section
- SH.1230** Small intestine, dog, c.s
- SH.1250** Liver, pig, section

URINARY AND GENITAL SYSTEM

- SH.1310** Injected kidney, rabbit, sec
- SH.1330** Testis, rabbit, c.s
- SH.1340** Ovary with developed eggs, rabbit
- SH.1376** Human chromosomes in blood, female

NERVOUS SYSTEM AND SENSORY ORGANS

- SH.1410** Nerve, rabbit, c.s and l.s
- SH.1430** Cerebrum section, dog
- SH.1450** Spinal cord, rabbit, c.s
- SH.1470** Taste buds, rabbit, l.s
- SH.1490** Retina, rabbit, sec

mammal histology set

PB.5222 SET FOR EDUCATION

Set with 23 microscopy slides for education: histological samples of mammals.
All microscope slides are supplied in a plastic box for 25 slides. The set contains:

EPITHELIUM AND CONNECTIVE TISSUES

- SH.1006** Elastic cartilage, rabbit
- SH.1012** Hard bone grinding of rabbit, tooth, de-calcium
- SH.1040** Smooth muscle, teased preparation, rabbit, l.s+c.s
- SH.1043** Cardiac muscle, dog, l.s
- SH.1045** Skeletal muscle, dog, l.s and c.s
- SH.1075** Skin section with sweat gland, human
- SH.1080** Ciliated epithelium, trachea, rabbit

RESPIRATORY, BLOOD CIRCULATION AND ENDOCRINE SYSTEM

- SH.1110** Lung with injected blood vessels, rabbit, c.s
- SH.1140** Pancreas, rabbit, section
- SH.1160** Lymph node, rabbit, section
- SH.1170** Thyroid gland, rabbit, section
- SH.1180** Adrenal gland, rabbit, section

DIGESTIVE SYSTEM

- SH.1220** Oesophagus dog, c.s
- SH.1235** Large intestine, dog, c.s
- SH.1260** Gall bladder, dog, section
- SH.1280** Golgi apparatus in Basal spinal ganglion, dog

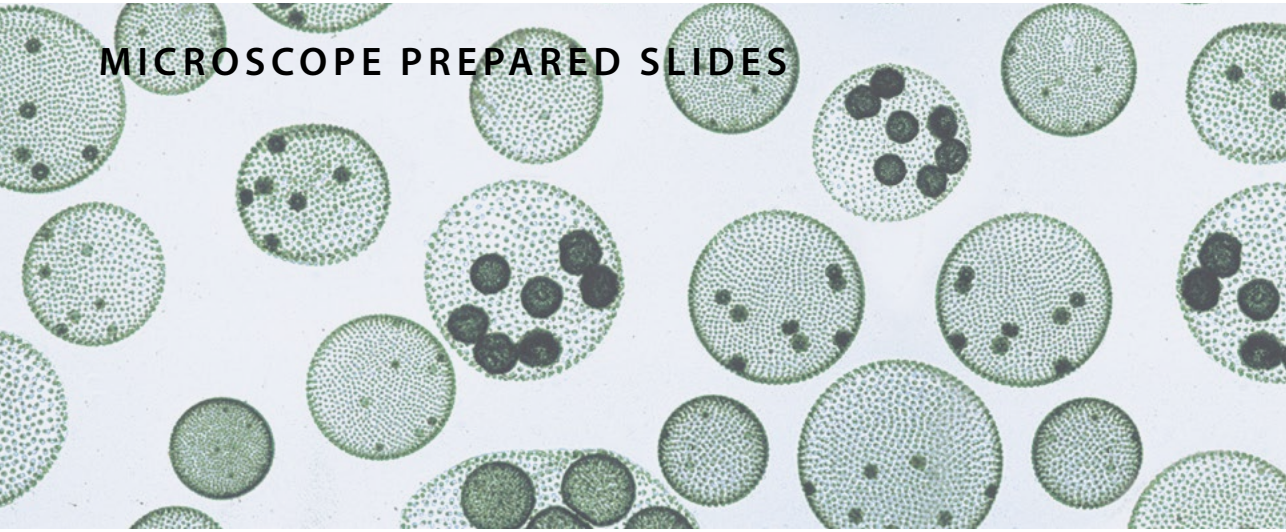
URINARY AND GENITAL SYSTEM

- SH.1315** Kidney, rat, sec. cortex & medulla
- SH.1360** Sperm, human, smear
- SH.1375** Human chromosomes in blood, male
- SZ.1724** Fruit fly, drosophila, giant chromosomes of salivary gland, w.m

NERVOUS SYSTEM AND SENSORY ORGANS

- SH.1415** Motor nerve cells with end plates, rabbit, w.m
- SH.1420** Cerebellum section, dog
- SH.1480** Eyeball section, rabbit, sagittal section

MICROSCOPE PREPARED SLIDES



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.s and c.s
- SH.1110** Lung with injected blood vessels, rabbit, c.s
- SZ.1708** Apis mellifica, honey bee, mouth parts
- SZ.1733** Pieris brassicae, cabbage-white butterfly, part of wing
- SZ.1877** Rana sp, frog, blood smear
- SB.2015** Ranunculus, buttercup, root, c.s

BOTANY

- SB.2160** Liliium, lily leaf, c.s
- SB.2222** Capsella, shepherds' purse, ovary w. embryo in cotyledon stadium, l.s
- SB.2374** Aspergillus, brown mold, w.m
- SB.2384** Volvox sp., w.m

USED ABBREVIATIONS

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

set for hobby 25 slides

slides of histology, zoology and botany

PB.5218 SET FOR HOBBY

Set with 25 prepared microscopy slides for hobby: zoology and botany.

All microscope slides are supplied in a plastic box with transparent cover for 25 slides. The set contains:

HISTOLOGY OF HUMAN AND MAMMALS

- SH.1072** Skin section through hair follicle, human
- SH.1150** Blood smear human, Giemsa stained
- SH.1415** Motor nerve cells with end plates, rabbit w.m
- SH.1470** Taste buds, rabbit, l.s

BOTANY

- SB.2009** Allium cepa, onion, mitosis root tip, l.s
- SB.2055** Zea mays, corn, stem, cs
- SB.2075** Tilia, lime tree, one year stem, c.s
- SB.2100** Pelargonium hortorum, geranium, stem c.s
- SB.2112** Cucurbita, pumpkin, stem, c.s
- SB.2130** Helianthus, sunflower, leaf, c.s
- SB.2135** Nerium oleander, leaf with sunken stomata, c.s
- SB.2210** Liliium, lily, anther with mature pollen, c.s
- SB.2225** Zea mays, corn, corn seed with embryo, l.s

ZOOLOGY

- SZ.1520** Paramecium, w.m
- SZ.1535** Euglena virides, a flagellate with eyespot
- SZ.1580** Hydra with bud, w.m
- SZ.1630** Taenia, tapeworm cattle, mature proglottid, w.m
- SZ.1635** Ascaris megalocephala, horse roundworm, female and male, c.s
- SZ.1640** Lumbricus, earthworm, c.s
- SZ.1655** Daphnia sp., water flea, w.m
- SZ.1705** Apis mellifica, honey bee, posterior leg, w.m
- SZ.1710** Apis mellifica, honey bee compound eye, c.s
- SZ.1719** Musca domestica, house fly, wing w.m
- SZ.1722** Culex pipiens, house mosquito, female, mouth parts
- SZ.1724** Fruit fly, drosophila, giant chromosomes of salivary gland, w.m

MICROSCOPE PREPARED SLIDES



individual euoslides 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 EUOSLIDES

- 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 euoslides for histology

These histological microscope slides consist of sample of epithelium and connective tissues, the respiratory system, blood circulation, endocrine system, digestive system, urinary and genital systems, nervous system and sensory organs

EPITHELIUM 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, heart muscle, dog, l.s
- SH.1060** Tendon, dog, l.s
- SH.1072** Skin section through hair follicle, human
- SH.1078** Stratified flat epithelium, dog, section
- SH.1080** Ciliated epithelium, trachea, rabbit

RESPIRATORY, BLOOD CIRCULATION AND ENDOCRINE SYSTEM

- SH.1110** Lung with injected blood vessels, rabbit, c.s
- SH.1120** Trachea, rabbit, c.s
- SH.1130** Artery and vein, rabbit, c.s
- SH.1140** Pancreas, rabbit, section
- SH.1150** Blood smear, human, Giemsa stained
- SH.1160** Lymph node, rabbit, section

DIGESTIVE SYSTEM

- SH.1220** Oesophagus, dog, c.s
- SH.1230** Small intestine, dog, c.s
- SH.1250** Liver, pig, section

URINARY AND GENITAL SYSTEM

- SH.1310** Injected kidney, rabbit, section
- SH.1330** Testis, rabbit, c.s
- SH.1340** Ovary with developed eggs, rabbit
- SH.1360** Sperm, human, smear

NERVOUS SYSTEM AND SENSORY ORGANS

- SH.1410** Nerve, rabbit, c.s and l.s
- SH.1415** Motor nerve cells with end plates, rabbit, w.m
- SH.1420** Cerebellum section, dog
- SH.1450** Spinal cord, rabbit, c.s
- SH.1470** Taste buds, rabbit, l.s
- SH.1490** Retina, rabbit, section

USED ABBREVIATIONS

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

individual euroslides for zoology

This series of zoology microscopy slides consists of samples with single-cell organisms (protozoa), coelenterate, worms (helminthes), Crustaceans (crustaceae), insects and amphibians

PROTOZOA

- SZ.1510** Amoeba proteus, w.m
- SZ.1520** Paramecium, w.m
- SZ.1522** Paramecium in conjugation w.m

- SZ.1535** Euglena virides, a flagellate with eyespot
- SZ.1540** Trachelomonas, a free swimming type euglena

COELENTERATA

- SZ.1580** Hydra with bud, w.m

HELMINTHES

- SZ.1630** Taenia, tapeworm pig, mature proglottid, w.m
- SZ.1635** Ascaris megalcephala, horse roundworm, female + male c.s
- SZ.1636** Ascaris megalcephala, horse roundworm, mitosis eggs
- SZ.1640** Lumbricus, earthworm, c.s

CRUSTACEANS

- SZ.1655** Daphnia sp., water flea, w.m

INSECTS

- SZ.1705** Apis mellifica, honey bee, posterior leg, w.m
- SZ.1708** Apis mellifica, honey bee, mouth parts
- SZ.1710** Apis mellifica, honey bee compound eye, c.s
- SZ.1719** Musca domestica, house fly, wing, w.m
- SZ.1720** Culex pipiens, house mosquito, larva, w.m
- SZ.1722** Culex pipiens, house modquito, female, mouth parts
- SZ.1724** Drosophila, fruit fly, giant chromosomes of salivary gland, w.m
- 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

- 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

individual euroslides for botany

This series of botanic microscopy slides consists of samples of sections of roots, stems, leaves, flowers, fruits and seeds, ferns and mosses, fungi, algae and bacteria

ROOTS

- SB.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.s
- SB.2025** Monocot/dicot plant roots, zea mays/helantius, c.s
- SB.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 cork 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, ovary, 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 stadium, 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.2360** Saccaromyces sp., yeast, budding, w.m
- SB.2365** Penicillium sp., w.m
- SB.2373** Coprinus, ink caps mushroom, section of pileus
- SB.2374** Aspergillus, brown mold, w.m

ALGAE

- SB.2377** Diatoms, w.m
- SB.2380** Spirogyra sp. in conjugation
- SB.2384** Volvox sp., w.m

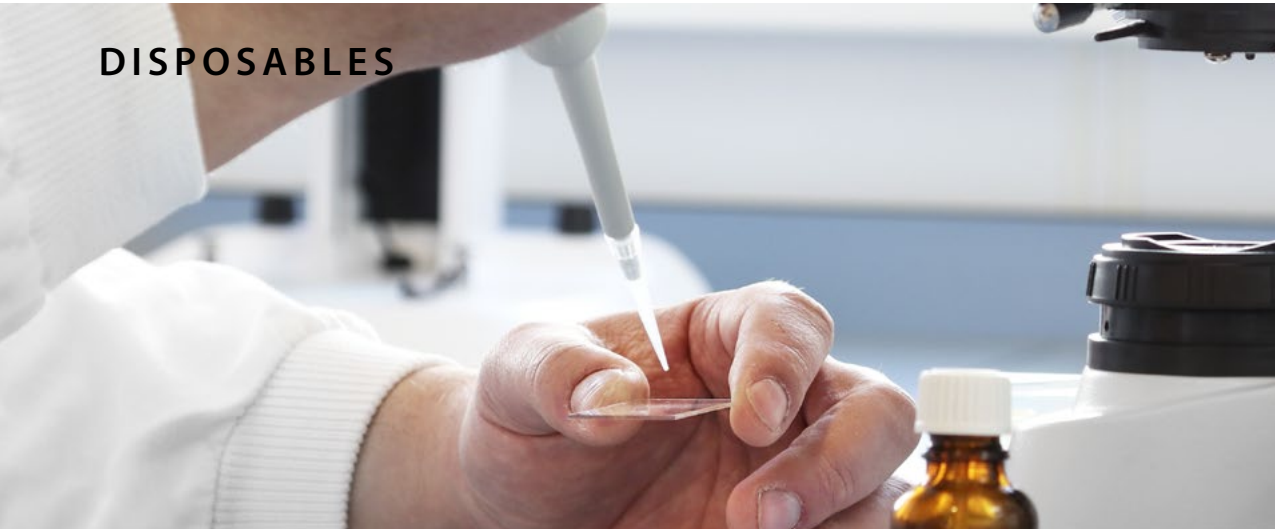
BACTERIA

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

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)

DISPOSABLES



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
- 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.5150

● PB.5180

● PB.5168 / PB.5170



● PB.5276



● PB.5280 / PB.5274



● PB.5210

● PB.5245

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, quick drying Canada balsam. In bottle (25 ml)
- PB.5274** Isopropyl alcohol 99%. In bottle (200 ml)
- PB.5277** Formalin 40%, fixing agent. In bottle (200 ml)
- PB.5275** Cleaning kit: lens cleaning fluid, lint free lens tissue, brush, air blower, cotton swabs
- PB.5276** Microscope maintenance and servicing kit, 16pcs: cleaning brush, 6 pcs screwdriver set, air blower, 3 pcs Allen key, 1.5, 2, 2.5 mm, lens cleaning fluid 20 ml, cleaning cloth 140 x 140 mm, 100 pcs lens tissue sheets, tube of maintenance grease, 10 ml bottle of oil, packed in a nice toolbox

(DISSOLVED) STAINS

Supplied in 25 ml bottles

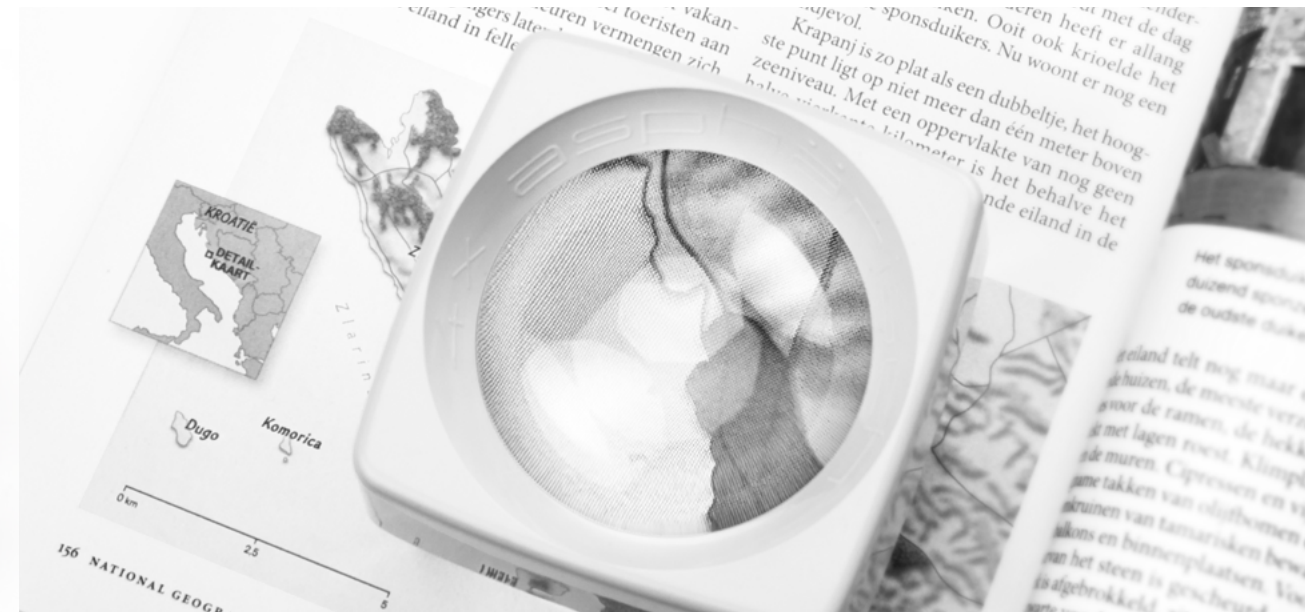
- PB.5280** Azo carmine-G. Biological stains for animal tissues. Also suitable for bacteria pigmentation
- PB.5283** Eosin yellow. Stain for general overall-view coloring
- PB.5286** Haematoxylin according to Ehrlich. General purpose nuclear stain
- PB.5289** Astra Blue. Stain for vegetal cells. To be used in combination with safranin
- PB.5292** Orange-G, stain for most elementary structures of animal tissues
- PB.5295** Safranin. 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** Fuchsin. For staining bacilli in tissue

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

Magnifiers are widely used by biologists, jewelers, watchmakers and philatelists to accurately observe all details of the object



handheld magnifiers and magnifiers with handles

- PB.5020** Magnifier with handle 4x, lens Ø 50 mm and handle Ø 8 mm. Fits on PB.5022
- PB.5021** Magnifier with handle 10x, aplanatic lens Ø 25 mm and handle Ø 8 mm. Fits on PB.5022
- PB.5022** Heavy stand with adjustable cross clamp, base Ø 70 mm. Weight 450 grams. For PB.5022 and PB.5021
- PB.5026** Handheld magnifier 10x with illuminator, aplanatic lens Ø 28 mm. Field of view 30 mm. Supplied without batteries



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

- 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 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.5034-LED

FOLDING MAGNIFIERS WHITE LED AND UV ILLUMINATION

- PB.5034-LUV** Achromatic magnifier 10x triplet. Lens Ø 21 mm. White LED and UV illumination
- PB.5018-LUV** Achromatic magnifier 15x triplet. Lens Ø 21mm. White LED and UV illumination
- PB.5033-LUV** Achromatic magnifier 20x, triplet. Lens Ø 21 mm. White LED and UV illumination
- PB.5035-LUV** Achromatic magnifier 30x triplet. Lens Ø 21 mm. White LED and UV illumination



● PB.5034-LUV

MAGNIFIERS & MEASURING MICROSCOPES

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



magnifiers & measuring microscopes

TABLE MAGNIFIERS

- PB.5039** Table magnifier, 15x magnification.
Glass achromatic lens Ø 19 mm, field of view 15 mm
- PB.5041** Table magnifier, 10x magnification.
Glass lens Ø 26 mm, field of view 25 mm
- PB.5043** Table magnifier, 4x magnification.
Plastic lens Ø 57 mm, field of view 55 mm
- PB.5040** Table magnifier, 8x magnification.
Plastic lens Ø 23 mm, field of view 30 mm.
10mm/100 reticle



● PB.5039 / PB.xxxx



● PB.5043 / PB.5040

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



● PB.5030



● PB.5049

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.
Eyepiece 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



● PB.5046



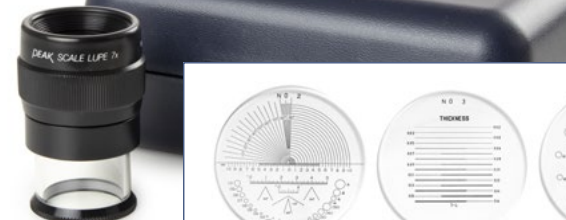
● PB.5047



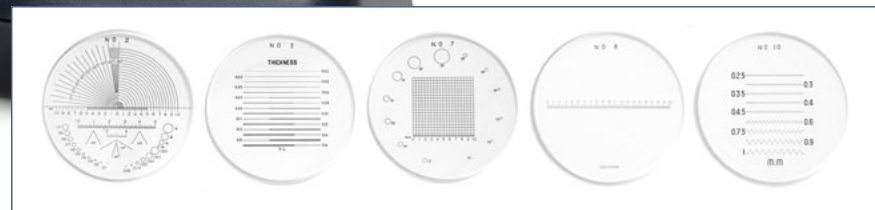
● PB.5044



● PB.5048



● PB.5045



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



● PB.5008

refractometers



refractometers



Refractometers are used for the identification of substances and concentration measurements of fluids. Because the refractive index (R.I.) of a solution is proportional to the concentration, it is easy to identify the substance or to measure the purity and concentrations of solutions

The Euromex refractometers are calibrated at 20° Celsius. Most refractometers are equipped with Automatic Temperature Compensation (ATC)

REFRACTOMETERS • PAGE 374
ABBE REFRACTOMETER • PAGE 377

REFRACTOMETERS

The Euromex refractometers are ideal for determining concentrations, testing and measuring of fluids



● 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, fruits, syrups, wine and monitoring of oil emulsions	RF.6190	0-90 Brix	0.2	3 scales: 0-42 / 42-71 / 71-90 Brix	•	•			
	RF.6510	0 - 10 Brix	0.1		•	•		•	
	RF.6520	0 - 20 Brix	0.1		•	•		•	
	RF.6532	0 - 32 Brix	0.2		•	•		•	
	RF.6562	28 - 62 Brix	0.2		•	•		•	
	RF.6580	0 - 80 Brix	0.5		•	•		•	
	RF.6582	45 - 82 Brix	0.5		•	•		•	
	RF.6592	58 - 92 Brix	0.2		•	•		•	
	RF.6635	0 - 150 °Oe	1	Oechsle units	•	•		•	
		0 - 35 Brix	0.2	Sugar concentration					
	0 - 27 °KMW	0.2	Babo units						
	0 - 22 %	0.2	% volume						
	0 - 37 CNM	0.5							
	RD.6735	0 - 150 °Oe	1		•	•			•
		0 - 35 Brix	0.1						
		0 - 25 °KMW	0.1						
		0 - 22 %	0.1						
	RD.6645	0 - 45 Brix	0.1		•	•			•
		1.33 - 1.41 R.I.	0.0003						
	RD.6666	0 - 80 Brix	0.5		•	•			•
		1.33 - 1.51 R.I.	0.0005						
	RD.6667	58 - 92 Brix	0.2		•	•			•
		1.43 - 1.52 R.I.	0.0003						
Honey	RF.6642	13 - 25 %	0.1	Honey moisture	•	•		•	
	RF.6644	58 - 92 Brix	0.5		•	•		•	
		38 - 43 °Be	0.5						
		12 - 27 %	1	Water					
Concentration of sugar/alcohol %	RF.6627	0 - 25 %	0.2	% volume	•	•		•	
		0 - 40 Brix	0.2						
		0 - 20 Baume	0.2						
Salinity and concentration of sugar	RF.6610	0 - 100 ‰	1		•	•		•	
		0 - 10 Brix	0.1						
		1.00 - 1.07 R.I.	0.005						
	RF.6628	0 - 28 %	0.2		•	•		•	
	RD.6728	0 - 28 %	0.1	% NaCl	•	•			•
	0 - 45 Brix	0.1							
	1.33 - 1.41 R.I.	0.0003	Only for sugar/salt						

Application	Art no	Range	Accuracy	Remarks	ATC	Handheld model	Table model	Analog	Digital
Clinical applications Proteins	RF.6612	0 - 12 g/dl	0.2	Proteins in serum	•	•	•		
		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)	•	•			•
			0.1	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 precious stones	RF.6381	1.30 - 1.81 R.I.	0.01				•	•	

ACCESSORIES AND SPARE PARTS



● RF.6381

- 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

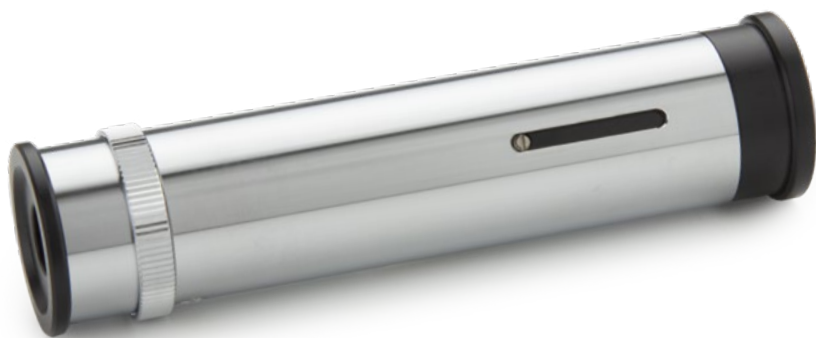
The Abbe refractometer can be connected to a water bath for measuring at a controlled temperature. During the use of this type of refractometer the use of a cold light source such as the LE.5209 is recommended. This Abbe table refractometer has scales for measurement of sugar concentrations and refractive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

polarimeters & spectrosopes



polarimeters & spectrosopes

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

Spectrosopes are used to visualize the light spectrum of light sources

POLARIMETERS



polarimeter

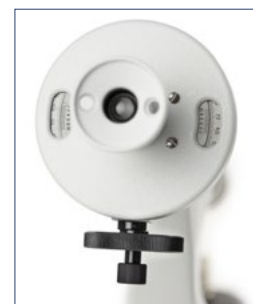
● 99.400-LED

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

HIGHLIGHTS

- The polarimeters are delivered with 100 and 200 mm observation tubes
- Equipped with a built-in 230 V 589.3 nm sodium lamp or high-power LED with 589.3 nm filter
- Fast and accurate

Polar scale, range $\pm 180^\circ$ 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



ACCESSORIES FOR 99.400

- 99.410** Measuring tube, 100 mm long
- 99.415** Measuring tube, 200 mm long
- 99.430** Cover glass for measuring tube $\varnothing 15$ mm
- 99.431** Rubber ring (for 99.430)
- 99.197** Spare sodium 589.3 nm lamp

MODEL	Scales	Accuracy	Observation tubes 100 and 200 mm	230 V sodium lamp with 589.3 nm filter	230 V High power LED with 589.3 nm filter
99.400	$\pm 180^\circ$	$\pm 0.1^\circ$ polar scale	•	•	
99.400-LED	$\pm 180^\circ$	$\pm 0.1^\circ$ polar scale	•		•

SPECTROSCOPES

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



handheld spectrosopes

SP.5200

Handheld spectroscope with adjustable slit, comparison prism, mirror, five glass mini-cuvettes and wavelength scale 400 - 700 nm with 589 nm indication. Divisions 10 nm

- Direct vision type
- Adjustable eye lens
- Adjustable slit 0 - 1 mm
- Angle dispersion C - F 7°
- Linear dispersion 60 mm
- Comparison prism for comparison between products
- Mirror
- 5 Glass cuvettes
- Wavelength scale 400 - 700 nm



• SP.5200

MODEL	Dimensions	Weight (grams)	Adjustable slit	Comparison prism	Angle dispersion	Linear dispersion	Wavelength scale	589 nm indication	With 5 glass cuvettes
SP.5200	h50x115xp23	250	0-1 mm	•	C-F 7°	60 mm	•	•	•

SP.5155

Handheld spectroscope with adjustable slit and comparison prism, mirror and five glass cuvettes

- Direct vision type
- Adjustable eyelens
- Adjustable slit 0 - 1 mm
- Angle dispersion C - F 7°
- Linear dispersion 60 mm
- Comparison prism
- Mirror
- five Glass cuvettes



• SP.5155

MODEL	Dimensions	Weight (grams)	Adjustable slit	Comparison prism	Angle dispersion	Linear dispersion	Wavelength scale	589 nm indication	With 5 glass cuvettes
SP.5155	h45x1105xd23	125	0-1 mm	•	C-F 7°	60 mm	--	--	•

SP.5150

Handheld spectroscope with adjustable slit from 0 tot 1 mm

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



• SP.5150

MODEL	Dimensions	Weight (grams)	Adjustable slit	Comparison prism	Angle dispersion	Linear dispersion	Wavelength scale	589 nm indication	With 5 glass cuvettes
SP.5150	90 x18 mm Ø	92	0-1 mm	--	C-F 7°	60 mm	--	--	--

SP.5100

Handheld spectroscope with fixed slit

- Direct vision type
- Adjustable eye lens
- Fixed slit
- Angle dispersion C - F 6°
- Linear dispersion 40 mm



• SP.5100

MODEL	Dimensions	Weight (grams)	Adjustable slit	Comparison prism	Angle dispersion	Linear dispersion	Wavelength scale	589 nm indication	With 5 glass cuvettes
SP.5100	90 x18 mm Ø	72	--	--	C-F 6°	40 mm	--	--	--

PATHOLOGY SCANNER



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

PS.1001
70 (h) x 150 (w) x 260 mm (d) | 1.0 kg

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, PathoView scanning software and user manual
Model	PS.1001

MODELS

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

choose the right euromex microscope

Euromex offers a large range of microscope series. Selecting the right microscope for your application might be challenging and time consuming.

To simplify this process we have listed our recommended models for most common applications in education, laboratories and industry

EDUCATION	FIELD OF APPLICATION	RECOMMENDED MODELS
• botany	Study of plants as branch of biology. Plant anatomy and morphology. Plant genetics and ecology. Plant biochemistry	MicroBlue, EcoBlue, BioBlue, BioBlue.Lab, AP series, EduBlue, StereoBlue
• digital imaging	Observation and perform analysis on microscope images, storage and share captured and videos	CMEX cameras, CCD cameras, HD cameras, EduPad, MacroZoom
• electronics	Development, production, assembling and inspection of electronic components or circuitry	bScope® (materials), EduBlue, StereoBlue, NexiusZoom, MacroZoom
• entomology	Study of insects as branch of zoology. Identification and classification of beetles, flies, termites, moths and butterflies, bees, ants, wasps	MicroBlue, EcoBlue, BioBlue, BioBlue.Lab, AP series, EduBlue, StereoBlue, MacroZoom
• geology, mineralogy	Earth Science; Study of solids, rocks and processes. Identification and classification of rocks and minerals	EcoBlue (polarization), BioBlue (polarization), AP series, EduBlue, StereoBlue
• geology, petrology	Identification by means of petrographic microscope	EcoBlue (polarization), BioBlue (polarization), AP series, EduBlue, StereoBlue
• mechanics	Manufacturing and quality inspection of mechanical parts	bScope® (materials), EduBlue, StereoBlue, NexiusZoom, MacroZoom
• microbiology	Study of microscopic uni-, multi- or acellular small organisms such as protozoa, algae, bacteria and more. Identification and classification	EcoBlue, BioBlue, bScope®, Delphi-X Observer
• mycology	Study of fungi as branch of biology. Identification and classification	EcoBlue, BioBlue, BioBlue.Lab, bScope®, AP series, EduBlue, StereoBlue
• petrology	Study of the composition and structure of rocks as branch of geology. Identification by means of polarization microscopes	EcoBlue (polarization), BioBlue (polarization), AP series, EduBlue, StereoBlue
• zoology	Animal biology. Study of invertebrates and vertebrates and related branches	EcoBlue, BioBlue, BioBlue.Lab, bScope®, AP series, EduBlue, StereoBlue, MacroZoom

UNIVERSITY LABS FIELD OF APPLICATION RECOMMENDED MODELS

• agronomy & forestry	Selective breeding of plants, fruit and production of food from plants, wood from trees, fuel. Plant physiology and genetics research	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series, MacroZoom
• anatomopathology	Diagnosis of diseases of organs or tissues. Cytopathology and forensic pathology	BioBlue.Lab, bScope®, iScope®, Oxion, Delphi-X Observer, NexiusZoom, DZ series
• asbestos control	Research of asbestos fibers, environmental protection during restoration of older buildings	iScope® (asbestos and polarization), NexiusZoom, DZ series, Z series
• bacteriology	Study of bacteria as subdivision of microbiology. Identification, classification	BioBlue.Lab, bScope®, iScope®, Oxion, Delphi-X Observer
• biochemistry	Study of chemical processes within living organism. Identification and classification of enzymes and structure of biomolecules	BioBlue.Lab, bScope®, iScope®, Oxion, Delphi-X Observer
• biomedical	Study of medical microbiology, virology, epidemiology, biomedical engineering	BioBlue.Lab, iScope®, Oxion, Delphi-X Observer
• biotechnology	Study of living organism in order to make food products, for plant protection (genetically modified organism) and other bio-process engineering. Development of pharmaceutical drugs, genetic testing, enzymes production, biofuels, textile	BioBlue.Lab, bScope®, iScope®, Oxion, Delphi-X Observer, StereoBlue, NexiusZoom, DZ series
• botany	Study of plants as branch of biology. Plant anatomy and morphology. Plant genetics and ecology. Plant biochemistry	BioBlue.Lab, bScope®, StereoBlue, NexiusZoom, DZ series, MacroZoom
• cell culture	Controlled growing of cells and tissues, fungal culture and microbiological culture	Delphi-X Inverso, Oxion Inverso, NexiusZoom, DZ series
• chemistry	Study of the composition and properties of chemicals	iScope® (materials and polarization), Oxion (materials), bScope® (materials), NexiusZoom, DZ series
• cosmetics	Research, development and testing (safety) of substances for make-up or perfume	iScope® (materials), Oxion (materials), bScope® (materials), NexiusZoom, DZ series
• cytology	Study of cell structure, function and chemistry. Detection of cellular diseases	BioBlue.Lab, iScope®, Oxion, Delphi-X Observer
• dermatology	Study and diagnosis, treatment of skin, nails and hair diseases	iScope®, Oxion, NexiusZoom, StereoBlue, DZ series, MacroZoom
• digital imaging	Observation and analysis of microscope images, save and share captured images and videos	CMEX cameras, CCD cameras, HD cameras, Cooled cameras, EduPad, ProPad
• electronics	Development, production, assembly and inspection of electronic components or circuitry	iScope® (materials), Oxion (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series, Z series, MacroZoom
• embryo collection	Embryo collection and transfer in mares, pigs, cows. Quality control	NexiusZoom, DZ series, Z series

• embryology	Study of gametes, embryos and fetuses	BioBlue.Lab, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series
• entomology	Study of insects as branch of zoology. Identification and classification of beetles, flies, termites, moths and butterflies, bees, ants, wasps	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series, MacroZoom
• environmental	Monitoring of environmental conditions such as water, atmosphere, ecosystems, soil and pollution	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series
• fluorescence	Study of living and non living materials with the help of fluorescence markers (fluorochromes)	iScope® (fluorescence), Oxion (fluorescence), Delphi-X Observer (fluorescence), Oxion Inverso (fluorescence), bScope® (fluorescence), DZ series
• food and beverages	Quality and safety controls, before, during and after the production of food and beverages	BioBlue.Lab, bScope®, iScope®, Oxion
• forensics	Analysis of scientific evidence. Toxicology, fingerprints, Forensic anthropology and archeology, forensic botany and entomology	BioBlue.Lab, iScope®, iScope® (materials and polarization), Oxion, Oxion (materials), Oxion Inverted, Oxion Inverted (materials), NexiusZoom, DZ series, Z series
• genetics	Study of genes, heredity in living organisms including bacteria, plants, animals and humans	iScope®, Oxion, Delphi-X Observer, DZ series
• geology, mineralogy	Earth Science; Study of solids, rocks and processes Identification and classification of rocks and minerals	iScope® (materials), Oxion (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series, MacroZoom
• geology, petrology	Identification by means of petrographic microscopy	iScope® (polarization), Delphi-X Observer (polarization), StereoBlue, NexiusZoom, DZ series
• glass industry	Quality control, before, during and after the production of glass and coatings	iScope® (materials), Oxion (materials), Oxion Inverso (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series
• hematology	Study and diagnosis, treatment and prevention of diseases of the blood	iScope®, bScope® (darkfield), iScope® (darkfield), Oxion, Oxion (darkfield)
• histopathology	Microscopic examination of tissue, diagnosis of diseases	iScope®, Oxion, Delphi-X Observer
• horticulture	Selective breeding of plants and fruit for production of food	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series, MacroZoom
• in vitro fertilization	In vitro fertilization IVF. 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

• mining	Extraction of minerals for identification, quantitative and qualitative evaluation of minerals	iScope® (materials and polarization), Oxion (materials and polarization), Oxion Inverso (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series, MacroZoom
• neuropathology	Study and diagnosis of diseases in nervous system tissue	Delphi-X Observer, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series
• oncology	Study and diagnosis, treatment and prevention of cancers	Delphi-X Observer, iScope®, Oxion
• ornithology	Study of birds as branch of zoology. Diagnosis of diseases in birds such as competition pigeons	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series
• paleontology	Study of fossils in order to determinate organisms evolution	iScope® (materials), Oxion (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series, MacroZoom
• paper industry	Production of paper related products. Quality inspection	iScope® (materials), Oxion (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series, MacroZoom
• parasitology	Study of parasites, medical and veterinary	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series, MacroZoom
• pathology	Study and diagnosis of diseases	Delphi-X Observer, iScope®, Oxion
• petrochemical	Research and transformation of crude oil and natural gas	iScope® (materials), Oxion (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series
• petrology	Study of the composition and structure of rocks as branch of geology. Identification by means of polarization	iScope® (polarization), StereoBlue, NexiusZoom, DZ series
• pharmaceutics	Development and production of drugs for medication. Quality assurance and inspection of produced products	Delphi-X Observer, iScope® (polarization), StereoBlue, NexiusZoom, DZ series
• phytopathology	Study and diagnosis of plant diseases	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series
• plastics	Development and production of plastics and plastic based compounds. Quality assurance and inspection	iScope® (materials), Oxion (materials), Oxion Inverso (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series
• textile	Development and production of all kinds of textile based products. Quality assurance and inspection	iScope® (materials), Oxion (materials), bScope® (materials), AP series, StereoBlue, NexiusZoom, DZ series, MacroZoom
• veterinary medicine	Prevention, diagnosis and treatment of diseases, injuries in animals	BioBlue.Lab, bScope®, iScope®, Oxion, Oxion Inverso, StereoBlue, NexiusZoom, DZ series
• virology	Study and diagnosis of viruses and virus-like agents	Delphi-X Observer, iScope®, Oxion, BioBlue.Lab, bScope®
• water treatment	Production of drinking water and wastewater treatment. Quality control and disease prevention	BioBlue.Lab, bScope®, iScope®, Oxion
• wood production	Wood production for construction material, fuel. Quality control	iScope® (materials), Oxion (materials), Oxion Inverso (materials), bScope® (materials), AP series, StereoBlue, NexiusZoom, DZ series, MacroZoom
• zoology	Animal biology. Study of invertebrates and vertebrates and related branches	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series

LIFE SCIENCE
LABORATORIES

FIELD OF APPLICATION

RECOMMENDED MODELS

• agronomy & forestry	Selective breeding of plants, fruit and production of food from plants, wood from trees, fuel. Plant physiology and genetics research	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series, MacroZoom
• anatomopathology	Diagnosis of diseases of organs or tissues. Cytopathology and forensic pathology	Delphi-X Observer, iScope®, bScope®, BioBlue.Lab, Oxion, StereoBlue, NexiusZoom, DZ series
• bacteriology	Study of bacteria as subdivision of microbiology. Identification, classification	BioBlue.Lab, bScope®, iScope®, Oxion, Oxion Inverso, Delphi-X Observer
• biochemistry	Study of chemical processes within living organism. Identification and classification of enzymes and structure of biomolecules	BioBlue.Lab, bScope®, iScope®, Oxion
• biomedical	Study of medical microbiology, virology, epidemiology, biomedical engineering	Delphi-X Observer, iScope®, bScope®, BioBlue.Lab, Oxion
• biotechnology	Study of living organism in order to make food products, for plant protection (genetically modified organism) and other bioprocess engineering. Development of pharmaceutical drugs, genetic testing, enzymes production, biofuels, textile	Delphi-X Observer, iScope®, bScope®, BioBlue.Lab, Oxion, NexiusZoom, DZ series, MacroZoom
• botany	Study of plants as branch of biology. Plant anatomy and morphology. Plant genetics and ecology. Plant biochemistry	BioBlue.Lab, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series
• cell culture	Controlled growth of cells and tissues, fungal culture and microbiological culture	Delphi-X Inverso, Oxion Inverso, NexiusZoom, DZ series
• chemistry	Study of the composition and properties of chemicals	iScope® (materials and polarization), Oxion (materials), bScope® (materials), NexiusZoom, DZ series
• cosmetics	Research, development and testing (safety) of substances for make-up or perfume	bScope® (materials), iScope® (materials), NexiusZoom, Oxion (materials), DZ series
• cytology	Study of cell structure, function and chemistry. Detection of cellular diseases	Delphi-X Observer, iScope®, bScope®, BioBlue.Lab, Oxion
• dermatology	Study and diagnosis, treatment of skin, nails and hair diseases	iScope®, Oxion, NexiusZoom, StereoBlue, DZ series, MacroZoom
• digital imaging	Observation and analysis of microscope images, save and captured the images and videos	CMEX cameras, CCD cameras, HD cameras, Cooled cameras, ProPad, MacroZoom
• embryo collection	Embryo collection and transfer in mares, pigs, cows. Quality control	NexiusZoom, DZ series, Z series
• embryology	Study of gametes, embryos and fetuses	BioBlue.Lab, bScope®, iScope®, Oxion, NexiusZoom, DZ series, Z series
• entomology	Study of insects as branch of zoology. Identification and classification of beetles, flies, termites, moths and butterflies, bees, ants, wasps	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series, MacroZoom
• environmental	Monitoring of environmental conditions such as water, atmosphere, ecosystems, soil and pollution	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series
• fluorescence	Study of living and non living material with the help of fluorescence markers (fluorochromes)	Delphi-X Observer (fluorescence), iScope® (fluorescence), Oxion (fluorescence), Oxion Inverso (fluorescence), bScope® (fluorescence), DZ series
• forensics	Analysis of scientific evidence. Toxicology, fingerprints, Forensic anthropology and archeology, forensic botany and entomology	BioBlue.Lab, bScope®, iScope®, Delphi-X Observer, Oxion, Oxion Inverted, NexiusZoom, DZ series, Z series

LIFE SCIENCE
LABORATORIES

FIELD OF APPLICATION

RECOMMENDED MODELS

• food and beverages	Quality and safety controls, before, during and after the production of food and beverages	BioBlue.Lab, bScope®, iScope®, Oxion
• genetics	Study of genes, heredity in living organism including bacteria, plants, animals and humans	Delphi-X Observer, iScope®, Oxion, DZ series
• hematology	Study and diagnosis, treatment and prevention of diseases of the blood	Delphi-X Observer, iScope®, bScope® (dark field), iScope® (darkfield), Oxion, Oxion (darkfield), iScope®, Oxion
• histopathology	Microscopic examination of tissue, diagnosis of diseases	Delphi-X Observer, iScope®, Oxion
• horticulture	Selective breeding of plants and fruit for production of food	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series, MacroZoom
• histopathology	Microscopic examination of tissue, diagnosis of diseases	iScope®, Oxion
• in vitro fertilization	In vitro fertilization IVF. Quality control of collected egg and sperm	StereoBlue, NexiusZoom, DZ series, Z series
• marine miology	Study of organisms living in the ocean or seas as branch of biology	iScope®, Oxion, NexiusZoom, DZ series
• microbiology	Study of microscopic uni-, multi- or acellular small organisms such as protozoa, algae, bacteria and more. Identification and classification	Delphi-X Observer, iScope®, Oxion, NexiusZoom, DZ series
• mycology	Study of fungi as branch of biology. Identification and classification	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series
• neuropathology	Study and diagnosis of diseases in nervous system tissue	Delphi-X Observer, iScope®, Oxion, NexiusZoom, DZ series
• oncology	Study and diagnosis, treatment and prevention of cancers	Delphi-X Observer, iScope®, Oxion
• parasitology	Study of parasites, medical and veterinary	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series
• pathology	Study and diagnosis of diseases	Delphi-X Observer, iScope®, Oxion
• pharmaceutics	Development and production of drugs for medication. Quality assurance and inspection of produced products	iScope® (polarization), StereoBlue, NexiusZoom, DZ series
• phytopathology	Study and diagnosis of plant diseases	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series, MacroZoom
• veterinary medicine	Prevention, diagnosis and treatment of diseases, injuries on animals	BioBlue.Lab, bScope®, iScope®, Oxion, Oxion Inverso, StereoBlue, NexiusZoom, DZ series
• virology	Study and diagnosis of viruses and virus-such as agents	Delphi-X Observer, BioBlue.Lab, bScope®, iScope®, Oxion
• water treatment	Production of drinking water and wastewater treatment. Quality control and disease prevention	BioBlue.Lab, bScope®, iScope®, Oxion
• zoology	Animal biology. Study of invertebrates and vertebrates and related branches	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series

INDUSTRY	FIELD OF APPLICATION	RECOMMENDED MODELS
• aerospace	Manufacturing and quality inspection of rockets and space vehicles related parts	iScope® (materials), Oxion (materials), NexiusZoom, DZ series, Z series
• agronomy & forestry	Selective breeding of plants, fruit and production of food from plants, wood from trees, fuel. Plant physiology and genetics research	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series, MacroZoom
• asbestos control	Research of asbestos fibers, environmental protection during restoration of older buildings	iScope® (asbestos and polarization), NexiusZoom, DZ series, Z series
• automotive	Manufacturing and quality inspection of automotive related parts	iScope® (materials), Oxion Inverso (materials), NexiusZoom, DZ series, Z series
• avionics	Manufacturing and quality inspection of aircraft related parts	iScope® (materials), NexiusZoom, DZ series
• biochemistry	Study of chemical processes within living organism. Identification and classification of enzymes and structure of biomolecules	BioBlue.Lab, iScope®, Oxion, NexiusZoom, DZ series
• chemistry	Study of the composition and properties of chemicals	iScope® (materials), Oxion (materials)
• cosmetics	Research, development and testing (safety) of substances for make-up or perfume	bScope® (materials), iScope® (materials), Oxion (materials), NexiusZoom, DZ series
• digital imaging	Observation and analysis of microscope images, save and captured the images and videos	CMEX cameras, CCD cameras, HD cameras, ProPad, MacroZoom
• electronics	Development, production, assembling and inspection of electronic components or circuitry	iScope® (materials), Oxion (materials), NexiusZoom, DZ series, Z series, BE-50 LED, MacroZoom
• environmental	Monitoring of environmental conditions such as water, atmosphere, ecosystems, soil and pollution	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series
• food and beverages	Quality and safety controls, before, during and after the production of food and beverages	BioBlue.Lab, bScope®, iScope®, Oxion
• forensics	Analysis of scientific evidence. Toxicology, fingerprints, Forensic anthropology and archeology, forensic botany and entomology	BioBlue.Lab, bScope®, bScope® (materials), iScope®, iScope® (materials and polarization), Oxion, Oxion (materials), Oxion Inverted, Oxion Inverted (materials), NexiusZoom, DZ series, Z series
• geology, mineralogy	Earth science that study the solid, rocks and processes. Identification and classification of rocks and minerals	iScope® (materials), Oxion (materials), Oxion Inverso (materials), B+ (materials), StereoBlue, NexiusZoom, DZ series, MacroZoom
• geology, petrology	Identification by means of an petrographic microscope	iScope® (polarization)
• glass industry	Quality control, before, during and after the production of glass and coatings	iScope® (materials), Oxion (materials), Oxion Inverso (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series
• horticulture	Selective breeding of plants and fruit for production of food	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series, MacroZoom
• jewelry	Precise manufacturing of very small decorative items such as brooches, rings, bracelets and more	BE-50 LED series, StereoBlue, NexiusZoom, DZ series, Z series

INDUSTRY	FIELD OF APPLICATION	RECOMMENDED MODELS
• mechanics	Manufacturing and quality inspection of mechanical parts	iScope® (materials), Oxion (materials), Oxion Inverso (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series, MacroZoom
• metallurgy	Manufacturing and quality inspection of metallic elements, intermetallic compounds and alloys	iScope® (materials), Oxion (materials), Oxion Inverso (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series, MacroZoom
• mining	Extraction of minerals Identification, quantitative and qualitative evaluation of minerals	iScope® (materials and polarization), Oxion (materials and polarization), Oxion Inverso (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series
• paper industry	Production of paper related products. Quality inspection	iScope® (materials), Oxion (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series, MacroZoom
• petrochemical	Research and transformation of crude oil and natural gas	iScope® (materials), Oxion (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series
• petrology	Study of the composition and structure of rocks as branch of geology. Identification by means of polarization microscopy	iScope® (polarization), StereoBlue, NexiusZoom, DZ series
• pharmaceuticals	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



PRODUCT

	P	A	G	E
Abbe refractometer	391			
About -				
- differential interference contrast				319
- field of view			253	345
- fluorescence			183	
- microscope basics		21		
- microscope optics			233	
- objectives		15		
- petrological microscopy				327
- stereo microscopes				287
Accessories for microscopy	352			
Adapter guide		104	258	350
AP series		68		
Asbestos research microscopes				294
Autofocus cameras		92	248	340
BE-50 Series				294
BioBlue		22		
BioBlue digital		78	236	
BioBlue.Lab		28	142	
Biological microscopes		8	106	
bScope biological		32	118	
bScope digital		80	238	330
bScope fluorescence			166	
bScope materials				308
CMEX Pro USB-3.0 cameras		90	246	338
CMEX USB-2.0 cameras		88	245	337
CMEX-WIFI camera		96	244	336
Cold light sources	342			
Cooled camera		97	252	344
Delphi-X Inverso biological			152	

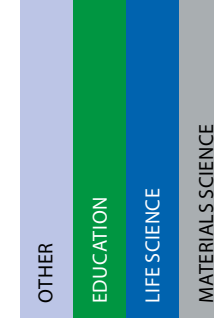
PRODUCT

	P	A	G	E
Delphi-X Inverso fluorescence			190	
Delphi-X Observer biological			126	
Delphi-X Observer fluorescence			172	
Delphi-X Observer materials				312
Differential interference contrast				311
Digital MacroZoom		86	240	332
Digital microscopes		74	236	330
Digital solutions		72	234	328
Disposables	378			
Dissection instruments	362			
Dissection kits	364			
DZ series			218	282
EcoBlue		16		
Ecoblue digital		76		
EduBlue		48		
EduBlue digital		82		
EduBlue LCD		84		
EduPad		98		
EduZoom		84		
Eyepiece cameras		86		
Field of view			245	331
Fluorescence filter sets			198	
Fluorescence LED light sources			196	
Fluorescence microscopes			158	
Handheld magnifiers	382			
Handheld refractometers	372			
Handheld spectrometers	348			
High definition cameras		92	248	340
How to keep the optics clean				299
How to match camera resolution			243	



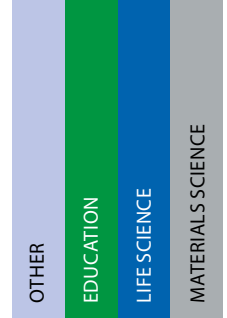
PRODUCT

	P	A	G	E
How to set up a stereo microscope		57	213	273
Illumination solutions	354			
ImageFocus software		102	256	348
Inverted biological			144	
Inverted fluorescence			182	
Inverted materials				316
iScope biological		38	108	
iScope fluorescence			160	
iScope materials				302
LED cold light sources	344			
LED ring light sources	344			
LED light sources fluorescence			196	
Light sources	340			
MacroZoom		86	240	332
Magnifiers	382			
Measuring microscopes	384			
MicroBlue		10		
MicroBlue digital		74		
Microscope basics		21		
Microscope optics			233	
NexiusZoom ESD				262
NexiusZoom and -EVO		58	204	262
NexiusZoom for gemology				274
Objectives		15		
Other products	380			
Optical instruments	380			
Oxion biological			136	
Oxion fluorescence			178	
Oxion Inverso biological			146	
Oxion Inverso materials				324



PRODUCT

	P	A	G	E
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
Spectrometers	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



Since 1966!

Euromex 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 bv 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 bv 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 bv

© 2019 Copyright Euromex Microscopen bv

HEADQUARTERS

Euromex Microscopen bv

Papenkamp 20
6836 BD Arnhem
The Netherlands
Tel: +31 (0) 26 323 22 11
info@euromex.com

EUROPEAN SALES OFFICE

Euromex Microscopen Spain, S.L

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

www.euromex.com