



# contents

euromex MICROSCOPE COLLECTION 2025-2026

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



# EDUCATION | BIOLOGICAL MICROSCOPES MicroBlue • EcoBlue • BioBlue

EDUCATION | STEREO MICROSCOPES EduBlue • StereoBlue NexiusZoom • AP series

BioBlue.Lab • bScope • iScope

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

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

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

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

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

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

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

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

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

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

# about **EUROMEX** ing manufacturer of production of optical components and optical

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

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

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

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

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



Visit our academy for video tutorials and manuals

View the product videos on YouTube

visit www.gsigroupholdings.com

assemblies. The offering varies from custom plan

elements, provided with optical coatings, covering

wavelengths from deep ultraviolet (DUV) to infrared

Physix engineers to meet the stringent requirements

Euromex Microscopes and Physix Photonics are both

(IR). Euromex draws on the extensive expertise of

manufacturing. For comprehensive details about

Physix Photonics, please visit www.physix.com

subsidiaries of **GSI Group Holdings**, a collection

diagnostics, life sciences, education, and industrial

of leading brands serving the biotech, clinical

sectors with a broad array of mission-critical laboratory-related consumable supplies, benchtop

equipment, and related accessories. GSI Group

Holdings is headquartered in Irvine, California, USA.

For more details about the brands and activities of

the companies under GSI Group Holdings, please

and curved optics to uniquely shaped optical

for optical components used in microscopy

choose the right **microscope** 

You

Tube



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

4

3

5

6

8

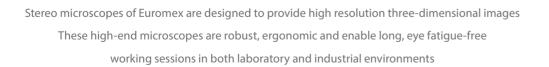
9

4 **a** euromex

# **industry** stereo microscopes







stereo microscopes

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

NEXIUSZOOM, -EVO AND -ESD • 294 NEXIUSZOOM FOR GEMOLOGY • 306 STEREOBLUE • 310 DZ SERIES • 314 ULTRAZOOM • 320 Z SERIES • 322 BE-50 SERIES • 328 P SERIES • 330

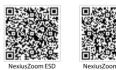




# nexiuszoom

# the new standard in stereo microscopy







The NexiusZoom stereo microscopes enable you to examine your specimen with high-performance precision and generate two- and three-dimensional images allowing observation for your most 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

**ESD** 

# 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  $45^{\circ}$  inclined tubes. Both eyepieces with  $\pm$  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.1703-AP

# AUXILIARY LENSES

NZ.1902-A

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

00



• •



**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



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 applications. Magnifications from 3.3 up to

and eyepieces. ESD safe microscopes for the

220 times can be achieved with auxiliary lenses

a euromex 297

NZ.1903-U ESD

# 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 and B stands)
- Articulated arm stand for table mounting or with heavy desktop stand, both without head holder, without illumination (-A and -AP stands)
- Lightweight articulated arm stand, with head holder, without illumination (NZ.9047)

All pillar and rack & pinion stands are supplied with two object clamps. Alloy metal cast, hardened coating. 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)



#### ILLUMINATION

3 W transmitted and incident LED illuminators with internal power supply 100-240 V. Both illuminators can be used simultaneously and the light intensities can be adjusted separately. The universal single or double arm stands and the articulated stands can be equipped with the ring illuminators LE.1974 and LE.1973 with respectively 72 or 144 power LEDs controlled in segments or with the LE.5212 illumination station, ideal for creating or lifting shades

# 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

# **ANTI-THEFT SLOT**

At the back of the microscope a Kensington Security slot is placed, which can be used to secure the instrument from theft (only on th P-, PG-, and S-models)

# PACKAGE CONTENT

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



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

MODELS	Bino	Trino	Pillar stand	Rack & pinion stand	Universal stand	Boom stand on heavy base plate	Articulated arm stand on table clamp	Articulated arm stand on heavy base plate	Gooseneck dual LED	Mirror LED	Weight (kg)
NZ.1902-P	•		•								5.0
NZ.1902-PG	•		•						•		5.1
NZ.1902-S	•			•							4.9
NZ.1902-U	•				•						15.6
NZ.1902-B	•					•					22.1
NZ.1902-A	•						•				8.6
NZ.1902-AP	•							•			20.7
NZ.1903-P		•	•								5.2
NZ.1903-PG		•	•						•		5.3
NZ.1903-M		•	•							•	5.1
NZ.1903-S		•		•							5.1
NZ.1903-U		•			•						15.7
NZ.1903-B		•				•					22.2
NZ.1903-A		•					•				8.7
NZ.1903-AP		•						•			20.8

# NEXIUSZOOM EVO 0.65-5.5 (WF 10X/23MM)

MODELS	Bino	Trino	Pillar stand	Rack & pinion stand	Universal stand	Boom stand on heavy base plate	Articulated arm stand on table clamp	Articulated arm stand on heavy base plate	Gooseneck dual LED	Mirror LED	Weight (kg)
NZ.1702-P	•		•								5.0
NZ.1702-PG	•		•						•		5.1
NZ.1702-M	•		•							•	5.1
NZ.1702-S	•			•							4.9
NZ.1702-U	•				•						15.6
NZ.1702-B	•					•					22.1
NZ.1702-A	•						•				8.6
NZ.1702-AP	•							•			20.7
NZ.1703-P		•	•								5.2
NZ.1703-PG		•	•						•		5.3
NZ.1703-M		•	•							•	5.1
NZ.1703-S		•		•							5.1
NZ.1703-U		•			•						15.7
NZ.1703-B		•				•					22.2
NZ.1703-A		•					•				8.7
NZ.1703-AP		•						•			20.8

# 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		ry lens 287 mm		ary lens 220 mm		ry lens 183 mm		ary lens D 105 mm		auxiliary ) 110 mm		ary lens D 53 mm		ary lens 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

00

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

Zoom indication		ary lens 287 mm		ary lens 220 mm		ry lens 183 mm		ary lens D 105 mm		auxiliary 110 mm		ary lens 0 53 mm		ry lens 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	29
4.5	13.5	17.0	18.0	12.8	22.5	10.2	33.8	6.8	45.0	5.1	67.5	3.4	90.0	2.6
5.0	15.0	15.3	20.0	11.5	25.0	9.2	37.5	6.1	50.0	4.6	75.0	3.1	100.0	2.3
5.5	16.5	13.9	22.0	10.5	27.5	8.4	41.3	5.6	55.0	4.2	82.5	2.8	110.0	2.1

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



# 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.0010** Fail of HWF 10x / 22 mill eyepleces
- 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.6020-CM HWF 20x/12 mm eyepieces 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.6210 Pair of HWF 10x/23 mm eyepieces for NZ EVO
- NZ.6210-C HWF 10x/23 mm eyepiece only with crosshairs for NZ EVO
- NZ.6210-CM HWF 10x/23 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.8905

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
- WD = Working distance

#### STANDS

- NZ.9000 Ergo pillar stand, 35 cm, without illuminationNZ.9005 Ergo pillar stand with adjustable transmitted3 W LED illumination, height 35 cm
- 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\*
- NZ.9030 Universal double-arm boom stand\*
- NZ.9032 Universal two-arm stand with table clamp\*
- NZ.9042 Stand with rotating mirror and indirect transmitted LED illumination
- NZ.9047 Lightweight articulated arm stand, with head holder, without illumination \* Without NZ head holder

#### **HEAD HOLDERS**

- NZ.9081 Head 76 mm holder for NexiusZoom head on articulated arm stand NZ.9025 and NZ.9027
- NZ.9090 Head holder, suitable for NZ.9000/9005/9015/901 7/9020/9030 stands
- NZ.9095-ADD Head holder, ADD-ON, with fine and coarse adjustment. For NZ.9000/9005/9015/9018/9020 /9030/9032 and NZ.9042 stands. Only available with new microscopes
- 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 are for NZ.9018/LE.5207/LE.5212, 1 pc
- LE.1974 Ring illuminator with 72 LEDs with adjustable light intensity. External power supply 110-240 Vac / 12 Vdc (50/60 Hz). With segment controller. Brightness of 20,000 Lux at 100 mm distance and color temperature of 6,500 K. Mounting for stereo head with diameter from 25 to 61 mm
- LE.1973 Ring illuminator with 144 LEDs with adjustable light intensity. External power supply 100-240 Vac / 12 Vdc (50/60 Hz). With segment controller Brightness of 23,000 Lux at 100 mm distance and color temperature of 6,500 K. Mounting for stereo head with diameter from 25 to 61 mm
- LE.5210 Euromex cold light illuminator EK-1, 100 W. 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 selfsustaining, 50 cm long, 4 mm diameter core
- LE.5215 Triple arm light conductor, gooseneck selfsustaining, 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.9505Mechanical 180 x 155 mm X-Y stage with 75 x55 mm translation and transparent glass plateAE.5168-NZHeating 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 reauest

# MISCELLANEOUS

- NZ.8950 Protection glass for NexiusZoom head
- NZ.9045 Fall protection ring for NexiusZoom pillars. Note: the one- and double arm stands are as a standard supplied with this ring
- NZ.9570 Pair of object clamps for stage
- NZ.9572 Adjustable GEM object clamp for -P, -PL and -S stands
- NZ.9950 Standard opaque stage plate
- NZ.9956 Black/white stage plate, Ø 95 mm

# DISPOSABLES

- NZ.9958 Standard glass object plate, opague, Ø 95 mm
- 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)

PB.5245	Lens cleaning paper, 100 sheets per pack
PB.5274	lsopropyl alcohol 99%, 200 ml

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



NZ.9005

304 **a euromex** 





NZ.9047



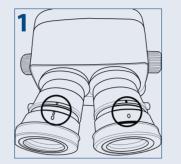


• The LE.5212 in two different configurations

# how to set up a stereo microscope

# OUICK INSTALLATION

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



Turn the diopter adjustment rings

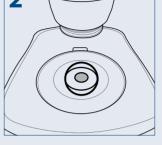
of both eyepieces to position "0"

to bring the specimen into focus

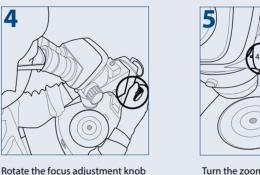
Turn the zoom adjustment knob

to the lowest magnification

Δ



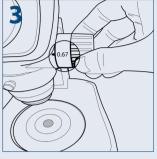
Put a specimen on the stage plate



Turn the zoom adjustment knob to the highest magnification



Rotate the diopter adjustment rings of the left and right eyepiece to bring the specimen into focus



Turn the zoom adjustment knob to the lowest magnification



Rotate the focus adjustment knob to bring the specimen into focus

# **PLEASE NOTE**

Put the zoom adjustment knob at the highest magnification again and check the image focusing. The diopter adjustment is complete when the image is accurately focused during zooming

If not, please repeat steps 3 to 8

# 306

The standard NexiusZoom is supplied with a pair of The NexiusZoom EVO is supplied with a pair of

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

# **OBJECTIVES**

NZ.1902 with backwards tilting stand

**EYEPIECES** 

HWF 10x/22 mm eyepieces

HWF 10x/23 mm eyepieces

SPECIFICATIONS

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

The NexiusZoom EVO is supplied with a 1:8.4 zoom objective with 0.65x to 5.5x magnifications, a field of view from 35.4 mm to 4.2 mm. 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

The specialized backwards tilting stand of the NexiusZoom and NexiusZoom EVO stereo microscopes for gemology applications offers 30 W halogen transmitted illumination towards the specimen at obligue 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



••





00

**NexiusZoom** 

MICROSCOPES FOR GEMOLOGY

NZ.1902-GEML

NZ.1903-GEMF

euromex

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 WD 5		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	

NDUSTRY

• •

# **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 l WD 10		Auxiliary WD 53		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	29	
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

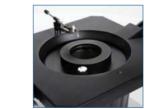
# HEADS & EYEPIECES

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

#### AUXILIARY LENSES

NZ.6099 Pair of eyecups

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







# 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.9527	Polarization filter for NexiusZoom GEML and GEMF
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)
SL.3678	Halogen spare bulb 6 V, 30 W for NexiusZoom
	GEML and GEMF
N7 0062	Spare El-bulb 7 W/ for Novius Zoom GEME

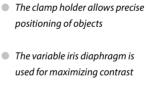
NZ.9962 Spare FL-bulb 7 W for NexiusZoom GEMF





NZ.5302 / NZ.5303





Brightfield/darkfield switch for transmitted illumination for maximum flexibility

308 **Beuromex** 

# BlueLine CROSCO EREO 0

SB.1903

# 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 iewelers and dental technicians



310 **Beuromex** 



# **HIGHIIGHTS**

- 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/
- 0.5x to 5.5 objective

С

0

SB.1903

SB.1903-P

SB.1302/SB.1402

SB.1302-P/SB.1402-P

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

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

- **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





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

00

# **EVO ZOOM OBJECTIVE**

- Zoom stereo 0.5x to 5.5x parfocal objective
- Magnification from 5x to 55x
- Field of view 38 mm to 3.9 mm
- Working distance 100 mm

# STAND

- The rack & pinion and pillar stands of the StereoBlue are equipped with ergonomic flat bases, complete with two object clamps and Ø 60 mm transparent and black/white stage plates The coarse adjustment is equipped with tension control
- The ergonomic universal (single arm stand, U) and boom stand (dual arm, B) are ideal for viewing large samples or working under the microscope. They come without illumination

# 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)

• The U- and B-stand can be equipped with ring illuminators

LE.1974 and LE.1973 with respectively 72 or 144 power LEDs

# STEREOBLUE 1X/3X AND 2X/4X OBJECTIVES

MODELS	Binocular	1x/3x objective	2x/4x objective	Rack & pinion stand 3 W LED	Pillar stand 3 W LED	Weight (kg)
SB.1302	•	•		•		3.3
SB.1302-P	•	•			•	4.2
SB.1402	•		•	•		3.3
SB.1402-P	•		•		•	4.2

# STEREOBLUE 0.7X UP TO 4.5X ZOOM/0.5X UP TO 5.5X ZOOM EVO

MODELS	Bino	Trino	0.7 - 4.5x zoom	0.5 - 5.5x zoom EVO	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.1902	•		•		•					3.6
SB.1902-P	•		•			•				4.4
SB.1902-U	•		•				•			15.4
SB.1902-B	•		•					•		21.9
SB.1903		•	•		•					3.7
SB.1903-P		•	•			•				4.5
SB.1903-U		•	•				•			15.5
SB.1903-B		•	•					•		22.0
SB.3903		•	•		•				•	3.7
SB.3903-P		•	•			•			•	4.5
SB.1702	•			•	•					3.6
SB.1702-P	•			•		•				4.4
SB.1702-U	•			•			•			15.4
SB.1702-B	•			•				•		21.9
SB.1703		•		•	•					3.7
SB.1703-P		•		•		•				4.5
SB.1703-U		•		•			•			15.5
SB.1703-B		•		•				•		22.0

# ANTI-THEFT SLOT

At the back of the microscope a Kensington Security slot is placed, which can be used to secure the instrument from theft (not on the U- and B-models)

# PACKAGE CONTENT

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



# ACCESSORIES AND SPARE PARTS

# **EYEPIECES**

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

# **AUXILIARY LENSES**

- SB.8903 Auxiliary 0.3x lens for zoom models, WD 287 mm. Only suitable for boom and articulated stands
- SB.8905 Auxiliary 0.5x lens for zoom models, WD 179 mm. Not suitable for SB.1X02, SB.1X03, SB.3903 and SB.3903-P
- SB.8907 Auxiliary 0.75x lens for zoom models, WD 105 mm
- SB.8915 Auxiliary 1.5x lens for zoom models, WD 53 mm. Not suitable for SB.39xx

WD = working distance

# **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
SB.9090	Head holder for SB.9020

SB.9045	Fall protection ring for StereoBlue pillars.
	Note: the one- and double arm stands are as a
	standard supplied with this ring
SB.9570	Pair of object clamps for stage
SB.9952	Stage plate transparent, Ø 60 mm
SB.9956	Stage plate black/white, Ø 60 mm
SB.9983-R	3 W LED replacement unit, incident illumination
SB.9983	3 W LED replacement unit, transmitted illumination
AE.1112	Micrometer 76 x 26 mm slide, 50 mm/50 divisions
NZ.4300	Aluminium case for NexiusZoom microscopes
	with -P/-S/-PG stands

# CAMERA ACCESSORIES

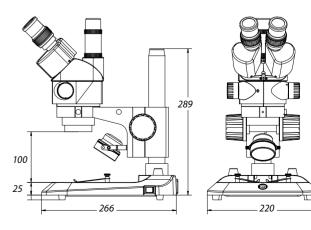
SB.9850	C-mount adapter with 0.5x lens for 1/2" cameras.
	Only for trinocular models
AE.5130	Universal SLR camera adapter with 2x projection
	lens for 23.2 mm tubes. Needs T2 adapter
AE.5025	T2 adapter for Nikon D digital SLR cameras
AE.5040	T2 adapter for Canon EOS digital SLR cameras
Other T2 ad	apters on request

••

# DISPOSABLES

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

# DIMENSIONS



# STEREO MICROSCOPES

# **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

Deuromex

DZ.1100 / DZ.1600 / DZ.1800

DZ.1105 / DZ.1605 / DZ.1805

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  $\pm$  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



# 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

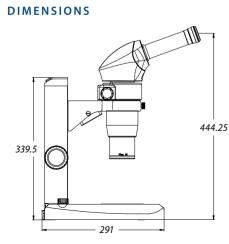
#### DZ SERIES STANDARD

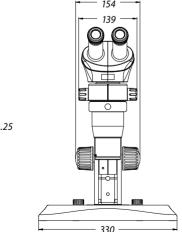
MODELS	Binocular 20° head	Binocular Ergo 0 to 35° tilting	Magnifications from 8 to 50x	Magnifications from 8 to 64x	Magnifications from 8 to 80x
DZ.1100		•			•
DZ.1105	•				•
DZ.1800		•		•	
DZ.1805	•			•	
DZ.1600		•	•		
DZ.1605	•		•		

All equipped with EWF 10x/22 mm eyepieces

# MAGNIFICATIONS AND FIELDS OF VIEW FOR STANDARD CONFIGURATIONS

				0.5x Objec WD 126 r		1.0x Obje WD 78 n		2.0x Object WD 33 m			
MO	DDE	LS	Zoom indication	Total magnification	Field of view	Total magnification	Field of view	Total magnification	Field of view		
			0.8x	4x	55	8x	27.5	16x	13.7		
			1.0x	5x	44	10x	22	20x	11		
		505	1.5x	7.5x	29.3	15x	14.6	30x	7.3		
	Z.1805 1600 / DZ.16	DZ.1800 / DZ.1805 DZ.1800 / DZ.1600 / DZ.1605	Z.16	2.0x	10x	22	20x	11	40x	5.5	
			305	0/0	3.0x	15x	14.6	30x	7.3	60x	3.6
			160	4.0x	20x	11	40x	5.5	80x	2.7	
105	0/0	DZ.	5.0x	25x	8.8	50x	4.4	100x	2.2		
Z.1.	180		6.0x	30x	7.3	60x	3.6	120x	1.8		
0/0	DZ		6.4x	32x	6.8	64x	3.4	128x	1.7		
DZ.1100 / DZ.1105			7.0x	35x	6.3	70x	3.1	140x	1.5		
DZ			8.0x	40x	5.5	80x	2.75	160x	1.4		





# 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

# ACCESSORIES/SPARE PARTS

# 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

# HEADS

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

# EYEPIECES

**DZ.3010** EWF 10x/22 eyepiece, 1 piece

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

• Eyepieces



# IRIS DIAPHRAGMS DZ.9010 Double iris diaphragms for increased depth of field

# OBJECTIVES

DZ.4003 Plan common main objective 0.3x. WD 276 mm DZ.4005 Plan apochromatic common main objective 0.5x. WD 126 mm 

# STANDS

- DZ.5020Universal stand without illumination.<br/>Dimensions 460(h) x 280 (l) x 400 (d) mmDZ.5040Ergonomic stand with transmitted and<br/>incident LED illumination. Coaxial coarse and fine<br/>adjustments, 100 graduations, 0.015 mm<br/>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, suitable for NZ.9000/9005/9015/9017/ 9020/9030 stands

• •

# **FLUORESCENCE ATTACHMENT**

- DZ.9050 Attachment for fluorescence with 100 W mercury vapor illumination with GFP-B and GFP-LP filter sets and one 23.2 mm photo port. Supplied with power supply
- DZ.9060 Filter cube with GFP-B band-pass filter set for blue excitation, EX 460-500, DM 505, EM 510-560
- DZ.9061 Filter cube with GFP-L long-pass filter set for blue excitation, EX 460-500, DM 505, EM 510
- DZ.9049 Empty filter cube
- Other fluorescence filters available on request
- Each cube needs two emission fluorescence filters
- Customized configuration model DZ.0800, 2x
   DZ.3010, DZ.2025, DZ.9005, DZ.9010, DZ.4010
   and DZ.5040



# **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 tubeDZ.9007 Photo port attachment with two 23.2 mm tubesDZ.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, Ø 100mm
- 50.875 Adjustable GEM clamp
- SL.5520 LED replacement for incident LED illumination of DZ.5040 stand

# DISPOSABLES

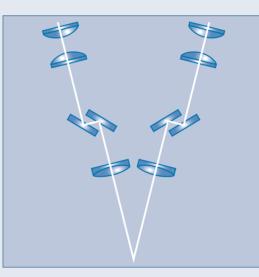
- AE.1385100 W HBO mercury vapor bulb for fluorescencePB.5245Lens cleaning paper, 100 sheets per pack
- PB.5274 Isopropyl alcohol 99% (200 ml)
- **PB.5275** Cleaning kit: lens cleaning fluid, lint free lens tissue, brush, air blower, cotton swabs

# 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

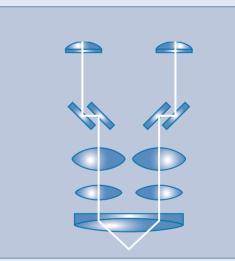
Low cost
Compact
Magnifications <sup>(1)</sup> up to approximately 100x
Good quality
Production environment

<sup>(1)</sup> Objective without auxiliary lenses and with 10x eyepieces

<sup>(2)</sup> With 10x eyepieces

<sup>(3)</sup> 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<sup>(2)</sup>, up to 300x Upgradeable<sup>(3)</sup> High imaging quality Research and development labs

# STEREO MICROSCOPES

# UltraZoom Industrial zoom microscope

The Euromex UltraZoom series combines ergonomic design, advanced optics, and flexibility, making it an indispensable tool for researchers and industrial professionals alike. Experience unmatched precision and comfort with this innovative industrial zoom microscope



# **Oblique Contrast Illumination**

Unmatched clarity for complex transparent samples. The Oblique Contrast Illumination (OCI) feature on our industrial stereo microscope is a must have for inspecting intricate or highly detailed



• •

specimens. Perfect for highlighting minute structures, subtle textures, micro-defects. It is it an invaluable tool for quality control, failure analysis, or any task requiring extreme precision



**ULTRAZOOM** 530/61 (h) x 320 (w) x 370 mm (d) | 13.1 kg

# HIGHLIGHTS

- Ergonomic tilting trinocular head from 0 to 30° inclined swiveling head for two height positions
- EWF 10x/23 mm eyepieces
- Plan-apo lens for superb imaging
- Fine and coarse focus controls
- Zoom Ratio: 1:18
- Magnification 7.5 to 135x
- Oblique Contrast Illumination
- Transmitted 8 W LED illumination
- 10 years warranty

# SPECIFICATIONS EYEPIECES

Pair of EWF 10x/23 mm eyepieces

# HEAD

- Ergonomic binocular 0-30° tilting head
- Diopter  $\pm$  5 adjustment on both eyepieces
- Interpupillary distance from 55 to 75 mm
- Photo port with 1x c-mount for 1" cameras

# **CENTRAL ZOOM UNIT**

Zoom ratio 1:18 for total magnifications from 0.75 to 13.5x

# COMMON MAIN OBJECTIVE

- Standard supplied with a 1x plan apochromatic Common Main Objective, WD 60 mm
- Standard supplied with protection window
- WD = working distance

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

#### STAND

- Large ergonomic stand with ø 180 mm object plate
- · Oblique Contrast Illumination slider
- Coaxial coarse and fine adjustment

# ILLUMINATION

Supplied with 8 W NeoLED transmitted and *Oblique Contrast Illumination* built-in 100-240 V power supply



# MAGNIFICATIONS

#### Objective WD 60 mm, standard outfit

MODEL	Zoom indication	Total magnification	Field of view
	0.75x	7.5x	3.07
	1.0x	10x	2.3
	2.0x	20x	1.15
	3.0x	30x	0.77
	6.0x	60x	0.38
	10.0x	100x	0.23
	13.5x	135x	0.17

# OBLIQUE CONTRAST ILLUMINATION

Oblique illumination enables the specimen to be illuminated from one side only (off-axis) by having the light source titled or directed from an oblique angle or from the side. Only diffracted light on a single side is admitted to the objective and, because of the obliquity of illumination, diffracted light on the other side misses the objective altogether. As a result, details in pseudo-relief from an otherwise almost invisible colorless specimen are than revealed

# PACKAGE CONTENT

Supplied with power cord, dust cover, tools and user manual All packed in sturdy box

# STEREO MICROSCOPES

# Z series

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 quality inspection of industrial pr

00

# 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

with different zoom heads, together with other components such as eyepieces, additional lenses, stands, stages, filters, etc

THAT





# Z series

ST.1720, ZE.1654

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

and LE.5210, LE.5239

ZE.1654

ST.1720

Modular system

**HIGHLIGHTS** 

- 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



STANDS WITH ILLUMINATION

ST.1740 Rack & pinion stand with 10 W halogen

With integrated power supply.

min/max height 240-290 mm

illumination. Supplied with frosted filter for

transmitted illumination and a blue filter for

incident illumination. Both illuminations are

adjustable and can be used simultaneously.

Dimensions: 290 (h) x 160 (w) x 240 mm (d)

# SPECIFICATIONS

**EYEPIECES** Pair of SWF 10x/23 mm eyepieces

# HEAD

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

# ZOOM MAGNIFICATION OBJECTIVES

- Zoom objective with magnifications from 0.4x to 2.5x
- Zoom objective with magnifications from 0.7x to 4.5x

• Zoom objective with magnifications from 1x to 7x Zoom objectives with click stops are also available on request All optics have an anti-reflection coating for maximum light throughput and are anti-fungus treated

# STANDS WITHOUT ILLUMINATION

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



# **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\*\*\*

\* 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



Coarse adjustment and friction adjustment for head holders

for ST.1790, ST.1794, ST1796. The head holder ST.1796 is also

Models with illumination are supplied with power cord,

dust cover, a spare fuse and user manual. All packed in a

equipped with a fine focusing adjustment

PACKAGE CONTENT

ST.1718

FOCUSING

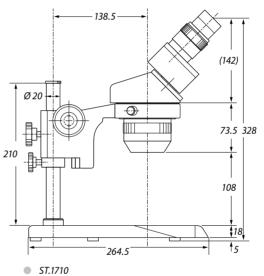
polystyrene box

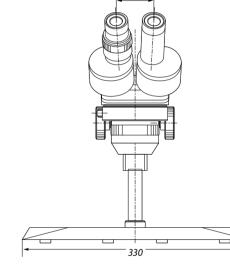
# STANDS

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
65.980/65.983			•	Ø 1000 *	0/295	65.983	

\* Length with the two arms totally extended

#### DIMENSIONS





54~74

# ZOOM STEREO HEADS

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

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

# ACCESSORIES AND SPARE PARTS

# EYEPIECES

#### (without eyecups)

AE.1836	Pair of SWF 10x/23 mm eyepieces
AE.1834	Pair of SWF 12.5x/20 mm eyepieces
AE.1840	Pair of SWF 30x/7.5 mm eyepieces
AE.5439	Pair of eyecups
AE.5425	Pair of eyecups, suitable when wearing glasses

# MICROMETER EYEPIECES (with adjustable lens)

AE.1839 SWF 10x/21 mm with 10 mm/100 micrometer reticle and crosshairs

••

 AE.1112
 Object slide 76 x 26 mm with micrometer

 50mm/500, 100 μm/division

# ADDITIONAL LENSES

# (for ZE.1659)

AE.1822 Additional 0.57x lens. WD 300 mm

# ADDITIONAL LENSES

# (for ZE.1624, ZE.1654, ZE.1626)

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

- AE.1856 Additional 0.5x lens. WD 150 mm.
   Suitable with ST.1740. Maximum object size is 15 mm
   AE.1857 Additional 0.75x lens. WD 97 mm
- AE.1858Additional 1.5x lens. WD 50 mmAE.1859Additional 2.0x lens. WD 34 mm

# ADDITIONAL LENS

# (for ZE.1657)

••

AE.1818Additional 1.5x lens. WD 57 mmWD = workong disctance

# PROTECTION WINDOW

#### (to be screwed under the objectives)

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

# MECHANICAL STAGES

AE.1876Plain stage 145 x 115 mm with 75 x 50 mm<br/>X-Y mechanical stage on ball bearings.<br/>Horizontal coaxial adjustment.<br/>Double Vernier with 0.1 mm graduations.<br/>Only with ST.1710 and ST.1740

# OBJECT PLATES - Ø 94 MM

AE.1882 Acrylic black/white object plate

# FILTERS - Ø 40 MM

AE.1897 Frosted glass filter

# **OBJECT HOLDER**

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

# FUSES

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

# CAMERA ACCESSORIES

DC.1320	Projection 1x objective with C-mount	
DC.1324	Projection 0.5x objective with C-mount	
	for cameras with 1/2" sensor.	
	To be inserted into a 23.2 mm tube	
DC.1326	Projection 0.33x objective with C-mount	
	for cameras with 1/3" sensor.	
	To be inserted into a 23.2 mm tube	
AE.5130	Universal SLR camera adapter with 2x projection	
	lens for 23.2 mm tubes. Needs T2 adapter	
AE.5025	T2 adapter for Nikon D digital SLR cameras	
AE.5040	T2 adapter for Canon EOS digital SLR cameras	

# Other T2 adapters on request



- AE.5446 Orientable
   clamp for gems
  - AE.1882 Acrylic black/white object plate

00



AE.1876





• AE.1896 Stage 145 x 115 mm with central glass object plate





# **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

BE.1812

# **HIGHIIGHTS**

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

# SPECIFICATIONS

BE.7405 / BE.7410 / BE.7420

DIMENSIONS 421 430

# HEAD

**EYEPIECES** Pair of WF 10x/20 mm

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.6010	Pair of HWF 10x/20 mm eyepieces
BE.6015	Pair of HWF 15x/12 mm eyepieces
BE.6020	Pair of HWF 20x/10 mm eyepieces
BE.6110	HWF 10x/20 mm eyepiece with micrometer
3E.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

BE.7405 0.5x objective for BE-50 LED. WD 250 mm BE.7410 1.0x objective for BE-50 LED. WD 230 mm BE.7420 2.0x objective for BE-50 LED. WD 119 mm AE.1112 Micrometer slide, 50 mm/50 divisions

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	•

328 **a euromex** 

**Beuromex** 329

# **STEREO MICROSCOPES**

# **P** series

• •

10/30x or 20x/40x magnification versions. By using optional eyepieces magnifications from 5x to 80x can be achieved

The microscopes of the P series are specifically

designed for industrial purposes and come in

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

60.200 (P-20)

Varranty

Halogen APL Battery 100-240V



60.100 / 60.200

# **HIGHIIGHTS**

- **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

# 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



60.100 (P-10)

# 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 and with three rechargeable AA batteries for maximum 35 hours continuous cordless operation. Both illuminators can be operated independently or simultaneously. Supplied with external mains adapter

330 **a euromex** 

4

**Beuromex** 331

LED

# 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**

DISPOSABLES

DIMENSIONS

Supplied with power cord, three rechargeable AA batteriies, dust cover, a spare fuse and user manual (and spare bulb for halogen models). All packed in a polystyrene box

AE.1112 Micrometer slide, 50 mm/50 divisions

PB.5274 Isopropyl alcohol 99% (200 ml)

PB.5245 Lens cleaning paper, 100 sheets per pack

PB.5275 Cleaning kit: lens cleaning fluid, lint free lens

tissue, brush, air blower and cotton swabs

196

290

# 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
- Micrometer eyepiece WF 10x/20 mm, 10 mm/100 50.811
- Pair of wide field eyepieces WF 15x/16 mm 50.815
- Pair of wide field eyepieces WF 20x/10 mm 50.820
- Pair of eyecups 50.840

#### **MISCELLANEOUS**

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



50.810

99		
50.815	50.820	

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

# about magnifiers

A basic magnifier consists of a convex lens that is mounted in a frame and handle to magnify an object. Lenses have been widely used in the Mediterranean region and Middle East over several millennia



TECHNICAL

FACTS

At higher magnifications, the image quality decreases rapidly due to important spherical aberration

Doublet and triplet magnifiers with multiple lenses enable higher magnifications from 10 to 30 times These are often mounted in a cylindrical holder with no handle (often called a "loupe")

Such magnifiers have very small apertures and they must be placed close to both the object and the eye





Other types of loupes are designed to be put on the table or sample, without or with micrometer scales in order to perform quick measurements

For magnification beyond 30 times, a stereomicroscope must be used



triplet

doublet

# industry materials science



# 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, glass, wood and chemical materials

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

ISCOPE •	336
BSCOPE •	344
ACHIOS-X OBSERVER •	348
DELPHI-X OBSERVER •	352
OXION .	360
DELPHI-X INVERSO •	364
OXION INVERSO •	368



# MATER

# iscope

# 

# **HIGHI IGHTS**

- EWF 10x/20 mm and EWF 10x/22 mm eyepieces
- HWF 12.5x/15 mm eyepieces for PLAi models •
- Binocular and trinocular models
- Reversed revolving nosepiece
- Infinity corrected IOS objectives for material observation and polarization
- 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<sup>™</sup> Köhler illumination
- Epi-NeoLED<sup>™</sup> 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 eyepieces (one includes a Walton-Beckett reticle), and with HWF 12.5x/15 mm eyepieces for PLAi models . All for Ø 30 mm tube

# HEAD

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

Binocular and trinocular Siedentopf type heads with 30° inclined tubes. Interpupillary distance from 48 to 76 mm. Two  $\pm$  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 guadruple nosepiece. Other models have a reversed quintuple nosepiece on ball bearings

# iScope® for materials science

The iScope<sup>®</sup> 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 two types of materials science microscopes; metallurgical and polarization microscopes









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

#### **OBJECTIVES**

Plan PLMi IOS (1)	5x/0,12	10x/0.25	20x/0.40		50x/0.70		S100x/0.80 <sup>(5)</sup>
Plan PLPOLi IOS (2)	5x/0.12	10x/0.25	20x/0.40	S40x/0.65		S60x/0.80 <sup>(5)</sup>	S100x/1.25 (5)
Plan PLPOLRi IOS <sup>(3)</sup>	5x/0.12	10x/0.25	20x/0.40		50x/0.70		S100x/0.80 <sup>(5)</sup>
Plan PLi IOS (4)	4x/0.10	10x/0.25	20x/0.40 <sup>(5)</sup>			S60x/0.85 <sup>(5)</sup>	S100x/1.25 <sup>(5)</sup>
Plan PLPHi IOS (4)		10x/0.25 <sup>(5)</sup>		S40x/0.65			

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

- <sup>(2)</sup> Plan PLPOLi strain free infinity corrected objectives for polarization applications. With 0.17 mm cover glass correction. For transmitted illumination
- <sup>(3)</sup> Plan PLPOLRi strain free Infinity corrected objectives for polarization applications. No cover glass correction. For reflected illumination attachment
- <sup>(4)</sup> Infinity corrected objectives for asbestos research. With 0.17 mm cover glass correction
- <sup>(5)</sup> Optional objectives

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

# 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 insert
- 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

•

# 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

Height adjustable Abbe N.A. 1.25 condenser with iris diaphragm and 360° rotatable polarizer.
For PLAi models: height adjustable Abbe N.A. 1.25 phase contrast condenser supplied with slider (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

#### TRANSMITTED ILLUMINATION

Intensity adjustable 3 W Köhler NeoLED<sup>™</sup> illumination with internal 100-240 V power supply. The larger aperture of NeoLED<sup>™</sup> allows the optical systems of the iScope<sup>®</sup> microscope to produce images at higher resolutions, very close to the theoretical diffraction limit of the optics. Other benefits for choosing NeoLED<sup>™</sup> are low energy consumption, no heating and a long operating life span. The Köhler setting provides homogeneous illumination and high contrast. Polarisation models with transmitted light only are supplied with: 360° rotatable polarization filter, 360° rotatable analyzer with 180 increments and nonius for 0.2 degree readout, Bertrand lens (build-in), 1 λ first red and 1/4 λ retardation plate, a quartz wedge, 45 mm green and blue filters for lamp house

## **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, 360° rotatable analyzer with 180 increments and nonius for 0.2 degree readout, Bertrand lens (build-in), 1  $\lambda$  first red plate, 1/4  $\lambda$ retardation plate, a quartz wedge, sliders with green/blue and white/neutral densitiy filter. 45 mm green and blue filters for lamp house

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

#### PACKAGE CONTENT

Supplied with power cord, dust cover, spare fuse and user manual

#### For PLAi models:

Supplied with green filter, phase centering telescope, power cord, dust cover,

spare fuse where available and user manual. All packed in polystyrene boxes All packed in polystyrene boxes



#### **ISCOPE® POLARIZATION MODELS**

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

<sup>(1)</sup> Strain free objectives with 0.17 mm cover glass correction

<sup>(2)</sup> 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
- <sup>(4)</sup> The iScope<sup>®</sup> polarization models are supplied with one eyepiece with crosshairs and one eyepiece with crosshairs and 10/100 micrometer

# **ISCOPE® METALLURGICAL MODEL**

MODEL	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.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® MODELS FOR ASBESTOS RESEARCH**

MODELS	Bino	Trino	HWF 12.5x/ 15 mm	HWF 12.5x/15 mm, with Walton- Beckett	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		•	•	•	•	•	•	•	•	•	

0

\* Cover glass correction

**Note:** the iScope® 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	WF12.5x/15 mm eyepiece, Ø 30 mm tube 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 models
IS.6310	EWF 10x/20 mm eyepiece*
IS.6310-C	EWF 10x/20 mm eyepiece with crosshairs*

micrometer and crosshairs\*

\*Ø30 mm tube

# OBJECTIVES

# Metallurgical

#### Plan Phase infinity corrected PLMi, IOS 45 mm parfocal\*

IS.6310-CM EWF 10x/20 mm eyepiece with 10/100

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

#### Asbestos

Plan Phase infinity corrected PLPHi, IOS 45 mm parfocal*	Plan Phase infinit	y corrected PLPHi	, IOS 45 mm	parfocal**
--	--------------------	-------------------	-------------	------------

IS.8910	10x/0.25 PLPHi objective
IS.8940	S40x/0.65 PLPHi objective

Polarization, with reflected illumination attachmentPlan infinity corrected PLPOLRi, IOS 45 mm parfocal\*IS.7905-R5x/0.12 PLPOLRi objective. WD 15.5 mmIS.7910-R10x/0.25 PLPOLRi objective. WD 10 mmIS.7920-R20x/0.40 PLPOLRi objective. WD 5.8 mmIS.7950-RS50x/0.75 PLPOLRi objective. WD 0.92 mmIS.7900-RS100x/0.80 PLPOLRi objective. WD 2 mm

 Polarization without reflected illumination attachment

 Plan infinity corrected PLPOLi, IOS 45 mm parfocal\*

 IS.7905-T
 5x/0.12 PLPOLi objective. WD 15.5 mm

 IS.7910-T
 10x/0.25 PLPOLi objective. WD 10 mm

# Polarization without reflected illumination attachment Plan infinity corrected PLPOLi, IOS 45 mm parfocal\*\*

IS.7920-T	20x/0.40 PLPOLi objective. WD 5.1 mm				
IS.7940-T	S40x/0.65 PLPOLi objective. WD 0.54 mm				
IS.7960-T	S60x/0.80 PLPOLi objective. WD 0.14 mm				
IS.7900-T	S100x/1.25 PLPOLi oil immersion objective.				
	WD 0.13 mm				
WD = working distance					
IOS = Infinite Optical System					
*No coverglass correction					
** 0.17 mm cover glass correction					

# TRANSMITTED KÖHLER ILLUMINATION

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
SI 5502	3 W Nool ED™ roplacement unit

**SL.5503** 3 W NeoLED<sup>™</sup> replacement unit

#### PHASE CONTRAST

IS.9163	Phase contrast slider set with 20x and S100x oil
	PLPHi IOS infinity corrected objectives and annuli
	for 20x/S100x oil
IS.9194	Slider with phase contrast annuli for S40 phase
	contast objective
IS.9148	Telescope for phase contrast

# 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 S50x 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
- IS.9993 NeoLED<sup>™</sup> replacement unitIS.9994 Halogen-NeoLED<sup>™</sup> 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.9501-ADD Stage with ergonomical low-positionned X-Y adjustments of mechanical stage. Right handed. Add-on price, only with new microscopes
- IS.9522 Optional 30 x 40 mm X-Y mechanical stage for circular polarization stage



IS.9608-R 360° Rotatable analyzer in slider



IS.9602-R Polarizer



IS.9604-R Quartz wedge in slider



IS.9610-R Lambda plate first red 530 nm



• IS.9612-R Lambda/4 retardation plate in slider



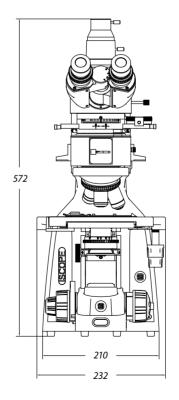
IS.9727 Polarizer 0-90° in slider

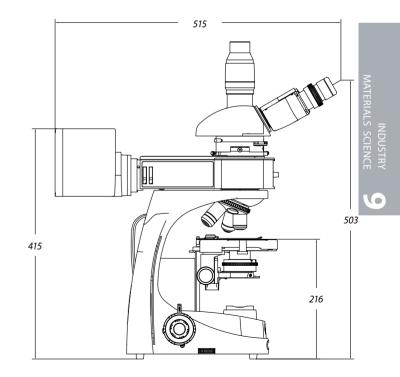
# DISPOSABLES

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 = 1.515 (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



# DIMENSIONS









# **bScope**<sup>®</sup> 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<sup>®</sup> 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



OO Trino

171

Phase

compact size of the bScope® together with the Cable Storage System allow more working space, safer operation and easy storage

Battery

Anti-the

nosepiece with slot for polarization filter Plan M-IOS objectives

Materials science microscopes

Polarizer and analyzer filters

**HIGHLIGHTS** 

Trinocular models WF 10x/22 mm evepieces Reversed ball-bearing guintuple

•

- **Rackless integrated X-Y mechanical stage**
- Color coded condenser
- 3 W NeoLED<sup>™</sup> adjustable transmitted and reflected NeoLED<sup>™</sup> illumination
- Integrated carrying grip
- Cable Storage System and anti-theft system
- 10 Years warranty

# SPECIFICATIONS

# **EYEPIECES**

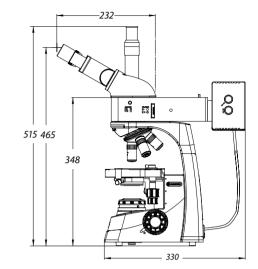
Wide field WF 10x/22 mm eyepieces with 22 mm field of view (Ø 30 mm tube)

# 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)



# DIMENSIONS



# NOSEPIECE

Revolving and reversed ball-bearing guadruple 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 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 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

**TRINOCULAR MODEL BS.1053-PLMi** 

BS.1053-PLMi



# STAGE

The bScope<sup>®</sup> 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 swingout filter holder. The condenser is color coded. Optionally available swing-out Abbe condenser (BS.9105)

#### 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<sup>™</sup> 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<sup>™</sup> TRANSMITTED ILLUMINATION

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

#### **CARRYING GRIP**

grip for easy

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







#### ANTI-THEFT SLOT

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

#### PACKAGE CONTENT

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

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

Optional: PLMi 100x IOS objective

# ACCESSORIES AND SPARE PARTS

#### **EYEPIECES**

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

#### **OBJECTIVES**

#### Plan infinity corrected PLMi, IOS 45 mm parfocal\*

<b>35.8105</b>	5x/0.12 PLMi objective. WD 26.1 mm
<b>35.8110</b>	10x/0.25 PLMi objective. WD 20.20 mm
35.8120	20x/0.40 PLMi objective. WD 8.80 mm
<b>35.8150</b>	50x/0.70 PLMi objective. WD 3.68 mm
35.8180	80x/0.80 PLMi objective. WD 1.25 mm
<b>35.8100</b>	100x/0.85 PLMi objective. WD 0.40 mm
ND = workir	ng distance
•No covergla	ass correction

#### POLARIZATION

R

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

# **MISCELLANEOUS**

Set of rechargeable AA batteries, three pieces AE.1370 BS.9577-L Add-on for left handed mechanical stage (only with new purchased microscope

BS.9515	Metal plain insert for mechanical stage
BS.9518	Glass plain insert for mechanical stage
BS.9993	NeoLED™ replacement unit
BS.9994	Halogen-NeoLED <sup>™</sup> replacement unit
AE.5226	Glass fuses 3A 250V, 10pcs
AE.9919	Nylon bag for bScope. 58(h) x 32(w) x 24(d)

#### CAMERA ACCESSORIES

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

#### DISPOSABLES

WD = working distance

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 = 1.515
PB.5274	lsopropyl alcohol 99% (200 ml)
PB.5275	Cleaning kit: lens cleaning fluid, lint free lens
	tissue/paper, brush, air blower, cotton swabs

•)



# Achios-X Observer for advanced materials science applications

The ergonomic design and cutting-edge optics of

the Achios-X Observer make it the perfect choice

With 22 mm field of view eyepieces and semi-pan

and plan apochromatic objectives, the Achios-X

Observer delivers exceptional color fidelity and

high-resolution imaging for precise and reliable

for advanced materials science applications.



observations



AX.1053-PLMRi

AX.2053-PLMRi 513 (h) x 255 (w) x 487 mm (d) | 15.6 kg AX.2058-PLMRi 586 (h) x 255 (w) x 487 mm (d) | 17.5 kg

8

# HIGHLIGHTS

- Extra Wide field WF 10x/22 mm, Ø 30 mm
- Revolving quintuple reversed nosepiece
- Brightfield and Darkfield EPi illumination
- Nomarski DIC (optional)
- Infinity corrected 60 mm achromatic Plan, Plan Phase or Plan Semi-Apochromatic EIS objectives
- Low positioned stage adjustment knobs
- Smart Light Control (SLC)

# SPECIFICATIONS

# EYEPIECES

• EWF 10x/22 mm eyepiece, with diopter adjustment

# HEADS

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

# NOSEPIECE

- A quintuple or an optional sixtuple nosepiece on ballbearings, equipped with gripped ring
- With 25 mm objectives mounting threads

# **OBJECTIVES - 45 MM PARFOCAL**

The Achios-X observer comes with

- Infinity corrected brightfield-darkfield Plan Semi
   apochromatic EIS objectives
- Infinity corrected brightfield-darkfield Plan apochromatic EIS objectives

Plan Apo         50x/0.80,         100x/0.90,           (PLAMi)         WD 1 mm         WD 1 mm*	Plan Semi-Apo (PL-SAMi)	5x/0.15, WD 20 mm	,	20x/0.45, WD 3.1 mm	

\* Optional

All objectives are 45 mm parafocal and have a M25 mm mounting thread. All optics are anti-fungus treated and antireflection coated for maximum light throughput



# STAGE

- Rackless mechanical stage
- Stage 238 x 140 mm X-Y
- Mechanical stage 78 x 54 mm
- Hard coated
- A glass inlay and a metal inlay

# LONG WD CONDENSER

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

# POLARIZATION

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

# LIGHT AND COLOR TEMPERATURE CONTROL

The Achios-X Observer sports Smart Light Control:

- Adjustment and memorization of the light intensity level for each objective
- Adjustment and memorization of the color temperature for each objective
- The eco-friendly NeoLED light source is both environmentally conscious and built to endure

# ILLUMINATION

- The Achios-X Observer materials science microscope is equipped with Epi and Diascopic intensity adjustable 3 W NeoLED illumination, with internal 100-240 Vac power supply
- A rotating cassette is implemented for quick changing between reflected darkfield and brightfield, and transmitted brightfield

# NEOLED

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

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

# NOMARSKI DIC (OPTIONAL)

With the redesign of the DIC-module visualization of height differences - which ordinarily cannot be displayed using brightfield techniques - has greatly improved. These relief-like images are ideal for surface inspections of wafers, LCD screens etc.

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

# **CSS - CABLE STORAGE SYSTEM**

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

# **CARRYING GRIP**

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

#### PACKAGING

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

MODELS	Trino	Ergo head	EWF 10x/22 mm eyepieces	Plan Semi- Apo BD 5x/10x/20x objectives	Plan Apo BD 50x objective	BD 100x	3W NeoLED transmitted illumination	3W NeoLED reflected illumination	Differential Interference Contrast (DIC)	Köhler illumination
AX.1053-PLMRi	•		•	•	•	о	•	•	0	•
AX.1058-PLMRi		•	•	•	•	ο	•	•	0	•

o = optional

•

# ACCESSORIES AND SPARE PARTS

# Under construction

# • (E ]





# Delphi-X Observer™ for materials science

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

The ergonomic design and outstanding objectives make the Delphi-X Observer<sup>™</sup> 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 nolarizat



DX.2053-PLMRi

DX.2053-PLMRi

8

# **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 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 SFWF 10x25 mm eyepieces, high numerical aperture objectives and a 200 mm focal length

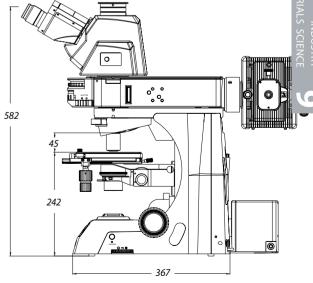


Revolver with slot for Nomarski DIC slider

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<sup>™</sup> offers superior optical performance for the most demanding applications

# DIMENSIONS



**Beuromex** 353

352 **a euromex** 

# OBJECTIVES

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

Plan semi-apo PLMi (BF/DF)	DX.81xx		5x/0.15, WD 20 mm	10x/0.30, WD 11 mm	20x/0.45, WD 3.1 mm		
Plan apo PLMi (BF/DF)	DX.81xx					50x/0.80, WD 1 mm	100x/0.90, WD 1 mm <sup>(1)</sup>
Plan semi-apo PLPOLRi <sup>(2)</sup> strain-free	DX.79xx		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	100x/0.90, WD 1 mm <sup>(1)</sup>
Plan PLPOLi (BF/POL) <sup>(3)</sup> strain-free	DX.79xx	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 <sup>(1)</sup>

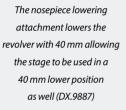
#### <sup>1)</sup> Optional

STAGE

•)

<sup>2)</sup> For models for polarization applications with incident illumination. No cover glass correction <sup>3)</sup> For models for polarization applications without incident illumination. With 0.17 mm cover glass correction DX.81xx objectives are 45 mm parfocal and have a M26 x 0.7 mounting thread DX.79xx objectives are 60 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

WD = working distance



• Large 215 x 170 mm stage with 105 x 105 mm integrated

standard sample size, lowered to 55 mm sample size)

right-handed mechanical stage, with glass and metal insert

Stage height can be lowered for large samples (1 to 28 mm

 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

diaphragm and 306° rotatable polarizer

Height adjustable Abbe N.A. 1.25 condenser with iris

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

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



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

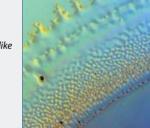
The Delphi-X Observer<sup>™</sup> materials science microscope is equipped with epi and diascopic intensity adjustable 100 W halogen illumination with internal 100-240 Vac power supply. The diascopic halogen illumination comes with two push-in/ push-out neutral density filters for attenuation of the light intensity for all kinds of samples and one Light Balancing Daylight filter (LBD)

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

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



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	•		0		•	•	о	•	•	0
DX.2058-PLMRi		•	0		•	•	о	•	•	о
DX.2053-PLMi	•		о		•	•	о		•	о
DX.2058-PLMi		•	о		•	•	0		•	о
DX.2053-PLPOLRi	•		о		•	•	о	•	•	о
DX.2058-PLPOLRi		•	о		•	•	0	•	•	о
DX.2053-PLPOLi	•		0	•		0	о	•		о

0

\* Infinity corrected o = optional

DX.2058-PLPOLi

# 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

354 **Beuromex** 

FOCUSING



# ACCESSORIES AND SPARE PARTS

# **EYEPIECES**

DX.6010	Super wide field SWF 10x/25 mm eyepiece
	for Ø 30 mm tube
DX.6010-CN	<b>1</b> Super wide field SWF 10x/25 mm eyepiece
	with 10/100 micrometer and crosshairs
	for Ø 30 mm tube
DX.6210	Super wide field SWF 10x/22 mm eyepiece
	for Ø 30 mm tube
DX.6210-CN	<b>1</b> Super wide field SWF 10x/22 mm eyepiece
	with micrometer and crosshairs
	for Ø 30 mm tube
DX.6012	Wide field WF 12.5x/17.5 mm eyepiece
	for Ø 30 mm tube
DX.6015	Wide field WF 15x/16 mm eyepiece
	for Ø 30 mm tube
DX.6020	Wide field WF 20x/12 mm eyepiece
	for Ø 30 mm tube
DX.6099-L	Eyecup for eyepiece
DX.6099-N	Eyeshade for eyepieces

#### **OBJECTIVES**

# Plan Semi-Apochromatic infinity corrected PL-SAMi, IOS 45 mm parfocal. M26 mounting thread\*

DX.8102	2x/0.06 IOS objective. WD 7.5 mm**
DX.8105	5x/0.15 objective. WD 20 mm**
DX.8110	10x/0.30 objective. WD 11 mm**
DX.8120	20x/0.45 objective. WD 3.0 mm**
DX.8150	50x/0.80 objective. WD 1 mm**
DX.8100	100x/0.90 objective. WD 1 mm**

# Plan Semi-Apochromatic infinity corrected PL-SAPOLRi, EIS 60 mm parfocal. M25 mounting thread\*

DX.7905-R 5x/0.15 PL-SAPOLRi objective. WD 20 mm\*\* DX.7910-R 10x/0.30 PL-SAPOLRi objective. WD 11 mm\*\* DX.7920-R 20x/0.45 PL-SAPOLRi objective. WD 3.0 mm\*\* DX.7950-R 50x/0.80 PL-SAPOLRi objective. WD 1 mm\*\* DX.7900-R 100x/0.90 objective PL-SAPOLRi objective. WD 1 mm\*\*

DX.2053-PLPOLRi

# Plan Semi-Apochromatic infinity corrected PL-SAPOLi, EIS 60 mm parfocal, 0.17 mm coverglass correction. M25 mounting thread\* DX.7904-T 4x/0.10 PL-SAPOLi objective. WD 20 mm\*\* DX.7910-T 10x/0.25 PL-SAPOLi objective. WD 10.2 mm\*\* DX.7920-T 20x/0.40 PL-SAPOLi objective. WD 12 mm\*\* DX.7940-T 40x/0.65 PL-SAPOLi objective. WD 0.7 mm\*\* DX.7960-T 60x/0.80 PL-SAPOLi objective. WD 0.3 mm\*\* DX.7900-T S100x/1.25 oil-immersion PL-SAPOLi objective. WD 0.2 mm\*\* WD = working distance \* No coverglass correction

\*\* Strain-free

# **POLARIZATION ATTACHMENT**

#### with transmitted 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 9602	Slider with rotatable polarizer to be inser

Slider with rotatable polarizer to be inserted in DX.9602 condenser of transmitted illumination

# **POLARIZATION ATTACHMENT**

with incident illumination

**DX.9602-R** Slider with rotatable polarizer to be inserted in reflected illumination attachment DX.9604-R Slider with quartz wedge plate for reflected illumination attachment DX.9608-R Slider with 0-360° rotatable analyzer,

0.1° divisions

DX.9610-R Slider with 1 lambda first plate red for reflected illumination attachment

# 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

#### **MISCELLANEOUS**

- **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 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 AE.5130 Universal SLR-adapter with built-in 2x lens for standard 23.2 mm tube. Needs T2 adapter AE.5025 T2 adapter for Nikon D SLR-digital camera AE.5040 T2 adapter for Canon EOS SLR-digital camera
- DX.9800 Side single photoport attachment

•)





DX.9850

358



DX.9863



- DX.9696 DIC attachment for materials sciences Delphi-X Observer<sup>™</sup> 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<sup>™</sup> (revision-2 models)
- AE.5216 Fuses 5A 250 V, per 10 pcs. models with 100 W halogen
- DX.9522 Optional 30 x 30 mm X-Y mechanical stage for polarization microscopes

#### DISPOSABLES

Lens cleaning paper, 100 sheets per pack PB.5245

📵 euromex.academy 🏹

- PB.5255 Immersion oil, 25 ml. Refraction index n = 1.515
- Isopropyl alcohol 99%, 200 ml PB.5274
- 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

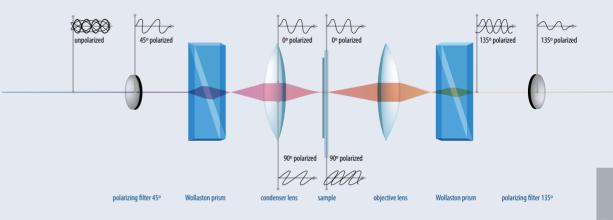


#### TECHNICAL FACTS

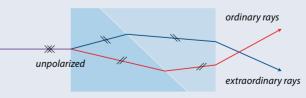
Differential interference contrast (DIC) technique helps in microscopy to enhance the contrast of samples

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 hypotenus. 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



### 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 other professionals



OX.3245

Oeurome



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<sup>™</sup> illumination
- Reflected 3 W NeoLED<sup>™</sup> 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 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

0





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

#### 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

#### 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<sup>™</sup> illumination with integrated 100-240 V power supply. Köhler illumination with field diaphragm

#### **REFLECTED EPI-ILLUMINATION**

Intensity adjustable 3 W NeoLED<sup>™</sup> 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

Detail of

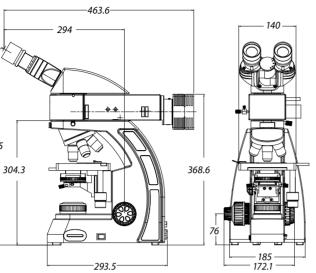
reflected illumination

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

 $(\bullet)$ 

479.5

#### DIMENSIONS





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	•	•	0	•	•

o = optional

### ACCESSORIES AND SPARE PARTS

#### **EYEPIECES**

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

#### **OBJECTIVES**

#### Plan infinity corrected PLMi, IOS 45 mm parfocal\*

AE.3172	5x/0.15 PLMi objective. WD 10.8 mm
AE.3173	10x/0.30 PLMi objective. WD 12.2 mm
AE.3175	20x/0.45 PLMi objective. WD 4 mm

#### Plan Semi-Apochromatic infinity corrected PL-SAMi, IOS 45 mm parfocal\*

AE.3177	50x/0.55 PL-SAMi objective. WD 7.9 mm	
AE.3179	100x/0.80 PL-SAMi objective. WD 2.1 mm	
WD = workin	g distance	
*no coverglass 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.5120-2	
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

Plain stage

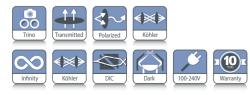


### MATERIALS SCIENCE MICROSCOPES

# **Delphi-X Inverso**<sup>™</sup> for materials science

Delphi-X Inverso<sup>™</sup> for materials science is an inverted microscope for the professional with demanding applications for materials sciences samples





# Delphi-X

Materials science applications

HIGHLIGHTS

- Observation of materials science samples
- Brightfield, dark field, polarization
- DIC (differential interference contrast)
- Long working distance IOS plan (semi-)apochromatic objectives
- Revolving sextuple nosepiece
- 100 W halogen illumination

### SPECIFICATIONS

### EYEPIECES

Pair of HWF plan 10x/22 mm

#### HEAD

Trinocular 45° inclined tubes. Interpupillary distance of 47 to 78 mm. Trinocular head with 100-0, 50/50 and 0/100 positions. Built-in Bertrand lens

#### NOSEPIECE

Revolving sextuple nosepiece on ball-bearings. With DIC slot



Bertrand lens and trino/eyepieces selector

#### **OBJECTIVES - 45 MM PARFOCAL**

High numerical, infinity (semi-)apochromatic bright-/darkfield objectives. Long working distance, IOS, no cover glass correction, M26 mount

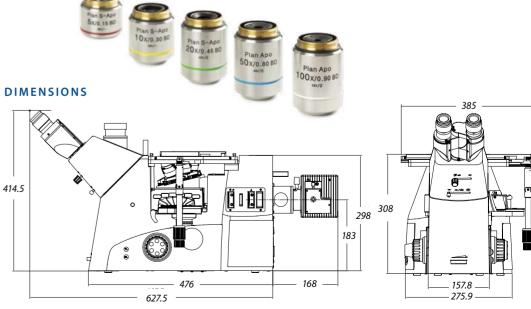
 Plan Semi-Apochromatic (SAMi): 5x/0.15 WD 20 mm, 10x/0.30

WD 11 mm, 20x/0.45 WD 3.1 mm

- Plan Apochromatic (Plan Apo (PLAMi): 50x/0.80 WD 1 mm and optional 100x/0.90 WD 1 mm
- WD = working distance

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

6



**D1.2053-PLMI** 414.5 (h) x 385 (w) x 627.5 mm (d) | 29 kg

DI.2053-PLMI

O Delphi-X

#### STAGE

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

- Supplied with:
- Metal insert with hole ø 20 mm
- Metal insert with hole ø 28 mm
- Metal insert with drop-shaped hole
- Maximum weight for sample: 30 kg

#### MAGNIFICATION CHANGER

A magnification changer with a 1.5x lens allows intermediary magnifications of 1.5 times the standard objective magnifications. For example, switching from 20x or 50x to 30x to 75x magnification can be done without the need to change objectives

#### MULTIFUNCTIONAL WHEEL

The Delphi-X Inverso has a 6-position multifunctional wheel, supplied with cubes for two brightfield, one darkfield and one polarization filter. Slider with prisms for the 5x/20x and 50x/100x magnifications and slider with analyzer. See photo 1

#### ADDITIONAL SLIDER SLOTS

Besides a field diaphragm and condenser aperture, two slots are available. A slider with two neutral density filters is also supplied. See photo 2

•)

### FOCUS ADJUSTMENT

Low positioned coaxial with 10 mm coarse and fine adjustments focusing knobs, 1  $\mu m$  precision and with friction adjustment

#### CAMERA PORTS

Beside the standard photo port of the head, there are two other photo parts at both both left and right side of the microscope. See photo 3

#### ILLUMINATION

Reflected 100 W halogen Intensity adjustable with internal 100-240 V power supply. Fuse holder 1 A / 250 V







MODEL	Trino	LWD Plan Semi-Apo 5/10/20x	LWD Plan Apo 50x	LWD Plan Apo 100x	100 W Halogen illumination	DIC
DI.2053-PLMI	•	•	•		•	o
o = optional						

ACCESSOIRES

#### EYEPIECES

#### Ø 30 mm

 D1.6010
 Super wide field SWF 10x/25 mm focusable eyepiece for Delphi-X Inverso

 D1.6010-C
 Super wide field SWF 10x/25 mm eyepiece with crosshairs

 D1.6010-M
 Super wide field SWF 10x/25 mm eyepiece with micrometer

 D1.6010-CM
 Super wide field SWF 10x/25 mm eyepiece with micrometer

 D1.6010-SG
 Super wide field SWF 10x/25 mm eyepiece

with 20 x 20 square grid reticle

- DI.6210 Super wide field SWF 10x/22 mm focusable eyepiece for Delphi-X Inverso
- DI.6012 Wide field WF 12.5x/17.5 mm eyepiece for Ø 30 mm tube for Delphi-X Inverso
- DI.6015 Wide field WF 15x/16 mm eyepiece for Ø 30 mm tube for Delphi-X Inverso
- DI.6020 Wide field WF 20x/12 mm eyepiece for Ø 30 mm tube for Delphi-X Inverso
   DI.6099-L Eyeshade for eyepieces

#### OBJECTIVES

Plan Semi-Apochromatic infinity corrected PL-SAMi, IOS 45 mm parfocal, M26 mounting thread, no cover glass correction

DI.8105	5x/0.15 PL-SAMi BD objective, LWD 20 mm
DI.8110	10x/0.30 PL-SAMi BD objective, LWD 11 mm
DI.8120	20x/0.40 PL-SAMi BD objective, LWD 3.1 mm
DI.8150	50x/0.80 PL-SAMi BD objective, LWD 1 mm

**DI.8100** 100x/0.90 PL-SAMi BD objective, LWD 1 mm BD = brightfield/darkfield

*LWD* = *Long working distance* 

## DIFFERENTIAL INTERFERENCE CONTRAST (DIC)

- **DI.9691-52** DIC prism for nosepiece of materials science Delphi Inverso model. To be used with Plan Semi-Apochromatic 5x/20x objectives
- **DI.9691-51** DIC prism for nosepiece of materials science Delphi Inverso models. To be used with Plan Apochromatic 50x/100x objectives
- DI.9698 DIC analyzer for nosepiece for life science Delphi-X Observer DIC

#### MISCELLANEOUS

DI.9810	C-mount with 1x magnification for 1 or 2/3 inch
	C-mount camera
DI.9840	C-mount with 0,4x magnification for 1/3 inch
	C-mount camera
DI.9850	C-mount with 0,5x magnification for 1/2 inch
	C-mount camera



## MATERIALS SCIENCE MICROSCOPES

### **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

mechanical stage. The polarization

and color filters make this instrument

suitable for a wide variety of applications

contrast illumination and a large

•)

368





Oxion

inversc

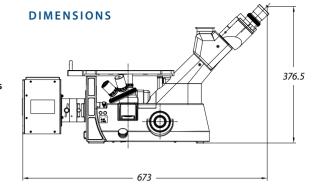


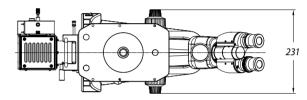
OX.2153-PLM

OX.2153-PLM / OX.2653-PLM

### **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 HWF plan 10x/22 mm eyepieces

NOSEPIECE Revolving quintuple nosepiece on ball-bearings

#### HEAD

- Trinocular 45° inclined tubes
- 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 Ø 12 mm hole and Ø 25 mm hole
- metallic insert with hole for mechanical stage

#### FOCUSING

Coaxial 25 mm coarse and fine adjustments, 2 µm 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 - Ø 30 MM

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**

#### Plan Achromatic infinity corrected PLMi, IOS 45 mm parfocal\*

OX.8205 5x/0.15 PLMi objective. LWD 10.8 mm OX.8210 10x/0.30 PLMi objective. LWD 12.2 mm OX.8220 20x/0.45 PLMi objective. LWD 4 mm

#### Plan Semi Apochromatic infinity corrected PL-SAMi, IOS 45 mm parfocal\*

OX.8250 semi S50x/0.55 PL-SAMi objective. LWD 7.9 mm OX.8200 semi S100x/0.80 PL-SAMi objective. LWD 2.1 mm LWD = Long working distance \* No cover glass correction

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 - Ø 30 MM

OX.9700 Blue filter in slider, for illumination attachment Green filter in slider, for illumination attachment OX.9702 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
- Halogen spare bulb 12 V 50 W SL.3679
- 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.5120-2
- 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
- Microscope slides 76 x 26 mm, ground edges, PB.5155 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 = 1.515 (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

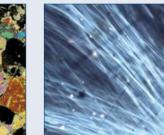
TECHNICAL FACTS

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

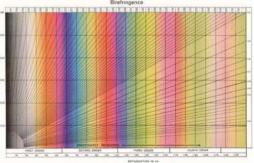
- adding strain free objectives for correct color rendering
- adding a removable polarization filter into the light path
- adding a second removable 360° rotating polarization filter called analyzer into the light path
- adding a Bertrand lens\* for observation of conoscopic interference fringes
- adding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





 Other attachments such as DSO (Dispersion Staining Objectives) and phase contrast equipment can be added

for specific identification of asbestos fibers



6

\* 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

a euromex 370

•

petrology

Mineral

The most common compensators are:

1  $\lambda$  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

•  $1/4 \lambda$  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

Crocodolite asbestos fiber

# industry digital solutions



# digital solutions

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

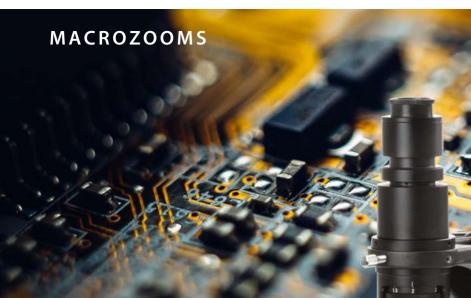
Euromex digital products incorporate all the latest available technology in this field such as WiFi, HDMI and sCMOS sensors. Our digital solutions package includes the powerful ImageFocus software for image analysis





MACROZOOMS •	374
WIFI CAMERA •	382
USB CAMERAS •	384
HD CAMERAS •	386
COOLED COLOR CAMERAS •	388
TABLET CAMERA •	390
SOFTWARE •	392
ADAPTERS •	394

INDUSTRY DIGITAL SOLUTIONS



## MZ.4500 macrozoom

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



3

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





### **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 polystyrene



### **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



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

MZ.4500

MZ.4500

374 **a euromex** 

**Beuromex** 375



### MZ.4600 digital macrozoom

This entry-level digital MacroZoom is equipped with a 0.7 to 5x zoom objective enables direct inspection of objects on external HD screen (not supplied). The mouse-driven built-in software control the camera parameters and enables measurements on screen, capturing and saving .jpg or .bmp format pictures and .mp4 format video on an USB memory stick The MZ.4600 have a built-in High Definition 1080p 2MP camera which can deliver up to 60 images per seconds and needs to be connected to an external stand-alone HD screen

MZ.4600





### HIGHLIGHTS

- MonoZoom stand-alone digital microscope
- Optical zoom from 0.7x up to 5x
- Magnification on screen from 2.5 up to 19x
- 100 mm working distance
- Built-in 1080p 2 MP HD camera
- Built-in mouse driven on-screen software
- Measurement function on screen
- .jpg or .bmp saved images
- .mp4 video recording up to max 2 hrs
- Removable 32 GB memory stick
- Metal stand
- 2 Years warranty

### SPECIFICATIONS\*

#### MACROZOOM OBJECTIVE

Single 0.7 to 5x zoom objective. Working distance 105 mm An optional 3D attachment enables a 45° angle observation

#### STAND

- Metal 320 x 260 mm pillar stand (Ø 32 mm), without illumination
- Also suitable for NexiusZoom stands

#### ILLUMINATION

The MZ.4600 comes with a 144 LED ringlight, adjustable from the side of the MacroZoom body

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

Built-in HD 1080p high definition 2 MP 1/2.8" CMOS high speed camera, 1920 x 1080 pixels and 60 images per second

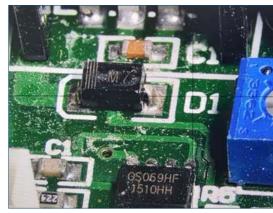
#### **BUILT- IN SOFTWARE**

The built-in on-screen software (only English language) is mouse driven and features camera and measurement functions

\* See for more specifications chapter 7

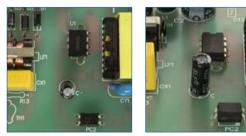
MZ.4600

323 (h) 320 (w) 260 mm (d) | 4.4 kg



3-D attachment MZ.4515

Below: view from above and from a 45° angle





MZ.4605 on

NZ.9047

376 **a euromex** 

### MZ series

Stand-alone or PC operated

**HIGHLIGHTS** 

- Sony 1/2.8" 4K/1080P CMOS sensor 18x optical zoom ratio
- Optical zoom factor up to 5.6x
- On-screen magnification from 2.8 to 47x
- 205 215 mm Working distance
- Standard LED ring light
- Optional directional LED ring light
- Built-in mouse-driven software
- 2 Years warranty

### SPECIFICATIONS

#### ZOOM OBJECTIVE

- The 16 elements objective has a 18x zoom ratio and produces magnifications up to 0.56 magnification with a manual or automatic focusing function
- Field of views from 255 x 145 mm (1x zoom) to 14 x 8 mm (18x zoom)
- On-screen magnification 2.8 to 47x @190 mm WD (24" screen)
- Focusing range is between 205 and 225 mm *WD* = *working distance*

#### CAMERA

- The 8.3 MP camera is equipped with a Sony 1/2.8 inch 4K UHD/1080P CMOS High Definition sensor with high signal-to-noise ratio generating a 3840 x 8160 pixels video streaming up to 60 images per second
- The 4K/UHD signal fits the HDMI input of a HD screen
- Image and video storage is done with a built-in SD card
- Stand-alone or PC operated (ImageFocus Alpha)

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

The built-in intuitive software is controlled by the supplied and to the camera connected mouse. It features a camera-, an autofocus control panel and a measurement toolbar

#### ILLUMINATION

A standard LED ring light assures a good standard lighting of the sample. A ring light with 12x 1W, 30° directional LEDs enables very flexible lighting of the sample



#### STAND

- The MacroZoom can be mounted on a dedicated rack&pinion stand with or without a dedicated HD screen
- With the 30° directional 12x 1W LED ring light (MZ. 4735,) the MacroZoom (MZ.4705) can also be mounted on the NexiusZoom stands (for instance, the NZ.9047, see dedicated datasheet on the website)

#### PACKAGE CONTENT

Supplied with a standard ring light, a 32 GB SD card, mouse, WiFi dongle, HDMI cable and external 100-240 Vac / 12Vdc / 3A power supply

#### ORDER PRODUCT REFERENCES

MZ.4700	Stand-alone digital autofocus MacroZoom <sup>(1)</sup> with standard <sup>(2)</sup> stand						
MZ.4700-HDS	Stand-alone digital autofocus MacroZoom <sup>(1)</sup> with standard <sup>(2)</sup> stand and HD screen						
MZ.4705	Stand-alone digital autofocus MacroZoom (1)						
MZ.4710	Standard <sup>(2)</sup> stand for MZ.4705						
MZ.4712	11 inch HD screen for MZ.4710 inclusief pillar						
	attachment						
MZ.4740	Standard LED ring light						
MZ.4735	Directional 12 x 1W LEDs ring light $^{(2)}$						
<sup>(1)</sup> Supplied with a	<sup>(1)</sup> Supplied with a 32 GB SD card, mouse, WiFi dongle, HDMI cable						
and External 100-240 Vac / 12Vdc / 3A power supply							

<sup>(2)</sup> With the MZ.4735 a MZ.4705 can also be mounted on NexiusZoom stands

### MZ.4700(-HDS) digital autofocus macrozoom 4K/1080p

The MZ.4700 is an integration of a 1080p HDMI camera, an electrically controlled continuous zoom auto-focus objective together with a stand and illumination system. The MZ.4700 enables direct inspection of objects on a HD screen. The mouse-driven built-in software controls the camera parameters and

enables measurements on screen, capturing and

saving .jpg or .bmp format pictures and

.mp4 format video on an USB memory stick

MACROZOOMS

-







MZ.4700

**MZ.4700** 350 (h) x 375 (w) x 250 mm (d) | 5.1 kg MZ.4700-HDS



## 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

LED Zoom LCD Digital 100-240V

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
- 110 mm working distance with 0.5x lens
- Built-in incident LED ring light
- Built-in 1080p 2 MP HD camera
- HD 11.6 inch screen, -5° to 15°
- Built-in mouse driven on-screen software
- Conveniently build-in capture button
- Removable 32 GB memory stick
- Metal stand
- 2 Years 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 110 mm

#### STAND

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

#### ILLUMINATION

A supplied 5500 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



WIFI CAMERA

USB CAMERAS

# ree software WFi 4.0 a Vise Apple Apple Android

### **CMEX-5 WiFi-4** digital WiFi camera with 1/1.8 inch CMOS sensor

The CMEX-5 WiFi-4 camera is equipped with a 4.0 MP Sony CMOS sensor with 12 bits grayscale conversion and a 24 bits color rendering and it can be used either through the USB data interface or through the WiFi interface

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 available on www.euromex. com. IOS app can be downloaded from the App Store (free of charge). ImageFocus Alpha software can be used by means of WiFi on PC's and Macs and is available on www.euromex.com

The camera is powered by the included USB charger or a computers USB port. Standard 0.5x C-mount objective is included

MODEL	Sensor	Sensor size (inches)	Pixels size (μm)	Resolutions	Grayscale conversion	Color rendering			Sensitivity V/ lux-1/30 s	Product number
CMEX-5 WiFi-4	CMOS	1/1.8″	2.9 x 2.9	2688 x 1512	12 bits	24 bits	44	48	921	DC.5000-WiFi-4

The CMEX-5 WiFi-3 camera is supplied in a box with USB cable, 30.0 and 30.5 mm adapters to use with stereo microscopes, and a 0,5x C-mount objective

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

0

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 \* Frame rates have been determined at optimal conditions



Sensitivity Product number

DC.3000-PRO

DC.5000-PRO

DC.10000-PRO

DC.20000-PRO

/lux-sec

1.9 V

1.76 V

0.31 V

84 ke

ADVANCED

**CAMERAS FOR** 

INDUSTRY

# Advanced CMEX USB-3.0 cameras with CMOS sensor

The CMEX-3 Pro, -5 Pro, -10 Pro and -20 Pro cameras are equipped with a 3.1, 5.1, 10 or 20 MP CMOS sensor with 12 bits grayscale conversion and a 24 bits color rendering. These cameras are equipped with a USB-3.0 data interface enabling fast frame rate

**USB CAMERAS** 

Besides capturing images and videos, the ImageFocus Alpha software allows measurements on still and live images and annotations on captured images. Compatible with Windows 10 and higher, both 32 and 64 bits configurations. A 2 GB RAM 2.8 GHz computer and 17 inch display is recommended. A Mac OS version is available. Free software can be downloaded from our website

100

68.

63.5

63.8

DIGITAL	MODELS	Sensor	Sensor size (inch)	Pixels size (µm)	Exposure time	Resolutions	Max. frames (p/sec)*	/Signal Noise (dl
	CMEX-3 Pro	CMOS	1/3″	2.2 x 2.2	1 ms ~ 2000 ms	2048 x 1534 1024 x 770	28 53	39
	CMEX-5 Pro	CMOS	1/2.5″	2.2 x 2.2	1 ms ~ 2000 ms	2592 x 1944 1296 x 972 640 x 486	16 50 98	39
	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
	CMEX-20 Pro	CMOS	1/1.8″	1.4 x 1.4	0.2 ms ~ 15 s	5120 x 3840 2560 x 1920	20 45	39.3

The CMEX-3 Pro, -5 Pro, -10 Pro and -20 Pro cameras are supplied with USB-3.0 cable, 30.0 and 30.5 mm adapters to use with stereo microscopes, 1 mm/100 (10 µm/division) calibration slide. The CMEX-5 Pro and -10 Pro are supplied with a 0.5x C-mount objective. The CMEX-3 Pro is supplied with a 0.37x, the -20 Pro with a 0.75x C-mount objective

\* Frame rates have been determined at optimal conditions

### 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

USB CAMERAS

Besides capturing images and videos, the ImageFocus Alpha software allows measurements on still and live images and annotations on captured images. Compatible with Windows 10 and higher, both 32 and 64 bits configurations. Also compatible with Mac OS. PC requirements: Intel Core2 2.8 GHz or higher or equivalent, 2 GB memory, USB-3.0 port, 17 inch display. Free software can be downloaded from our website

MODELS	Number of pixels (MP)	Sensor and size (inches)	Pixels size (µm)	Exposure time	Resolutions	Max. frames (p/sec)*	Color rendering	Dynamic range (dB)	S/N Ratio (dB)	Sensitivity V/lux-sec	Product number
sCMEX- 3	3.1	1/2.8" sCMOS	2.5 x 2.5	0.244 ~ 15000 ms	2048 x 1536 1920 x 1080	50 58	36 bits			0.15	DC.3000s
sCMEX- 6	6.3	1/1.8" sCMOS	2.5 x 2.5	0.244 ~ 15000 ms	3072 x 2048 1536 x 1024	30 38	36 bits	66.8	44.51	0.15	DC.6000s
sCMEX-20	20	1" sCMOS	2.4 x 2.4	0.264 ~ 15000 ms	5440 x 3648 2736 x 1824 1824 x 1246	15 50 60	36 bits	66.3	44.74	0.21	DC.200009
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 is supplied with a 0.37x objective, the DC.6000s is supplied with a 0.5x objective, the DC.20000s and DC.32000s are supplied with a 1.0x adapter \* Frame rates have been determined at optimal conditions



sCMEX

SCIENTIFIC

**GRADE CAMERAS** 

FOR INDUSTRY



### (Ultra) high definition cameras CMOS color cameras

These UHD-4K and HD cameras offer the perfect solution to modern microscopy where real-time images are needed. These HD image quality cameras can be used with biological, metallurgical or stereo microscopes

### STAND-ALONE MODE

To use these cameras you do not need a computer or have any computer knowledge. Most camera settings are done automatically and therefore these cameras are very user- friendly. This results in faster, more flexible and compact working conditions. Simply connect the camera to a high definition dedicated 11.6" or 13" HD screen, TV-HD or HD-beamer with a HDMI input and the system is ready to go. The mouse driven built-in software of the camera enables captured images and recorded videos to be saved on the integrated SD memory card

Almost all HD cameras offer a full range of measuring functions on live and captured images

#### COMPUTER CONTROLLED MODE

Users who want more camera controls and more functions can also connect the camera to a computer and benefit from the extensive functions of the Euromex ImageFocus software. It runs on Windows 10 and higher, both 32 and 64 bits. Besides extended camera settings, the software can save images in JPG, TIFF or BMP formats and record videos in .avi format on the hard disk of the computer. The software offers different measurement functions on live and captured images and also full control over the camera parameters

### HIGHLIGHTS

- (Ultra) high definition cameras
- Real-time images directly on TV, monitor or beamer
- Stand-alone or computer controlled mode
- Built-in mouse-driven software and SD memory card
- HDMI, USB-2.0/3.0
- GbE (Ethernet) (VC.3042)
- WiFi (VC.3042 and VC.3034)
- Autofocus model available
- Compatible with ImageFocus software



VC.3036-HDS on stereo microscope



• VC.3034-HDS on the BioBlue

#### **PACKAGE CONTENT\***

MODELS	UHD-4K	UHD-4K Touch	HD-Ultra	HD-Lite	HD-Mini	HD-Mini +HDS	HD-Autofocus	HD-Pro
C-mount with objective	0.5x	0.5x	0.37x	0.45x	0.37x	0.37x	0.5x	0.37x
Interface(s)	Digital HDMI, USB-3, WiFi	Digital HDMI, USB-2	Digital HDMI, USB-2	Digital HDMI, USB-2	Digital HDMI	Digital HDMI	Digital HDMI, WiFi	Digital HDMI, USB-2
30 and 30.5 mm adapters	•	•	•	•	•	•	•	•
SD card	32 GB	32 GB	16 GB	8 GB	32 GB	32 GB	32 GB	32 GB
Cailbration slide 10mm/100	•	•	•	•	•	•	•	•
External power supply	12V 1A	12V 2A	12V 2A	12V 2A	12V 1A	12V 1A	12V 1A	12V 1A
Dimensions (w x d x h)	88 x 78 x 65	88 x 78 x 65	80 x 70 x 90	80 x 70 x 90	51ø x 60	50 x 50 x 60	81 x 65 x 78	81 x 65 x 78
Product number	VC.3045	VC.3043	VC.3036	VC.3031	VC.3023		VC.3034	VC.3039
With HD screen	13" VC.3045-HDS	13" Touch VC.3043-HDS	11.6" VC.3036-HDS	11.6" VC.3031-HDS		13" VC.3024-HDS	13" VC.3034-HDS	13" VC.3039-HDS

\* See for more information chapter 7

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



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 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 10 and higher, both 32 and 64 bits configurations. A Mac OS version is also supplied (with a few differences in features)

1	MODELS	Number of pixels (MP)	Sensor	Pixel size (µm)	Resolutions	Max. frames (p/sec)*	USB-3	Dynamic range (dB)	S/N Ratio	Sensitivity @ 1/30 sec	Peltier cooling
	DC.6000i	6	1" CCD	4.54 x 4.54	2748 x 2200 2748 x 1092	7.5 14	•	62.34	41.6	880 mV	•
	DC.20000i	20	1" CMOS	2.4 x 2.4	5440 x 3648 4096 x 2160 2736 x 1824 1824 x 1216	5 10 15 30	·	66.3	41.74	462 mV	·

\* Frame rates have been determined at optimal conditions

### 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

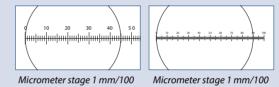
#### CALCULATING FOV OF AN EYEPIECE

The FOV through an eyepiece is equal to:

OV=	Field Number
-0v=	<b>Object Magnification</b>

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/18 900 nm FOV with 10x/18 eyepiece and S40x objective eyepiece and S20x objective



#### FIELD OF VIEW WITH CAMERA

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

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



13.2 mm

4.8 mm

6 mm

6.4 mm

8 mm

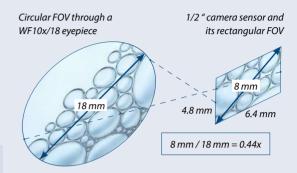
8.8 mm

1/2

3.6 mm

4.8 mm

#### EYEPIECE VERSUS CAMERA FOV



TECHNICAL

FACTS

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

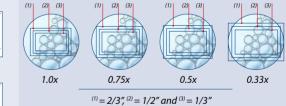


Figure: different camera sensor sizes (2/3, 1/2, 1/3 inch) with different "demagnifying" lenses (C-mount photo-adapters) 0.33x, 0.50x, 0,75x and 1.0x

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

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

36 mm or lar



## LaboPad



### LaboPad with microscope camera

The LaboPad with a 12.1 inch display can be supplied with a 2.1 MP, 5.1 MP, 12.0 MP or a 4 MP WiFi camera. Together with the ImageFocus Plus or ImageFocus Alpha software it offers a state-of-theart solution for a modern digital solution







LaboPad

#### SOFTWARE

LaboPad USB camera works with ImageFocus Plus software and LaboPad with WiFi camera works with ImageFocus Alpha. The WiFi camera can also be operated through IOS and Android apps



### SPECIFICATIONS

12.1" Tablet with microscope camera

HIGHLIGHTS

- 2160 x 1440 pixels touch screen
- Windows 11
- ImageFocus Plus software for PC
- ImageFocus Alpha for WiFi enabled
   PC, Android and iOS devices
- Tablet can be fully detached from camera
- Optional keyboard
- LaboPad, detachable, take it anywhere

Processor	Quad Core max 3.3 GHz HD graphics processor
Screen	12.1 inch IPS 2160*1440 / 3:2
Memory	12 GB
Storage	512 GB Flash HDD, micro SD/SDHC sloth for cards up to 64 GB
Webcam	2 MP front and 5MP rear camera
Connectivity	Micro USB 2.0, Micro HDMI, USB-C, WiFi 6 and Bluetooth 4.0
Audio	Stereo with 3.5 mm audio jack, internal microphone and speaker
Battery	Lithium, 38Wh, 5000mA
Weight	0.8 KG (tablet) 4.8 kg (complete)
System	Windows 11
Software	ImageFocus Plus

Specifications can be changed by Euromex microscopen by without notice. Consult website to check latest specifications

MODELS	Camera (MP)	Sensor size	Resolution	Pixels size (µm)	ADC	Color rendering	Dynamic (dB)	Sensitivity	Interface	Product number
LaboPad-2	2.1	1/2.9″	1920 x 1080	2.8 x 2.8	12 bits	24 bits		0.51 V/lux-sec	2.0	LP.2000f
LaboPad-5	5.1	1/2.8″	2592 x 1920	2.0 x 2.0	12 bits	24 bits	72 dB	2.0 V/lux-sec	¥ 2.0	LP.5000f
LaboPad-12	12.0	1/2.3″	4072 x 3176	1.33 x 1.33	8 bits	24 bits	60 dB	1.5 V/lux-sec	¥ 2.0	LP.12000f
LaboPad-WiFi	4	1/1.8″	2688x1512	2.9 x 2.9	12 bits	24 bits	48 dB	0.9 V/lux-1/30 sec	<b>#é®#</b>	LP.5000-WiFi

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

### SOFTWARF

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

	IMAGE FOCUS 4	
DC.1300c	DC.1300c	

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

IMAGE FOCUS ALPHA			
DC.3000-Pro	DC.5000-WiFi		
DC.5000-Pro	DC.3000s		
DC.10000-Pro	DC.6000s		
DC.18000-Pro	DC.20000s		
VC.3039	VC.3042		

#### IMAGE STITCHING

Image stitching is the process of combining multiple images with overlapping fields of view to produce one image

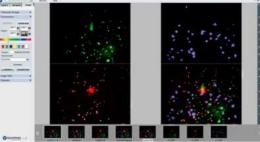
#### **EXTENDED DEPTH OF FOCUS**

"The extended depth of focus" function in the ImageFocus Alpha software or "stacking software, allows to combine a number of digital images of a object, focused at different focus planes, into one final image with much greater depth of field (see illustration below)





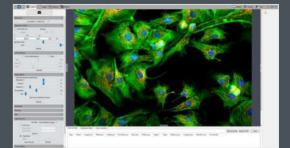
### FREE UPDATES **AVAILABLE ON** EUROMEX.COM



### ImageFocus 4 40 software

- ImageFocus 4 has a wide range of functions:
- Measurements can be done on still and live image
- Images can be saved in .jpg, .tif, .or .bmp formats as well as .avi format videos
- The brightness, contrast and saturation of captured images can be adjusted
- Camera parameters for exposure time, white balance and color control are easily accessible
- The software also has specific functions for fluorescence such as combining captured fluorescence images
- Compatible with Windows 10 and higher, both 32 and 64 bits configuration. A Mac OS Light version is also available for capturing images\*
- PC requirements: Intel Core2 2.8 GHz or higher or
- equivalent, 2GB memory or more, 17" screen
- \* Mac version not available for VC Series

One language can be selected during initial installation of the ImageFocus 4 software: English, German, French, Dutch, Spanish and Russian



#### ImageFocus Plus software ImageFocus

- ImageFocus Plus has a wide range of functions:
- Measurements on still and live image
- Extended depth of focus and stitching on still and live image (only with VC.3036 and VC.3031 cameras)
- Images can be saved in .jpg, .tif, .bmp or .dicom formats as well as .avi and mpeg-4 format videos
- The brightness, contrast and saturation of captured images can be adjusted
- Camera parameters for exposure time, white balance and color control are easily accessible
- The software also has specific functions for fluorescence such as combining captured fluorescence images
- Compatible with Windows 10 and higher, 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

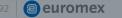
ImageFocus Plus software features English, German, French, Dutch, Spanish and Russian



### 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 10 and higher, both 32 and 64 bits configuration. A Mac OS version is also supplied (with a few differences in features)
- PC requirements: Intel Core2 2.8 GHz or higher or equivalent, 2GB memory or more, 17" screen

One language can be selected during initial installation of the ImageFocus Alpha software English, Catalan, French, German, Indonesian, Italian, Japanese, Korean, Polish, Russian, Simplified Chinese, Spanish, Thai, Traditional Chinese, Turkish





NZ.9850

### adapter guide

### microscope and camera

Most Euromex cameras are supplied with a photo port C-mount adapterto connect it to any Euromex trinocular microscope\*. Monocular microscopes require the removal of the eyepiece so that the camera can be fitted into the 23.2 mm tube. Binocular microscopes require the removal of an eyepiece plus an additional mechanical adapter. To connect our cameras to another microscope brand, see adapter references below:

\* Except for the Oxion, Oxion Inverso and Delphi-X Inverso™ series. They need an additional adapter. See next page

MODELS	1/3 inch camera	1/2 inch camera	2/3 inch camera	1 inch camera
Leica (1)	AE.9835-L (0.35x)	AE.9855-L (0.55x)	AE.9870-L (0.70x)	AE.9810-L (1x)
Olympus <sup>(2)</sup>	AE.9835-O (0.35x)	AE.9850-O (0.50x)	AE.9863-O (0.63x) AE.9880-O (0.80x)	AE.9810-O (1x)
Zeiss (3)	AE.9835-Z (0.35x)	AE.9850-Z (0.50x)	AE.9865-Z (0.65x) AE.9880-Z (0.80x)	AE.9810-Z (1x)
Zeiss PrimoStar 3 <sup>(4)</sup>	AE.9835-ZP3 (0.35x)	AE.9850-ZP3 (0.50x)	AE.9865-ZP3 (0.65x)	AE.9810-ZP3 (1x)
Zeiss ZA <sup>(5)</sup>		AE.9850-ZA (0.50x)	AE.9863-ZA (0.63x) AE.9880-ZA (0.80x)	AE.9810-ZA (1x) AE.9812-ZA (1.2x)
Nikon (6)	AE.9835-N (0.35x)	AE.9855-N (0.55x)	AE.9870-N (0.70x) AE.9880-N (0.80x)	AE.9810-N (1x)

INDUSTRY

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

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

- <sup>(4)</sup> Zeiss PrimoStar, C-mount, anodized aluminum
- <sup>(5)</sup> Zeiss 60N-C, 60N-T2 photo ports of Axio examiner, Axio Imager, Axio Lab, Axio Observer, Axio Scope, Axio Zoom, Stemy 508 and SteREO Discovery
- <sup>(6)</sup> Nikon E100, E200, 50i, 55i, 80i, 90i, Ni series, Ti Series, SMZ800, SMZ1000, SMZ15000, 38 mm to 25.4 mm C-mount, stainless steel

Standard C-Mount: 25.4 mm (1 inch) diameter with 32 threads per inch



FOR ALL

#### 23.2 MM PHOTO PORT C-MOUNT ADAPTERS

Suitable for all Ø 23.2 mm (photo) tubes

- DC.1324 C-mount adapter with 0.45x objective for 1/2" camera
- DC.1353 C-mount adapter with 0.37x objective, fixed focal length and short barrel\*. For 1/3" camera
- DC.1355 C-mount adapter with 0.50x objective, fixed focal length and short barrel\*. For 1/2" camera
- DC.1357 C-mount adapter with 0.75x objective, fixed focal length and short barrel\*. For 2/3" camera
- **DC.1359** C-mount adapter with 1x lens, fixed focal length and short barrel, for standard 23.2 mm tube and 1 inch camera
- DC.1330 30 mm to 23.2 mm conversion adapters DC.1335 30.5 mm to 23.2 mm conversion adapters \* for increased light efficiency

#### **DIGITAL SLR ADAPTERS**

Digital singe lens reflex camera with a APS-C sensor can be mounted on a standard 23.2 mm trinocular tube Choose the universal DC.5130 adapter with built-in 2x objective, together with a brand-specific T-2 adapter

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



#### PHOTO PORT ADAPTERS

Suitable for Euromex microscopes with a photo port such as Oxion, NexiusZoom, StereoBlue, Delphi-X Observer<sup>™</sup> 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 NexiusZoom microscopes and 1/2" cameras
- **OX.9810** C-mount adapter with 1x magnification for 1" cameras
- **OX.9833** C-mount adapter with 0.33x objective for Oxion microscopes and 1/3" cameras
- **OX.9850** C-mount adapter with 0.5x objective for Oxion and Oxion Inverso microscopes and 1/2" cameras
- SB.9850 C-mount adapter with 0.5x objective for StereoBlue microscopes and 1/2" cameras

ID<u>US</u>T LUTIO





for microscopy





- ILLUMINATION SOLUTIONS 399
- DISSECTION INSTRUMENTS 406
  - DISSECTION KITS 408
- MICROSCOPE PREPARED SLIDES 410
- MICROSCOPE SLIDES PROFESSIONAL 422
  - DISPOSABLES 428
    - STAINS 429

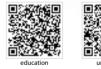


# illumination solutions

# illumination solutions

For stereo microscopes choosing the right illumination is essential to obtain a perfect image with maximum resolution. LED light sources have a much longer life span, less energy consumption and less heating than halogen light sources

The major advantage of LED illumination is the constant light spectrum at all light intensity levels. These light sources are suitable for all kinds of applications in industry, life sciences and materials sciences







### **ILLUMINATION SOLUTIONS**

The right light source solution can enhance and reveal the details you want to examine



### **Illumination solutions**

#### MULTIFUNCTIONAL 150 W HALOGEN OR 30 W POWER-LED • COLD LIGHT SOURCE

A powerful multifunctional 150 W halogen (LE.5211) and 30 W PowerLED cold light source is ideal for the advanced requirements of numerous applications in life and materials science. The intensity is adjustable and has a built-in forced air cooling. The LE.5211 and LE.5211-LED light sources require a light fiber conductor such as the single LE.5213, dual LE.5214, triple LE.5215 or the LE.5239 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

<u>[</u>
C
C

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

\* with LE.5214 dual arm light conductor

#### MULTIFUNCTIONAL 100 W HALOGEN • COLD LIGHT SOURCE

This popular multifunctional cold light source contains a 100 W halogen light source. The intensity is adjustable and it has a built-in forced air cooling. The LE.5210 light source requires a light fiber conductor such as the single LE.5213, dual LE.5214, triple LE.5215 or the LE.5239 ring light fiber conductors. The LE.5213, LE.5214 and LE.5215 light conductors can be equipped with a lens holder (LE.5222) and a focusing lens (LE.5224). Ideal for all kinds of applications in Life and Materials sciences, various industrial applications and for stereo microscopy



Power	100 W halogen
Luminous flux	20,000 lux max.*
Color temperature	3,000 K
Operating voltage	100 and 240 V AC / 12 V DC (50/60 Hz)
Dimensions	115 (h) x 320 (w) x 215 mm (d)
Weight	3.8 kg
Model	LE.5210

\* with LE.5214 dual arm light conductor

#### **COMPACT SINGLE 20 W** LIGHT SOURCE



Compact cold light source with single 40 cm, 6 mm diameter fiber light conductor. Equipped with a 20 W halogen lamp. Light intensity is factory prese and can not be adjusted				
Power	20 W halogen			
Color temperature	3.000 K			

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

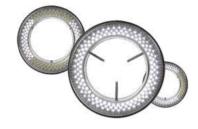
Economical dual LED intensity adjustable light source with two 44 cm flexible gooseneck arms, each mounted with a 3 W LED. Ideal for applications in life and materials sciences, various industrial applications and for stereo microscopy

[			
	ł		
		1	Į
	4	-	
	0.000	-	-

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

#### 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

. ..

**Ring illumination** 

Color tomporature

72 LEDs with adjustable intensity and

for stereo head with diameter from 25 to 61 mm

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

4 segment illumination

from 50 to 180 mm

21,000 lux at 100 mm distance

6,500 K

100 mm LE.1974

#### **PROFESSIONAL HIGH POWERLED RING LIGHT SOURCES** LE.1980/ LE.1981/ LE.1990/ LE.1991

LED ring light source with maximum illuminance and metal construction for professional usage. With adjustable intensity, optional power supply/segment controller, diffuser, polarizers and Fresnel focusing lenses for perfect illumination of objects



MODELS	Number of LEDs	Color temperature	Illuminance	For mounting diameters	Internal/external diameter	Required power supply/ controller
LE.1980	48	6,000 K	17,000 lux	from 30 to 66 mm	45/90 mm	LE.1992 Analog controller
LE.1981	48	6,000 K	17,000 lux	from 30 to 66 mm	45/90 mm	LE.1993 Digital segments controller
LE.1990	72	6,000 K	21,000 lux	from 40 to 66 mm	60/110 mm	LE.1992 Analog controller
LE.1991	72	6,000 K	21,000 lux	from 40 to 66 mm	60/110 mm	LE.1993 Digital segments controller

#### **ILLUMINATION STATION LE.5212**

Light source station with multiple power supply connections for two self-sustaining gooseneck-type guides, one ring light and one transmitted stage illumination. For stand-alone usage or mounted on stereo microscope pillar stands with diameters up to 44 mm or with 35- and 25-mm pole mounting adapter rings

Each self-sustaining gooseneck-type LED guide is equipped with a 3-lens focusing head and has a length of 56 cm White 6,500 K LED ring light generating with 60 LEDs up to 24,000 Lux. Mounting diameters from 21 to 61 mm Transmitted light stage illumination with a 6,500 K white LED generating up to 8,000 Lux with 42 LEDs. Stage diameter 94.5 and 15 mm thick

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

402



euromex

<b>Ring illumination</b>	16 high power LEDs with adjustable intensity
Color temperature	6,500-7,500 K
Illuminance	≥ 44000 lux at 100 mm distance
working distance:	from 40 to 120 mm
Mounting	for stereo head with diameter from 25 to 61 mm
Power supply	100-240 V AC / 24 V DC
External diameter	90 mm
Model	LE.1975

Compact 20,000 lux LED

ring light source

COMPACT 72 LEDS • LE.1974

	Color temperature
	Illuminance
	working distance:
	Mounting
	Power supply
$\mathcal{O}$	External diameter
-	Model
l,	

POLARIZING LED	RING LIGHT • LE.1975
POLARIZING LED	

LED ring light with white or polarized light for all kinds of demanding applications

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

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

power supply



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

### ACCESSORIES AND SPARE PARTS

#### FOR LE.5210, LE.5211 AND LE.5211-LED COLD LIGHT SOURCES

#### FIBER LIGHT CONDUCTORS

LE.5213	Single arm fiber light conductor,
	gooseneck self-sustaining,
	50 cm long, 4 mm diameter
LE.5214	Dual arm fiber light conductor,
	gooseneck self-sustaining,
	50 cm long, 4 mm diameter
LE.5215	Triple arm fiber light conductor,
	gooseneck self-sustaining,
	50 cm long, 4 mm diameter
LE.5219	Dual arm fiber light conductor,
	gooseneck self-sustaining,
	70 cm long, 4 mm diameter
LE.5239	Slit ring-shaped fiber light conductor
	60 cm long, 8 mm diameter
LE.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.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.5231 Conversion KB12/80B filter

#### HALOGEN BULBS AND FUSES

- SL.5219Halogen 100 W 12 V bulb with reflector<br/>(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

#### 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

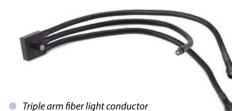


Fresnel lens

Polarizing filter



Dual arm fiber light conductor



### **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	PB.5050
		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	0
	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,	1 A CON
		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	
ł	PB.5077	Cover glass forceps, length 11 cm	
			2
			1
			1 2



#### SCISSORS AND BLADES

- PB.5080 Dressing scissors with blunt/sharp tip, length 14 cm
- PB.5084 Dissecting scissors, sharp tips, length 11 cm
- PB.5092 Scalpel with blunt tip, length 15 cm
- PB.5094
   Scalpel handle no. 4

   (for blades PB.5095 and PB.5096)

   PB.5095
   Scalpel blades with sharp tip, 5 pieces per set

   PB.5096
   Scalpel blades with blunt tip, 5 pieces per set

   PB.5103
   Strop, double sided for stropping of scalpels, microtome knifes. Includes stropping paste

   PB.5105
   Razor plano/concave, for sectioning. With plastic handle
- PB.5106 Microtome knife plano/concave. 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



ACCESSOIRES

### PREPARATION ACCESSORIES



### dissection kits

#### **4-PC DISSECTION KIT PB.5110 IN IMITATION LEATHER CASE**

Kit with straight dissecting needle (PB.5050), dissecting forceps (PB.5067), dissecting scissors (PB.5084) and scalpel (PB.5092). Supplied with imitation leather case

### 6-PC DISSECTION KIT **PB.5111 IN PLASTIC CASE**

Kit with straight dissecting needle (PB.5050), lancet-shaped dissecting needle (PB.5054), dissecting forceps (PB.5067), dissecting scissors (PB.5084), scalpel handle no. 4 (PB.5094) and blades (PB.5096). Supplied with plastic case







#### **10-PC DISSECTION KIT PB.5112 IN IMITATION LEATHER CASE**

Kit with two straight dissecting needles (PB.5050), lancet-shaped dissecting needle (PB.5054), dressing forceps (PB.5062), dissecting forceps (PB.5067), scissors (PB.5080), dissecting scissors (PB.5084), two scalpels (PB.5094), five scalpel blades with straight tip and five blades with blunt tip (PB.5095/PB.5096). Supplied with imitation leather case



#### 9-PC DISSECTION KIT **PB.5114 IN WOODEN CASE**

Kit with two straight dissecting needles (PB.5050), lancet-shaped dissecting needle (PB.5054), dressing forceps (PB.5062), dissecting forceps (PB.5067), scissors (PB.5080), dissecting scissors (PB.5084), two scalpels (PB.5094), five scalpel blades with straight tip and five blades with blunt tip (PB.5095/PB.5096). Supplied with wooden cabinet



### 6-PC DISSECTION KIT FOR KOI FISH **PB.5115 IN PLASTIC CASE**

Dissecting set for Koi fish. Consisting of plastic box with forceps with 1 x 2 points (PB.5060), forceps blunt points, 13 cm (PB.5062), scissors, blunt/ sharp points, 14 cm (PB.5080), microscope scissors, sharp points, 11 cm (PB.5084), blunt-pointed probe (PB.5056), scalpel handle no. 4 (PB.5094), five scalpel blades with straight tip and five blades with blunt tip (PB.5095/PB.5096)



### **PROFESSIONAL SLIDE PREPARATION KIT PB.5125 IN PLASTIC DELUXE CASE**

Kit with three prepared slides, 50 microscope slides (PB.5150) and 100 cover glasses (PB.5165). Two microscope slides with cavity. Canada balsam, dissecting needle (PB.5050 and PB.5054). Dissecting forceps (PB.5067), dissecting scissors (PB.5084) and scalpel (PB.5092). Supplied with plastic deluxe case



### MICROSCOPE PREPARED SLIDES



Euromex offers teachers, students and microscopy amateurs a wide range of quality micro-slides, which can be used immediately in biology classes as introduction to histology, zoology and botany

# sets with 25 slides for education histology, zoology and botany set

#### **PB.5211 FOR EDUCATION**

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

#### HISTOLOGY

SH.1011 Hard bone grinding, human, section
SH.1045 Skeletal muscle, dog, l.s and c.s
SH.1072 Skin section through hair follicle, human
SH.1078 Stratified flat epithelium, dog, section
SH.1150 Blood smear, human, Giemsa stained

#### ZOOLOGY

SZ.1510 Amoeba proteus, w.m
SZ.1580 Hydra with bud, w.m
SZ.1640 Lumbricus - earthworm, c.s
SZ.1655 Daphnia sp., water flea, w.m
SZ.1715 Musca domestica, house fly, mouth parts
SZ.1717 Musca domestica, house fly, leg with clinging pads
SZ.1719 Musca domestica, house fly, wing w.m

#### BOTANY

- SB.2006 Allium cepa, onion, scale epidermis, w.m
- SB.2009 Allium cepa, onion, mitosis root tip, l.s
- SB.2055 Zea mays, corn, stem, cs
- **SB.2060** Triticum aestivum, wheat, stem, c.s
- SB.2070 Helianthus, sunflower, young stem, c.s
- SB.2130 Helianthus, sunflower, leaf, c.s
- SB.2205 Monocot/dicot flower, zea mays/ranunculus, c.s
- SB.2212 Lilium, lily, ovary, c.s
- SB.2335 Mnium, w.m
- SB.2355 Rhizopus nigricans, bread mold, developed sporangiaSB.2377 Diatoms, w.m
- SB.2381 Spirogyra sp., vegetative mass, w.m
- SB.2405 Dental plaque, smear

## histology, zoology and botany set

#### PB. 5212 FOR EDUCATION

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

#### HISTOLOGY

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

#### ZOOLOGY

- SZ.1520Paramecium, w.mSSZ.1625Schistosoma Japonicum, fluke eggs, bilharzioseSSZ.1630Taenia, tapeworm cattle, mature proglottid, w.mSSZ.1635Ascaris megalocephala, horse roundworm,<br/>female + male, c.sSSZ.1708Apis mellifica, honey bee, mouth partsSSZ.1725Periplaneta, cockroach, mouth parts of chewing type
- **SZ.1730** Pieres brassicae, cabbage-white butterfly, mouth, w.m
- SZ.1750 Periplaneta, cockroach, spiracle of insect, w.m

#### BOTANY

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

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

### histology, zoology and botany set

#### **PB. 5213 FOR EDUCATION**

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

#### HISTOLOGY

SH.1006Elastic cartilage, rabbitSSH.1040Smooth muscle, teased preparation, rabbit, l.s+c.sSSH.1110Lung with injected blood vessels, rabbit, c.s

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

#### ZOOLOGY

- SZ.1535 Euglena virides, a flagellate with eyespot
- SZ.1586 Hvdra, w.m of tentacles
- SZ.1620 Schistosoma Japonicum, female, w.m
- SZ.1705 Apis mellifica, honey bee, posterior leg, w.m
- SZ.1733 Pieres brassicae, cabbage-white butterfly,
- part of wing SZ.1738 Locusta, grasshopper, mouth parts, w.m
- SZ.1780 Insects four types of legs, honey bee, house fly, house mosquito, spider
- SZ.1877 Rana sp, frog, blood smear

#### BOTANY

- SB.2011 Zea mays, corn root tip with hairs, l.s
- SB.2020 Helianthus, sunflower, old root, c.s.
- SB.2025 Monocot/dicot plant roots, zea mays/helantius, c.s
- **SB.2040** Solanum tuberosum, potato, starch grains
- SB.2075 Tilia, lime tree, one year stem, c.s
- SB.2091 Hydrilla stem, c.s
- SB.2100 Pelargonium hortorum, geranium, stem c.s
- SB.2337 Mnium, antheridial branch, l.s SB.2339 Mnium, archegonial branch, l.s
- SB.2373 Coprinus, ink caps mushroom, section of pleus
- SB.2380 Spirogyra sp. in conjugation
- SB.2420 3 types of bacteria, cocci, bacilli, spirelli

### 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 megalocephala, horse roundworm,

- mitosis eggs
- SZ.1760 Ctenocephalus canis, dog flea, w.m
- SZ.1770 Tetranychus, red spider mite, w.m
- SZ.1930 Bird, wing and down feather, section
- SZ.1940 Chicken, embryo 48 hours, sagittal section

#### BOTANY

- SB.2090 Hydrilla verticillata, hydrilla stem tip, l.s
- SB.2112 Cucurbita, pumpkin, stem, c.s
- SB.2135 Nerium oleander, leaf with sunken stomata, c.s
- SB.2210 Lilium, lily, anther with mature pollen, c.s
- SB.2214 Lilium, lily, pollen, different stages of meiosis
- SB.2220 Capsella, shepherds' purse, ovary w. embryo in pre-cotyledon stadium, l.s
- SB.2222 Capsella, shepherds' purse, ovary w. embryo in cotyledon stadium, l.s
- SB.2234 Pinus, pine tree, pollen, w.m
- SB.2330 Marchantia, liverworts, thallus with gemma cup, c.s
- SB.2360 Saccaromyces sp., yeast, budding, w.m
- SB.2365 Penicillium sp., w.m
- SB.2410 Streptococus lactis, milk bacteria, smear
- SB.2415 Bacillus subtilis, hay bacteria, smear

### histology, zoology and botany set

#### **PB. 5214 FOR EDUCATION**

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

#### HISTOLOGY OF MAMMALS

SH.1060 Tendon I.s (Dense connective tissue), dog SH.1075 Skin section with sweat gland, human SH.1330 Testis rabbit, c.s SH.1340 Ovary rabbit with developed eggs SH.1360 Sperm, human, smear SH.1490 Retina, rabbit, sec

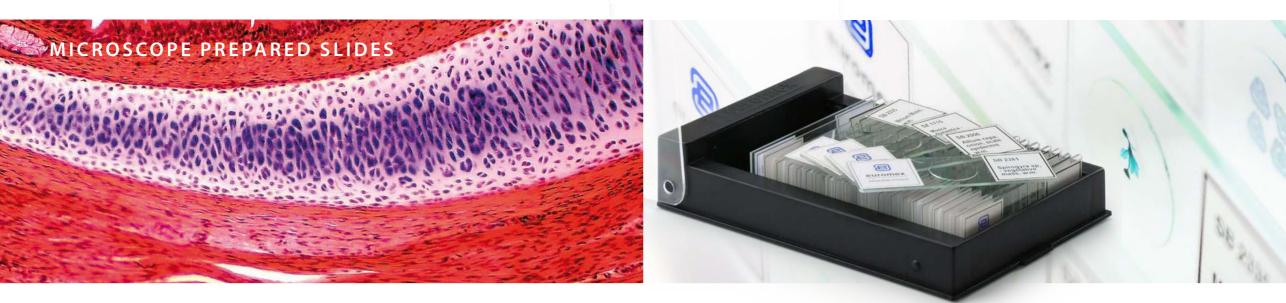
#### ZOOLOGY

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

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

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

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



### sets with 23 slides for education mammal histology set

#### **PB.5221 SET FOR EDUCATION**

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

#### EPHITELIUM AND CONNECTIVE TISSUES

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

# RESPIRATORY, BLOOD CIRCULATION AND ENDOCRINE SYSTEM

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

#### DIGESTIVE SYSTEM

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

#### URINARY AND GENITAL SYSTEM

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

#### NERVOUS SYSTEM AND SENSORY ORGANS

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

### mammal histology set

#### **PB.5222 SET FOR EDUCATION**

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

#### EPHITELIUM AND CONNECTIVE TISSUES

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

#### RESPIRATORY, BLOOD CIRCULATION AND ENDOCRINE SYSTEM

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

#### **DIGESTIVE SYSTEM**

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

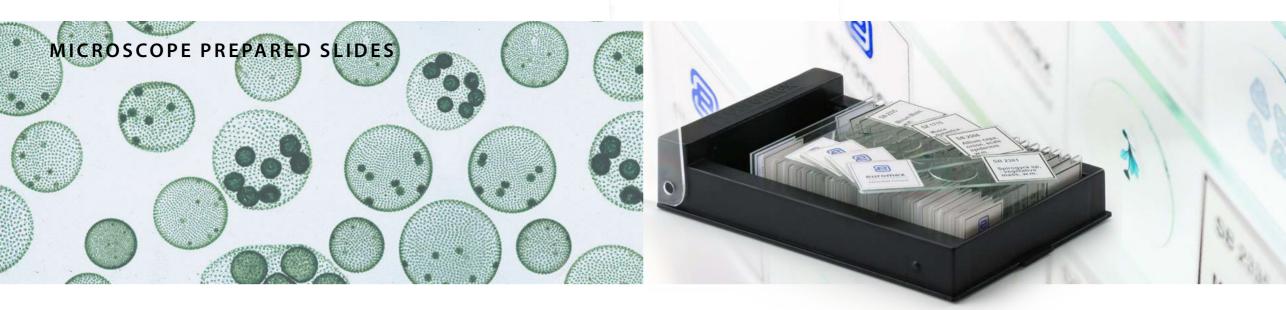
#### URINARY AND GENITAL SYSTEM

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

#### NERVOUS SYSTEM AN SENSORY ORGANS

SH.1415 Motor nerve cells with end plates, rabbit, w.mSH.1420 Cerebellum section, dogSH.1480 Eyeball section, rabbit, sagittal section

414 **Beuromex** 



### set for hobby 10 slides zoology and botany set

#### **PB.5204 SET FOR HOBBY**

Set with 10 prepared microscopy slides for hobby: zoology and botany. All microscope slides are supplied in a plastic box with transparent cover for 25 slides. The set contains:

#### ZOOLOGY

- SH.1040 Smooth muscle, teased preparation, rabbit, l.sand c.s
- SH.1110 Lung with injected blood vessels, rabbit, c.s
- SZ.1708 Apis mellifica, honey bee, mouth parts
- SZ.1733 Pieres brassicae, cabbage-white butterfly, part of wing
- SZ.1877 Rana sp, frog, blood smear
- SB.2015 Ranunculus, buttercup, root, c.s

#### BOTANY

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

### set for hobby 25 slides slides of histology, zoology and botany

#### **PB.5218 SET FOR HOBBY**

Set with 25 prepared microscopy slides for hobby: zoology and botany. All microscope slides are supplied in a plastic box with transparent cover for 25 slides. The set contains:

#### HISTOLOGY OF HUMAN AND MAMMALS

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

#### BOTANY

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

#### ZOOLOGY

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

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

### MICROSCOPE PREPARED SLIDES



### individual euroslides prepared slides

Euromex supplies complete sets and individual prepared microscope slides for educational use as well as for the hobby market

These high quality microscope slides are usually supplied directly from stock, at the very best prices. The slides on the next page are separately available

#### HOW TO ORDER INDIVIDUAL EUROSLIDES

Minimum purchase quantity is 10 pieces of the same slide

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

### individual euroslides for histology

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

#### EPHITELIUM AND CONNECTIVE TISSUES

SH.1001	Loose connective tissue, rabbit
SH.1005	Hyaline cartilage rabbit, section
SH.1006	Elastic cartilage, rabbit
SH.1011	Hard bone grinding, human, section
SH.1012	Hard bone grinding of rabbit, tooth, decalcium
SH.1040	Smooth muscle, teased preparation,
	rabbit, l.s and c.s
SH.1045	Skeletal muscle, dog, l.s and c.s
SH.1049	Muscle types, striated, smooth,
	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.sSH.1230 Small intestine, dog, c.sSH.1250 Liver, pig, section

#### URINARY AND GENITAL SYSTEM

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

#### NERVOUS SYSTEM

#### AND SENSORY ORGANS

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

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

### individual euroslides for zoology

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

INSECTS

### individual euroslides for botany

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

#### PROTOZOA

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

#### COELENTERATA

SZ.1580 Hydra with bud, w.m

#### HELMINTHES

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

HOW TO ORDER INDIVIDUAL EUROSLIDES

Minimum purchase quantity is 10 pieces of the same slide

SZ.1640 Lumbricus, earthworm, c.s

#### CRUSTACEANS

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

- SZ.1705 Apis mellifica, honey bee, posterior leg, w.m
  SZ.1708 Apis mellifica, honey bee, mouth parts
  SZ.1710 Apis mellifica, honey bee compound eye, c.s
- **SZ.1719** Musca domestica, house fly, wing, w.m
- **SZ.1720** Culex pipiens, house mosquito, larva, w.m
- **SZ.1722** Culex pipiens, house modquito, female, mouth parts
- **SZ.1724** Drosophila, fruit fly, giant chromosomes of salivary gland, w.m
- **SZ.1730** Pieres brassicae, cabbage-white butterfly, mouth, w.m
- SZ.1733 Pieres brassicae, cabbage-white butterfly, part of wing
- **SZ.1738** Locusta, grasshopper, mouth parts, w.m
- **SZ.1760** Ctenocephalus canis, dog flea, w.m
- **SZ.1780** Insects- four types of legs, honey bee, house fly, house modquito, spider

#### AMPHIBIANS

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

- SZ.1877 Rana sp, frog, blood smear
- **SZ.1880** Frog uncleaved egg, c.s
- **SZ.1881** Frog egg, two cells stadium, c.s
- **SZ.1883** Frog egg, advanced cleavage c.s
- **SZ.1885** Frog egg, blastula phase, c.s
- **SZ.1887** Frog egg, early gastrula phase, c.s
- **SZ.1889** Frog egg, advanced gastrula phase, c.s

#### ROOTS

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

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

#### STEMS

SB.2055Zea mays, corn, stem, c.sSB.2060Triticum aestivum, wheat, stem, c.sSB.2070Helianthus, sunflower, young stem, c.sSB.2076Tilia, lime tree, 1, 2 and 3 year stems on one slide, c.sSB.2095Monocot/dicot stem, corn/pumpkin, c.sSB.2100Pelargonium hortorum, geranium, stem, c.sSB.2105Hibiscus, young stem, c.sSB.2115Sambucus, elderberry or Morus Alba, mulberry,

stem with crok cambium and lenticels, c.s

#### LEAVES

SB.2130 Helianthus, sunflower, leaf, c.s
SB.2135 Nerium oleander, leaf with sunken stomata, c.s
SB.2140 Triticum, wheat, leaf, c.s
SB.2150 Monocot/dicot leaves, zea mays/ligustrum lucidum, c.s
SB.2160 Lilium, lily leaf, c.s

#### FLOWERS, FRUITS AND SEEDS

- SB.2205 Monocot/dicot flower, zea mays/ranunculus, c.s
- SB.2210 Lilium, lily, anther with mature pollen, c.s
- SB.2212 Lilium, lily, overy, c.s
- SB.2214 Lilium, lily, pollen, different stages of meiosis
- **SB.2220** Capsella, shepherds' purse, ovary w. embryo in pre-cotyledon stadium, l.s
- SB.2222 Capsella, sheperd's purse, ovary w. embryo in cotyledon statium, l.s
- SB.2225 Zea mays, corn seed with embryo, l.s
- SB.2232 Pinus, pine tree, female (cone) globose fruit, l.s
- SB.2240 Triticum aestivum, wheat, kernel, l.s

#### FERNS AND MOSSES

- **SB.2315** Cyrtomium, holly fern, prothallium with young sporophyt, w.m
- SB.2337 Mnium, antheridial branch, l.s
- SB.2339 Mnium, archegonial branch, l.s

#### FUNGI

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

#### ALGAE

 SB.2377
 Diatoms, w.m

 SB.2380
 Spirogyra sp. in conjugation

 SB.2384
 Volvox sp., w.m

#### BACTERIA

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



### microscope slides for professional use

Euromex offers Globe Scientific professional microscope slides in three distinct lines, to meet the demands of today's modern laboratories

#### MICROSCOPE SLIDES

General purpose microscope slides The economical alternative for less demanding applications

**Diamond Essentials** microscope slides Produced from the highest quality soda lime glass and ideal for use in all routine applications. These slides provide excellent quality while offering substantial savings

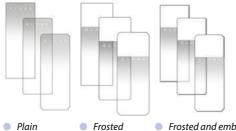
#### Diamond White Glass microscope slides

Produced from superior quality white glass with exceptional clarity, low self-fluorescence and uniform thickness. The glass is formulated for minimal oxidation, which ensures sample integrity during long-term storage. This top guality line is designed for the most demanding applications and provides considerable savings compared to other name brand white glass slides on the market

Globe Scientific microscope slides are offered in a large selection of Colors, corner styles and edges. All slides are precleaned and ready to use. Globe Scientific can also custom produce microscope slides for your particular needs

#### **CORNER/EDGE TYPES**

- Traditional style: 90° ground edge/90° corners. Frosted or plain
- Safety corners: 90° ground edge/slightly clipped corners. Corners are slightly clipped for safety and comfort
- · Clipped corners: 45° beveled edge/clipped corners. No sharp edges. Perfect for blood smears



Frosted Frosted and embossed

#### **GENERAL PURPOSE SLIDES**

ITEM	Plain*	Frosted	Ground edge	Safety corners**	Case
1291	•		•	•	1440
1294		one side	•	•	1440

\* The plain slides have painted dots in each corner to help alleviate sticking. All slides are pre-cleaned and ready to use \*\* Safety corners: 90° ground edge/slightly clipped corners. Corners are slightly clipped for safety and comfort

#### **DIAMOND ESSENTIALS**

ITEM	90° corners	Safety corners	Clipped corners	Ground edges	Beveled edges	Frosted 1 side	Frosted 2 sides	Color	Case
1301	•			•					1440
1321		•		•					1440
1331			•		•				1440
1304	•			•		•			1440
1324		•		•		•			1440
1334			•		•	•			1440
1308	•			•			•		1440
1328		•		•			•		1440
1338			•		•		•		1440
1304B	•			•		•		Blue	1440
1304G	•			•		•		Green	1440
1304N	•			•		•		Orange	1440
1304P	•			•		•		Pink	1440
1304W	•			•		•		White	1440
1304Y	•			•		•		Yellow	1440
1324B		•		•		•		Blue	1440
1324N		•		•		•		Orange	1440
1324P		•		•		•		Pink	1440
1324W		•		•		•		White	1440
1324Y		•		•		•		Yellow	1440
1334B					•	•		Blue	1440
1334G					•	•		Green	1440
1334P					•	•		Pink	1440
1334W					•	•		White	1440
1334Y					•	•		Yellow	1440

#### **DIAMOND WHITE GLASS**

TEM	Plain	Frosted	Ground edge	Beveled edge	90° corners	<b>Clipped corners</b>	Charged	Color	Case
1380-10	•		•		•				1440
1384-10	•			•		•			1440
1380-20		one side	•		•				1440
1384-20		one side		•		•			1440
1380-30		two sides	•		•				1440
1384-30		two sides		•		•			1440
1380-50B		•	•		•			Blue	1440
1380-50P		•	•		•			Pink	1440
1380-50W		•	•		•			White	1440
1380-50Y		•	•		•			Yellow	1440
1384-50P		•		•		•		Pink	1440
1384-50W		•		•		•		White	1440
1358B		•	•		•		•	Blue	1440
1358G		•	•		•		•	Green	1440
1358P		•	•		•		•	Pink	1440
1358W		•	•		•		•	White	1440
1358Y		•	•		•		•	Yellow	1440
1354W		•		•		•	•	White	1440

euromex 422

### COVER GLASSES

Our Cover glass range is produced to meet microscopy and laboratory needs, ensuring precise results in every analysis. Our cover glass protects specimens, minimizes contamination, and optimizes optical performance. With premium quality, uniform thickness, exceptional clarity, and chemical resistance, our cover glass is versatile for various applications. The cover glass is offered in two thicknesses and various sizes

#### **KEY FEATURES**

- High quality material Made from chemically-resistant white glass
- Uniform flatness Ensures consistent sample preparation and examination
- Aluminum wrapped Prevents sticking, ensuring easy separation
- 2 Thicknesses Available in No. 1 (0.14mm) and No. 1.5 (0.175mm)
- Recommended use Ideal for manual applications in histology, cytology, urinalysis, and microbiology

#### **COVER GLASS**

ITEM	Size	Thickness 0.14 mm (nr. 1)	Thickness 0.175 mm (nr. 1.5)	Pcs per box	Per carton
1401-10-200	18 x 18 mm	•		200	1000
1401-15-200	18 x 18 mm		•	200	1000
1402-10-200	20 x 20 mm	•		200	1000
1402-15-200	20 x 20 mm		•	200	1000
1404-10-200	22 x 22 mm	•		200	1000
1404-15-200	22 x 22 mm		•	200	1000
1408-10-100	24 x 32 mm	•		100	1000
1408-15-100	24 x 32 mm		•	100	1000
1415-10-100	24 x 50 mm	•		100	1000
1415-15-100	24 x 50 mm		•	100	1000
1419-10-100	24 x 60 mm	•		100	1000
1419-15-100	24 x 60 mm			100	1000



### SLIDE MAILERS

Our range ensures secure transportation and protection for microscope slides. Engineered for durability, our mailers guarantee your specimens arrive intact

#### **RELIABLE PROTECTION**

Our mailers safeguard slides from damage, breakage, and contaminants during transit, offering peace of mind for analysis or archival purposes

#### **KEY FEATURES**

- Secure Enclosure: Ensures slides remaining safely enclosed during transportation
- Shock Absorption: Minimizes damage risk with sturdy, cushioned interiors
- Compatibility: Accommodates standard microscope slide sizes and thicknesses
- Convenience: Streamlines packaging and handling with user-friendly designs
- Versatility: Offers various configurations to suit specific shipping and storage needs



#### Cardboard slide mailers

Cardboard slide mailers feature an inner finger groove for effortless slide removal along with a cover that opens for viewing. The flat surface area is ideal for labeling or writing any necessary information. They are light-weight and reusable to minimize cost. The 20-place cardboard slide holder contains a numerical index that corresponds to the inner slide compartments. The inside flaps are recessed so that there is no contact or contamination between the slides and the cover when closed. With a 360° hinge, the cover folds flat underneath to save space when the holder is in use

#### Extra sturdy plastic slide mailers

Our plastic slide mailers are produced from polypropylene (PP) and feature a snap-close lid to keep slides secure during transport

#### Plastic slide mailers with flip top lids

These compact plastic slide mailers are produced from polypropylene (PP) and feature a flip-top lid to keep slides secure during transport. The slim design saves valuable space and features inner slots which keep slides separated

The side opening lid provides easy access to the entire length

euromex 424

### SLIDE STORAGE

Our products ensure the integrity and longevity of your slides. Choose from compact boxes or durable trays to meet your needs

#### KEY FEATURES

Secure storage:

Protects slides from damage, dust, and contaminantsOrganization:

- Various sizes and configurations for efficient workflow
- Compatibility:
   Accommodates standard microscope slides
- Space-efficiency: Maximizes storage space in laboratories

#### Slide storage boxes

Globe Scientific's microscope slide storage boxes are produced from durable ABS plastic and offer a hinged lid for easy opening and closing. An inventory sheet is affixed to the inside cover for convenient slide identification and organization. The base of the box is cork lined for added protection. Available in four sizes and various colours, these storage boxes accommodate 25 x 75 mm and 1" x 3" microscope slides These stackable boxes are produced from durable ABS plastic and feature heavy-duty stainless steel clasps and hinged lids for easy opening and closing. An inventory sheet is affixed to the inside cover for convenient slide identification and organization. The base of the box is cork lined for added protection. Available in 6 colours, these storage boxes accommodate 25 x 75 mm

microscope slides

Heavy-duty slide storage boxes

with stainless steel clasp



#### SLIDE MAILERS

ITEM	Material	Specifics	Description	Color	Packaging options
513001	Cardboard		holds 1 slide		100 & 1000
513002	Cardboard		holds 2 slides		100 & 1000
513003	Cardboard		holds 3 slides		50 & 500
513004	Cardboard		holds 4 slides		50 & 200
513025	Cardboard		holds 20 slides		1 & 10
513031	Plastic		holds 1 slide	Natural	100 & 1000
513041	Plastic		holds 2 slides	Natural	100 & 1000
513041B	Plastic		holds 2 slides	Blue	100 & 1000
513045	Plastic		holds 3 slides	natural	100 & 1000
513052	Plastic	with flip top lids	holds 2 slides	Natural	100 & 1000
513052B	Plastic	with flip top lids	holds 2 slides	Blue	100 & 1000
513062	Plastic	with flip top lids	holds 5 slides	Natural	100 & 1000
513062B	Plastic	with flip top lids	holds 5 slides	Blue	100 & 1000
513065	Plastic	Side opening	holds 5 slides	Natural	100 & 1000
513055	Plastic	Side opening	holds 5 slides	Natural	100 & 1000

#### SLIDE SORAGE

ITEM	Number of slides	With tray	Tray alone	Color	Dimensions (L x W x H)	Case
513029A	20			Grey		Each
513029B	20			Blue		Each
513029G	20			Green		Each
513029Y	20			Yellow		Each
513029W	20			White		Each
513250B	100	•		Blue		Each
513250G	100	•		Green		Each
513250P	100	•		Pink		Each
513250W	100	•		White		Each
513250Y	100	•		Yellow		Each
513252B	100		•	Blue		Each
513252G	100		•	Green		Each
513252P	100		•	Pink		Each
513252W	100		•	White		Each
513252Y	100		•	Yellow		Each
513072A	12			Grey	82 x 51 x 35 mm	1
513072B	12			Blue	82 x 51 x 35 mm	1
513072G	12			Dark grey	82 x 51 x 35 mm	1
513072N	12			Orange	82 x 51 x 35 mm	1
513072W	12			White	82 x 51 x 35 mm	1
513072AST	12			(1 ea. A,B,G,N,W)	82 x 51 x 35 mm	5
513075A	25			Grey	96 x 84 x 35 mm	1
513075B	25			Blue	96 x 84 x 35 mm	1
513075G	25			Dark grey	96 x 84 x 35 mm	1
513075N	25			Orange	96 x 84 x 35 mm	1
513075W	25			White	96 x 84 x 35 mm	1
513075Y	25			(1 ea. A,B,G,N,W)	96 x 84 x 35 mm	5
513077A	50			Grey	203 x 82 x 35 mm	1
513077B	50			Blue	203 x 82 x 35 mm	1
513077G	50			Dark grey	203 x 82 x 35 mm	1
513077N	50			Orange	203 x 82 x 35 mm	1
513077W	50			White	203 x 82 x 35 mm	1
513077AST	50			(1 ea. A,B,G,N,W)	203 x 82 x 35 mm	5
513079A	100			Grey	203 x 165 x 35 mm	1
513079B	100			Blue	203 x 165 x 35 mm	1
513079G	100			Dark grey	203 x 165 x 35 mm	1
513079R	100			Red	203 x 165 x 35 mm	1
513079W	100			White	203 x 165 x 35 mm	1
513079N	100			Orange	203 x 165 x 35 mm	1
513079AST	100			(1 ea. A,B,G,N,W)	203 x 165 x 35 mm	5
513080A	100			Grey	203 x 165 x 35 mm	1
513080B	100			Blue	203 x 165 x 35 mm	1
513080G	100			Dark grey	203 x 165 x 35 mm	1
513080N	100			Orange	203 x 165 x 35 mm	1
513080R	100			Red	203 x 165 x 35 mm	1
513080W	100			White	203 x 165 x 35 mm	1
513080AST	100			(1 ea. A,B,G,N,W)	203 x 165 x 35 mm	5



### **disposables** Microscope slides for educational use

PB.5150	Microscope slides 76 x 26 mm, clear glass,
	cut edges. 50 pieces
PB.5155	Microscope slides 76 x 26 mm clear glass,
	ground edges. 50 pieces
PB.5157-W	Microscope slides 76 x 26 mm,
	ground white frosted side, 50 pieces
PB.5157-B	Microscope slides 76 x 26 mm,
	ground blue frosted side, 50 pieces
PB.5160	Microscope slides 76 x 26 mm with concavity,

ground edges. 10 pieces

- 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
   100 pieces

#### **MICROSCOPE SLIDE BOXES**

PB.5165 Cover glasses 18 x 18 mm,

 
 PB.5181
 Black plastic slide box for 25

 PB.5180
 Wooden slide box for 25 slides. White interior with index

 PB.5185
 Black plastic slide box for 100 slides



### STAINS

Staining enables observation of cells and tissues of low contrast. Euromex offers a range of common stains





#### MISCELLANEOUS ACCESSORIES

#### PB.5200 Staining trough for 10 slides

- **PB.5210** Fine pointed brush
- PB.5245 Lens paper. 100 sheets
- **PB.5250** Solid paraffin. Melting point 60°C, 200 grams
- **PB.5255** Immersion oil, refractive index nD = 1.515. (25 ml)
- PB.5265 Entellan, quick drying Canada balsam. In bottle (25 ml)
- PB.5274 Isopropyl alcohol 99%. In bottle (200 ml)
- PB.5277 Formalin 40%, fixing agent. In bottle (200 ml)
- **PB.5275** Cleaning kit: lens cleaning fluid, lint free lens tissue, brush, air blower, cotton swabs
- PB.5276 Microscope maintenance and servicing kit, 16pcs: cleaning brush, 6 pcs screwdriver set, air blower, 3 pcs Allen key, 1.5, 2, 2.5 mm, lens cleaning fluid 20 ml, cleaning cloth 140 x 140 mm, 100 pcs lens tissue sheets, tube of maintenance grease, 10 ml bottle of oil, packed in a nice toolbox

PB.5286 - PB.5297



### (DISSOLVED) STAINS

Supplied in 25 ml bottles

- PB.5283 Eosin yellow. Stain for general overall-view coloring
- **PB.5286** Haematoxylin according to Ehrlich. General purpose nuclear stain
- **PB.5289** Astra Blue. Stain for vegetal cells. To be used in combination with safranin
- **PB.5292** Orange-G, stain for most elementary structures of animal tissues
- **PB.5295** Safranine. A general stain for showing nuclei and cellulose walls. To be used in combination with Astra Blue
- PB.5297 Methylene Blue. Biological and bacteriological stain
- **PB.5300** Analin Blue, to be used as third color for Azo pigmentation
- PB.5305 Fuchsine. For staining bacilli in tissue



# 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 • 432 REFRACTOMETERS • 437 POLARIMETERS • 443 SPECTROMETERS • 444



# **MAGNIFIERS & MEASURING MICROSCOPES**



# handheld magnifiers and magnifiers with handles

**PB.5020** Magnifier with handle 4x, lens Ø 50 mm and handle Ø 8 mm. Fits on PB.5022 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

#### FOLDING MAGNIFIERS

PB.5016	Aplanatic magnifier 6x, doublet.
	Lens Ø 20 mm. Field of view 25 mm
PB.5018	Aplanatic magnifier 15x, doublet.
	Lens Ø 18 mm. Field of view 14 mm
PB.5032	Achromatic magnifier 10x, triplet.
	Lens Ø 20 mm. Field of view 15 mm
PB.5033	Achromatic magnifier 20x, triplet.
	Lens Ø 20 mm. Field of view 8 mm



PB.5032

## FOLDING MAGNIFIERS WHITE LED ILLUMINATION

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

LED LOUPE RIPLET 10X-21MM

PB.5036 Aplanatic magnifier 10x, doublet. Lens Ø 20 mm. Field of view 20 mm PB.5037 Achromatic diamond magnifier 10x with four lenses Ø 21 mm. Field of view 25 mm



PB.5016

# FOLDING MAGNIFIERS WHITE LED AND UV ILLUMINATION

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



LED LOUPE TRIPLET 10X-21mm

PB.5034-LUV

PB.5034-LED



# **MAGNIFIERS & MEASURING MICROSCOPES**

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



NO B

# magnifiers & measuring microscopes

#### TABLE MAGNIFIERS

10mm/100 reticle

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.

#### **MISCELLANEOUS MAGNIFIERS**

- PB.5030 Dual sliding magnifier with 3x and 6x magnification. Lens aperture 23 x 23 mm. Fields of view 50 x 50 mm and 25 x 25 mm. Plastic housing PB.5049 Linen tester folding magnifier with 6x aplanatic lens.
  - A 25 x 25 mm base with millimeter scale. Metal casing lacquered in black. Supplied with plastic case





### MEASURING MAGNIFIERS WITH RETICLE

PB.5044 Measuring magnifier 7x. Eyepiece Ø 18 mm. Field of view 24 mm. Measuring scale 10-0-10 mm divided into 0.1 mm and crosshairs

- PB.5045 Measuring magnifier 7x. Evepiece Ø 18 mm. Field of view 24 mm. 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 MICROSCOPES

- PB.5008 Measuring microscope 20x with LED illumination. Measuring scale 7.2 mm with 0.1 mm graduation PB.5010 Measuring microscope 40x with LED illumination. Measuring scale 3 mm with 0.05 mm graduation
- PB.5012 Measuring microscope 60x with LED illumination. Measuring scale 1.75 mm with 0.02 mm graduation PB.5014 Measuring microscope 100x with LED illumination.

Measuring scale 1.1 mm with 0.01 mm graduation



# refractometers





# refractometers

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

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

REFRACTOMETERS • PAGE 430 ABBE REFRACTOMETER • PAGE 433



refractometers

# handheld and table models

A refractometer is an instrument that measures the refractive index of a liquid or refractive material such as sugar concentrations in fruits, juices, soft drinks, energy drinks, wines or must, liquors, jams, honey, industrial lubricants, antifreeze, ethanol, battery acids, salt, propylene glycol, ethylene glycol solutions

A few drops of the liquid that needs to be examined are gently deposited on a measuring prism and covered with a cover-glass. The rays of the light source (ambient light, built-in LED light source or external cold-light source) will be bent (refracted) in function of the composition of the liquid under observation This results in a shadow line between a dark and a light portion. The measured value can be directly read through a focusable eyepiece on a refraction index scale and/or on a specific built-in scale(s) of the refractometer in Brix, Oechsle, Babo units or % volume, specific gravity, protein in serum or in °C

Euromex offers portable or handheld refractometers, analogue or digital and laboratory Abbe refractometer products used in wine making, distilling, food processing, canning, beekeeping, brewing, pharmaceutical, manufacturing, machining, automotive industries

Most of the refractometers have also an A(utomated) T(emperature) C(ompensation) mechanism in order to compensate for temperature variations. Calibration can be verified with a calibration fluid (in most cases distilled water) and adjusted by a screw if needed

Application	Art no	Pana		Accuracy	Remarks	ATC	Handheld model	Table model	Analog	Digital
Concentrations of sugar in marmalades,	RF.6190	Range 0-90	Brix	0.2	3 scales: 0-42 / 42-71 / 71-90 Brix	4	•	F	•	
fruits, syrups, wine and monitoring	RF.6510	0 - 10	Brix	0.1						
of oil emulsions	RF.6520	0 - 20	Brix	0.1		•				
	RF.6532	0 - 32	Brix	0.2		•				
	RF.6562	28 - 62	Brix	0.2						
	RF.6580	0 - 80	Brix	0.5		•				
	RF.6582	45 - 82	Brix	0.5		•				
	RF.6592	58 - 92	Brix	0.2						
	RF.6635	0 - 150 0 - 35 0 - 27 0 - 22	°Oe Brix °KMW %	1 0.2 0.2 0.2	Oechsle units Sugar concentration Babo units % volume	•	•		•	
		0 - 37	CNM	0.5						
	RD.6735	0 - 150 0 - 35 0 - 25 0 - 22	°Oe Brix °KMW %	1 0.1 0.1 0.1			•			•
	RD.6645	0 - 45 1.33 - 1.41	Brix R.I.	0.1 0.0003		•	•			•
	RD.6666	0 - 80 1.33 - 1.51	Brix R.I.	0.5 0.0005		•	•			•
	RD.6667	58 - 92 1.43 - 1.52	Brix R.I.	0.2 0.0003		•	•			•
Honey	RF.6642	13 - 25	%	0.1	Honey moisture	•	•		•	
	RF.6644	58 - 92 38 - 43 12 - 27	Brix °Be %	0.5 0.5 1	Water	•	•		·	
Concentration of sugar/alcohol %	RF.6627	0 - 25 0 - 40 0 - 20	% Brix Baume	0.2 0.2 0.2	% volume	•	•		•	
Salinity and concentration of sugar	RF.6610	0 - 100 0 - 10 1.00 - 1.07	‰ Brix R.I.	1 0.1 0.005		•	•		•	
	RF.6628	0 - 28	%	0.2		•	•		•	
	RD.6728	0 - 28 0 - 45 1.33 - 1.41	% Brix R.I.	0.1 0.1 0.0003	% NaCl Only for sugar/salt	•	•			•
Clinical applications Proteins	RF.6612	0 - 12 1.00 - 1.05 1.333 - 1.360	g/dl sg R.l	0.2 0.002 0.0003	Proteins in serum Urine specific gravity	•	•		•	
	RF.6614	2 - 14 1.00 - 1.06 1.00 - 1.06	g/dl sg sg	0.1 0.001 0.001	Proteins in serum Urine specific gravity (dog) Urine specific gravity (cat)	•	•		•	

Application	Art no	Range		Accuracy	Remarks	ATC	Handheld model	Table model	Analog	Digital
	RD.6712	0 - 12 1.00 - 1.05 1.33 - 1.39	g/dl sg R.I.	0.1 0.001 0.0001	Proteins in serum Urine specific gravity		•			•
	RD.6714	0 - 14 0 - 14 1.00 - 1.06 1.00 - 1.06 1.33 - 1.39	g/dl g/dl sg sg R.I.	0.1 0.1 0.001 0.001 0.0001	Proteins in serum (dog) Proteins in serum (cat) Urine specific gravity (dog) Urine specific gravity (cat)		•			•
Battery Acid/Coolant	RF.6650	1.10 - 1.40 -50 / 0 -50 / 0 -40 / 0	sg ℃ ℃	0.01 5 5 10	Battery fluids Ethylene glycol G13 Propylene glycol G11/12 windshield washer fluid	•	•		•	
	RD.6730	1.0 - 1.50 -50 / 0 -50 / 0 -40 / 0	sg ℃ ℃	0.01 0.5 0.5 0.5	Battery fluids Ethylene glycol G13 Propylene glycol G11/12 windshield washer fluid	•	•			•
AdBlue/Urea	RF.6652	0 - 40	%	0.2		•	•		•	
Identification of precious stones	RF.6381	1.30 - 1.81	R.I.	0.01				•	•	

# ACCESSORIES AND SPARE PARTS

- RF.5295 Test slide 78.8 Brix for calibration of RF.5190
- **RF.5385** 5 ml immersion nD 1.65 liquid for RF.5381

   and RF.6381
- LE.5209 20 W 12 V cold light source with single fiber light conductor (for Abbe refractometer 98.490)
- **98.492** Thermometer 0-50° C (for Abbe refractometer 98.490)
- 98.496 Calibration slide nD 1.5163 (for Abbe refractometer 98.490)



RF.6381



# 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

#### 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		

The Abbe refractometer can be connected to a water bath for measuring at a controlled temperature. During the use of this type of refractometer the use of a cold light source such

as the LE.5209 is recommended. This Abbe table refractometer has scales for measurement of sugar concentrations and refractive indices. Delivered with carrying case, digital thermometer, calibration plate, adjusting tool and with 0.5 ml calibration liquid

98.490



# polarimeters & spectroscopes





Polarimeters are suitable for fast and accurate measurements of sugars, glucose, perfume, chemical substances and medical drugs. Equipped with a Glan Thomson prism and Laurent Quartz plate, a built-in 230 V 589.3 nm sodium lamp or a high-power LED with 589.3 nm filter

Polar scale, range ± 180° with 0.1° readings. Supplied with observation tubes of 100 mm and 200 mm. Bright light measuring field permits reading with accuracy of 0.1° with aid of Vernier



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	•		

99.400-LED

# HIGHLIGHTS

The polarimeters are delivered with 100 and 200 mm observation tubes

Equipped with a built-in 230 V 589.3 nm sodium lamp or high-power LED with 589.3 nm filter Fast and accurate

### ACCESSORIES FOR 99.400

99.410Measuring tube, 100 mm long99.415Measuring tube, 200 mm long99.430Cover glass for measuring tube Ø 15 mm99.431Rubber ring (for 99.430)

99.197 Spare sodium 589.3 nm lamp

# polarimeters & spectroscopes

A polarimeter measures the rotation angle of polarized light traveling through an optically active substance. The rotation angle of the polarization plane of linear polarized light is different for each optical active substance as described in the Law of Biot

Polarimetry is a non-destructive test method for measuring optical activity of organic and inorganic substances. It is very useful to analyze expensive non-reproducible samples. Polarimeters are extensively used for quality and process control in research laboratories in the chemical and food industry Spectroscopes are used to visualize the light spectrum of light sources

# **SPECTROSCOPES**

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



# handheld spectroscopes SP.5200

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



- 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.5155

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

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



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

# SP.5150

Handheld spectroscope with adjustable slit from 0 tot 1 mm

Weight

92

Adjustable

0-1 mm

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

Dimensions

90 x18 mm Ø



# SP.5100

MODEL

SP.5150

## Handheld spectroscope with fixed slit

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

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

C-F 7°

60 mm

SP.5100

a euromex

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



#### UNIVERSITY LABS FIELD OF APPLICATION

# **RECOMMENDED MODELS**

• embryology	Study of gametes, embryos and foetuses	BioBlue.Lab, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series
• entomology	Study of insects as branch of zoology. Identification and classification of beetles, flies, termites, moths and butterflies, bees, ants, wasps	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series, MacroZoom
• environmental	Monitoring of environmental conditions such as water, atmosphere, ecosystems, soil and pollution	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series
• fluorescence	Study of living and non living materials with the help of fluorescence markers (fluorochromes)	iScope® (fluorescence), Oxion (fluorescence), Delphi-X Observer (fluorescence), Oxion Inverso (fluorescence), bScope® (fluorescence), DZ series
<ul> <li>food and beverages</li> </ul>	Quality and safety controls, before, during and after the production of food and beverages	BioBlue.Lab, bScope®, iScope®, Oxion
Forensic anthropology and archeology, forensic botany and entomology		BioBlue.Lab, iScope <sup>®</sup> , iScope <sup>®</sup> (materials and polarization), Oxion, Oxion (materials), Oxion Inverted, Oxion Inverted (materials), NexiusZoom, DZ series, Z series
• genetics	Study of genes, heredity in living organisms including bacteria, plants, animals and humans	iScope®, Oxion, Delphi-X Observer, DZ series
• geology, mineralogy	Earth Science; Study of solids, rocks and processes Identification and classification of rocks and minerals	iScope® (materials), Oxion (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series, MacroZoom
• geology, petrology	Identification by means of petrographic microscopy	iScope® (polarization), Delphi-X Observer (polarization), StereoBlue, NexiusZoom, DZ series
• glass industry	Quality control, before, during and after the production of glass and coatings	iScope® (materials), Oxion (materials), Oxion Inverso (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series
• hematology	Study and diagnosis, treatment and prevention of diseases of the blood	iScope®, bScope® (darkfield), iScope® (darkfield), Oxion, Oxion (darkfield)
<ul> <li>histopathology</li> </ul>	Microscopic examination of tissue, diagnosis of diseases	iScope®, 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
<ul> <li>in vitro fertilization</li> </ul>	In vitro fertilization IFV. Quality control of collected egg and sperm	StereoBlue, NexiusZoom, DZ series, Z series
• marine Biology	Study of organisms living in the ocean or seas as branch of biology	bScope®, BioBlue.Lab, iScope®, Oxion
mechanics	Manufacturing and quality inspection of mechanical parts	Delphi-X Observer (materials), iScope® (materials), Oxion (materials), Oxion Inverso (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series, MacroZoom
• metallurgy	Manufacturing and quality inspection of metallic elements, intermetallic compounds and alloys	Delphi-X Observer (materials), iScope® (materials), Oxion (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series, MacroZoom
• microbiology	Study of microscopic uni-, multi- or acellular small organisms such as protozoa, algae, bacteria and more	iScope®, Oxion, StereoBlue, NexiusZoom, DZ series
• mycology	Study of fungi as branch of biology	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series

#### UNIVERSITY LABS FIELD OF APPLICATION

#### **RECOMMENDED MODELS**

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

448 **a euromex** 



# 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 serie
• cytology	Study of cell structure, function an chemistry. Detection of cellular diseases	Delphi-X Observer, iScope®, bScope®, BioBlue.Lab, Oxion
• dermatology	Study and diagnosis, treatment of skin, nails and hair diseases	iScope <sup>®</sup> , 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
<ul> <li>food and beverages</li> </ul>	Quality and safety controls, before, during and after the production of food and beverages	BioBlue.Lab, bScope®, iScope®, Oxion

# LIFE SCIENCE FIELD OF APPLICATION LABORATORIES

#### **RECOMMENDED MODELS**

• genetics	Study of genes, heredity in living organism including bacteria, plants, animals and humans	Delphi-X Observer, iScope®, Oxion, DZ series
• hematology	Study and diagnosis, treatment and prevention of diseases of the blood	Delphi-X Observer, iScope®, bScope® (dark filed), iScope® (darkfield), Oxion, Oxion (darkfield), iScope®, Oxion
<ul> <li>histopathology</li> </ul>	Microscopic examination of tissue, diagnosis of diseases	Delphi-X Observer, iScope®, Oxion
horticulture	Selective breeding of plants and fruit for production of food	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series, MacroZoom
<ul> <li>histopathology</li> </ul>	Microscopic examination of tissue, diagnosis of diseases	iScope®, Oxion
• in vitro fertilization	In vitro fertilization IVF. Quality control of collected egg and sperm	StereoBlue, NexiusZoom, DZ series, Z series
• marine miology	Study of organisms living in the ocean or seas as branch of biology	iScope <sup>®</sup> , 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 <sup>®</sup> (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

LS

FIELD OF APPLICATION

INDUSTRY

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
<ul> <li>asbestos control</li> </ul>	Research of asbestos fibers, environmental protection during restoration of older buildings	iScope® (asbestos and polarization), NexiusZoom, DZ series, Z series
• automotive	Manufacturing and quality inspection of automotive related parts	iScope® (materials), Oxion Inverso (materials), NexiusZoom, DZ series, Z series
• avionics	Manufacturing and quality inspection of aircraft related parts	iScope <sup>®</sup> (materials), NexiusZoom, DZ series
• biochemistry	Study of chemical processes within living organism. Identification and classification of enzymes and structure of biomolecules	BioBlue.Lab, iScope <sup>®</sup> , 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
<ul> <li>food and beverages</li> </ul>	Quality and safety controls, before, during and after the production of food and beverages	BioBlue.Lab, bScope®, iScope®, Oxion
• forensics	Analysis of scientific evidence. Toxicology, fingerprints, Forensic anthropology and archeology, forensic botany and entomology	BioBlue.Lab, bScope <sup>®</sup> , bScope <sup>®</sup> (materials), iScope <sup>®</sup> , iScope <sup>®</sup> (materials and polarization), Oxion, Oxion (materials), Oxion Inverted, Oxion Inverted (materials), NexiusZoom, DZ series, Z series
• geology, mineralogy	Earth science that study the solid, rocks and processes. Identification and classification of rocks and minerals	iScope® (materials), Oxion (materials), Oxion Inverso (materials), B+ (materials), StereoBlue, NexiusZoom, DZ series, MacroZoom
• geology, petrology	Identification by means of an petrographic microscope	iScope® (polarization)
• glass industry	Quality control, before, during and after the production of glass and coatings	iScope® (materials), Oxion (materials), Oxion Inverso (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series
• horticulture	Selective breeding of plants and fruit for production of food	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series, MacroZoom
• jewelry	Precise manufacturing of very small decorative items such as brooches, rings, bracelets and more	BE-50 LED series, StereoBlue, NexiusZoom, DZ series, Z series

• mechanics	Manufacturing and quality inspection of mechanical parts	iScope® (materials), Oxion (materials), Oxion Inverso (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series, MacroZoom
• metallurgy	Manufacturing and quality inspection of metallic elements, intermetallic compounds and alloys	iScope® (materials), Oxion (materials), Oxion Inverso (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series, MacroZoom
• mining	Extraction of minerals Identification, quantitative and qualitative evaluation of minerals	iScope <sup>®</sup> (materials and polarization), Oxion (materials and polarization), Oxion Inverso (materials), bScope <sup>®</sup> (materials), StereoBlue, NexiusZoom, DZ series
• paper industry	Production of paper related products. Quality inspection	iScope® (materials), Oxion (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series, MacroZoom
• petrochemical	Research and transformation of crude oil and natural gas	iScope® (materials), Oxion (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series
• petrology	Study of the composition and structure of rocks as branch of geology. Identification by means of polarization microscopy	iScope® (polarization), StereoBlue, NexiusZoom, DZ series
• pharmaceutics	Development and production of drugs for medication. Quality assurance and inspection of produced products	iScope® (polarization), StereoBlue, NexiusZoom, DZ series
• plastics	Development and production of plastics and plastic based compounds. Quality assurance and inspection	iScope® (materials), Oxion (materials), Oxion Inverso (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series
• printing industry	Production of relief printing, lithography	iScope® (materials), Oxion (materials), bScope® (materials), AP series, StereoBlue, NexiusZoom, DZ series, MacroZoom
• textile	Development and production of all kinds of textile based products. Quality assurance and inspection	iScope® (materials), Oxion (materials), Oxion Inverso (materials), B+ (materials), AP series, StereoBlue, NexiusZoom, DZ series, MacroZoom
• water treatment	Production of drinking water and wastewater treatment. Quality control and disease prevention	BioBlue.Lab, bScope®, iScope®, Oxion
• wood production	Wood production for construction material, fuel. Quality control	iScope® (materials), Oxion (materials), Oxion Inverso (materials), B+ (materials), AP series, StereoBlue, NexiusZoom, DZ series, MacroZoom



# The Euromex Quality System is certified according to ISO 9001:2015, and ISO 13485:2016 for medical supplies. This 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 by. The content of and all information published in this catalog are provided in good faith as a convenience to you and may be used for information purposes only and at all times in accordance with these terms of access

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

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

Euromex is a registered trademark of Euromex Microscopen by

© 2025 Copyright Euromex Microscopen bv

#### EUROMEX HEADQUARTERS

**Euromex Microscopen bv** Typograaf 8 • 6921 VB Duiven • The Netherlands +31 (0) 26 323 22 11 • info@euromex.com

#### SALES OFFICE WORLD WIDE

Euromex Microscopen Spain, S.L Carretera de Barcelona 88, Entresuelo Esc. B - Local 9 • 08302 Mataró, Spain +34 (0) 937 415 609 • info@euromex.com

## SALES OFFICE NORTH AMERICA Globe Scientific 400 Corporate Drive • Mahwah, NJ 07430 • USA

1 201-599-1400 • usa@euromex.com

# www.euromex.com



