

MICROSCOPES FOR EDUCATION, LIFE SCIENCE AND INDUSTRY

PART 1 MICROSCOPES FOR EDUCATIONPART 2 MICROSCOPES FOR LIFE SCIENCEPART 3 MICROSCOPES FOR INDUSTRY



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euromex MICROSCOPE COLLECTION 2020

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EDUCATION | BIOLOGICAL MICROSCOPES MicroBlue • EcoBlue • BioBlue

EDUCATION | STEREO MICROSCOPE EduBlue • StereoBlue NexiusZoom • AP series

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

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

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

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 • Adapte

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 • Oxion Inverso

INDUSTRY | DIGITAL SOLUTIONS

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

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

OTHER OPTICAL PRODUCTS

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

about euromex

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

The corporate office is based in Arnhem, The Netherlands. A facility with a 2,000 m² conditioned logistics warehouse, an opto-mechanical workshop, an R&D department and a high-level quality control department

Around the world, Euromex operates in more than 120 countries through distributors, resellers and agents. A wide variety of customers such as schools and educational institutes, clinical and research laboratories and a broad range of industrial customers are using Euromex microscopes Euromex Microscopen bv is a subsidiary of **Euromex Optics Group bv**, a group holding company with active subsidiaries in the field of optical instruments and high level optical and opto-mechanical components

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

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

choose the right **microscope**

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

SEE PAGE 398

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

SEE PAGE 406

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stereo microscopes

Stereo microscopes of Euromex are designed to provide high resolution three-dimensional images. These high-end microscopes are robust, ergonomic and enable long, fatigue-free

working sessions in both laboratory and industrial environments

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

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nexiuszoom

the new standard in stereo microscopy

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

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

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NexiusZoom **STEREO MICROSCOPES FEATURED**

NexiusZoom, -EVO and -ESD

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

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

The standard NexiusZoom is supplied with a pair of HWF

10x/22 mm eyepieces. The NexiusZoom EVO is supplied with

Binocular or trinocular heads with 45° inclined tubes. Both

distance adjustable between 54 mm and 75 mm. Trinocular

NexiusZoom EVO models are now equipped with click-stops

head is supplied with a fixed light path beam splitter. The

The standard NexiusZoom is supplied with a 1:6.7 zoom

objective with 0.67x to 4.5x magnifications, a field of view from 33 mm to 4.9 mm. Working distance 110 mm

NZ.1902-AP

eyepieces with ± 5 diopter adjustments. Interpupillary

- **Ergonomic stands**
- **3 W LED illuminations**
- Configurations up to 220x magnification
- ESD safe models available

SPECIFICATIONS

a pair of HWF 10x/23 mm eyepieces

10 Years warranty

EYEPIECES

HEAD

OBJECTIVES



The NexiusZoom EVO is supplied with a 1:8.4 zoom objective with 0.65x to 5.5x magnifications, a field of view from 35.4 mm to 4.2 mm. Working distance 110 mm

AUXILIARY LENSES

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

NZ.1903-S NZ.1903-P

NZ.1903-U ESD







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POLARIZATION

The NexiusZoom and NexiusZoom EVO can be supplied with an optional 360° rotatable circular stage with built-in polarization filter and/or an optional rotatable analyzer filter in mount to be screwed under the objective

STAND

- Ergonomic pillar or rack & pinion stand with 3 W incident and 3 W transmitted LED illuminations (-P and -S stands)
- Ergonomic pillar stand with two 3 W gooseneck type incident LED illuminations on each side and a 3 W transmitted LED illumination (-PG stand)
- Ergonomic pillar stand with rotating mirror and 3 W LED transmitted and incident illuminations (-M stand)
- Ergonomic universal or boom stands, without illumination (-U, -B and BC stands)
- Articulated arm stand for table mounting or with heavy desktop stand, both without head holder, without illumination (-A and -AP stands)

All pillar and rack & pinion stands are supplied with two object clamps. Alloy metal cast, hardened coating. More illumination options see chapter 10 (Accessories)

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



ILLUMINATION

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

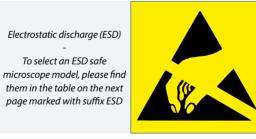
ESD SAFE MICROSCOPES

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

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

PACKAGE CONTENT

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



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

MODELS	Bino	Trino	Pillar stand	Rack & pinion stand	Universal stand	Boom stand on heavy base plate	Boom stand on table clamp	Articulated arm stand on table clamp	Articulated arm stand on heavy base plate	Gooseneck dual LED	Mirror LED	Weight (kg)
NZ.1902-P	•		•									5.0
NZ.1902-PG	•		•							•		5.1
NZ.1902-M	•		•								•	4.9
NZ.1902-S	•			•								4.9
NZ.1902-U	•				•							15.6
NZ.1902-B	•					•						22.1
NZ.1902-BC	•						•					10.5
NZ.1902-A	•							•				8.6
NZ.1902-AP	•								•			20.7
NZ.1903-P		•	•									5.2
NZ.1903-PG		•	•							•		5.3
NZ.1903-M		•	•								•	5.1
NZ.1903-S		•		•								5.1
NZ.1903-U		•			•							15.7
NZ.1903-B		•				•						22.2
NZ.1903-BC		•					•					10.6
NZ.1903-A		•						•				8.7
NZ.1903-AP		•							•			20.8

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

MODELS	Bino	Trino	Pillar stand	Rack & pinion stand	Universal stand	Boom stand on heavy base plate	Boom stand on table clamp	Articulated arm stand on table clamp	Articulated arm stand on heavy base plate	Gooseneck dual LED	Mirror LED	Weight (kg)
NZ.1702-P	•		•									5.0
NZ.1702-PG	•		•							•		5.1
NZ.1702-M	•		•								•	4.9
NZ.1702-S	•			•								4.9
NZ.1702-U	•				•							15.6
NZ.1702-B	•					•						22.1
NZ.1702-BC	•						•					10.5
NZ.1702-A	•							•				8.6
NZ.1702-AP	•								•			20.7
NZ.1703-P		•	•									5.2
NZ.1703-PG		•	•							•		5.3
NZ.1703-M		•	•								•	5.1
NZ.1703-S		•		•								5.1
NZ.1703-U		•			•							15.7
NZ.1703-B		•				•						22.2
NZ.1703-BC		•					•					10.6
NZ.1703-A		•						•				8.7
NZ.1703-AP		•							•			20.8

EREO MICROSCOPES

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		ny 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	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	73,3	4	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	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	36,7	8	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	24,4	12	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	18,3	16	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	12,2	22.5	9.8	33.8	6.5	45.0	4.9	67.5	3.3	90.0	2.4

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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		ary lens 9 183 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
0.65	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
0.7	2,1	109,5	2,8	82,1	3.5	65.7	5.3	43.4	7.0	32.9	10.5	21.9	14.0	16.4
0.8	2,4	95,8	3,2	71,9	4.0	57.5	6.0	38.3	8.0	28.8	12.0	19.2	16.0	14.4
1.0	3	76,7	4	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	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	38,3	8	28,8	10.0	23.0	15.0	15.3	20.0	11.5	30.0	7.7	40.0	5.8
3.0	9	25,6	12	19,2	15.0	15.3	22.5	10.2	30.0	7.7	45.0	5.1	60.0	3.8
4.0	12	19,2	16	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	12,8	22.5	10.2	33.8	6.8	45.0	5.1	67.5	3.4	90.0	2.6
5.5	16,5	13,9	22	10,5	27.5	8.4	41.3	5.6	55.0	4.2	82.5	2.8	110	2.1





ACCESSORIES AND SPARE PARTS

HEADS & EYEPIECES

- NZ.5302NexiusZoom binocular head with eyepiecesNZ.5303NexiusZoom trinocular head with eyepiecesNZ.6010Pair of HWF 10x / 22 mm eyepiecesNZ.6010-CHWF 10x/22 mm eyepiece only with crosshairsNZ.6010-CHWF 10x/22 mm eyepiece only with 10/100
micrometer and crosshairsNZ.6015Pair of HWF 15x / 16 mm eyepiecesNZ.6020Pair of HWF 20x / 12 mm eyepieces
- NZ.6110 HWF 10x / 22 mm eyepiece with micrometer
- NZ.6210 Pair of HWF 10x/23 mm eyepieces for NZ EVO
- NZ.6210-C HWF 10x/22 mm eyepiece only with crosshairs for NZ EVO
- NZ.6210-CM HWF 10x/22 mm eyepiece only with 10/100 micrometer and crosshairs for NZ EVO
- NZ.6099 Pair of eyecups



AUXILIARY LENSES

 NZ.8903 Additional 0.3x lens for NZ. WD 287 mm. Only suitable for A, AP, U, B, BC and M stands
 NZ.8904 Additional 0.4x lens for NZ. WD 220 mm. Only suitable for P, PG, A, AP, U, B, BC nd M stands
 NZ.8905 Additional 0.5x lens for NZ. WD 183 mm. Only suitable for P, PG, A, AP, U, B, BC nd M stands

- NZ.8907 Additional 0.75x lens for NZ. WD 105 mm. Only suitable for P. PG, A. AP. U. B. BC nd M stands
- NZ.8915 Additional 1.5x lens for NZ. WD 53 mm
- NZ.8920 Additional 2.0 lens for NZ. WD 34 mm

STANDS

- NZ.9000 Ergo pillar stand without illumination
- NZ.9005 Ergo pillar stand with adjustable transmitted 3 W LED illumination
- NZ.9010 Ergo rack & pinion stand with incident and transmitted 3 W LED illuminators
- NZ.9015 Ergo pillar stand with incident and transmitted 3 W LED illuminators
- NZ.9018 Ergo pillar stand with two 3 W gooseneck type incident LED illuminations on each side and a 3 W transmitted LED illumination
- NZ.9020 Universal one-arm stand without NZ head holder
- NZ.9025 Black universal stand with table clamp without NZ head holder
- NZ.9027 Black universal stand with heavy baseplate without NZ head holder
- NZ.9030 Universal double-arm boom stand without NZ head holder
- NZ.9032 Universal two-arm stand with table clamp without NZ head holder
- NZ.9042 Stand with rotating mirror and indirect transmitted LED illumination
- NZ.9090 NexiusZoom head holder (for NZ.9020, NZ. 9030 and NZ. 9032)

HEAD HOLDERS

- NZ.9081 NZ head holder 76 mm for NZ and black universal stand NZ.9025/NZ.9027
- NZ.9090 NZ head holder for NZ.9020/9030/9032 pillar stands
- NZ.9095 NZ head holder with fine and coarse adjustment for NZ.9020/9030/9032 pillar stands. Only available with new microscopes
- WD = Working distance
- NZ = NexiusZoom

ILLUMINATION

- LE.5207 Multi-functional dual 3 W LED adjustable light source. Equipped with two flexible gooseneck arms with LED illuminator
- LE.5212 Euromex illumination station with two independently controlled goosenecks, a ring light and a transmitted stage illuminator
- LE.5260 Interchangeable high power (standard) white 6,500K light guide for NZ.9018/LE.5207/LE.5212, 1 pc
- LE.5261 Interchangeable high power 365 nm flexible arm for NZ.9018/LE.5207/LE.5212, 1 pc
- LE.5262 Interchangeable high power 395 nm flexible arm for NZ.9018/LE.5207/LE.5212, 1 pc
- LE.5263 Interchangeable high power 420 nm flexible 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.5224Aspherical focusing lens for mounting in LE.5222More illumination options, see chapter 11

POLARIZATION ATTACHMENTS

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

DARKFIELD ATTACHMENT

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

STAGES

 NZ.9505
 Mechanical 180 x 155 mm X-Y stage with 75 x

 75 mm translation and transparent glass plate

 AE.5168-NZ
 Heating stage with PID controller up to 50°C.

 Only with the purchase of a new microscope

CAMERA ACCESSORIES

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

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

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

 AE.5025
 T2 adapter for Nikon D SLR digital camera

 AE.5040
 T2 adapter for Canon EOS SLR digital camera

 Other T2 adapters on request

MISCELLANEOUS

 NZ.8950
 Protection glass for NexiusZoom head

 NZ.9570
 Pair of object clamps for stage

 NZ.9572
 Adjustable GEM object clamp for -P, -PL and -S stands

DISPOSABLES

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

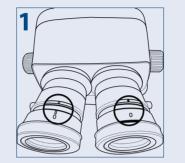


• The LE.5212 in two different configurations

how to set up a stereo microscope

QUICK 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

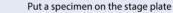


Turn the diopter adjustment rings

of both eyepieces to position "0"

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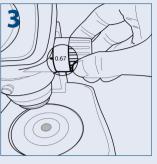








Rotate the diopter adjustment rings of the left and right eyepiece to bring the specimen into focus



Turn the zoom adjustment knob to the lowest magnification



Rotate the focus adjustment knob to bring the specimen into focus

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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





Rotate the focus adjustment knob to bring the specimen into focus



Turn the zoom adjustment knob to the lowest magnification



NZ.9950

NZ.9956

NZ.9958

NZ.9983

AE.1112

Standard opaque stage plate

Standard glass object plate, opaque

3 W LED replacement unit for NZ,

Object micrometer 50 mm (divided in

500 parts on glass slide 76 x 26 mm)

Black/white stage plate

NZ.9983-R 3 W LED replacement unit for NZ,

incident illumination

transmitted illumination

MICROSCOPES FOR GEMOLOGY

NexiusZoom

FEATURED

NexiusZoom

The specialized backwards tilting stand

of the NexiusZoom and NexiusZoom

applications offers 30 W halogen

transmitted illumination towards

the specimen at obligue angles.

The stand is also available with

This enables the examination of your

gems in perfect darkfield conditions.

1 W LED or a 7 W fluorescent incident

illumination for brightfield contrast

EVO stereo microscopes for gemology

for gemology

NZ.1902 with backwards tilting stand

SPECIFICATIONS

EYEPIECES

The standard NexiusZoom is supplied with a pair of HWF 10x/22 mm eyepieces The NexiusZoom EVO is supplied with a pair of HWF 10x/23 mm eyepieces

HEAD

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

OBJECTIVES

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

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

••

NZ.1902-GEML

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



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 au WD 11	•	Auxiliary lens 0.75x WD 105 mm		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	
0.67	6.7	32.8	5.0	43.8	10.1	21.9	13.4	16.4	
0.7	7.0	31.4	5.3	41.9	10.5	21.0	14.0	15.7	
0.8	8.0	27.5	6.0	36.7	12.0	18.3	16.0	13.8	
1.0	10.0	22.0	7.5	29.3	15.0	14.7	20.0	11.0	
1.5	15.0	14.7	11.3	19.6	22.5	9.8	30.0	7.3	
2.0	20.0	11.0	15.0	14.7	30.0	7.3	40.0	5.5	
3.0	30.0	7.3	22.5	9.8	45.0	4.9	60.0	3.7	
4.0	40.0	5.5	30.0	7.3	60.0	3.7	80.0	2.8	
4.5	45.0	4.9	33.8	6.5	67.5	3.3	90.0	2.4	

••

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

Zoom indication	Without auxiliary lens WD 110 mm		Auxiliary lens 0.75x WD 105 mm		Auxiliary 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
NZ.6110	HWF 10x / 22 mm eyepiece with micrometer
NZ.6099	Pair of eyecups

AUXILIARY LENSES

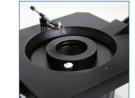
NZ.8907	Auxiliary lens 0.75x. WD 105 mm]
NZ.8915	Auxiliary lens 1.5x. WD 53 mm
NZ.8920	Auxiliary lens 2.0x. WD 34 mm
	Not suitable for NZ.1902-S and NZ.1903-S

CAMERA ACCESSORIES

NZ.9833	C-mount adapter with 0.33x lens for 1/3" cameras
	Suitable for trinocular models
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 ad	lapters on request

MISCELLANEOUS

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



positioning of objects • The variable iris diaphragm is

• The clamp holder allows precise

used for maximizing contrast Brightfield/darkfield switch for

transmitted illumination for

maximum flexibility









StereoBlue

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

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

pillar and universal stands

3 W LED illuminators
Also available with batteries

Built-in ring light

HIGHLIGHTS

Binocular and trinocular models WF 10x/21 mm eyepieces Dual 1x/3x or 2x/4x

Zoom stereo 0.7x to 4.5x objective

Available in ergonomic rack & pinion,

magnification objectives

Ergonomic stands

- Ergonomic carrying grip
- 5 Years warranty



Model with universal stand (SB.1902-U)

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/7 mm or 10.5 mm/5.25 mm
- Working distance 100 mm

- Zoom stereo 0.7x to 4.5x parfocal objective
- Magnification from 7x to 45x
- Field of view 30 mm to 4.7 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 \emptyset 60 mm transparent and black/white stage plates The coarse adjustment is equipped with tension control

The ergonomic universal single arm stand is ideal for viewing large samples or working under the microscope. Comes without illumination. The universal single arm stand can be equipped with the ring illuminators LE.1974 and LE.1973 with respectively 72 or 144 power LEDs controlled in segments, ideal for creating or lifting shades. The stands are alloy metal casted with hardened coating

More illumination options see chapter 11 (Accessories)

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 Job
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 Job

 Bino
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 Incident
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 LED
 Zoom
 Battery
 Job
 Job

SB.1903

ILLUMINATION

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

PACKAGE CONTENT

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



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



MODELS	Binocular	Trinocular	1x/3x objective	2x/4x objective	0.7 - 4.5x zoom	Rack & pinion stand	Pillar stand	Universal stand	30 LED right light	Weight (kg)
SB.1302	•		•			•				3.3
SB.1302-P	•		•				•			4.2
SB.1402	•			•		•				3.3
SB.1402-P	•			•			•			4.2
SB.1902	•				•	•				3.6
SB.1902-P	•				•		•			4.4
SB.1902-U	•				•			•		15.4
SB.1903		•			•	•				3.7
SB.1903-P		•			•		•			4.5
SB.1903-U		•			•			•		15.5
SB.3903		•			•	•			•	3.7
SB.3903-P		•			•		•		•	45

ACCESSORIES AND SPARE PARTS

EYEPIECES

SB.6210Pair of HWF 10x/21 mm eyepiecesSB.6210-CWF 10X/21 mm eyepiece with crosshairsSB.6210-MWF 10X/21 mm eyepiece with micrometer scaleSB.6015Pair of HWF 15x/15 mm eyepiecesSB.6015-CWF 15X/15 mm eyepiece with crosshairsSB.6020Pair of HWF 20x/10 mm eyepiecesSB.6020-CWF 20/10 mm eyepiece with crosshairsSB.6020-BWF 20/10 mm eyepiece with micrometer scaleSB.6020-BPair of HWF 20x/10 mm eyepiecesSB.6020-BWF 20/10 mm eyepiece with micrometer scaleSB.6020-BPair of eyecups

AUXILIARY LENSES

- SB.8903 Auxiliary 0.3x lens for zoom models, working distance 287 mm. Only suitable for boom and articulated stands
- SB.8905 Auxiliary 0.5x lens for zoom models, working distance 179 mm. Only suitable for SB.1902-P, SB.1903-P, SB.1902-U and SB.1903-U
- SB.8907 Auxiliary 0.75x lens for zoom models working distance 105 mm
- **SB.8915** Auxiliary 1.5x lens for zoom models working distance 53 mm. Not suitable for SB.39xx

POLARIZATION ATTACHMENT

- SB.9520Polarization 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.9525360° rotatable analyzer in mountto be screwed under the head

MISCELLANEOUS

rotection glass window
Iniversal single-arm stand without
tereoBlue head holder
lead holder for SB.9020
Darkfield attachment,
nly for –S and –P models
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	3 W LED replacement unit, incident illumination
SB.9983-R	3 W LED replacement unit, transmitted
	illumination
AE.1112	Micrometer 76 x 26 mm slide, 50 mm/50 divisions

CAMERA ACCESSORIES

SB.9850	C-mount adapter with 0.5x lens for 1/2" cameras.
	Only for trinocular models
AE 5130	Universal CLD compare adapter with 24 projection

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

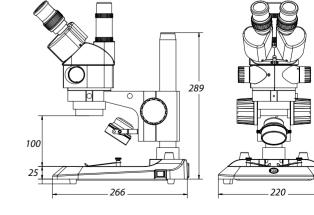
DISPOSABLES

PB.5274

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

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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 305 (h) x 330 (w) x 285 mm (d) | 6.0 kg **DZ.1105 / DZ.1605 / DZ.1805** 305 (h) x 330 (w) x 285 mm (d) | 5.2 kg For weight of other products see table 'Mode

Bino	OO Trino	360°	Incident	Transmitted	Polarized
Infinity	LED	HG-HBO	Zoom	100-240V	Warranty

HIGHLIGHTS

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

SPECIFICATIONS

EYEPIECES

Pair of EWF 10x/22 mm eyepieces

HEAD

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

CENTRAL ZOOM UNIT

Three central zoom units are available:

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

COMMON MAIN OBJECTIVE

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



Customizea fluorescence model

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

STAND

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

ILLUMINATION

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

PACKAGE CONTENT

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

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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

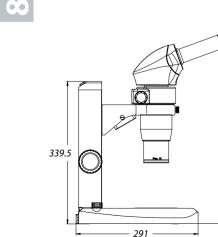
MODELS	Binocular 20° head	Binocular Ergo 0 to 35° tilting	Magnifications from 8 to 50x	Magnifications from 8 to 64x	Magnifications from 8 to 80x
DZ.1100		•			•
DZ.1105	•				•
DZ.1800		•		•	
DZ.1805	•			•	
DZ.1600		•	•		
DZ.1605	•		•		

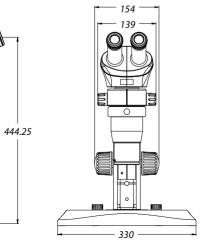
All equipped with EWF 10x/22 mm eyepieces

MAGNIFICATIONS AND FIELDS OF VIEW FOR STANDARD CONFIGURATIONS

				0.5x Objective WD 126 mm		• •		2.0x Objective WD 33 mm	
MOD	DELS	S	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
	ų	2	1.5x	7.5x	29.3	15x	14.6	30x	7.3
	202120 / 002120 /	710	2.0x	10x	22	20x	11	40x	5.5
۲ ۲	ŝ		3.0x	15x	14.6	30x	7.3	60x	3.6
718(1012		4.0x	20x	11	40x	5.5	80x	2.7
/DZ1105 DZ1800/DZ1805		Z	5.0x	25x	8.8	50x	4.4	100x	2.2
Z11	100		6.0x	30x	7.3	60x	3.6	120x	1.8
0/0	1		6.4x	32x	6.8	64x	3.4	128x	1.7
DZ1100/DZ1105			7.0x	35x	6.3	70x	3.1	140x	1.5
DZ			8.0x	40x	5.5	80x	2.75	160x	1.4

All equipped with EWF 10x/22 mm eyepieces





BUILD YOUR OWN MICROSCOPE

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

CENTRAL ZOOM UNITS

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

HEADS

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

EYEPIECES

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



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
 Plan apochromatic common main objective

 DZ.4010
 Plan apochromatic common main objective
 - 1.0x. WD 78 mm

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

STANDS

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

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

ACCESSORIES/SPARE PARTS

POLARIZATION ATTACHMENTS

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

Other fluorescence filters available on request

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



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

CAMERA ACCESSORIES

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

MISCELLANEOUS

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

DISPOSABLES

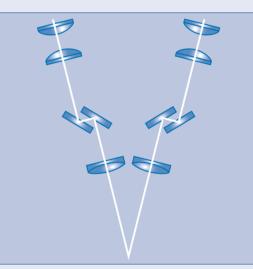
- AE.1385 100 W HBO mercury vapor bulb for fluorescence
- PB.5245 Lens cleaning paper, 100 sheets per pack
- Isopropyl alcohol 99% (200 ml) PB.5274
- PB.5275 Cleaning kit: lens cleaning fluid, lint free lens tissue, brush, air blower, cotton swabs

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

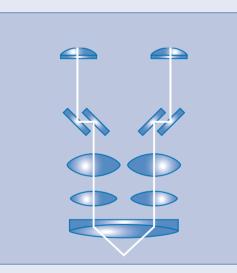
- Low cost
- Compact
- Magnifications⁽¹⁾ up to approximately 100x
- Good quality
- Production environment

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

⁽²⁾ With 10x eyepieces

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

common main objective (CMO) principle



Two parallel optical trains share a common main objective and

Allows modular systems (infinity optical system)

• Enables higher magnifications⁽²⁾, up to 300x

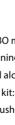
generate two images under a small angle

Upgradeable⁽³⁾

· High imaging quality

Research and development labs

generate two images of the object



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 a reliable quality inspection of industrial products.

Certain components are also integrated in machines.

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

ZE.1654 ST.1720

	Bino	CO Trino	360°	Incident	Transmitted
Polarized		Halogen	Zoom	100-240V	Warranty

ST.1720, ZE.1654

and LE.5210, LE.5239

TAT

Z series

HIGHIIGHTS

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



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

SPECIFICATIONS

EYEPIECES

Pair of SWF 10x/23 mm eyepieces

HEAD

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

ZOOM MAGNIFICATION OBJECTIVES

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

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

STANDS WITHOUT ILLUMINATION

ST.1710 Pillar stand with ST.1790 head holder. Pillar height 210 mm, diameter Ø 20 mm Dimensions 250 (h) x 150 (w) x 240 mm (d) Pillar ergonomically flat stand with ST.1790 head holder. Pillar height 213 mm, diameter Ø 20 mm. Dimensions 258 (h) x 330 (w) x 306 (d)

STANDS WITH ILLUMINATION

ST.1718

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

min/max height 240-290 mm

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



BOOM STANDS

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

HEAD HOLDERS

Other optional head holders for boom stands

- **ST.1790** Head holder with coarse adjustment*
- **ST.1796** Head holder with coarse and fine adjustment* Head holder with coarse adjustment and opening for one fiber light guide*
- **ST.1792** Head holder with coarse adjustment and opening for one fiber light guide*[
- **ST.1794** Orientable head holder with coarse adjustment and opening for one fiber light guide**
- **ST.1798** Orientable head holder with coarse and fine adjustment and opening for one fiber light guide**
- * Not suitable for boom stands ST.1720 and 65.980/65.983 ** Only suitable for boom stand ST.1720 All head holders have an internal diameter of 84 mm and a friction adjustment

STAGE

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

FOCUSING

Coarse adjustment and friction adjustment for head holders for ST.1790, ST.1794, ST1796. The head holders ST.1796 and ST.1798 are also equipped with a fine focusing adjustment

PACKAGE CONTENT

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

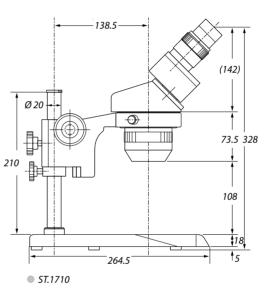


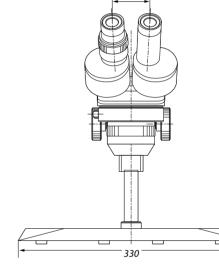
ST.1718 🌑

STANDS MODELS Column (mm) Column (mm) Column (mm)

	(mm)	(mm)					
ST.1710	210	20		240 x 150	258	ST.1790	
ST.1718	213	20		330 x 306	285	ST.1790	
ST.1720	610	29		780 x 270	650	ST.1794	
ST.1735			•	240 x 160	290		3 W LED
ST.1740			•	240 x 160	290		10 W Hal
ST.1770	360	29		500 x 580	400	ST.1790	
65.980/65.983			•	Ø 1000 *	0/295	65.983	

* Length with the two arms totally extended





54~74

Head holde

Height (mm

60

ZOOM STEREO HEADS

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

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

ACCESSORIES AND SPARE PARTS

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

MICROMETER EYEPIECES (with adjustable lens)

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

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MICROMETER SLIDE

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

ADDITIONAL LENSES

(for ZE.1659)

AE.1850 Additional 0.7x lens. WD 233 mm AE.1822 Additional 0.57x lens. WD 300 mm

ADDITIONAL LENSES

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

- AE.1855 Additional 0.3x lens. WD 250 mm. Suitable with ST.1720, ST.1770, ST.1780, ST.1785 and 65.980 stands
- AE.1870 Additional 0.44x lens. WD 180 mm. Suitable with ST.1715, ST.1720, ST.1770, ST.1780, ST.1785 and 65.980 stands
- AE.1856 Additional 0.5x lens. WD 150 mm. Suitable with ST.1740. Maximum object size is 15 mm AE.1857 Additional 0.75x lens. WD 97 mm Additional 1.5x lens. WD 50 mm AE.1858

Additional 2.0x lens. WD 34 mm

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ADDITIONAL LENSES

(for ZE.1629)

AE.1859

AE.1805	Additional 0.3x lens. WD 330 mm.	
	Suitable with ST.1720, ST.1770, ST.1780, ST.1785	
	and 65.980 stands	
AE.1806	Additional 0.5x lens. WD 198 mm.	
	Suitable with ST.1715, ST.1720, ST.1770, ST.1780,	
	ST.1785 and 65.980 stands	
AE.1807	Additional 0.75x lens. WD 125 mm	
AE.1808	Additional 1.5x lens. WD 62 mm	
AE.1809	Additional 2.0x lens. WD 42 mm	

ADDITIONAL LENSES

(for ZE.1657)

- AE.1816 Additional 0.35x lens. WD 250 mm
- AE.1817 Additional 0.5x lens. WD 174 mm
- AE.1818 Additional 1.5x lens. WD 57 mm

PROTECTION WINDOWS

- (to be screwed under the objectives)
- AE.1845 Protection window for all heads of ZE series except ZE.1659
- AE.1825 Protection window for ZE.1659. Not suitable with additional lenses

DARKFIELD

- AE.1878 Darkfield attachment for ST.1740
- AE.1879 Iris diaphragm suitable with AE.1878
- AE.1871 Object table for AE.1878 with ST.1760 stand. Suitable to observe contact lenses or gems with an object slide

POLARIZATION

- AE.1890 Analyzer, in rotatable mount. Not suitable with ZE.1659
- AE.1891 Polarizer in mount. Suitable with ST.1740 and ST.1760 AE.1892 Retardation plate gypsum 1st order red.

Suitable with polarizer AE.1891

MECHANICAL STAGES

- Plain stage 145 x 115 mm with 75 x 50 mm AE.1876 X-Y mechanical stage on ball bearings. Horizontal coaxial adjustment. Double Vernier with 0.1 mm graduations. Only with ST.1710, ST.1715 and ST.1740 AE.1896 Stage 145 x 115 mm with central glass object plate and 75 x 50 mm X-Y mechanical stage on ball bearings. Horizontal coaxial adjustments. Double Vernier with 0.1 mm graduations. Only with ST.1740 and ST.1760
- Large stage 170 x 155 mm with 100 x 105 mm AE.1877 X-Y mechanical stage on ball bearings. For ST.1710, ST.1715 and ST.1740
- AE.1950 Large 390 x 390 mm stage with 360 x 360 mm X-Y mechanical stage. Only for ST.1720, ST.1770, ST.1780 and ST.1785

OBJECT STAGES

- Round object high-profile table with frosted AE.1884 glass filter. Interchangeable with darkfield ST.1760
- AE.1885 Round object low-profile table with frosted glass filter. Interchangeable with darkfield ST.1740

OBJECT PLATES - Ø 94 MM

AE.1880	Acrylic translucent object plate
AE.1881	Glass transparent object plate
AE.1882	Acrylic black/white object plate

FILTERS - Ø 40 MM

AE.1897	Frosted glass filter
AE.1898	Blue filter

OBJECT HOLDER

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

SPARE BULB AND FUSES

SL.1868	30 W 230 V incandescent bulb for ST.1750 stand
SL.1869	10 W 6 V halogen bulb for ST.1740 illumination
AE.5252	Fuses for ST.1740 stand. Per 10 pieces

CAMERA ACCESSORIES

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

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

- DC.1320 Projection 1x objective with C-mount
- DC.1324 Projection 0.5x objective with C-mount for cameras with 1/2" sensor. To be inserted into a 23.2 mm tube
- DC.1326 Projection 0.33x objective with C-mount for cameras with 1/3" sensor. To be inserted into a 23.2 mm tube

Universal SLR camera adapter with 2x projection					
lens for 23.2 mm tubes. Needs T2 adapter					
T2 adapter for Nikon D digital SLR cameras					
T2 adapter for Canon EOS digital SLR cameras					
Other T2 adapters on request					
WD = working distance					



BE-50

BE.1812

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STEREO MICROSCOPE

BE series HIGHLIGHTS

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

SPECIFICATIONS

BE.7405 / BE.7410 / BE.7420

Pair of WF 10x/20 mm

EYEPIECES

HEAD

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

STAND

Stable overhanging heavy base stand with pillar

FOCUSING ADJUSTMENT Coarse adjustment with tension control

ILLUMINATION

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

ACCESSORIES AND SPARE PARTS

BE.6005	Pair of HWF 5x/22 mm eyepieces
BE.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
BE.6099	Pair of eyecups

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	•

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

· Comes with 0.5x fixed magnification objective,

Additional 1x fixed magnification objective available,

· Additional 2x fixed magnification objective available,

Other magnifications available with optional eyepieces up to 40x

magnification 5x, field of view 40 mm.

magnification 10x, field of view 20 mm.

magnification 20x, field of view 10 mm.

Working distance 250 mm

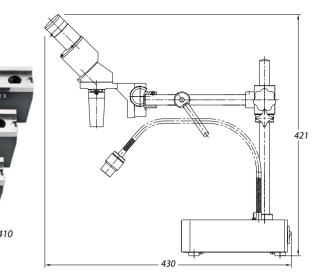
Working distance 230 mm

Working distance 119 mm

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

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OBJECTIVES



8



BE-50 series

this stereo microscope

Stereo microscopes of the BE-50 series

distance are the main characteristics of

soldering, quality inspection and so on

Magnifications vary from 2.5x to 40x

with interchangeable objectives mounted

in a slider are intensively used in the industry.

The high depth of field and the extra large working

These characteristics allow users to work under the

A 44 cm flexible arm LED light source makes sure

heavy metal base makes this system very stable.

the object can be illuminated from any angle. The

microscope with ease. Ideal for jewelers, watchmakers,

STEREO MICROSCOPES

P series

Binocular models

HIGHLIGHTS

- 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 ۰ 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



P-10 (60.100)

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STAND

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

ILLUMINATION

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

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

P series

5x to 80x can be achieved

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

The microscopes of the P series are specifically

designed for industrial purposes and come in

By using optional eyepieces magnifications from

10/30x or 20x/40x magnification versions.





60.100/60.200

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

AE.1112

PB.5245

PB.5274

PB.5275

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

Micrometer slide, 50 mm/50 divisions

Isopropyl alcohol 99% (200 ml)

Lens cleaning paper, 100 sheets per pack

Cleaning kit: lens cleaning fluid, lint free lens tissue, brush, air blower and cotton swabs

ACCESSORIES AND SPARE PARTS

EYEPIECES

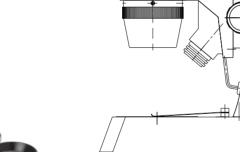
50.805	Pair of wide field eyepieces WF 5x/22 mm
50.810	Pair of wide field eyepieces WF 10x/20 mm
50.811	Micrometer eyepiece WF 10x/20 mm, 10 mm/100
50.815	Pair of wide field eyepieces WF 15x/16 mm
50.820	Pair of wide field eyepieces WF 20x/10 mm

50.840 Pair of eyecups

MISCELLANEOUS

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





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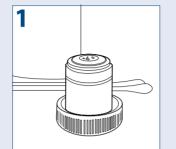
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MODELS	45° head	1x/3x objective	2x/4x objective	Transmitted halogen illumination	Incident halogen illumination	Transmitted LED illumination	Incident LED illumination
P-10 60.100	•	•		•	•		
P-10 LED 60.110	•	•				•	•
P-20 60.200	•		•	•	•		
P-20 LED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

how to keep the optics clean PB.5275 cleaning kit

TECHNICAL FACTS

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



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



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

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



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



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

6

5

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



3

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

PLEASE NOTE

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



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, asbestos, glass, wood and chemical materials

Euromex offers a range of metallurgical microscopes, microscopes with rotatable stages and strain-free objectives for polarized light observation, microscopes for asbestos identification and inverted materials science microscopes ISCOPE (MATERIALS & POLARIZATION) • PAGE 302 BSCOPE (MATERIALS) • PAGE 308 DELPHI-X OBSERVER (MATERIALS) • PAGE 312 OXION (MATERIALS) • PAGE 320 OXION INVERSO (MATERIALS) • PAGE 324





MATERIALS SCIENCE MICROSCOPES

HIGHLIGHTS

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

SPECIFICATIONS

EYEPIECES

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

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

HEAD

Binocular and trinocular Siedentopf type heads with 30° inclined tubes. Interpupillary distance from 48 to 76 mm. Two \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



NOSEPIECE

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

STAGE

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

STANDARD CONDENSER

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

iScope® for materials science

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

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



iscope

FEATURED

IS.1053-PLMi 585 (h) x 210 (w) x 480 mm (d) | 10.5 kg **IS.1053-PLPOLRi** 590 (h) x 210 (w) x 475 mm (d) | 12.3 kg

 OOO Bino
 Image: Cooperative state stat

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CONDENSER FOR POLARIZATION MICROSCOPES

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

CONDENSER FOR ASBESTOS RESEARCH MICROSCOPES

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

FOCUSING

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

DIASCOPIC ILLUMINATION

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

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OBJECTIVES

high contrast

5x/0,12	10/0.25	20x/0.40	
5x/0.12	10/0.25	20x/0.40	S40x/0.65
5x/0.12	10/0.25	20x/0.40 (6)	
4x/0.10	10/0.25	20x/0.40	S40x/0.65 (
	5x/0.12 5x/0.12	5x/0.12 10/0.25 5x/0.12 10/0.25	5x/0.12 10/0.25 20x/0.40 5x/0.12 10/0.25 20x/0.40 (6)

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

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

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

REFLECTED ILLUMINATION FOR METALLURGICAL MODELS

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

REFLECTED ILLUMINATION FOR POLARIZATION MODELS

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

ICARE SENSOR

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

CSS - CABLE STORAGE SYSTEM

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

PACKAGE CONTENT

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

20x/0.40		50x/0.70		S100x/0.80 (6)
20x/0.40	S40x/0.65		S60x/0.80 (6)	S100x/1.25 (6)
20x/0.40 (6)		50x/0.70		S100x/0.80 (6)
20x/0.40	S40x/0.65 (5)		S60x/0.85 (6)	S100x/1.25 (6)

- ⁽⁴⁾ Plan PLi infinity corrected objectives for asbestos research. With 0.17 mm cover glass correction
- ⁽⁵⁾ The S40x objective for asbestos research is a plan phase PLPHi infinity corrected objective. With 0.17 mm cover glass correction
- ⁽⁶⁾ Optional objectives

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

ISCOPE® POLARIZATION MODELS

MODELS	Bino	Trino	EWF 10x/22 mm ⁽⁴⁾	Plan PLPOLi 5x/10x/20x/ S40x IOS objectives ⁽¹⁾	Plan PLPOLRi 5x/10x/20x/ S50x IOS objectives ⁽²⁾	Ø160mm stage, 360° rotatable	Polarization condenser with gratuated 360° polarizer	iCare Sensor	Transmitted illumination Köhler LED	50W 12V halogen epi- illumination ⁽³⁾
IS.1052-PLPOLi	•		•	•		•	•	•	•	
IS.1053-PLPOLi		•	•	•		•	•	•	•	
IS.1052-PLPOLRi	•		•		•	•	•	•	•	•
IS.1053-PLPOLRi		•	•		•	•	•	•	•	•

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

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

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

⁽⁴⁾ The iScope[®] polarization models are supplied with a EWF 10x/22 mm eyepiece with a crosshairs reticle and a EWF 10x/22 mm eyepiece with crosshairs and 10/100 micrometer

ISCOPE® METALLURGICAL MODELS

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

*Objectives without cover glass correction

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

ISCOPE® ASBESTOS RESEARCH MODELS

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

* Objectives with cover glass correction

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



ACCESSORIES AND SPARE PARTS

EYEPIECES

- IS.6210 EWF 10x/22 mm eyepiece (Ø 30mm tube)
 IS.6210-C EWF 10x/22 mm eyepiece with crosshairs (Ø 30 mm tube)
 IS.6210-P EWF 10x/22 mm eyepiece with pointer (Ø 30 mm tube)
 IS.6210-CM EWF 10x/22 mm eyepiece with 10/100 micrometer and crosshairs (Ø 30 mm tube)
 IS.6212 WF 12.5x/17 mm eyepiece (Ø 30 mm tube)
- IS.6212-W WF 12.5x/17 mm eyepiece with Walton Beckett reticle (Ø 30 mm tube)
- IS.6215 WF 15x/16 mm eyepiece (Ø 30 mm tube)
- **IS.6215-CM** EWF 15x/16 mm eyepiece with 10/100 micrometer and crosshairs (Ø 30 mm tube)
- IS.6220WF 20x/12 mm eyepiece (Ø 30 mm tube)IS.6299Pair of eyecups for infinity corrected
- iScope® models
- IS.6310 EWF 10x/20 mm eyepiece (Ø 30mm tube)

PLAN PLMI INFINITY CORRECTED IOS OBJECTIVES FOR MATERIALS SCIENCE

 IS.8105
 Plan PLMi 4x/0.12 IOS objective. * WD 15.5 mm

 IS.8110
 Plan PLMi 10x/0.25 IOS objective. * WD 10 mm

 IS.8120
 Plan PLMi 20x/0.40 IOS objective. * WD 5.8 mm

 IS.8150
 Plan PLMi 550x/0.70 IOS objective. * WD 0.32 mm

 IS.8100
 Plan PLMi S100x/0.80 IOS objective. * WD 2 mm

 * No cover glass correction
 * No cover glass correction

•

PLAN PLI INFINITY CORRECTED IOS OBJECTIVES FOR ASBESTOS RESEARCH

- IS.7202
 PLan PLi 2x/0.05 IOS objective. ** WD 20.2 mm

 IS.7204
 PLan PLi 4x/0.12 IOS objective. ** WD 15.4 mm
- **IS.7210** PLan PLi 10x/0.25 IOS objective. ** WD 10 mm
- **IS.7220** PLan PLi 20x/0.40 IOS objective. ** WD 5.1 mm
- IS.7210 PLan phase PLPHi 40x/0.65 IOS objective. ** WD 0.54 mm
- IS.7260 PLan PLi 60x/0.85 IOS objective. ** WD 0.14 mm
- IS.7200 PLan PLi 100x/1.25 IOS objective. ** WD 0.19 mm
- ** With 0.17 mm cover glass correction

PLAN PLPOLI INFINITY CORRECTED IOS OBJECTIVES FOR POLARIZATION

- without reflected illumination attachment
- IS.7905-T Plan PLPOLi 5x/0.12 IOS objective. * WD 15.5 mm
- IS.7910-T Plan PLPOLi 10x/0.25 IOS objective. * WD 10 mm
- IS.7920-T Plan PLPOLi 20x/0.40 IOS objective. ** WD 5.1 mm
- IS.7940-T Plan PLPOLi S40x/0.65 IOS objective. ** WD 0.54 mm
- IS.7960-T Plan PLPOLi S60x/0.80 IOS objective. ** WD 0.14 mm
- IS.7900-T Plan PLPOLi S100x/1.25 IOS oil immersion objective. ** WD 0.13 mm
- * No cover glass correction
- ** With 0.17 mm cover glass correction

PLAN PLPOLRI INFINITY CORRECTED IOS OBJECTIVES FOR POLARIZATION

with reflected illumination attachment

 IS.7905-R
 Plan PLPOLi 5x/0.12 IOS objective. * WD 15.5 mm

 IS.7910-R
 Plan PLPOLi 10x/0.25 IOS objective. * WD 10 mm

 IS.7920-R
 Plan PLPOLi 20x/0.40 IOS objective. * WD 0.92 mm

 IS.7900-R
 Plan PLPOLi S100x/0.80 IOS objective. * WD 2 mm

 * No cover glass correction
 *

TRANSMITTED KÖHLER ILLUMINATION SYSTEM

- IS.9700 Blue filter 45 mm for lamphouse
- IS.9702 Green filter 45 mm for lamphouse
- IS.9704 Yellow filter 45 mm for lamphouse
- IS.9706 White opaque filter 45 mm for lamphouse
- **SL.5503** 3 W NeoLED[™] replacement unit

POLARIZATION ATTACHMENT without reflected illumination

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

POLARIZATION ATTACHMENT

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

MATERIALS SCIENCE ATTACHMENT

with reflected NeoLED™ epi-illumination

- IS.9230 Reflected NeoLED[™] epi-illumination attachment with for materials science with 5x, 10x, 20x and 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
- SL.5500 3 W NeoLED™ replacement unit

CAMERA ACCESSORIES

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

MISCELLANEOUS

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

DISPOSABLES

Ρ

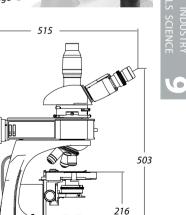
И

415

572

PB.5155	Microscope slides 76 x 26 mm, ground edges,				
	50 pieces				
PB.5165	Cover glasses 18 x 18 mm,				
	thickness 0.13 - 0.17 mm, 100 pieces				
PB.5168	Cover glasses 22 x 22 mm,				
	thickness 0.13 - 0.17 mm, 100 pieces				
PB.5245	Lens cleaning paper, 100 sheets per pack				
PB.5255	Immersion oil, n = 1.482 (25 ml)				
PB.5274	Cleaning liquid, isopropanol alcohol 99%				
	(200 ml)				
PB.5275	Cleaning kit: lens cleaning fluid, lint free lens				
	tissue, brush, air blower and cotton swabs				
VD = working distance					





MATERIALS SCIENCE MICROSCOPES

631:

(bscope)

FEATURED

 Reversed ball-bearing quintuple nosepiece with slot for polarization filter

Materials science microscopes

WF 10x/22 mm eyepieces

Plan M-IOS objectives

HIGHLIGHTS

Trinocular models

- Polarizer and analyzer filters
- Rackless integrated X-Y mechanical stage
- 3 W NeoLED[™] adjustable transmitted and reflected NeoLED[™] illumination
- Integrated carrying grip
- Cable Storage System and anti-theft system
- 10 Years warranty

SPECIFICATIONS

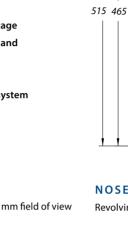
EYEPIECES

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

HEAD

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





NOSEPIECE Revolving and reversed ball-bearing quadruple nosepiece

*** E**

232

OBJECTIVES

348

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

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

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

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bScope[®] for materials science

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

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



 TRINOCULAR MODEL BS.1053-PLMi

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

scope

BS.1053-PLMi

FOCUSING

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

STAGE

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

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

CONDENSER FOR BRIGHTFIELD

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

POLARIZATION

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

NEOLED[™] REFLECTED ILLUMINATION

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

NEOLED[™] TRANSMITTED ILLUMINATION

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

KÖHLER ILLUMINATION

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

CORDLESS USE

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

CSS – CABLE STORAGE SYSTEM

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







grip for easy

CARRYING GRIP

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

ANTI-THEFT SLOT

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

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

Optional: PLMi 100x IOS objective

ACCESSORIES AND SPARE PARTS

EYEPIECES

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

OBJECTIVES

BS.8105	Plan M-IOS DIN 5x/0.12 infinity corrected
	objective. WD 26.1 mm
BS.8110	Plan M-IOS DIN 10x/0.25 infinity corrected
	objective. WD 20.20 mm
BS.8120	Plan M-IOS DIN 20x/0.40 infinity corrected
	objective. WD 8.80 mm
BS.8150	Plan M-IOS DIN 50x/0.70 infinity corrected
	objective. WD 3.68 mm
BS.8180	Plan M-IOS DIN 80x/0.80 infinity corrected
	objective. WD 1.25 mm
BS.8100	Plan M-IOS DIN 100x/0.85 infinity corrected
	objective. WD 0.40 mm
POLARIZ	ZATION
BS.9602	Analyzer in mount for under nosepiece
DC OCAT	Delevieren feulenen herren

Polarizer, for lamphouse BS.9645

BS.9601-R Polarizer in slider for reflected illumination attachment

PACKAGE CONTENT

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

MISCELLANEOUS

AE.1370	Set of rechargeable batteries, three pieces

BS.9515	Metal plain insert for mechanical stage

BS.9518 Glass plain insert for mechanical stage

CAMERA ACCESSORIES

AE.5130	Universal 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

PB.5155	Microscope slides 76 x 26 mm, ground edges,
	50 pieces
PB.5165	Cover glasses 18 x 18 mm,
	thickness 0.13-0.17 mm, 100 pieces
PB.5168	Cover glasses 22 x 22 mm,
	thickness 0.13-0.17 mm, 100 pieces
PB.5245	Lens cleaning paper, 100 sheets per pack
PB.5255	Immersion oil (25 ml). n = 1.482
PB.5274	lsopropyl alcohol 99% (200 ml)
DB 5375	Cleaning kits long cleaning fluid lint free long

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

WD = working distance

MATERIALS SCIENCE MICROSCOPES

(2)

Delphi-X Observer for materials science

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

INDUSTRY MATERIALS SCIENO

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



HIGHLIGHTS

- Brightfield and darkfield EPi illumination
- Polarization

Delphi-X

- 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

Delphi-X

(

BS.1053-PLMi

DX.2053-PLMi

454 (h) x 261 (w) x 470 mm (d) | 21.6 kg

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

ENHANCED INFINITY SYSTEM (EIS)

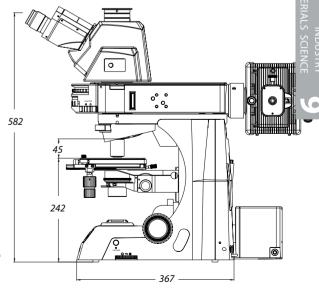
The enhanced infinity system (EIS) of the Delphi-X Observer™ consists of super wide field SFWF 10x25 mm eyepieces, high



• Revolver with slot for Nomarski DIC slider

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

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



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OBJECTIVES

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

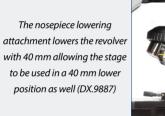
Plan semi-apo PLMi (BF/DF)		5x/0.15, WD 20 mm	10x/0.30, WD 11 mm	20x/0.45, WD 3.1 mm		
Plan apo PLMi (BF/DF)					50x/0.80, WD 1 mm	100x/0.90, WD 1 mm ⁽¹⁾
Plan semi-apo PLPOLRi ⁽²⁾ strain-free		5x/0.15, WD 20 mm	10x/0.30, WD 11 mm	20x/0.45, WD 3.0 mm	50x/0.80, WD 1 mm	
Plan PLPOLi (BF/POL) ⁽³⁾	2x/0.06,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

¹⁾ Optional

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

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

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



STAGE

 Large 215 x 170 mm stage with 105 x 105 mm integrated right-handed mechanical stage, with glass and metal insert Stage height can be lowered for large samples (1 to 28 mm standard sample size, lowered to 55 mm sample size)
 Diameter 190 mm circular stage for models for polarization

applications. 360° Rotatable with Vernier and two object

clamps and an optional 30 x 30 mm X-Y mechanical stage

CONDENSER FOR POLARIZATION

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

FOCUSING

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



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

LONG WORKING DISTANCE CONDENSER

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

ILLUMINATION

The Delphi-X Observer materials science microscope is equipped with epi and 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 smooth attenuation of the light intensity for all kinds of samples The microscope comes with an analyzer and a polarizer which can easily be inserted into the free slots of the Epi-Illuminator for high quality polarized images. Furthermore a rotating cassette is implemented for quick changing between darkfield, brightfield and dimmed brightfield

NOMARSKI DIC (OPTIONAL)

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



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

ICARE SENSOR

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

CARRYING GRIP

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

PACKAGE CONTENT

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

MODELS	Fixed 30 degree Siedentopf head	Ergonomic tilting head	Plan EIS 2x/0.06 objective*	Plan EIS 4x/0.10, 10x/0.25 and 40x/0.65 objectives*	Plan semi-apo EIS 5x/0.15, 10x/0.30 and 20x/0.45 objectives*	Plan apo EIS 50x/0.80 objective*	Plan apo EIS 100x/0.90 objective*	100 W 12 V transmitted halogen Köhler illumination	100 W 12 V reflected halogen Köhler illumination	(DIC)
DX.2053-PLMRi	•		0		•	•	0		•	0
DX.2058-PLMRi		•	о		•	•	0		•	о
DX.2053-PLMi	•		о		•	•	о	•		о
DX.2058-PLMi		•	о		•	•	0	•		о
DX.2053-PLPOLRi	•		о	•		0	0	•	•	0
DX.2058-PLPOLRi		•	0	•		0	0	•	•	0
DX.2053-PLPOLi	•		о	•		0	0	•		0
DX.2058-PLPOLi		•	0	•		0	0	•		0

* Infinity corrected o = optional



ACCESSORIES AND SPARE PARTS

EVEDIECEC

EYEPIEC	ES		
DX.6010	Super wide field SWF 10x/25 mm eyepiece	DX.7920-R	Infinity EIS 45
	for Ø 30 mm tube		PLPOLi 20x/0.
DX.6010-CN	Super wide field SWF 10x/25 mm eyepiece		WD 3.0 mm. N
	with 10/100 micrometer and crosshairs	DX.7950-R	Infinity EIS 45
	for Ø 30 mm tube		50x/0.80 strai
DX.6210	Super wide field SWF 10x/22 mm eyepiece		No cover glass
	for Ø 30 mm tube		
DX.6210-CN	Super wide field SWF 10x/22 mm eyepiece	DX.7904-T	Infinity EIS 45
	with micrometer and crosshairs		free objective
	for Ø 30 mm tube		glass correction
DX.6012	Wide field WF 12.5x/17.5 mm eyepiece	DX.7910-T	Infinity EIS 45
	for Ø 30 mm tube		free objective
DX.6015	Wide field WF 15x/16 mm eyepiece		glass correction
	for Ø 30 mm tube	DX.7920-T	Infinity EIS 45
DX.6020	Wide field WF 20x/12 mm eyepiece		objective. WD
	for Ø 30 mm tube		correction
DX.6099-L	Eyecup for eyepiece	DX.7940-T	Infinity EIS 45
			free objective
INFINITY	CORRECTED OBJECTIVES		glass correction
(all objectives	below have a M26x0.7 thread)	DX.7960-T	Infinity EIS 45
DX.8102	Infinity EIS 45 mm plan PLMi 2x/0.06 objective.		objective. WD
	WD 7.5 mm *		correction
DX.8105	Infinity EIS 45 mm plan semi-apochromatic	DX.7900-T	Infinity EIS 45
	SAMi 5x/0.15 objective. WD 20 mm *		free oil-imme
DX.8110	Infinity EIS 45 mm plan semi-apochromatic		0.17 mm cove
	SAMi 10x/0.30 objective. WD 11 mm *	WD = workin	g distance
DX.8120	Infinity EIS 45 mm plan semi-apochromatic SAMi		
	20x/0.45 objective. WD 3.0 mm *	POLARIZ	ZATION AT
DX.8150	Infinity EIS 45 mm plan apochromatic PLAMi	without incid	lent illuminatior
	50x/0.80 objective. WD 1 mm *	DX.9604	Slider with qua
DX.8100	Infinity EIS 45 mm plan apochromatic PLAMi	DX.9608	Slider with 0-3
	100x/0.90 objective. WD 1 mm		0.1° divisions
* No cover gla	ass correction	DX.9610	Slider with Lar
		DX.9612	Slider with Lar
DX.7905-R	Infinity EIS 45 mm plan Semi-apochromatic		
	PLPOLi 5x/0.15 strain-free objective.		
	WD 20 mm. No cover glass correction		

DX.7910-R Infinity EIS 45 mm plan Semi-apochromatic

PLPOLi 10x/0.30 strain-free objective. WD 11 mm. No cover glass correction

- 5 mm plan apochromatic PLPOLi ain-free objective. WD 1 mm. ss correction
- 5 mm plan PLPOLi 4x/0.10 straine. WD 20 mm. With 0.17 mm cover tion
- 5 mm plan PLPOLi 10x/0.25 straine. WD 10.2 mm. With 0.17 mm cover tion
- 5 mm plan PLMi 20x/0.40 strain-free /D 12 mm. With 0.17 mm cover glass
- 5 mm plan PLPOLi 40x/0.65 straine. WD 0.7 mm. With 0.17 mm cover tion
- 5 mm plan PLMi 60x/0.80 strain-free D 0.3 mm. With 0.17 mm cover glass
- 5 mm plan PLPOLi S100x/1.25 strainersion objective. WD 0.2 mm. With er glass correction

TTACHMENT

without incident illumination			
DX.9604	Slider with quartz wedge plate		
DX.9608	Slider with 0-360° rotatable analyzer,		
	0.1° divisions		
DX.9610	Slider with Lambda plate first red		
DX.9612	Slider with Lambda/4 plate		

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POLARIZATION ATTACHMENT

- with incident illumination
- DX.9602-R Slider with rotatable polarizer

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

MATERIALS SCIENCE STAGES

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

CAMERA ACCESSORIES

- DX.9810 C-mount with 1 magnification for C-mount camera
 DX.9835 C-mount with high resolution relay 0.35x objective for 1/3 inch C-mount camera
 DX.9850 C-mount with high resolution relay 0.50x objective for 1/2 inch C-mount camera
 DX.9863 C-mount with high resolution relay 0,63x objective for 2/3 inch C-mount camera
 AE.5130 Universal SLR-adapter with built-in 2x lens for
- INDUSTRY MATFRIAI

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- standard 23.2 mm tube. Needs T2 adapter AE.5025 T2 adapter for Nikon D SLR-digital camera
- AE.5040 T2 adapter for Canon EOS SLR-digital camera

MISCELLANEOUS

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

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

DISPOSABLES

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

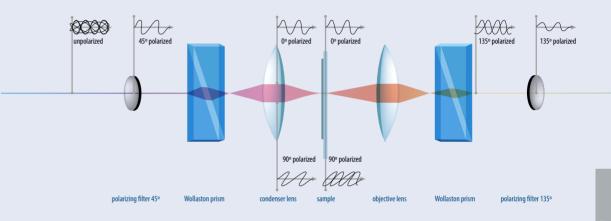
about differential interference contrast

TECHNICAL FACTS

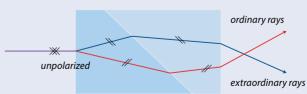
Differential interference contrast (DIC) technique helps in microscopy to enhance the contrast of samples

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

MATERIALS SCIENCE MICROSCOPES



Oxion for materials science

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

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

 \bigcirc



euromex





• OX.3245

SPECIFICATIONS

EYEPIECES

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

HEAD

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



HIGHLIGHTS

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

•

NOSEPIECE

Reversed nosepiece for a maximum of five objectives on ball bearings

OBJECTIVES

(IOS-infinity corrected system) Standard configurations equipped with infinity corrected DIN long working distance LWD plan M-IOS 5x/0.14, 10x/0.25, 20x/0.40 and plan semi apochromatic LWD 50x/0.55 and 100x/0.80 objectives

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

FOCUSING

Coaxial coarse and fine adjustments, 200 graduations, 1 µm per graduation, 200 µm per rotation, total travel range is approximately 28 mm.

Supplied with an adjustable rack stop to prevent damage to sample and objectives. The coarse adjustments are equipped with friction control

6

OX.3245

STAGE

180 x 145 mm stage with integrated mechanical 78 x 45 mm X-Y stage. Is supplied with plain metal and plain glass inserts A ceramic stage is also available on request

CONDENSER FOR TRANSMITTED ILLUMINATION

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

TRANSMITTED ILLUMINATION

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

REFLECTED EPI-ILLUMINATION

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

PACKAGE CONTENT

Detail of reflected illumination

MODELS Trinocular

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

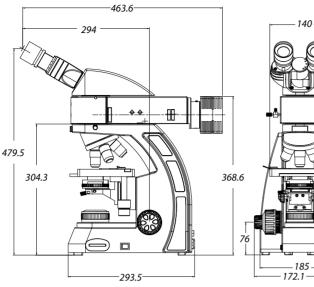
M-IOS

5x/10x/20x/50x objectives

•

M-IOS

100x objective





Reflected illumination

3 W NeoLED™

.

Transmitted illumination

3 W NeoLED™

.

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			
ORIECTIVES				

OBJECTIVES

AE.3172	Plan achromatic M-IOS DIN PL 5x/0.15 objective.*
	WD 10.8 mm
AE.3173	Plan achromatic M-IOS DIN PL 10x/0.30
	objective.* WD 10 mm
AE.3175	Plan achromatic M-IOS DIN PL 20x/0.45
	objective.* WD 4 mm
AE.3177	Plan semi apochromatic M-IOS DIN 50x/0.55
	objective.* WD 7.9 mm
AE.3179	Plan semi apochromatic M-IOS DIN 100x/0.80
	objective.* WD 2.1 mm
* No cover glass correction	

POLARIZATION ATTACHMENTS

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

FILTERS

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

AE.3208 White color balance interference filter (for reflected illumination unit)

CAMERA ACCESSORIES

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

MISCELLANEOUS

OX.9515	Metal plain insert for mechanical stage
OX.9518	Glass plain insert for mechanical stage

07.9510	Glass plain insert for mechanical stage
AE.3185	Slider with darkfield stop for transmitted
	illumination (only for objectives 10x, 20x
	and S40x)

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

DISPOSABLES

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

Plain stage



322 **a euromex**

OX.3240

OX.3245

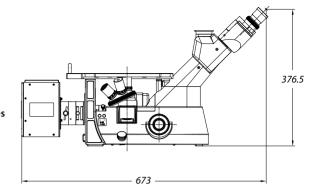
MATERIALS SCIENCE MICROSCOPES

FEATURED

nverso

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

Pair of DIN HWF plan 10x/22 mm eyepieces

NOSEPIECE

EYEPIECES

Revolving quintuple nosepiece on ball-bearings

HEAD

Trinocular 45° inclined tubes with extended low and high positions. One diopter adjustment on left eyepiece. Interpupillary distance of 54 to 75 mm. Trinocular head with light path selector 100-0/80-20

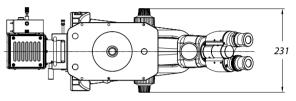
OBJECTIVES

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



CONDENSER

Abbe condenser with iris diaphragm

FOCUSING

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

ILLUMINATION

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

POLARIZATION

Standard polarization filter and 360° rotating analyzer

FILTERS

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

PACKAGE CONTENT

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

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

observation of large pieces of material, m for example of metal, wood or plastics The Oxion Inverso is available with a powerful 50 W halogen brightfield

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



 Incident
 Polarized

 Incident
 Polarized

 Incident
 Infinity

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 Infinity

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 Infinity

OX.2153-PLM



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

LWD = long working distance

ACCESSORIES AND SPARE PARTS

EYEPIECES

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

OBJECTIVES

OX.8205	Plan achromatic PLM 5x/0.15 IOS objective*.
	WD 10.8 mm
OX.8210	Plan achromatic PLM 10x/0.30 IOS objective*.
	WD 10 mm

- OX.8220 Plan achromatic PLM 20x/0.45 IOS objective*. WD 4 mm
- OX.8250 Plan semi apochromatic PLM S50x/0.55 IOS objective*. WD 7.9 mm OX.8200 Plan semi apochromatic PLM S100x/0.80 IOS
- objective*. WD 2.1 mm
- * No cover glass correction

STAGE AND ACCESSORIES

Large stage with

X-Y mechanical stage

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



FILTERS

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

C-MOUNT ADAPTERS

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

for 1/2" sensor cameras

MISCELLANEOUS

- AE.3199 Glass fuses 3.15 A 250 V, 10 pcs
- 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 or AE.5120-2
- AE.5025 T2 adapter for Nikon D digital SLR cameras
- AE.5040 T2 adapter for Canon EOS digital SLR cameras
- AE.3199 Glass fuses 3.15 A 250 V packed, per 10 pieces
- PB.5155 Microscope slides 76 x 26 mm, ground edges, 50 pieces
- PB.5165 Cover glasses 18 x 18 mm, thickness 0.13 - 0.17 mm, 100 pieces
- PB.5168 Cover glasses 22 x 22 mm, thickness 0.13 - 0.17 mm, 100 pieces
- PB.5245 Lens cleaning paper, 100 sheets per pack PB.5255 Immersion oil, n = 1.482 (25 ml)
- PB.5274 Isopropyl alcohol 99% (200 ml)
- PB.5275 Cleaning kit: lens cleaning fluid, lint free lens
 - tissue, brush, air blower and cotton swabs

about petrological microscopy

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

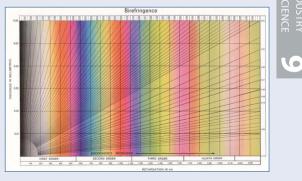




The most common compensators are:

- 1 λ Wave plate is often referred to as a first-order red plate or as a sensitive tint because it produces the interference color having a tint similar to the first-order red seen in the Michel-Levy chart. Introduce an optical path difference of circa 540-570 nm
- $1/4 \lambda$ 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

 Other attachments such as DSO (Dispersion Staining) Objectives) and phase contrast equipment can be added for specific identification of asbestos fibers



* 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

petrology

Mineral

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 Euromex product range of digital cameras and digital microscopes with a built-in camera offers the best suitable solutions for your specific application needs

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



IDUSTRY



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

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

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

Bino	Transmitted	Polarized	Köhler	Infinity	NeoLED
Abbe	Digital	Battery	100-240V	Warranty	Warranty

HIGHLIGHTS

- Binocular model
- 2-position swiveling ergo head
- Integrated 5.0 MP CMOS color USB.2 camera
- 2592 x 1944 pixels
- Dynamic range of 76 db
- Signal/noise ratio of 41 db
- 10 Years warranty (2 years on camera)

SPECIFICATIONS

CAMERA

The digital bScope microscopes are equipped with a 5.0 MP 1/2.5 inch CMOS USB-2.0 camera, 24 bits color depth, 7 frames per second (2592 x 1944 pixels) or 27 frames per second (1280 x 960 pixels). Dynamic range is 76 db and signal/noise ratio 41 db. Supplied with ImageFocus Alpha software, USB-2.0 cable and a micrometer 1mm/100 calibration slide

SOFTWARE

The capture and analysis ImageFocus Alpha software allows to save images in .jpg, .tif, .bmp or .dicom formats as well as .avi format videos. Measurements and annotations can be done on live or captured images. Compatible with Windows 7, 8 and 10, both 32 and 64 bits configurations. A Mac OS version is also available. Free updates can be downloaded from our website. For full microscope specifications and accessories see chapter 9: Materials science microscopes

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

393

348

All models can optionally be supplied with three AA rechargeable batteries

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

BS.1057-PLMi

scope



79

0

330

195

M حصص



MZ.5000 digital macrozoom

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

The digital MacroZoom is equipped with a built-in full High Definition 1080p camera which can deliver up to 60 images per second and is connected either to the supplied and attached 11.6" screen or an external stand-alone HD screen • MZ.5000



HIGHLIGHTS

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

SPECIFICATIONS

CENTRAL ZOOM OBJECTIVE

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

STAND

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

ILLUMINATION

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

BUILT-IN CAMERA

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



Adjustable screen

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

BUILT-IN SOFTWARE

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

PACKAGE CONTENT

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

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

MZ.5000

MZ series

MZ.4500

visual inspections

A standard heavy

metal base makes the whole system very

stable for adding all

and camera systems

kinds of illumination systems

macrozoom

be used in combination with C-mount types of

With a working distance of 105 mm it is highly suitable for repairs, tooling engineers and

cameras with a HD screens or computer screens.



SPECIFICATIONS

CENTRAL ZOOM OBJECTIVE

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

STAND

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

CAMERA SYSTEMS

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

PACKAGING Supplied with dust cover and packed in styrofoam 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



MZ.4500 h) 32 (w) 28.5mm (d) | 3.06 kg

The high-end MacroZoom is built around one 0.7 to 5 times optical zoom objective and must

• MZ.4500

MACROZOOMS



CMEX-WiFi 5.0 MP digital WiFi camera with 1/2.5 inch CMOS sensor

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

The CMEX camera streams H.264 encoded high resolution images simultaneously to several WiFi enabled smartphones, tablets or computers with iOS, Android or Windows operating systems

Power supply through USB charger or computer USB port. Standard C-mount mounting

Adding a WiFi camera to your microscope is ideal for wireless sharing/viewing of microscope images. Ideal for demonstrations where remote viewing is needed

Android app for this camera is supplied on cd-rom and www.euromex.com. IOS app can be downloaded from the App store (free of charge). ImageFocus Alpha software can be used by means of WiFi on PC's and Macs

The camera is powered by the included USB charger or a computers USB port. Standard 0.45x C-mount objective is included

MODEL	Sensor	Sensor size (inches)	Pixels size (μm)	Resolutions	Grayscale conversion	Color rendering	•	•	Sensitivity V/lux-sec	Product number
CMEX-WiFi 5	CMOS	1/2.5″	2.2 x 2.2	1280 x 720	12 bits	24 bits	43	61	1.0	DC. 5000-WiFi

The CMEX-WiFi 5 camera is supplied in a box with USB-2.0 cable, 30.0 and 30.5 mm adapters to use with stereo microscopes, and a 0.45x C-mount objective

CMEX USB-2.0 cameras with fast CMOS sensor

The CMEX-2f, CMEX-5f and CMEX-12f are equippedBwith a fast CMOS sensor. The CMEX cameras arenequipped with USB-2.0 data interface and suppliedcwith ImageFocus Plus softwareb

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

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

The CMEX cameras are supplied with USB-2.0 cable, 30.0 and 30.5 mm to 23.2 mm conversion adapters for use with stereo microscopes, 1 mm/100 (10 μm/division) calibration slide. The cameras are supplied with a 0.45x C-mount objective

Free software ImageFocus USB-3.0 Windows Apple

USB CAMERAS

CMEX-18 Pro

ADVANCED

CAMERAS FOR

INDUSTRY

FEATURED

Advanced CMEX USB-3.0 cameras with CMOS sensor

The CMEX-3 Pro, -5 Pro, -10 Pro and -18 Pro cameras are equipped with a 3.1, 5.1, 10 or 18 MP CMOS sensor with 12 bits grayscale conversion and a 24 bits color rendering. These cameras are equipped with a USB-3.0 data interface enabling fast frame rate and are supplied with ImageFocus Alpha software Besides capturing images and videos, the software allows measurements on still and live images and annotations on captured images. Compatible with Windows 7, 8 and 10, both 32 and 64 bits configurations. A 2 GB RAM 2.8 GHz computer and 17 inch display is recommended. A Mac OS version is available. Free updates can be downloaded from our website

MODELS	Sensor	Sensor size (inch)	Pixels size (µm)	Exposure time	Resolutions	Max. frames (p/sec)	Signal/ Noise (db)	Dynamic (db)	Sensitivity V/lux-sec	Product number
CMEX-3 Pro	CMOS	1/3″	2.2 x 2.2	1 ms ~ 2000 ms	2048 x 1534 1024 x 770	28 53	39	100	1.9	DC.3000-PRO
CMEX-5 Pro	CMOS	1/2.5″	2.2 x 2.2	1 ms ~ 2000 ms	2560 x 1922 1270 x 960 640 x 480	14 39 100	39	68.	1.76	DC.5000-PRO
CMEX-10 Pro	CMOS	1/2.3″	1.67 x 1.67	1 ms ~ 2000 ms	3584 x 2746 1792 x 1372	8 25	35.5	63.5	0.31	DC. 10000-PRO
CMEX-18 Pro	CMOS	1/2.3″	1.25 x 1.25	1 ms ~ 2000 ms	4912 x 3684 2456 x 1842 1228 x 922	6 18 32	42	65	1.3	DC. 18000-PRO

The CMEX-3 Pro, -5 Pro, -10 Pro and -18 Pro cameras are supplied with USB-3.0 cable, 30.0 and 30.5 mm adapters to use with stereo microscopes, 1 mm/100 (10 μm/division) calibration slide. The CMEX-5 Pro, -10 Pro and -18 Pro are supplied with a 0.5x C-mount objective. The CMEX-3 Pro is supplied with a 0.37x C-mount objective

sCMEX USB-3.0 cameras with scientific grade sCMOS sensor

The sCMEX-3, sCMEX-6 and sCMEX-20 cameras are equipped with a scientific grade back illuminated Sony sCMOS sensor with 16 bits grayscale conversion and an outstanding 36 bits color rendering. Suitable for brightfield, darkfield and fluorescence. The sCMEX cameras are equipped with a USB-3.0 data interface and supplied with ImageFocus Alpha software

USB CAMERAS

Besides capturing images and videos, the software allows measurements on still and live images and annotations on captured images. Compatible with Windows 7, 8 and 10, both 32 and 64 bits configurations. Also compatible with Mac OS. PC requirements: Intel Core2 2.8 GHz or higher or equivalent, 2 GB memory, USB-3.0 port, 17 inch display. Free updates can be downloaded from our website

MODELS	Number of pixels (MP)	Sensor	Sensor size (inches)	Pixels size (μm)	Exposure time	Resolutions	Max. frames (p/sec)	Color rendering	Sensitivity V/lux-sec	Product number
sCMEX-3	3.1	sCMOS	1/2.8″	2.5 x 2.5	0.244~	2048 x 1536	50	36 bits	0.15	DC.3000s
					15000 ms	1920 x 1080	58			
sCMEX- 6	6.3	sCMOS	1/1.8″	2.5 x 2.5	0.244~	3072 x 2048	30	36 bits	0.15	DC.6000s
					15000 ms	1536 x 1024	38			
sCMEX-20	20	sCMOS	1″	2.4 x 2.4	0.264 ~	5440 x 3648	15	36 bits	0.21	DC.20000s
					15000 ms	2736 x 1824	50		0.21	
						1824 x 1246	60		0.21	

The sCMEX cameras are supplied in a carton box with USB-2.0 cable, 30.0 and 30.5 mm to 23.2 mm conversion adapters for use with stereo microscopes, 1 mm/100 (10 μ m/division) calibration slide. The DC.3000s and DC.6000s are supplied with a 0.5x objective and the DC.20000s is supplied with a 1.0x adapter

• sCMEX

SCIENTIFIC

GRADE CAMERAS

FOR INDUSTRY

FEATURED

(3)

HD AND HD-AUTOFOCUS CAMERAS



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

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

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

STAND-ALONE MODE

To use these cameras you do not need a computer or have any computer knowledge. Most camera settings are done automatically and therefore these cameras are very user- friendly. This results in faster, more flexible and compact working conditions. Simply connect the camera to a high definition dedicated 11.6" HD screen, TV-HD or HD-beamer with a HDMI input and the system is ready to go. The HD-4K camera can also be connected to a GbE ethernet and DHCP enabled network router and has also a WiFi interface. The mouse driven built-in software of the camera enables captured images and recorded videos* to be saved on the integrated SD memory card

HIGH DEFINITION

CAMERAS

FOR INDUSTRY

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

COMPUTER CONTROLLED MODE

Users who want more camera controls and more functions can also connect the camera to a computer and benefit from the extensive functions of the Euromex ImageFocus software. It runs

HIGHLIGHTS

- HD 1080p or 720p high definition color cameras
- Real-time images directly on TV, monitor or beamer
- Stand-alone or computer controlled mode
- Built-in mouse-driven software and SD memory card
- C-mount interface
- HDMI, USB-2.0/3.0, GbE and WiFi interface(s)
- Autofocus model available
- Compatible with ImageFocus software

on Windows 7, 8 and 10, both 32 and 64 bits. Euromex supplies free software updates on www.euromex.com. Besides extended camera settings, the software can save images in JPG, TIFF or BMP formats and record videos in .avi format on the hard disk of the computer. The software offers different measurement functions on live and captured images and also full control over the camera parameters. Specific functions for fluorescence - such as histogram adjustments and combining captured fluorescence images - are also available with the ImageFocus software

PACKAGE CONTENT

MODELS	HD-4K	HD-Ultra	HD-Lite	HD-Mini	HD-Autofocus	HD-Pro
Software	ImageFocus Alpha	ImageFocus Plus	ImageFocus Plus			ImageFocus Alpha
Software languages	15 ⁽²⁾	6 ⁽¹⁾	6 ⁽¹⁾	English	15 (2)	15 ⁽²⁾
Compatible	Win 7, 8 and 10 Mac OS	Win 7, 8 and 10 Mac OS	Win 7, 8 and 10 Mac OS			Win 7, 8 and 10 Mac OS
C-mount with objective	0.5x	0.37x	0.45x	0.37x	0.5x	0.37x
Interface(s)	•	•	•	Only HDMI	•	•
30 and 30.5 mm adapters	•	•	•	•	•	•
SD card	16 GB	8 GB	4 GB	16 GB	16 GB	16 GB
Cailbration slide 10mm/100	•	•	•	•	•	•
External power supply	12V 1A	12V 2A	12V 2A	12V 1A	12V 1A	12V 1A
Dimensions (w x d x h)	78 x 65 x 98	80 x 70 x 90	80 x 70 x 90	50 x 50 x 60	81 x 65 x 78	81 x 65 x 78
Weight (grams)	555	440	280	150	500	500
Product number	VC.3040	VC.3036	VC.3031	VC.3020	VC.3034	VC.3038
With 11.6" HD screen	VC.3040-HDS	VC.3036-HDS	VC.3031-HDS	VC.3020-HDS	VC.3034-HDS	VC.3038-HDS

⁽¹⁾ One language can be selected during initial installation of the ImageFocus Plus software: English, German, French, Dutch, Spanish and Russian ⁽²⁾ English, Catalan, French, German, Indonesian, Italian, Japanese, Korean, Polish, Russian, Simplified Chinese, Spanish, Thai, Traditional Chinese, Turkish



VC.3036-HDS on stereo microscope

INDUSTRY DIGITAL SOLUTIONS

ALL HD-CAMERAS

MODELS	HD-4K	HD-Ultra	HD-Lite	HD-Mini	HD-Autofocus	HD-Pro HDMI
Sensor	Sony 4K	Sony	Aptina	Aptina	Sony	Sony
Format	1/1.8″, HDTV 1080p	1/2.8", HDTV 1080p	1/2.5″, HDTV 1080p	1/3", HDTV 720p	1/1.9″, HDTV 1080p	1/2.8", HDTV 1080p
Pixels	3840 x 2160 ⁽¹⁾ HDMI 60 fps USB 30 fps	3264 x 1836 ⁽¹⁾ 1920 x 1080 ⁽²⁾ HDMI 60 fps USB 30 fps	2592 x 1944 ⁽¹⁾ 1920 x 1080 ⁽²⁾ HDMI 15 fps, USB 15fps	1280 x 720 ⁽¹⁾ 1280 x 720 ⁽²⁾ HDMI 30 fps	1920 x 1080 ⁽¹⁾ HDMI 60 fps	1920 x 1080 (1920 x 1080 (HDMI 60 fps, USB 26 fps
Pixel size	2.0 x 2.0 (μm)	2.8 x 2.8 (µm)	2.2 x 2.2 (μm)	3.75 x 3.75 (μm)	3.75 x 3.75 (μm)	2.9 x 2.9 (μm)
Video recording	1080p	1080p	1080p		1080p	1080p
Video output	HDMI, USB-3.0 ⁽⁵⁾ , GbE ethernet, WiFi ⁽⁵⁾	HDMI, USB-2.0	HDMI, USB-2.0	HDMI	HDMI, USB-C (3)	HDMI, USB-2.0
Scan mode	Progressive	Progressive	Progressive	Progressive	Progressive	Progressive
Exposure	Automatic/ manual	Automatic/ manual	Automatic/ manual	Automatic/ manual	Automatic/ manual	Automatic/ manual
White balance	Automatic/ manual/ROI	Automatic/ manual			Automatic/ manual	Automatic/ manual/ROI
Sensitivity lux-sec	505 mV	510 mV	1 V	6.5 V	1.12 V (1/30s)	1.3 V (1/30s)
Color rendering (bits)	36	36	24	24	24	24
Signal/Noise (db)	44	55	40.5	44	50	38
Dynamic (db)		69	60	85	65	66
Storage	16 GB SD card (max. 32 GB)	8 GB SD card (max. 32 GB)	4 GB SD card (max. 32 GB)	16 GB SD card (max. 32 GB)	16 GB SD card (max. 32 GB)	16 GB SD card (max. 32 GB)
Camera buttons	on/off	on/off	on/off		on/off	on/off
Mounting	C-mount	C-mount	C-mount	C-mount	C-mount	C-mount
External power supply	100-240 Vac to 12Vdc/1A	100-240 Vac to 12Vdc/2A	100-240 Vac to 12Vdc/2A	100-240 Vac to 12Vdc/1A	100-240 Vac to 12Vdc/2A	100-240 Vac to 12Vdc/2A
Relative humidity	10-60 %	45-85 %	45-85 %	30-80 %	45-85%	30~80%
Temperature Operation Storage	-10 – 50° C 0 – 60° C -20 to 60° C -20 to 70°		0 – 60° C -20 to 70° C	-10 – 40° C -20 to 60° C	–10-40° C -20°C to 60° C	-10~ 50° C -20°C to 60° (
Product number	VC.3040 VC.3040-HDS ⁽⁴⁾	VC.3036 VC.3036-HDS (4)	VC.3031 VC.3031-HDS (4)	VC.3020 VC.3020-HDS (4)	VC.3034 VC.3034-HDS (4)	VC.3038 VC.3038-HDS

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

BUILT-IN SOFTWARE FEATURES (HDMI MODE)

MODELS	HD-4K	HD-Ultra	HD-Lite	HD-Mini	HD-Autofocus	HD-Pro HDM
Image capturing (JPEG)	3840 x 2160	3261 x 1840	2592 x 1944	1280x720	1920 x 1080	1920 x 1080
Video recording	3840 x 2160 MP4	1920 x 1080 AVI	1920 x 1080 AVI		1920 x 1080 ASF	1920 x 1080 ASF
Browse saved images	•	•	•		•	•
Browse saved video's	•	•	•		no	•
SD card storage	16 GB	8 GB	4 GB	16 GB	16 GB	16 GB
Mouse driven	•	•	•	•	•	•
Auto exposure	•	•	•	•	•	•
Exposure time	0.04 ~ 1000 ms	0.001s ~ 10 s	0.001s ~ 10 s	0.2 ~ 2000 ms	0.06 ~ 918 ms	0.036 ~ 8000 ms
Gain	•	•	•	•	•	•
RGB & white balance	•	•	•	•	•	•
Gamma	•	•	•	•	•	•
Sharpness	•	•	•	•	•	•
Noise reduction	3D algorithm	3D algorithm	3D algorithm	Standard	Standard	Standard
Saturation & contrast	•	•	•	•	•	•
Horiz. & vert. flip	•	•	•	•	•	•
Grids	cross/multi	cross/multi	multi	m ulti	multi	User defined
Autofocus					•	
Compare function	•	•	•		•	•
Measurement functions	captured & live images	captured & live images			live image only	captured & live images
Calibration table	•	•			•	•
Line & free curve	•	•			•	•
Polygon & rectangle	•	•			•	•
Angle	•	•			•	•
Circle 3 points	•	•			•	•
Circle radius	•	•			•	•
Export function	CSV	CSV, Txt			CSV	CSV
Languages	5 (2)	8 (1)	8 (1)		5 (2)	5 (2)
	VC.3040	VC.3036	VC.3031	VC.3020	VC.3034	VC.3038

⁽¹⁾ English, simplified Chinese, traditional Chinese, German, Italian, French, Japanese, Korean ⁽²⁾ English, Simplified Chinese, Traditional Chinese, Korean and Thai



INDUSTRY 10



DC.20000i and DC.6000i

Cooled color camera with CCD or CMOS sensor

The Euromex 6 and 20 Megapixel Peltier cooled cameras are equipped with Peltier cooling elements that allow the camera to be used for fluorescence and other low light applications. These advanced and premium models are supplied with a USB-3.0 interface

All cameras are supplied with ImageFocus Alpha software. The software has specific functions for fluorescence like combining capture fluorescence images. Furthermore it allows capturing of images and videos, doing measurements and annotations, generating reports, live image stitching etc. Compatible with Windows 7, 8 and 10, both 32 and 64 bits configurations. A Mac OS version is also supplied (with a few differences in features)

MODELS USB-3 Pixel size (un Sensitivity pixels (MP) (p/sec) @ 1/30 sec DC.6000i 6 1" CCD 4.54 x 4.54 2748 x 2200 7.5 880 mV 2748 x 1092 14 DC.20000i 20 1" CMOS 2.4 x 2.4 5440 x 3648 5 462 mV 4096 x 2160 10 2736 x 1824 15 1824 x 1216 30

about field of view

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

CALCULATING FOV OF AN EYEPIECE

The FOV through an eyepiece is equal to:

Field Number FOV= **Object Magnification**

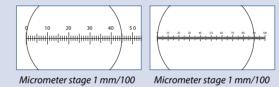
Field number (FN) is usually engraved on the eyepiece as a figure next to the magnification and expressed in mm, e.g. WF 10x/18. A 10x/18 eyepiece with a 40x objective will have a FOV = 18 mm / 40 = 0.45 mm or 450 nm

900 nm FOV with 10x/18

3.6 mm

4.8 mm

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



4.8 mm

6 mm

6.4 mm

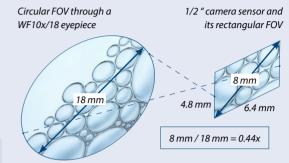
8 mm

8.8 mm

1/2 "



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%

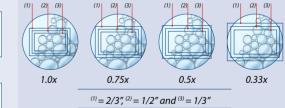
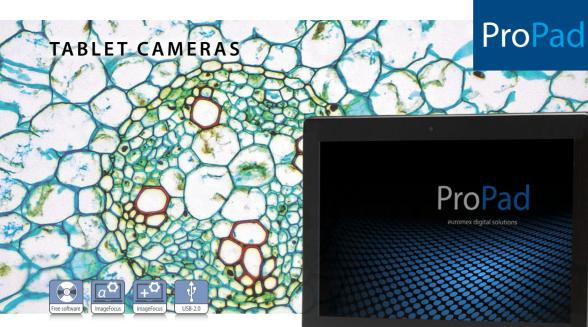


Figure: different camera sensor sizes (2/3, 1/2, 1/3 inch) with different "demagnifying" lenses (C-mount photo-adapters) 0.33x, 0.50x, 0,75x and 1.0x

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



ProPad tablet with microscope camera and keyboard-docking station

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

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

SOFTWARE

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

HIGHLIGHTS

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



SPECIFICATIONS

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

Specifications can be changed by Euromex microscopen by without prior notice

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

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



SOFTWARF

The software is compatible with all cameras mentioned in table below. Besides live imaging the software captures images in .jpeg, .tif, .bmp or .dicom formats or video recording in .avi format

IMAGE FC	OCUS 4
DC.130)0c

IMAGE FO	CUS PLUS
DC.2000f	VC.3036
DC.5000f	VC.3031
DC.12000f	

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

IMAGE STITCHING

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

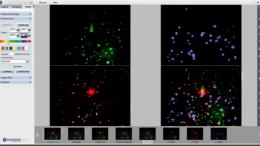
EXTENDED DEPTH OF FOCUS

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





FREE UPDATES AVAILABLE ON EUROMEX.COM

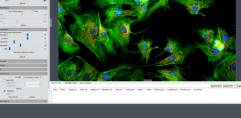


ImageFocus 4 40 software ImageFocus

ImageFocus 4 has a wide range of functions:

- Measurements can be done on still and live image
- Images can be saved in .jpg, .tif, .bmp or .dicom formats as well as .avi format videos
- The brightness, contrast and saturation of captured images can be adjusted
- Camera parameters for exposure time, white balance and color control are easily accessible
- The software also has specific functions for fluorescence such as combining captured fluorescence images
- Compatible with Windows 7, 8 and 10, both 32 and 64 bits configuration. A Mac OS 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 can be done on still and live image
- Images can be saved in .jpg, .tif, .bmp or .dicom formats as well as .avi and mpeg-4 format videos
- The brightness, contrast and saturation of captured images can be adjusted
- Camera parameters for exposure time, white balance and color control are easily accessible
- The software also has specific functions for fluorescence such as combining captured fluorescence images
- Compatible with Windows 7, 8 and 10, both 32 and 64 bits configuration. A Mac OS version is also available
- PC requirements: Intel Core2 2.8 GHz or higher or equivalent, 2GB memory or more, 17" screen

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



ImageFocus Alpha software

ImageFocus Alpha has a wide range of functions:

- Measuring, segmentation & counting, stichting of images, extended depth of focus, etc
- Images can be saved in .jpg, .tif, .bmp or .dicom formats as well as .avi format videos
- The brightness, contrast and saturation of captured images can be adjusted
- Camera parameters for exposure time, white balance and color control are easily accessible
- The software also has specific functions for fluorescence such as combining captured fluorescence images
- Compatible with Windows 7, 8 and 10, both 32 and 64 bits configuration. A Mac OS version is also supplied (with a few differences in features)
- PC requirements: Intel Core2 2.8 GHz or higher or equivalent, 2GB memory or more, 17" screen

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



a euromex







adapter guide microscope and camera

Most Euromex cameras are supplied with (a) standard plug & play adapter(s), which means that it can be connected to any Euromex microscope, except for the Oxion and Oxion Inverso series.

These microscopes need an additional adapter. See next page. Do you want to connect one of our cameras to another microscope brand, see adapter references below:

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

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

- ⁽²⁾ Olympus CX, CX2, BX, BX2, IX, MX, GX, SZX, STM, 35 mm to 25.4 mm C-mount, anodized aluminum
- ⁽³⁾ Zeiss PrimoStar, PrimoStar Vert, 30 mm to 25.4 mm C-mount, anodized aluminum
- ⁽⁴⁾ Zeiss 60N-C, 60N-T2 photo ports of Axio examiner, Axio Imager, Axio Lab,
- Axio Observer, Axio Scope, Axio Zoom, Stemy 508 and SteREO Discovery
- ⁽⁵⁾ Nikon E100, E200, 50i, 55i, 80i, 90i, Ni series, Ti Series, SMZ800, SMZ1000, SMZ15000, 38 mm to 25.4 mm C-mount, stainless steel



STANDARD PLUG & PLAY

C-mount adapters for standard Ø 23.2 mm tube

- 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.1327 C-mount adapter with 0.75x objective for 2/3" camera
- 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.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.5120-2 Standard 23.2 mm diameter tube for Oxion photo port (x)
- T2 adapter for Nikon D digital SLR cameras AE.5025
- AE.5040 T2 adapter for Canon EOS digital SLR cameras
- Other T2 adapters on request





AE.5120-2

DC.1330/DC.1335

DC.1324

• AE.5130

PHOTO PORT ADAPTERS

Suitable for Euromex microscopes with a photo port such as Oxion, NexiusZoom and StereoBlue

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







for microscopy





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illumination solutions

for stereo microscopy

illumination solutions

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

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

354 **Beuromex**

ILLUMINATION SOLUTIONS

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



Illumination solutions

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

A powerful multifunctional 150 W halogen (LE.5211) and 30 W PowerLED cold light source is ideal for the advanced requirements of numerous applications in life and materials science. The intensity is adjustable and has a built-in forced air cooling. The LE.5211 and LE.5211-LED light sources require a light fiber conductor such as the single LE.5213, dual LE.5214, triple LE.5215 or the LE.5239 or LE.5240 ring light fiber conductors. The LE.5213, LE.5214 and LE.5215 light conductors can be equipped with a lens holder (LE.5222) and a focusing lens (LE.5224)



LE.5211-LED/LE.5211 + LE.5214 +2x LE.5222 + 2x LE.5224

Power	150 W halogen	30 W PowerLED (equivalent to 120 W halogen)
Luminous flux	21,000 lux max ¹⁾	30,000 lux max.*
Color temperature	3,000 K	6,500 K
Operating voltage	100 and 240 V AC / 12 V DC (50/60 Hz)	100-240 V AC / 12 V DC (50/60 Hz)
Dimensions	(h) 150 x (w) 150 x (d) 230 mm	150 (h) x 150 (w) x 230 mm (d)
Weight	2.8 kg	3.9 kg
Model	LE.5211	LE.5211-LED

* with LE.5214 dual arm light conductor



This popular multifunctional cold light source contains a 100 W halogen light source. The intensity is adjustable and it has a built-in forced air cooling. The LE.5210 light source requires a light fiber conductor such as the single LE.5213, dual LE.5214, triple LE.5215 or the LE.5239 or LE.5240 ring light fiber conductors. The LE.5213, LE.5214 and LE.5215 light conductors can be equipped with a lens holder (LE.5222) and a focusing lens (LE.5224). Ideal for all kinds of applications in Life and Materials sciences, various industrial applications and for stereo microscopy



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

* with LE.5214 dual arm light conductor

COMPACT SINGLE 20 W LIGHT SOURCE



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

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

ECONOMICAL AND COMPACT DUAL 3 W LED • LIGHT SOURCE

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



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

144 LEDS RING LIGHT SOURCE • LE.1973

Ring illumination

Color temperature Illuminance

working distance:

External diameter

Mounting

Model

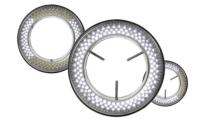
Power supply

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

COMPACT 72 LEDS • LE.1974

Compact 20,000 lux LED

ring light source



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

72 LEDs with adjustable intensity and

for stereo head with diameter from 25 to 61 mm

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

4 segment illumination

from 50 to 180 mm

21,000 lux at 100 mm distance

6,500 K

100 mm

LE.1974

PROFESSIONAL HIGH POWERLED RING LIGHT SOURCES LE.1990/LE.1991

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



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

ILLUMINATION STATION LE.5212

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

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

3 W gooseneck

guide LED

White LED, 6,500 K

365 nm, monochrome

395 nm, monochrome

420 nm, monochrome

4 W white LFD

ring light





LE.1992 LE.1993

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

MODELS

LE.5212-365 LE.5212-395

LE.5212-420

LE.5212

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

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

power supply

	Ring illumination	Fluorescent 40 kHz ring, fixed intensity
	Color temperature	5,200 K
	Illuminance	6,500 lux at 100 mm distance
67	working distance:	35-160mm
	Mounting	48 mm with adapter for ZE series microscope
	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,
	1 10

- gooseneck self-sustaining, 50 cm long, 4 mm diameter LE.5214 Dual arm fiber light conductor,
- gooseneck self-sustaining, 50 cm long, 4 mm diameter
- LE.5215 Triple arm fiber light conductor, gooseneck self-sustaining, 50 cm long, 4 mm diameter
- LE.5219 Dual arm fiber light conductor, gooseneck self-sustaining, 70 cm long, 4 mm diameter
- LE.5239 Slit ring-shaped fiber light conductor 60 cm long, 8 mm diameter
- LE.5240 Slit ring shaped fiber light conductor 100 cm long, 8 mm diameter
- LE.5241 Flexible fiber light conductor, curved 90°, 60 cm long, 4 mm diameter LE.5216 Single arm flexible fiber light conductor,
- 100 cm long, 4 mm diameter

- LE.5235 Dual arm flexible fiber light conductor, 100 cm long, 4 mm diameter
- LE.5235-3 Dual arm flexible fiber light conductor, 300 cm long, 4 mm diameter
- LE.5217 Triple arm flexible fiber light conductor, 100 cm long, 4 mm diameter
- LE.5218 Single arm flexible fiber light conductor, 100 cm long, 8 mm diameter
- LE.5220Single 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.5223, 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.5223 Set of 3 color filters (red, blue, green), suitable for LE.5222 and LE.5228
- LE.5229 Polarization filter
- LE.5231 Conversion KB12/80B filter

HALOGEN BULBS AND FUSES

SL.5208	Halogen 20 W 12 V bulb with reflector
	(3,000 hrs nominal), GU4 fits LE.5209
SL.5219	Halogen 100 W 12 V bulb with reflector
	(50 hrs nominal), MR16 fits LE.5210
SL.5230	Halogen 100 W 12 V 'Long Life' bulb
	(1,000 hrs nominal), MR16 fits LE.5210
SL.5235	Halogen 150 W 15 V bulb
	(50 hrs nominal), MR16 fits LE.5211
SL.5240	Halogen 150 W 15 V 'Long Life' bulb
	(500 hrs nominal), MR16 fits LE.5211
AE.5227	Spare fuses 1A/250 V, 10 pieces

FOR LE.1980 AND LE.1981

LE.1984-050 Fresnel lens, WD from 40 to 80 mm LE.1984-100 Fresnel lens, WD from 80 to 150 mm LE.1984-200 Fresnel lens, WD from 150 to 240 mm LE.1984 Diffusing filter, for WD from 40 to 300 mm LE.1985 Glass protection window LE.1987 Polarizing filter LE.1888 Rotatable polarizing filter LE.1992 100-230 V power supply analog controller. Intensity adjustable from 0-100% LE.1993 100-230 V power supply digital segment controller. Intensity adjustable from 0-100%

FOR LE.1990 AND LE.1991

LE.1994-05	0 Fresnel lens, WD from 40 to 80mm
LE.1994-100	0 Fresnel lens, WD from 80 to 150 mm
LE.1994-20	0 Fresnel lens, WD from 150 to 240 mm
LE.1994	Diffusing filter, for WD
	from 40 to 300 mm
LE.1995	Glass protection window
LE.1997	Polarizing filter
LE.1998	Rotatable polarizing filter
LE.1992	100-230 V power supply analog controller.
	Intensity adjustable from 0-100%
LE.1993	100-230 V power supply digital segment
	controller. Intensity adjustable from 0-100%

FOR LE.5212

- LE.5260 Interchangeable self-sustaining gooseneck-type guide with a white 6,500 K high-power LED for NZ.9018, LE.5207 or LE.5212, 1 pc (A)
- LE.5261 Interchangeable self-sustaining gooseneck-type guide with a 365 nm high-power UV-LED for NZ.9018, LE.5207 or LE.5212, 1 pc (B)
- LE.5262 Interchangeable self-sustaining gooseneck-type guide with a 395 nm high-power Violet-LED for NZ.9018, LE.5207 or LE.5212, 1 pc (C)
- LE.5263 Interchangeable self-sustaining gooseneck-type guide with a 420 nm high-power Violet-LED for NZ.9018, LE.5207 or LE.5212, 1 pc (D)
- LE.5264 Polarization filter, screw on type for Interchangeable self-sustaining gooseneck-type guides for NZ.9018, LE.5207 or LE.5212, 1 pc

FOR LE.1863

SL.1864 Spare fluorescence lamp

WD = working distance

PREPARATION ACCESSORIES

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

dissection instruments

PB.5050	Dissecting needle, straight tip	■ ● PB.5050	▶ ● PB.5054
	with plastic handle		
PB.5054	Dissecting needle, lancet-shaped		
	with plastic handle		
PB.5056	Blunt-pointed probe, Ø 2 mm,		
	length 140 mm		
PB.5058	Section lifter with wooden handle		-
PB.5060	Serrated thumb dressing forceps,		
	length 13 mm	*	-
PB.5062	Dressing forceps with blunt tips,		
	length 13 cm		
PB.5064	Dressing forceps with blunt tips,		
	length 20 cm		
PB.5067	Dissecting forceps with sharp tips,		
	length 13 cm		
PB.5069	Dissecting forceps with finely		
	curved sharp tips, length 13 cm		17
PB.5077	Cover glass forceps, length 11 cm		1 1
			ome
		ROMEX	
		A	• 1



SCISSORS AND BLADES

PB.5080	Dressing scissors with blunt/sharp tip,
	length 14 cm

- Dissecting scissors, sharp tips, length 11 cm PB.5084
- Scalpel with blunt tip, length 15 cm PB.5092 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 With fixed handle, length 17 cm

PB.5103

HANDHELD MICROTOMES

- MT.5500 Cylinder microtome. Circular stage Ø 70 mm with flat black glass top. Height adjustable with micrometer division 0.01 mm. Complete with plano-concave knife PB.5106 and wooden cabinet MT.5501 Cylinder microtome. Identical to MT.5500 but without knife and wooden cabinet
- MT.5503 Handheld microtome. Box type with table clamp and razor blade holder. Thickness adjustment by 0.025 mm intervals. Complete with wooden cabinet



PREPARATION ACCESSORIES



dissection kits

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

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

6-PC DISSECTION KIT PB.5111 IN PLASTIC CASE

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







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

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



9-PC DISSECTION KIT PB.5114 IN WOODEN CASE

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



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

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



PROFESSIONAL SLIDE PREPARATION KIT PB.5125 IN PLASTIC DELUXE CASE

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



ACCESSOIRES MICROSCOPY

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

ZOOLOGY

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

BOTANY

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

histology, zoology and botany set

PB. 5212 FOR EDUCATION

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

HISTOLOGY

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

ZOOLOGY

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

BOTANY

- SB.2095Monocot/dicot stem, zea mays/pumpkin, c.sSB.2105Hibiscus, young stem, c.sSB.2110Cucurbita, pumpkin, stem, l.sSB.2115Sambucus, elderberry or Morus Alba, mulberry,
stem with cork cambium + lenticels, c.sSB.2160Lilium, lily leaf, c.sSB.2225Zea mays, corn, corn seed with embryo, l.sSB.2235Pirus, pear, stone cells, sectionSB.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.sS

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

histology, zoology and botany set

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

Set with 25 microscopy slides for education: histological samples of mammals, zoology and botany.

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.1636

- SZ.1610 Planaria, flat worm, injected intestinal tube, w.m 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 OF MAMMALS

PB. 5214 FOR EDUCATION

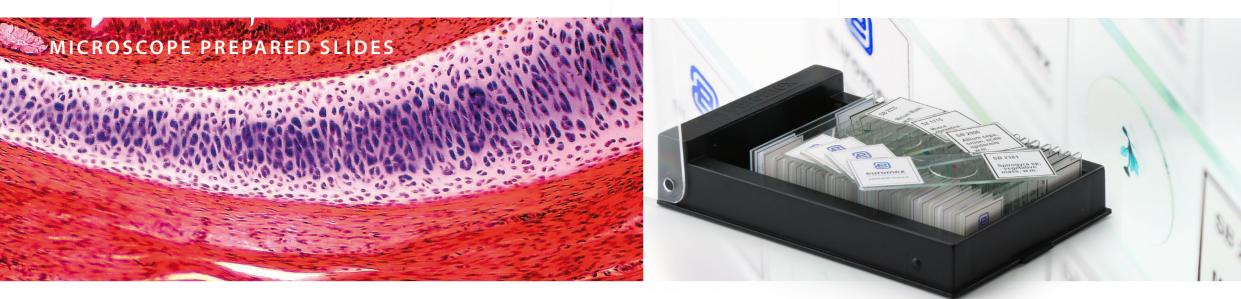
SH.1060 Tendon I.s (Dense connective tissue), dog SH.1075 Skin section with sweat gland, human SH.1330 Testis rabbit, c.s SH.1340 Ovary rabbit with developed eggs SH.1360 Sperm, human, smear SH.1490 Retina, rabbit, sec

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



sets with 23 slides for education mammal histology set

PB.5221 SET FOR EDUCATION

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

EPHITELIUM AND CONNECTIVE TISSUES

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

RESPIRATORY, BLOOD CIRCULATION AND ENDOCRINE SYSTEM

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

DIGESTIVE SYSTEM

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

URINARY AND GENITAL SYSTEM

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

NERVOUS SYSTEM AND SENSORY ORGANS

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

mammal histology set

PB.5222 SET FOR EDUCATION

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

EPHITELIUM AND CONNECTIVE TISSUES

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

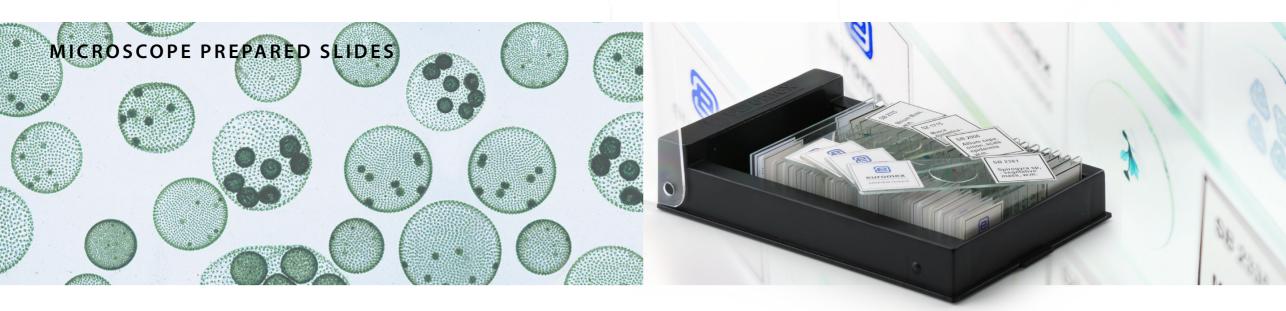
URINARY AND GENITAL SYSTEM

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

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set for hobby 10 slides zoology and botany set

PB.5204 SET FOR HOBBY

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

ZOOLOGY

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

BOTANY

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

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 Z

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

BOTANY

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

ZOOLOGY

- SZ.1520 Paramecium, w.m
 SZ.1535 Euglena virides, a flagellate with eyespot
 SZ.1536 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.s SH.1230 Small intestine, dog, c.s SH.1250 Liver, pig, section

URINARY AND GENITAL SYSTEM

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

NERVOUS SYSTEM

AND SENSORY ORGANS

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

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

individual euroslides for zoology

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

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
- SZ.1640 Lumbricus, earthworm, c.s

CRUSTACEANS

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

Δ

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

AMPHIBIANS

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

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

- 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)



PB.5180

a ree

disposables

MICROSCOPE SLIDES AND COVER GLASSES

PB.5150	Microscope slides 76 x 26 mm, half white glass,
	cut edges. 50 pieces
PB.5155	Microscope slides 76 x 26 mm white glass,
	ground edges. 50 pieces
PB.5157-W	Microscope slides 76 x 26 mm,
	ground white frosted side, 50 pieces
PB.5157-B	Microscope slides 76 x 26 mm,
	ground blue frosted side, 50 pieces
PB.5160	Microscope slides 76 x 26 mm with concavity,
	ground edges. 10 pieces
PB.5165	Cover glasses 18 x 18 mm,
	thickness 0.13-0.17 mm. 100 pieces

- PB.5168 Cover glasses 22 x 22 mm, thickness 0.13-0.17 mm. 100 pieces
- PB.5170 Cover glasses Ø18 mm, thickness 0.13-0.17 mm. 100 pieces

MICROSCOPE SLIDE BOXES

- **PB.5181** Black plastic slide box for 25
- PB.5180 Wooden slide box for 25 slides. White interior with index
- PB.5185 Black plastic slide box for 100 slides

PB.5168 / PB.5170

STAINS

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



MISCELLANEOUS ACCESSORIES

PB.5200 Staining trough for 10 slides

PB.5210 Fine pointed brush

- PB.5245 Lens paper. 100 sheets
- **PB.5250** Solid paraffin. Melting point 60°C, 200 grams
- **PB.5255** Immersion oil, refractive index nD = 1.482. (25 ml)
- **PB.5265** Entellan, guick drying Canada balsam. In bottle (25 ml)
- PB.5274 Isopropyl alcohol 99%. In bottle (200 ml)
- PB.5277 Formalin 40%, fixing agent. In bottle (200 ml)
- PB.5275 Cleaning kit: lens cleaning fluid, lint free lens tissue, brush, air blower, cotton swabs
- PB.5276 Microscope maintenance and servicing kit, 16pcs: cleaning brush, 6 pcs screwdriver set, air blower, 3 pcs Allen key, 1.5, 2, 2.5 mm, lens cleaning fluid 20 ml, cleaning cloth 140 x 140 mm, 100 pcs lens tissue sheets, tube of maintenance grease, 10 ml bottle of oil, packed in a nice toolbox

(DISSOLVED) STAINS

Supplied in 25 ml bottles

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



euromex 378

PB.5150

8

EUROMEX HOLLAND 50pcs



PB.5276

other products

optical instruments



optical instruments

Euromex offers a large range of optical products for a wide variety of applications in different fields

Our high-quality magnifiers, refractometers and other optical instruments all ensure an excellent optical quality and unmatched durability MAGNIFIERS & MEASURING MICROSCOPES • PAGE 382 REFRACTOMETERS • PAGE 386 POLARIMETERS • PAGE 393 SPECTROSCOPES • PAGE 394 PATHOLOGY SCANNER • PAGE 396

MAGNIFIERS & MEASURING MICROSCOPES



handheld magnifiers and magnifiers with handles

PB.5022 🔵

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

PB.5020



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

LED LOUPE RIPLET 10X-21MM

PB.5034-LED

PB.5032

FOLDING MAGNIFIERS

WHITE LED ILLUMINATION

PB.5034-LED Achromatic magnifier 10x triplet.

PB.5018-LED Achromatic magnifier 15x triplet.

PB.5033-LED Achromatic magnifier 20x, triplet.

PB.5035-LED Achromatic magnifier 30x triplet.

Lens Ø 21 mm. White LED illumination

Lens Ø 21mm. White LED illumination

Lens Ø 21 mm. White LED illumination

Lens Ø 21 mm. White LED illumination

FOLDING MAGNIFIERS

PB.5016 Aplanatic magnifier 6x, doublet.

PB.5018 Aplanatic magnifier 15x, doublet.

PB.5032 Achromatic magnifier 10x, triplet.

PB.5033 Achromatic magnifier 20x, triplet.

Lens Ø 20 mm. Field of view 25 mm

Lens Ø 18 mm. Field of view 14 mm

Lens Ø 20 mm. Field of view 15 mm

Lens Ø 20 mm. Field of view 8 mm

ACHROMAT 10X-20mm

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MAGNIFIERS & MEASURING MICROSCOPES

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



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magnifiers & measuring microscopes

TABLE MAGNIFIERS

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

MISCELLANEOUS MAGNIFIERS

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



MEASURING MAGNIFIERS WITH RETICLE

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

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

PB.5046 Measuring magnifier 10x.

Eyepiece Ø 20 mm. Field of view 35 mm. Measuring scale 15-0-15 mm with 0.1, 0.2 and 0.5 mm graduations

- PB.5048 Measuring magnifier 4x.
 Eyepiece Ø 30 mm. Field of view 65 mm.
 Measuring scale 25-0-25 mm with 0.1 mm graduations
- PB.5047 Measuring magnifier 10x.
 Eyepiece Ø 25 mm. Field of view 30 mm.
 Measuring scale 15-0-15 mm with 0.1 graduation.
 White LED-illumination

PB.5046

PB.5045

PB.5047

MEASURING MICROSCOPES

- **PB.5008** Measuring microscope 20x with LED illumination.

 Measuring scale 7.2 mm with 0.1 mm graduation
- **PB.5010** Measuring microscope 40x with LED illumination.

 Measuring scale 3 mm with 0.05 mm graduation
- **PB.5012** Measuring microscope 60x with LED illumination.

 Measuring scale 1.75 mm with 0.02 mm graduation
- **PB.5014** Measuring microscope 100x with LED illumination. Measuring scale 1.1 mm with 0.01 mm graduation

PB.504 PB.504

refractometers





refractometers

OTHER OPTICAL PRODUCTS MAGNIFIERS | INSTRUMENTS

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

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

REFRACTOMETERS • PAGE 374 ABBE REFRACTOMETER • PAGE 377



Analog refractometer

Digital refractometer

refractometers handheld and table models

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

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

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

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

Application	Art no	Range	Accuracy	Remarks	ATC	Handheld model	Table model	Analog	Digital
Concentrations of sugar in marmalades,	RF.6190	0-90 Brix	0.2	3 scales: 0-42 / 42-71 / 71-90 Brix		•		•	
fruits, syrups,	RF.6510	0-10 Brix	0.1		•	•		•	
wine and monitoring	RF.6520	0-20 Brix	0.1		•	•		•	
of oil emulsions	RF.6532	0-32 Brix	0.2		•	•		•	
	RF.6562	28-62 Brix	0.2		•	•			
	RF.6580	0-80 Brix	0.5		•	•			
	RF.6582	45 - 82 Brix	0.5		•	•		•	
	RF.6592	58 - 92 Brix	0.2		•	•		•	
	RF.6635	0-150 °Oe	1	Oechsle units	•	•		•	
		0-35 Brix	0.2	Sugar concentration					
		0-27 °KMW	0.2	Babo units					
		0-22 %	0.2	% volume					
		0-37 CNM	0.5						
	RD.6735	0-150 °Oe	1		•	•			•
		0-35 Brix	0.1						
		0-25 °KMW	0.1						
		0-22 %	0.1						
	RD.6645	0-45 Brix	0.1		•	•			•
		1.33 - 1.41 R.I.	0.0003						
	RD.6666	0-80 Brix	0.5		•	•			•
		1.33 - 1.51 R.I.	0.0005						
	RD.6667	58 - 92 Brix	0.2		•	•			•
	DE CC 40	1.43 - 1.52 R.I.	0.0003	the second state of					
Honey	RF.6642	13 - 25 %	0.1	Honey moisture	•	•		•	
	RF.6644	58 - 92 Brix	0.5		•	•		•	
		38-43 °Be	0.5						
		12 - 27 %	1	Water					
Concentration of	RF.6627	0-25 %	0.2	% volume	•	•		•	
sugar/alcohol %		0-40 Brix	0.2						
Colinity and	DF 6610	0-20 Baume 0-100 0/00	0.2						
Salinity and concentration of sugar	RF.6610	0 - 10 0/ 00 0 - 10 Brix	1 0.1		•	•		•	
concentration of sugar		1.00 - 1.07 R.I.	0.005						
	RF.6628	0-28 %	0.005						
	111.0020	0 20 /0	0.2		-	-			
	RD.6728	0-28 %	0.1	% NaCl	•	•			•
		0-45 Brix	0.1						
		1.33 - 1.41 R.I.	0.0003	Only for sugar/salt					

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

ACCESSORIES AND SPARE PARTS



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

 RF.5384 5 ml immersion nD 1.79 liquid for RF.5381
- LE.5209 20 W 12 V cold light source with single fiber light conductor (for Abbe refractometer 98.490)
- SL.5208 Spare 20 W 12 V halogen bulb
- **98.492** Thermometer 0-50° C (for Abbe refractometer 98.490)
- 98.496 Calibration slide nD 1.5163 (for Abbe refractometer 98.490)



98.490

Abbe laboratory refractometer substance identification

The Abbe laboratory refractometer is a bench-top instrument for high-precision measurements of an index of refraction and suitable for determination of the refractive index of solid samples, such as glass, plastics, and polymer films

The instrument is supplied with a thermometer and water connection to control fluid temperatures. Also equipped with a Brix and a refraction index scale and supplied with a test plate

Capable of measuring all kinds of concentrations and identifying several types of substances

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

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



Substance identification of sugar concentration

MODEL	Scales	Accuracy	Remarks	Analog
98.490	0-95 Brix	0.5 Brix	Abbe table refractometer without light source	•
	1.300-1.700 RI	0.0002 RI		

polarimeters & spectroscopes



polarimeters & spectroscopes

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

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



polarimeter

99.400-LED

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

Polar scale, range \pm 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



ACC	ESS	ORIE	S	FOR	99.4	00

or high-power LED with 589.3 nm filter

99.410 Measuring tube, 100 mm long

99.415 Measuring tube, 200 mm long

HIGHLIGHTS

observation tubes

Fast and accurate

99.431

99.197

99.430 Cover glass for measuring tube Ø 15 mm

• The polarimeters are delivered with 100 and 200 mm

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

Rubber ring (for 99.430) Spare sodium 589.3 nm lamp

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

SPECTROSCOPES

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



handheld spectroscopes SP.5200

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



SP.5155

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

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



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

SP.5150

Handheld spectroscope with adjustable slit from 0 tot 1 mm

Weight

92

Adjustable

0-1 mm

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

Dimensions

90 x18 mm Ø



(月) euromex

SP.5100

MODEL

SP.5150

Handheld spectroscope with fixed slit

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

With

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

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

394

SP.5100



PS.1001

PathoScan 10,000 DPI slide scanner

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

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

PATHOVIEW SCANNING SOFTWARE

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

HIGHLIGHTS

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



PS.1001 / PS.3001

SPECIFICATION

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

MODELS

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

PS.1001

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

choose the right euromex microscope

Euromex offers a large range of microscope series. Selecting the right microscope for your application might be challenging and time consuming. To simplify this process we have listed our recommended models for most common applications in education, laboratories and industry

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

UNIVERSITY LABS FIELD OF APPLICATION

RECOMMENDED MODELS

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

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
 food and beverages 	Quality and safety controls, before, during and after the production of food and beverages	BioBlue.Lab, bScope®, iScope®, Oxion
• forensics	Analysis of scientific evidence. Toxicology, fingerprints, Forensic anthropology and archeology, forensic botany and entomology	BioBlue.Lab, iScope®, iScope® (materials and polarization), Oxion, Oxion (materials), Oxion Inverted, Oxion Inverted (materials), NexiusZoom, DZ series, Z series
• genetics	Study of genes, heredity in living organisms including bacteria, plants, animals and humans	iScope®, Oxion, Delphi-X Observer, DZ series
• geology, mineralogy	Earth Science; Study of solids, rocks and processes Identification and classification of rocks and minerals	iScope® (materials), Oxion (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series, MacroZoom
• geology, petrology	Identification by means of petrographic microscopy	iScope® (polarization), Delphi-X Observer (polarization), StereoBlue, NexiusZoom, DZ series
• glass industry	Quality control, before, during and after the production of glass and coatings	iScope® (materials), Oxion (materials), Oxion Inverso (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series
• hematology	Study and diagnosis, treatment and prevention of diseases of the blood	iScope®, bScope® (darkfield), iScope® (darkfield), Oxion, Oxion (darkfield)
 histopathology 	Microscopic examination of tissue, diagnosis of diseases	iScope [®] , Oxion, Delphi-X Observer
horticulture	Selective breeding of plants and fruit for production of food	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series, MacroZoom
• in vitro fertilization	In vitro fertilization IFV. Quality control of collected egg and sperm	StereoBlue, NexiusZoom, DZ series, Z series
• marine Biology	Study of organisms living in the ocean or seas as branch of biology	bScope®, BioBlue.Lab, iScope®, Oxion
• mechanics	Manufacturing and quality inspection of mechanical parts	Delphi-X Observer (materials), iScope® (materials), Oxion (materials), Oxion Inverso (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series, MacroZoom
• metallurgy	Manufacturing and quality inspection of metallic elements, intermetallic compounds and alloys	Delphi-X Observer (materials), iScope® (materials), Oxion (materials), bScope® (materials), StereoBlue, NexiusZoom, DZ series, MacroZoom
• microbiology	Study of microscopic uni-, multi- or acellular small organisms such as protozoa, algae, bacteria and more	iScope®, Oxion, StereoBlue, NexiusZoom, DZ series
• mycology	Study of fungi as branch of biology	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series

UNIVERSITY LABS FIELD OF APPLICATION

RECOMMENDED MODELS

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

LIFE SCIENCE LABORATORIES

FIELD OF APPLICATION

RECOMMENDED MODELS

• agronomy & forestry	Selective breeding of plants, fruit and production of food from plants, wood from trees, fuel. Plant physiology and genetics research	BioBlue.Lab, b5cope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series, MacroZoom
 anatomopathology 	Diagnosis of diseases of organs or tissues. Cytopathology and forensic pathology	Delphi-X Observer, iScope®, bScope®, BioBlue.Lab, Oxion, StereoBlue, NexiusZoom, DZ series
 bacteriology 	Study of bacteria as subdivision of microbiology. Identification, classification	BioBlue.Lab, bScope®, iScope®, Oxion, Oxion Inverso, Delphi-X Observer
• biochemistry	Study of chemical processes within living organism. Identification and classification of enzymes and structure of biomolecules	BioBlue.Lab, bScope®, iScope®, Oxion
• biomedical	Study of medical microbiology, virology, epidemiology, biomedical engineering	Delphi-X Observer, iScope®, bScope®, BioBlue.Lab, Oxion
• biotechnology	Study of living organism in order to make food products, for plant protection (genetically modified organism) and other bioprocess engineering. Development of pharmaceutical drugs, genetic testing, enzymes production, biofuels, textile	Delphi-X Observer, iScope®, bScope®, BioBlue.Lab, Oxion, NexiusZoom, DZ series, MacroZoom
• botany	Study of plants as branch of biology. Plant anatomy and morphology. Plant genetics and ecology. Plant biochemistry	BioBlue.Lab, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series
• cell culture	Controlled growth of cells and tissues, fungal culture and microbiological culture	Delphi-X Inverso, Oxion Inverso, NexiusZoom, DZ series
• chemistry	Study of the composition and properties of chemicals	iScope® (materials and polarization), Oxion (materials), bScope® (materials), NexiusZoom, DZ series
• cosmetics	Research, development and testing (safety) of substances for make-up or perfume	bScope® (materials), iScope® (materials), NexiusZoom, Oxion (materials), DZ series
• cytology	Study of cell structure, function an chemistry. Detection of cellular diseases	Delphi-X Observer, iScope®, bScope®, BioBlue.Lab, Oxion
• dermatology	Study and diagnosis, treatment of skin, nails and hair diseases	iScope®, Oxion, NexiusZoom, StereoBlue, DZ series, MacroZoom
• digital imaging	Observation and analysis of microscope images, save and captured the images and videos	CMEX cameras, CCD cameras, HD cameras, Cooled cameras, ProPad, MacroZoom
• embryo collection	Embryo collection and transfer in mares, pigs, cows. Quality control	NexiusZoom, DZ series, Z series
• embryology	Study of gametes, embryos and fetuses	BioBlue.Lab, bScope®, iScope®, Oxion, NexiusZoom, DZ series, Z series
• entomology	Study of insects as branch of zoology. Identification and classification of beetles, flies, termites, moths and butterflies, bees, ants, wasps	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series, MacroZoom
• environmental	Monitoring of environmental conditions such as water, atmosphere, ecosystems, soil and pollution	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series
• fluorescence	Study of living and non living material with the help of fluorescence markers (fluorochromes)	Delphi-X Observer (fluorescence), iScope® (fluorescence), Oxion (fluorescence), Oxion Inverso (fluorescence), bScope® (fluorescence), DZ series
• forensics	Analysis of scientific evidence. Toxicology, fingerprints, Forensic anthropology and archeology, forensic botany and entomology	BioBlue.Lab, bScope®, iScope®, Delphi-X Observer, Oxion, Oxion Inverted, NexiusZoom, DZ series, Z series

LIFE SCIENCE FIELD OF APPLICATION LABORATORIES

RECOMMENDED MODELS

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

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INDUSTRY

FIELD OF APPLICATION RECOMMENDED MODELS

INDUSTRY

FIELD OF APPLICATION

RECOMMENDED MODELS

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

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

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