



# CATALOG 2018

MICROSCOPES  
FOR INDUSTRY

PART 3

 **euromex**  
microscopes holland

PART 1 MICROSCOPES FOR EDUCATION

PART 2 MICROSCOPES FOR LABORATORIES

PART 3 MICROSCOPES FOR INDUSTRY



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## EDUCATION | BIOLOGICAL MICROSCOPES

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

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## EDUCATION | STEREO MICROSCOPES

EduBlue • StereoBlue  
NexiusZoom • AP series

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## EDUCATION | DIGITAL SOLUTIONS

Digital microscopes • USB cameras • HD cameras • WiFi cameras  
Tablet cameras • CCD camera • Software • Adapters

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## LABORATORIES | LIFE SCIENCE MICROSCOPES

iScope • bScope • Delphi-X Observer • Oxion • BioBlue.Lab • Oxion Inverso • iScope (fluorescence)  
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## LABORATORIES | STEREO MICROSCOPES

NexiusZoom • StereoBlue • DZ series  
Z series • P series

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## LABORATORIES | DIGITAL SOLUTIONS

Digital microscope • USB cameras • HD cameras • WiFi camera  
Tablet camera • CCD cameras • Software • Adapters

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## INDUSTRY | STEREO MICROSCOPES

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

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## INDUSTRY | MATERIALS SCIENCE MICROSCOPES

iScope (material & polarization) • bScope (material)  
Oxion (material) • Oxion Inverso (material)

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## INDUSTRY | DIGITAL SOLUTIONS

USB cameras • HD cameras • WiFi camera  
Tablet camera • CCD camera • Software • Adapters

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## ACCESSORIES | FOR MICROSCOPY

Illumination solutions • Preparation accessories • Dissection kits  
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## OTHER OPTICAL PRODUCTS

Magnifiers & measuring microscopes • Refractometer  
Polarimeter • Spectroscopes • Pathology Scanner

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## USB MICROSCOPES

Q-scope USB microscopes • Q-scope WiFi microscopes  
Q-scope stands

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

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

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

Euromex Microscopen bv is a subsidiary of **Euromex Optics Group bv**, a group holding company with active subsidiaries in the field of optical instruments and high level optical and opto-mechanical components

The broad product offering of Euromex can be found in this grand catalog and online at **[www.euromex.com](http://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](http://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, laboratories and industry can simplify your selection

[SEE APPENDIX](#)

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

[SEE APPENDIX](#)

# StereoMicroscopes

## Industry



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# StereoMicroscopes

## Industry

Stereo microscopes from Euromex are designed to provide high resolution three-dimensional images. These high-end microscopes are robust, ergonomic and enable long, fatigue-free working sessions in both laboratory and industrial environments

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

# NexiusZoom

The new standard in stereo microscopy



The NexiusZoom stereo microscopes from 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 to observe larger objects

# STEREO MICROSCOPES

NexiusZoom

FEATURED

## NexiusZoom, -EVO and -ESD

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



NZ.1903-U ESD

<b>NZ.1903-S</b>	
<b>Dimensions</b>	<b>Weight</b>
(h) 339 x (w) 256 x (d) 311 mm	5.1 kg
<b>NZ.1903-P</b>	
<b>Dimensions</b>	<b>Weight</b>
(h) 299 x (w) 256 x (d) 311 mm	5.3 kg

For weight of other products see table



## HIGHLIGHTS

- Binocular and trinocular heads with HWF 10x/22 or HWF 10x/23 mm eyepieces
- Zoom 1:6.7 ratio, 6.7x to 45x or 1:8.4, 6.5x to 55x
- Ergonomically designed stands
- 3 W LED illuminations
- Configurations up to 220x magnification
- ESD safe models available
- 10 years warranty

## SPECIFICATIONS

### EYEPIECES

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

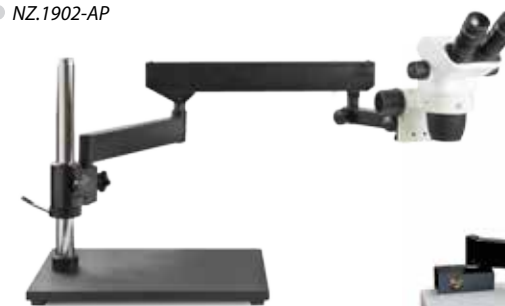
### HEAD

Binocular or trinocular heads with 45° inclined tubes. Both eyepieces with ± 5 diopter adjustments. Interpupillary distance adjustable between 54 mm and 75 mm. Trinocular head is supplied with a fixed light path beamsplitter (50:50)

### OBJECTIVE

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



NZ.1903-PL

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 0.3x, 0.5x, 0.75x, 1.5x and 2.0x are also available for the standard NexiusZoom and for the NexiusZoom EVO

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

NZ.1902-A



INDUSTRY STEREO MICROSCOPES

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## POLARIZATION

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

## STAND

- Ergonomically designed pillar or rack & pinion stand with 3W incident and 3W transmitted LED illuminations
- Ergonomically designed pillar stand with two 3W goose-neck type incident LED illuminations on each side and a 3W transmitted LED illumination
- Ergonomically designed universal or boom stands, without illumination (-U, -B and BC stands)
- Articulated arm stand for table mounting or with heavy desktop stand, both without head holder, without illumination (-A and -AP stands)

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

*More illumination options see chapter 10 (Accessories)*

## STAGE

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



● NZ.9505

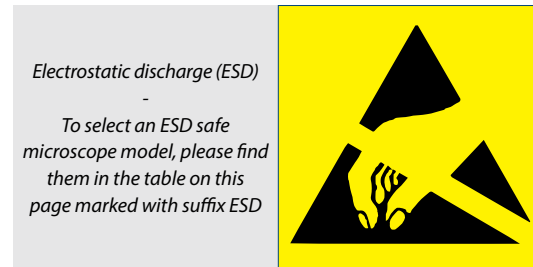
## ILLUMINATION

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

## ESD SAFE MICROSCOPES

For inspection and assembly applications. Electrostatic discharge (ESD) is the unwanted sudden flow of electricity between two electrically charged objects. ESD can cause a range of harmful effects as well as permanent damage to solid state electronics 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 AND NEXIUSZOOM ESD 0.67- 4.5 (WF 10X/22MM)

MODELS	Binocular	Trinocular	Pillar stand	Rack & pinion stand	Universal stand	Boom stand	Articulated arm stand	Goose-neck dual LED	Anti static ESD	Weight (kg)
NZ.1902-P	•		•							5.0
NZ.1902-PL	•		•					•		5.1
NZ.1902-P-ESD	•		•						•	4.9
NZ.1902-S	•			•						4.9
NZ.1902-U	•				•					15.6
NZ.1902-B	•					•				22.1
NZ.1902-BC <sup>(1)</sup>	•					•				10.5
NZ.1902-A	•						•			8.6
NZ.1902-AP <sup>(2)</sup>	•						•			20.7
NZ.1903-P		•	•							5.2
NZ.1903-PL		•	•					•		5.3
NZ.1903-P-ESD		•	•						•	5.1
NZ.1903-S		•		•						5.1
NZ.1903-U		•			•					15.7
NZ.1903-B		•				•				22.2
NZ.1903-BC <sup>(1)</sup>		•				•				10.6
NZ.1903-A		•					•			8.7
NZ.1903-AP <sup>(2)</sup>		•					•			20.8

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

MODELS	Binocular	Trinocular	Pillar stand	Rack & pinion stand	Universal stand	Boom stand	Articulated arm stand	Goose-neck dual LED	Weight (kg)
NZ.1702-P	•		•						5.0
NZ.1702-PL	•		•					•	5.1
NZ.1702-S	•			•					4.9
NZ.1702-U	•				•				15.6
NZ.1702-B	•					•			22.1
NZ.1702-BC <sup>(1)</sup>	•					•			10.5
NZ.1702-A	•						•		8.6
NZ.1702-AP <sup>(2)</sup>	•						•		20.7
NZ.1703-P		•	•						5.2
NZ.1703-PL		•	•					•	5.3
NZ.1703-S		•		•					5.1
NZ.1703-U		•			•				15.7
NZ.1703-B		•				•			22.2
NZ.1703-BC <sup>(1)</sup>		•				•			10.6
NZ.1703-A		•					•		8.7
NZ.1703-AP <sup>(2)</sup>		•					•		20.8

<sup>(1)</sup> Boom stand model with tabletop clamp

<sup>(2)</sup> Articulated stand model with heavy desktop base plate



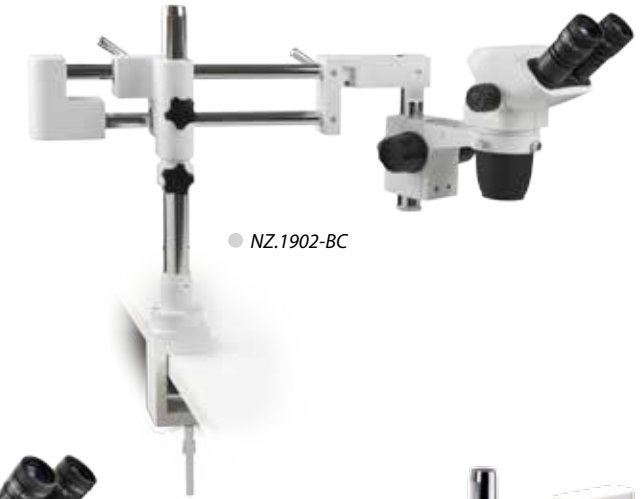
## MAGNIFICATIONS

**NexiusZoom and NexiusZoom ESD:** working distance and field of view with standard High Wide Field (HWF) 10x / 22 eyepieces

Zoom indication	Objective 1x (standard) WD 110 mm		Auxiliary lens 0.5x WD 165 mm		Auxiliary lens 0.75x WD 120 mm		Auxiliary lens 1.5x WD 53 mm		Auxiliary lens 2x WD 30 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	Total magnification	Field of view in mm
0.67	6.7	32.8	3.35	65.7	5.0	43.8	10.1	21.9	13.4	16.4
0.7	7.0	31.4	3.5	62.9	5.3	41.9	10.5	21.0	14.0	15.7
0.8	8.0	27.5	4.0	55.0	6.0	36.7	12.0	18.3	16.0	13.8
1.0	10.0	22.0	5.0	44.0	7.5	29.3	15.0	14.7	20.0	11.0
1.5	15.0	14.7	7.5	29.3	11.3	19.6	22.5	9.8	30.0	7.3
2.0	20.0	11.0	10.0	22.0	15.0	14.7	30.0	7.3	40.0	5.5
3.0	30.0	7.3	15.0	14.7	22.5	9.8	45.0	4.9	60.0	3.7
4.0	40.0	5.5	20.0	11.0	30.0	7.3	60.0	3.7	80.0	2.8
4.5	45.0	4.9	22.5	9.8	33.8	6.5	67.5	3.3	90.0	2.4

**NexiusZoom EVO:** working distance and field of view with standard High Wide Field (HWF) 10x / 23 eyepieces

Zoom indication	Objective 1x (standard) WD 110 mm		Auxiliary lens 0.5x WD 165 mm		Auxiliary lens 0.75x WD 120 mm		Auxiliary lens 1.5x WD 53 mm		Auxiliary lens 2x WD 30 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	Total magnification	Field of view in mm
0.65	6.5	35.4	3.25	70.8	4.9	47.2	9.8	23.6	13.0	17.7
0.7	7.0	32.9	3.5	65.7	5.3	43.4	10.5	21.9	14.0	16.4
0.8	8.0	28.8	4.0	57.5	6.0	38.3	12.0	19.2	16.0	14.4
1.0	10.0	23.0	5.0	46.0	7.5	30.7	15.0	15.3	20.0	11.5
1.5	15.0	15.3	7.5	30.7	11.3	20.4	22.5	10.2	30.0	7.7
2.0	20.0	11.5	10.0	23.0	15.0	15.3	30.0	7.7	40.0	5.8
3.0	30.0	7.7	15.0	15.3	22.5	10.2	45.0	5.1	60.0	3.8
4.0	40.0	5.8	20.0	11.5	30.0	7.7	60.0	3.8	80.0	2.9
4.5	45.0	5.1	22.5	10.2	33.8	6.8	67.5	3.4	90.0	2.6
5.5	55.0	4.2	27.5	8.4	41.3	5.6	82.5	2.8	110	2.1



## ACCESSORIES AND SPARE PARTS

**NZ.5302** NexiusZoom binocular head with eyepieces

**NZ.5303** NexiusZoom trinocular head with eyepieces

**NZ.6010** Pair of HWF 10x / 22 mm eyepieces

**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

**NZ.8903** Auxiliary 0,3x lens for NexiusZoom. WD approx. 278 mm. Not suitable for -S, -P -M stand models

**NZ.8905** Auxiliary lens 0.5x. WD approx. 165 mm  
Not suitable for -S and -M stand models

**NZ.8907** Auxiliary lens 0.75x. WD approx. 120 mm

**NZ.8915** Auxiliary lens 1.5x. WD approx. 53 mm

**NZ.8920** Auxiliary lens 2.0x. WD approx. 30 mm  
Not suitable for the -S stand model

**NZ.8950** Protection glass for NexiusZoom head

**NZ.9010** Ergonomic rack & pinion stand with 3W transmitted and incident LED illuminators

**NZ.9015** Ergonomic pillar stand with 3W transmitted and incident LED illuminators

## How to set up a Stereo Microscope

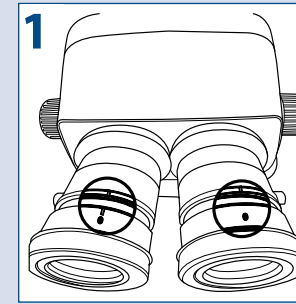
Setting up your stereo microscope properly is essential to getting parfocal images during the entire zoom range. It also prevents head aches, stressful eyes and fatigue. Below you will find a setup guide that will help get the best out of your microscope

- NZ.9017** Ergonomically designed pillar stand with two 3W goose-neck type incident LED illuminations on each side and a 3W transmitted LED illumination
- NZ.9020** Universal (single arm) stand without NexiusZoom head holder
- NZ.9030** Boom (double arm) stand without NexiusZoom head holder
- NZ.9032** Boom (double arm) stand with table clamp (without NexiusZoom head holder NZ.9090)
- NZ.9042** Ergonomic pillar stand with rotating mirror and transmitted and incident 3W LED illumination
- NZ.9090** NexiusZoom head holder (for NZ.9020, NZ. 9030 and NZ. 9032)
- NZ.9095** NexiusZoom head holder with fine coarse (for NZ.9020, NZ. 9030 and NZ. 9032)
- NZ.9095-ADD** NexiusZoom head holder with fine coarse ADD-ON for NZ.9020, NZ. 9030 and NZ.9032  
Only available with new microscopes
- NZ.9025** Articulated arm stand with table clamp (without NexiusZoom head holder)
- NZ.9027** Articulated arm stand with heavy stand (without NexiusZoom head holder)
- NZ.9081** NexiusZoom head holder (for articulated arm stand NZ.9025 and NZ.9027)
- NZ.9520** Polarization kit for NexiusZoom: 360° rotatable round 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 round 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
- AE.5168-NZ** Heating stage with PID controller up to 50°C. Only with the purchase of a new microscope
- NZ.9950** Standard opaque stage plate

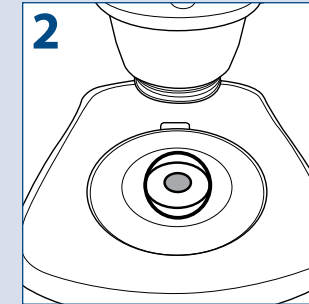
- NZ.9956** Black/white stage plate
- NZ.9570** Pair of object clamps for stage
- NZ.9572** Adjustable GEM object clamp for -P, -PL and -S stands
- 50.876** Darkfield attachment (for -S and -P stands)
- NZ.9833** C-mount adapter with 0.33x lens for 1/3" cameras (suitable for trinocular models)
- NZ.9850** 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.5025** T2 adapter for Nikon D digital SLR cameras
- AE.5040** T2 adapter for Canon EOS digital SLR cameras  
*Other T2 adapters on request*
- AE.1112** Object micrometer 50 mm (divided in 500 parts on glass slide 76 x 26 mm)



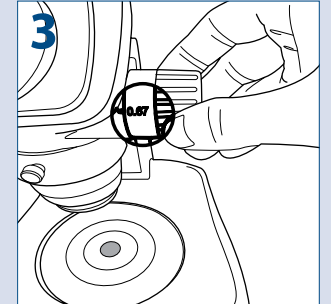
NZ.5302 / NZ.5303 ●



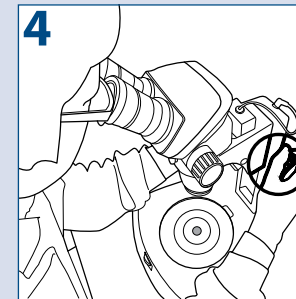
Turn the diopter adjustment rings of both eyepieces to position "0"



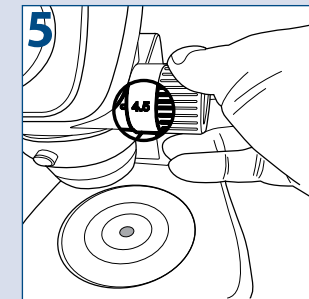
Put a specimen on the stage plate



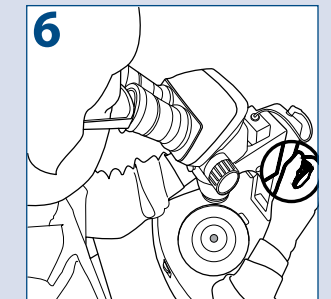
Turn the zoom adjustment knob to the lowest magnification



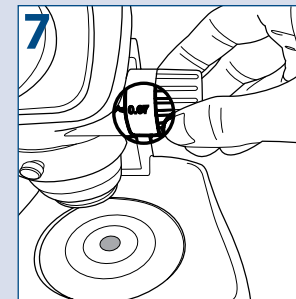
Rotate the focus adjustment knob to bring the specimen into focus



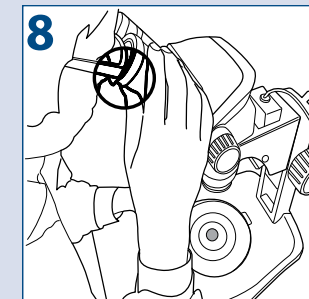
Turn the zoom adjustment knob to the highest magnification



Rotate the focus adjustment knob to bring the specimen into focus



Turn the zoom adjustment knob to the lowest magnification



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

### PLEASE NOTE

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

If not, please repeat steps 3 to 8

# MICROSCOPES FOR GEMOLOGY

NexiusZoom

FEATURED



## NexiusZoom for gemology

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

● NZ.1902-GEML

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

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



● NZ.1902 with backwards tilting stand

## HIGHLIGHTS

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



## 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. WD 110 mm

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

### STAND

Ergonomically designed 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, iris diaphragm and incident illumination

### ILLUMINATION

30 Watt halogen transmitted illumination, 1W LED or 7W fluorescent incident illumination.

With internal power supply 100-240 V operation. 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

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	Objective 1x (standard) WD 110 mm		Auxiliary lens 0.75x WD 120 mm		Auxiliary lens 1.5x WD 53 mm		Auxiliary lens 2x WD 30 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	Objective 1x (standard) WD 110 mm		Auxiliary lens 0.75x WD 120 mm		Auxiliary lens 1.5x WD 53 mm		Auxiliary lens 2x WD 30 mm	
	Total magnification	Field of view in mm	Total magnification	Field of view in mm	Total magnification	Field of view in mm	Total magnification	Field of view in mm
0.65	6.5	35.4	4.9	47.2	9.8	23.6	13.0	17.7
0.7	7.0	32.9	5.3	43.4	10.5	21.9	14.0	16.4
0.8	8.0	28.8	6.0	38.3	12.0	19.2	16.0	14.4
1.0	10.0	23.0	7.5	30.7	15.0	15.3	20.0	11.5
1.5	15.0	15.3	11.3	20.4	22.5	10.2	30.0	7.7
2.0	20.0	11.5	15.0	15.3	30.0	7.7	40.0	5.8
3.0	30.0	7.7	22.5	10.2	45.0	5.1	60.0	3.8
4.0	40.0	5.8	30.0	7.7	60.0	3.8	80.0	2.9
4.5	45.0	5.1	33.8	6.8	67.5	3.4	90.0	2.6
5.5	55.0	4.2	41.3	5.6	82.5	2.8	110	2.1

## ACCESSORIES AND SPARE PARTS

- 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
  
- NZ.8907** Auxiliary lens 0.75x. WD 120 mm
- NZ.8915** Auxiliary lens 1.5x. WD 53 mm
- NZ.8920** Auxiliary lens 2.0x. WD 30 mm. Not suitable for NZ.1902-S and NZ.1903-S
- 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
  
- 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.5025** T2 adapter for Nikon D digital SLR cameras
- AE.5040** T2 adapter for Canon EOS digital SLR cameras. Other T2 adapters on request
  
- AE.1112** Object micrometer 50 mm (divided in 500 parts on glass slide 76 x 26 mm)



- The clamp holder allows precise positioning of objects
- The variable iris diaphragm is used for maximizing contrast
- Brightfield/darkfield switch for transmitted illumination for maximum flexibility



NZ.5302 / NZ.5303 ●

# STEREO MICROSCOPES



7 INDUSTRY STEREO MICROSCOPES



## StereoBlue

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

● SB.1903



<b>SB.1302/SB.1402</b>	
<b>Dimensions</b>	<b>Weight</b>
(h) 350 x (w) 220 x (d) 266 mm	4.0 kg

<b>SB.1302-P/SB.1402-P</b>	
<b>Dimensions</b>	<b>Weight</b>
(h) 299 x (w) 220 x (d) 266 mm	4.7 kg

For weight of other products see table 'Models'

## HIGHLIGHTS

- Binocular and trinocular models
- Dual 1x/3x or 2x/4x magnification objectives
- Zoom stereo 0.7x to 4.5x objective
- Ergonomically designed stands
- Available in ergonomic rack & pinion, pillar and universal stands
- 3 W LED illuminators
- Built-in ring light
- Ergonomic carrying grip
- 5 years warranty



Model with universal stand (SB.1902-U) ●

## SPECIFICATIONS

### EYEPIECES

Pair of WF 10x/20 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

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 20 mm/6.6 mm or 10 mm/5.0 mm
- working distance 100 mm

### ZOOM OBJECTIVE

- Zoom Stereo 0.7x to 4.5x parfocal objective
- Magnification from 7x to 45x
- Field of view 28.5 mm to 4.4 mm
- working distance 100 mm
- Upgradable to maximum 135x magnification

### STAND

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

The ergonomically designed universal single arm stand is ideal for viewing large samples or working under the microscope. Standard supplied 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. More illumination options see chapter 10 (Accessories). The stands are alloy metal casted with hardened coating. More illumination options see chapter 10

INDUSTRY STEREO MICROSCOPES 7

### ILLUMINATION

With 3 W transmitted and incident LED illuminators which can be used simultaneously or adjusted separately. SB.3903 and SB.3903-P models come with a built-in 30 LED ring light for reflexed illuminator and 3 W transmitted illuminator

### PACKAGE CONTENT

Models with illumination are supplied with power cord, dust cover, eyecups, a spare fuse, Ø 60 mm transparent,

black/white stage plates and user manual. All packed in a polystyrene box



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



● SB.1302

● SB.1402-P

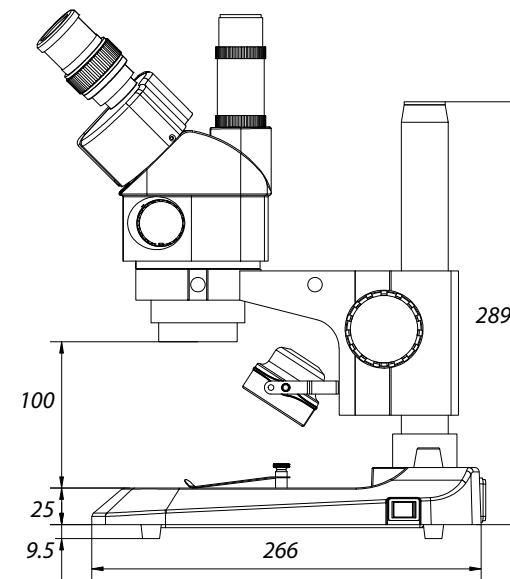
● SB.1902

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		•			•		•		•	4.5

## ACCESSORIES AND SPARE PARTS

- SB.6010** Pair of HWF 10x/20 mm eyepieces
- SB.6010-C** WF 10X/20 mm eyepiece with cross-hair
- SB.6010-M** WF 10X/20 mm eyepiece with micrometer scale
- SB.6015** Pair of HWF 15x/15 mm eyepieces
- SB.6015-C** WF 15X/15 mm eyepiece with cross-hair
- SB.6015-M** WF 15X/15 mm eyepiece with micrometer scale
- SB.6020** Pair of HWF 20x/10 mm eyepieces
- SB.6020-C** WF 20/10 mm eyepiece with cross-hair
- SB.6020-M** WF 20/10 mm eyepiece with micrometer scale
- SB.6099** Pair of eyecups
  
- SB.8903** Auxiliary 0,3x lens. WD approx. 247 mm. Only suitable for one and two arm boom stands and articulated arm stand
- SB.8905** Auxiliary 0.5x lens, WD approx. 170 mm. Advised only for zoom models with pillar or universal stands (with rack & pinion models the sample thickness is max. 2 cm)
- SB.8907** Auxiliary 0.75x lens for zoom models. WD approx. 114 mm
  
- SB.8915** Auxiliary 1.5x lens for zoom models. WD approx. 48 mm (not suitable for models SB.3903/SB3903-P)
- SB.8950** Protection glass window for StereoBlue Not suitable with auxiliary lenses
- SB.9032** Universal single arm stand with table clamp without StereoBlue head holder (SB.9090)
- SB.9090** NexusZoom head holder
- SB.9040** Darkfield attachment for StereoBlue
- SB.9520** Polarization kit for StereoBlue: 360° rotatable round stage with built-in polarization filter (SB.9524) + analyzer in mount to be screwed under head (SB.9525)
- SB.9524** 360° rotatable round stage with built-in polarization filter for StereoBlue
- SB.9525** 360° rotatable analyzer in mount to be screwed under head of StereoBlue
  
- SB.9570** Pair of object clamps for stage
- SB.9833** C-mount adapter with 0.33x lens for 1/3" cameras. Only for trinocular models
- SB.9850** C-mount adapter with 0.5x lens for 1/2" cameras. Only for trinocular models
- SB.9952** Stage plate, transparent, Ø 60 mm
- SB.9956** Stage plate, black/white, Ø 60 mm
  
- SB.9983** 3W LED replacement unit for StereoBlue, incident illumination
- SB.9983-R** 3 W LED replacement unit for StereoBlue, transmitted illumination

### DIMENSIONS



- AE.5130** Universal SLR camera adapter with 2x projection lens for 23.2 mm tubes. Needs T2 adapter
- AE.5025** T2 adapter for Nikon D digital SLR cameras
- AE.5040** T2 adapter for Canon EOS digital SLR cameras  
*Other T2 adapters on request*
  
- AE.1112** Micrometer 76 x 26 mm slide, 50 mm/50 divisions
- PB.5245** Lens cleaning paper, 100 sheets per pack
- PB.5274** Isopropyl alcohol 99% (200 ml)
- PB.5275** Cleaning kit: lens cleaning fluid, lint free lens tissue, brush, air blower, cotton swabs

# STEREO MICROSCOPES

## DZ series

7 INDUSTRY STEREO MICROSCOPES

● *customized configuration model (DZ.0800, 2x DZ.3010, DZ.2025, DZ.9005, DZ.9010, DZ.4010 and DZ.504 0)*



## 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

DZ.1100 / DZ.1600 / DZ.1800	
Dimensions	Weight
(h) 305 x (w) 330 x (d) 285 mm	6.0 kg
DZ.1105 / DZ.1605 / DZ.1805	
Dimensions	Weight
(h) 305 x (w) 330 x (d) 285 mm	5.2 kg

For weight of other products see table 'Models'



## HIGHLIGHTS

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



● Customized fluorescence model

## 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

### 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. Plan apochromatic Common Main Objectives 0.5x (WD 126 mm) and 2x (WD 33 mm) are also available

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

7 INDUSTRY STEREO MICROSCOPES

## 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/22mm eyepieces

### MAGNIFICATIONS AND FIELDS OF VIEW FOR STANDARD CONFIGURATIONS

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

All equipped with EWF 10x/22mm eyepieces



● DZ.3010 / DZ.3020 / DZ.3015

DZ.9013 ●

## 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

### STANDS

**DZ.5020** Universal stand without illumination. Dimensions 460(h) x 280 (l) x 400 (d) mm

**DZ.5040** Ergonomic stand with transmitted and incident LED illumination. Coaxial coarse and fine adjustments, 100 graduations, 0.015 mm per graduations

**65.980** Articulated arm stand for mounting on table without head holder (65.981 )

**65.981** Head holder 76 mm for DZ series and black articulated arm stand (65.980)

**NZ.9025** Articulated arm stand with table clamp (without DZ head holder 65.981)

**NZ.9027** Articulated arm stand with heavy stand (without DZ head holder 65.981)

**NZ.9042** Stand with rotating mirror and transmitted LED illumination

**NZ.9030** Boom (double arm) stand with heavy stand (without head holder NZ.9090)

**NZ.9032** Boom (double arm) stand with table clamp (without head holder NZ.9090)

**NZ.9090** Head holder (for NZ.9020, NZ. 9030 and NZ.9032)

### HEADS

**DZ.2020** Ergonomic binocular 0-35° tilting head without eyepieces

**DZ.2025** Binocular 20° tilted head without eyepieces Interpupillary distance from 55 to 75 mm.

### EYEPIECES

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

**DZ.3012** EWF 10x/22 eyepiece with crosshair, 1 piece

**DZ.3015** WF 15x/16 eyepiece, 1 piece

**DZ.3020** WF 20x/12 eyepiece, 1 piece

### DIAPHRAGM

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

### OBJECTIVES

**DZ.4003** Plan Common Main objective 0.3x. WD 276 mm

**DZ.4005** Plan apochromatic Common Main objective 0.5x. WD 126 mm

**DZ.4010** Plan apochromatic Common Main objective 1.0x. WD 78 mm

**DZ.4020** Plan apochromatic Common Main objectives 2.0x. WD 33 mm

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

### FLUORESCENCE ATTACHMENT

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

**DZ.9060** Filter cube with GFP-B for Blue excitation, EM band pass filter (EX 460-500, DM 505, EM 510-560)

**DZ.9061** Filter cube with GFP-L for Blue excitation, EM long pass filter (EX 460-500, DM 505, EM 510)

Other fluorescence filters available on request



## ACCESSORIES AND SPARE PARTS

**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

**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

**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.1900** Glass object plate, ø 100mm

**AE.1903** Acrylic white/black object plate

**50.875** Adjustable GEM clamp

**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*



DZ.0800 / DZ.2020 / DZ.3010 (2x) DZ.4005 / DZ.5040 ●

**AE.1385** 100 W HBO mercury vapor bulb for fluorescence

**SL.5520** LED replacement for incident LED illumination of DZ.5040 stand

**AE.1112** Micrometer slide, 50 mm/50 divisions

**PB.5245** Lens cleaning paper, 100 sheets per pack

**PB.5274** Isopropyl alcohol 99% (200 ml)

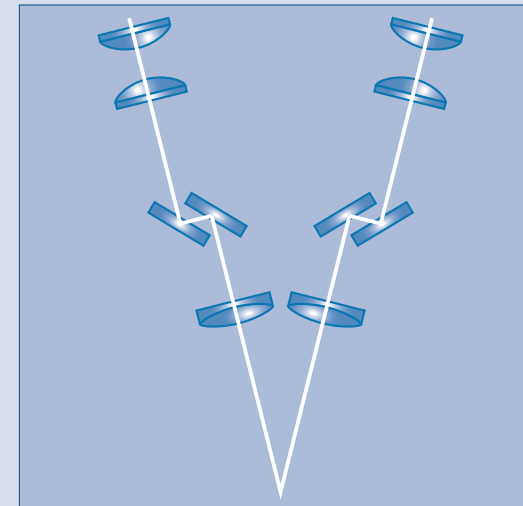
**PB.5275** Cleaning kit: lens cleaning fluid, lint free lens tissue, brush, air blower, cotton swabs

## Two concepts of 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, 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 axis under a small angle, between 10° and 12°, generate two images of the object

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

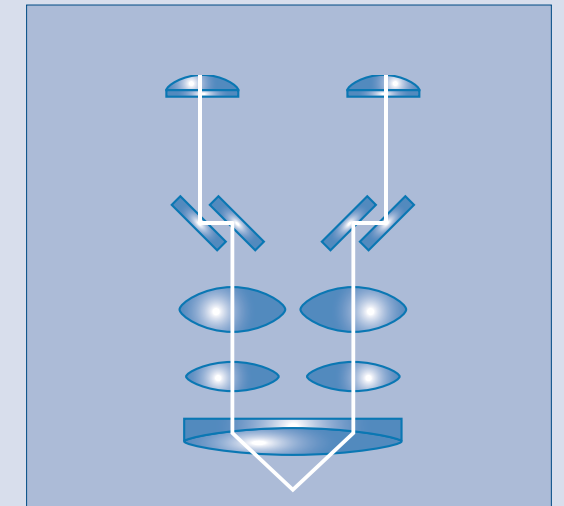
<sup>(1)</sup> Objective without auxiliary lenses and with 10x eyepieces

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

<sup>(3)</sup> The parallel system allows many accessories such as photo and epi-fluorescence attachments, iris diaphragms, beamsplitters to be added

### Common Main Objective (CMO)

principle



Two optical trains with their optical axis parallel to each other, share a last Common Main Objective to generate two images under a small angle

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

# Z series

## STEREO MICROSCOPES

INDUSTRY 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



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

<b>ZE.1654</b>	
<b>Dimensions</b>	<b>Weight</b>
(h) 250 x (w) 155 x (d) 210 mm	2.5 kg
<b>ST.1720</b>	
<b>Dimensions</b>	<b>Weight</b>
(h) 780 x (w) 270 x (d) 740 (max) mm	19 kg



## HIGHLIGHTS

- Modular system
- Binocular and trinocular models
- Standard SWF 10x/23 mm eyepieces
- Stereo zoom heads with fix 45°, 60° or 90° inclined tubes
- Zoom magnification objectives
- Superior resolution optics
- Multiple stands
- 10 years warranty



ZE.1659, AE.1950 and LE.5210 and LE.5218

## SPECIFICATIONS

### EYEPIECES

Pair of SWF 10x/23 mm eyepieces

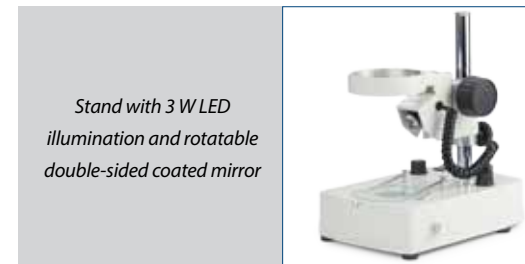
### HEAD

- Binocular or trinocular heads with 45°, 60° or 90° inclined tubes
- Diopter ± 6° adjustment on both tubes for Z series
- Interpupillary distance from 55 to 75 mm.

### 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



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

### STANDS WITHOUT ILLUMINATION

- ST.1710** Pillar stand with ST.1790 head holder. Pillar height 210 mm, diameter ø 20 mm. Dimensions(h) 250 x (w)150 x (d) 240 mm
- ST.1715** Pillar stand with ST.1792 head holder. Pillar height 250 mm, diameter ø 20 mm. Dimensions(h) 290 x (w)150 x (d) 240
- ST.1717** Pillar ergonomic flat stand with ST.1790 head holder. Pillar height 250 mm, diameter ø 20 mm. Dimensions(h) 290 x (w) 250 x (d) 350
- ST.1770** Large pillar wooden stand with ST.1790 head holder. Pillar height 360 mm, diameter ø 29 mm. Suitable for SMD inspection. Dimensions(h) 400 x (w) 580 x (d) 500

### STANDS WITH ILLUMINATION

- ST.1735** Rack & pinion stand with 3 W LED illumination and rotatable double-sided coated mirror (one frosted and one aluminum coated side). Especially developed for observation of transparent objects. Adjustable light intensity. Supplied with external power supply. Dimensions: 240 x 160 x 290 (D x W x H), min/max height 240-290

INDUSTRY STEREO MICROSCOPES

7

## SPECIFICATIONS

### STANDS WITH ILLUMINATION

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

### BOOM STANDS

**ST.1720** Articulated one arm boom stand with a 270 x 270 mm base, 610 mm and  $\varnothing$  29 mm pillar, with orientable stereo head holder ST.1794. Vertical post 780 mm. Weight 19.5 kg

**65.980** Articulated one arm stand to be mounted on table without 83 mm head holder. Depth positioning of stereo head between 33 and 100 cm. WD between 0 and maximum 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

**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

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

### FOCUSING

Coarse adjustment and friction adjustment for head holders for ST.1790, St.1792, ST.1794, ST.1796. The head holders ST.1796 and ST.1798 are also equipped with a fine focusing adjustment

### PACKAGE CONTENT

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

## ACCESSORIES AND SPARE PARTS

### EYEPIECES (without eyecups)

**AE.1835** Pair of SWF 5x/26 mm eyepieces

**AE.1836** Pair of SWF 10x/23 mm eyepieces

**AE.1834** Pair of SWF 12.5x/20 mm eyepieces

**AE.1837** Pair of SWF 15x/16 mm eyepieces

**AE.1838** Pair of SWF 20x/11.5 mm eyepieces

**AE.1840** Pair of SWF 30x/7.5 mm eyepieces

**AE.5439** Pair of eyecups

**AE.5425** Pair of eyecups, suitable when wearing spectacles

### MICROMETER EYEPIECES (with adjustable lens)

**AE.1839** SWF 10x/21mm with 10 mm/100 micrometer reticle and cross hair

**AE.1841** SWF 10x/21mm with 10 x 10 mm reticle, 400 squares

**AE.1842** SWF 10x/21mm with photo corners marks



ST.1717 ●

## 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		• <sup>(1)</sup>	45°	0.7 - 4.5x	7 - 45x	104	32/5.1
ZE.1670	•		45°	1 - 7x	10 - 70x	104	23/3.3
ZE.1671		• <sup>(1)</sup>	45°	1 - 7x	10 - 70x	104	23/3.3
ZE.1626	•		60°	0.7 - 4.5x	7 - 45x	93	32/5.1
ZE.1629	•		90°	0.7 - 4.5x	7 - 45x	110	32/5.1
ZE.1659		• <sup>(1)</sup>	45°	0.4 - 2.5x	4 - 25x	185	57/9.2

<sup>(1)</sup> 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

## STANDS

MODELS	Column (mm)	Diameter (mm)	Rack & pinion	I x p base (mm)	Height (mm)	Head holder	Illumination
ST.1710	210	20		240x150	250	ST.1790	
ST.1715	250	20		240x150	290	ST.1792	
ST.1717	250	20		320x250	290	ST.1790	
ST.1720	610	29		780x270	650	ST.1794	
ST.1735			•	240x160	290		3 W LED
ST.1740			•	240x160	290		10 W Hal
ST.1770	360	29		500x580	400	ST.1790	
65.980/65.983			•	$\varnothing$ 1000 <sup>(1)</sup>	0/295	65.983	

<sup>(1)</sup> Length with the two arms totally extended. The stand ST.1760 is not suitable for head holder ZE.1659

# ACCESSORIES AND SPARE PARTS

## MICROMETER SLIDE

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

## ADDITIONAL LENSES

(for ZE.1659)

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

## ADDITIONAL LENSES

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

- AE.1855** Additional 0.3x lens. WD 250 mm. Suitable with ST.1720, ST.1770, ST.1780, ST.1785 and 65.980 stands
- AE.1870** Additional 0.44x lens. WD 180 mm. Suitable with ST.1715, ST.1720, ST.1770, ST.1780, ST.1785 and 65.980 stands
- AE.1856** Additional 0.5x lens. WD 150 mm. Suitable with ST.1740. Maximum object size is 15 mm
- AE.1857** Additional 0.75x lens. WD 97 mm
- AE.1858** Additional 1.5x lens. WD 50 mm
- AE.1859** Additional 2.0x lens. WD 34 mm

## ADDITIONAL LENSES

(for ZE.1629)

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

## ADDITIONAL LENSES

(for ZE.1657)

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

## PROTECTION WINDOWS

(to be screwed under the objectives)

- AE.1845** Protection window for all heads of ZE series except ZE.1659
- AE.1825** Protection window for ZE.1659. Not suitable with additional lenses

## DARKFIELD

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

## POLARIZATION

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

## MECHANICAL STAGES

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

## OBJECT STAGES

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

## OBJECT PLATES - Ø 94 MM

- AE.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

## ACCESSORIES

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

- AE.5063** Projection 0.7x objective with C-mount for cameras with 2/3" sensor. To be placed over a 23.2 mm tube of a ZE series photo tube. Optional reticle available
- DC.1320** Projection 1x objective with C-mount
- DC.1324** Projection 0.5x objective with C-mount for cameras with 1/2" sensor. To be inserted into a 23.2 mm tube
- DC.1326** Projection 0.33x objective with C-mount for cameras with 1/3" sensor. To be inserted into a 23.2 mm tube
- AE.5130** Universal SLR camera adapter with 2x projection lens for 23.2 mm tubes. Needs T2 adapter
- AE.5025** T2 adapter for Nikon D digital SLR cameras
- AE.5040** T2 adapter for Canon EOS digital SLR cameras  
*Other T2 adapters on request*



● ZE.1629, ST.1710, LE.5210 and LE.5214

# STEREO MICROSCOPES

## BE series

### BE-50 series

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

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

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



BE.1802



<b>BE-50</b>	
<b>Dimensions</b>	<b>Weight</b>
(h) 345 x (w) 130 x (d) 410 mm	7.0 kg

## HIGHLIGHTS

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

## SPECIFICATIONS

### EYEPIECES

Pair of WF 10x/20 mm

### HEAD

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

### STAND

Stable overhanging heavy base stand with pillar

### FOCUSING ADJUSTMENT

Coarse adjustment with tension control

### ILLUMINATION

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

## ACCESSORIES AND SPARE PARTS

- BE.6005** Pair of HWF 5x/22 mm eyepieces
- BE.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

### OBJECTIVES

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

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



BE.7405 / BE.7410 / BE.7420

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

### MODELS

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

# P series

## STEREO MICROSCOPES

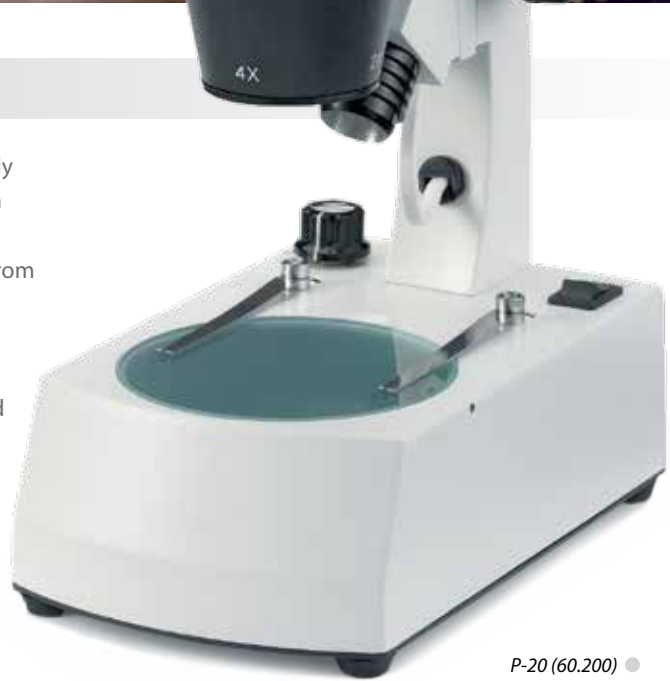


### P series

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

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

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



P-20 (60.200) ●



<b>60.100 / 60.200</b>	
<b>Dimensions</b>	<b>Weight</b>
(h) 315 x (w) 120 x (d) 190 mm	2.5 kg

## HIGHLIGHTS

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



P-10 (60.100) ●

## SPECIFICATIONS

### EYEPIECES

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

### HEAD

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

### OBJECTIVES

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

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

### STAND

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

### ILLUMINATION

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

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

## CAMERAS

Euromex offers a wide range of industrial and laboratory grade cameras, see chapter 9 (Digital Solutions).

For P series, the camera replaces one of the eyepieces

## PACKAGE CONTENT

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

All packed in a polystyrene box

## ACCESSORIES AND SPARE PARTS

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

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



## MODELS

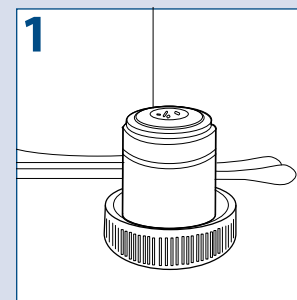
	45° head	1x/3x objective	2x/4x objective	Transmitted halogen illumination	Incident halogen illumination	Transmitted LED illumination	Incident LED illumination
P-10 60.100	•	•		•	•		
P-10 LED 60.110	•	•				•	•
P-20 60.200	•		•	•	•		
P-20 LED 60.210	•		•			•	•

## How to keep the optics clean?

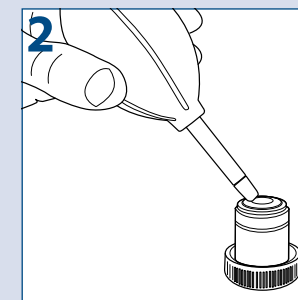
### PB.5275 Cleaning kit

Dust and dirt particles have a negative affect on image quality. Keeping the optical system of your microscope clean is essential for the best image quality and overall lifetime of your microscope.

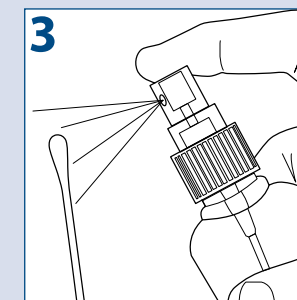
Dust and dirt on optical elements such as lenses, prisms and filters that are left unattended can be become difficult - or even impossible - to remove and may cause mold



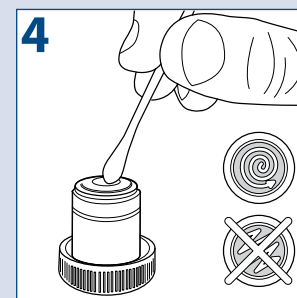
Place your objective or eyepiece on a secure location. One can use the objective's cap and eyepieces can be placed in the cut-outs within the storage box. Condensers and collector lenses can remain on the microscope



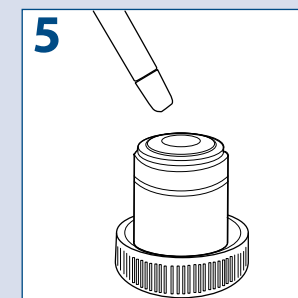
To prevent scratches on coatings and optical glass, try to remove dirt and dust that sticks to the optical surface first with an air blower or pressurized dry air (oil-free and under moderate pressure version only)



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



Clean the lens by using the tip of the cotton swab or the lens paper<sup>(1)</sup>. When cleaning a large lens surface, wipe with little pressure from the center towards the periphery in a circular motion, do not use zig-zag motion. Discard each lens paper or cotton swab after a single use



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

## 6

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



## 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

<sup>(1)</sup> Use enough lens paper so that solvents do not dissolve oils from your hands which can make their way through the paper on to the coated surface

# MaterialsScience

## Industry



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BSCOPE (MATERIAL) • PAGE 272  
OXION (MATERIAL) • PAGE 276  
OXION INVERSO (MATERIAL) • PAGE 280





# MaterialsScience

## Industry

Microscopes for materials science applications have the 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



IS.1053-PLMi ●

**iScope®**  
for materials science

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

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

<b>IS.1053-PLMi</b>	
<b>Dimensions</b>	<b>Weight</b>
(h) 585 x (w) 210 x (d) 480 mm	10.5 kg

<b>IS.1053-PLPOLRi</b>	
<b>Dimensions</b>	<b>Weight</b>
(h) 590 x (w) 210 x (l) 475 mm	12.3 kg



HIGHLIGHTS

- EWF 10x/20 mm and EWF 10x/22 mm eyepieces
- Binocular and trinocular models
- Reversed revolving nosepiece
- Infinity corrected IOS objectives for material observation, polarization and asbestos research
- 150 x 140 mm rackless stage equipped with metal and glass inserts
- Ø 160 mm rotatable round 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 cross hair and one eyepiece with a cross hair and micrometer reticle

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

HEAD

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

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



IS.1053-PLPOLRi ●

NOSEPIECE

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

STAGE

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

STANDARD CONDENSER

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

## CONDENSER FOR POLARIZATION MICROSCOPES

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

## CONDENSER FOR ASBESTOS RESEARCH MICROSCOPES

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

## FOCUSING

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

## DIASCOPIIC ILLUMINATION

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

The Köhler setting provides homogeneous illumination and high contrast

## OBJECTIVES

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

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

<sup>(2)</sup> Plan PLPOLi strain free Infinity corrected objectives for polarization applications. With 0.17 mm cover glass correction. For transmitted illumination

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

## 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

<sup>(4)</sup> Plan PLi Infinity corrected objectives for asbestos research. No cover glass correction. With 0.17 mm cover glass correction

<sup>(5)</sup> The S40x objective for asbestos research is a plan phase PLPHi infinity corrected objective

<sup>(6)</sup> 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 <sup>(4)</sup>	Plan PLPOLi 4x/10x/20x/ S40x IOS objectives <sup>(1)</sup>	Plan PLPOLRi 5x/10x/20x/ S50x IOS objectives <sup>(2)</sup>	Ø160 mm stage, 360° rotatable	Polarization condenser with gratuated 360° polarizer	iCare Sensor	Transmitted illumination Köhler LED	50W 12V halogen epi-illumination <sup>(3)</sup>
IS.1052-PLPOLi	•		•	•		•	•	•	•	
IS.1053-PLPOLi		•	•	•		•	•	•	•	
IS.1052-PLPOLRi	•		•		•	•	•	•	•	•
IS.1053-PLPOLRi		•	•		•	•	•	•	•	•

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

<sup>(2)</sup> Strain free objectives without 0.17 mm cover glass correction

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

<sup>(4)</sup> The iScope® polarization models are supplied with a EWf 10x/22 mm eyepiece with a cross hair reticle and a EWf 10x/22 mm eyepiece with cross hair and 10/100 micrometer

## ISCOPE® MATERIALS SCIENCE MODELS

MODELS	Binocular	Trinocular	EWf 10x/20 mm	Plan PLMi 5x/10x/20x/S50x IOS objectives <sup>(1)</sup>	Mechanical rackless stage	Abbe condenser	Köhler 3 W LED	Metallurgical attachment with NeoLED™ epi-illumination
IS.1052-PLMi	•		•	•	•	•	•	•
IS.1053-PLMi		•	•	•	•	•	•	•

<sup>(1)</sup> 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 (1)	Plan phase PLPHi S40x objectives	Phase contrast condenser	Mechanical rackless stage	iCare Sensor	Köhler LED
IS.1052-PLAi	•		•	•	•	•	•	•	•	•
IS.1053-PLAi		•	•	•	•	•	•	•	•	•

<sup>(1)</sup> 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



# ACCESSORIES AND SPARE PARTS

## EYEPIECES

- IS.6210** EWF 10x/22 mm eyepiece (Ø 30mm tube)
- IS.6210-C** EWF 10x/22 mm eyepiece with cross hair (Ø30 mm tube)
- IS.6210-P** EWF 10x/22 mm eyepiece with pointer (Ø30 mm tube)
- IS.6210-CM** EWF 10x/22 mm eyepiece with 10/100 micrometer and cross hair (Ø30 mm tube)
- IS.6212** WF 12.5x/17 mm eyepiece (Ø30 mm tube)
- IS.6212-W** WF 12.5x/17 mm eyepiece with Walton Beckett reticle (Ø30 mm tube)
- IS.6215** WF 15x/16 mm eyepiece (Ø30 mm tube)
- IS.6220** WF 20x/12 mm eyepiece (Ø30 mm tube)
- IS.6299** Pair of eyecups for infinity corrected iScope® models

## PLAN PLMI INFINITY CORRECTED IOS OBJECTIVES FOR MATERIALS SCIENCE

- IS.8105** Plan PLMi 4x/0.12 IOS objective without 0.17 mm cover glass correction. WD 15.5 mm
- IS.8110** Plan PLMi 10x/0.25 IOS objective without 0.17 mm cover glass correction. WD 10 mm
- IS.8120** Plan PLMi 20x/0.40 IOS objective without 0.17 mm cover glass correction. WD 5.8 mm
- IS.8150** Plan PLMi S50x/0.70 IOS objective without 0.17 mm cover glass correction. WD 0.32 mm
- IS.8100** Plan PLMi S100x/0.80 IOS objective without 0.17 mm cover glass correction. WD 2 mm

## PLAN PLI INFINITY CORRECTED IOS OBJECTIVES FOR ASBESTOS RESEARCH

- IS.7202** PPlan PLi 2x IOS objective with 0.17 mm cover glass correction. WD 20.2 mm
- IS.7204** PPlan PLi 4x/0.12 IOS objective with 0.17 mm cover glass correction. WD 15.4 mm
- IS.7210** PPlan PLi 10x/0.25 IOS objective with 0.17 mm cover glass correction. WD 10 mm
- IS.7220** PPlan PLi 20x/0.40 IOS objective with 0.17 mm cover glass correction. WD 5.1 mm
- IS.7210** PPlan phase PLPHi 40x/0.65 IOS objective with 0.17 mm cover glass correction. WD 0.54 mm
- IS.7260** PPlan PLi 60x/0.85 IOS objective with 0.17 mm cover glass correction. WD 0.14 mm

- IS.7200** PPlan PLi 100x/1.25 IOS objective with 0.17 mm cover glass correction. WD 0.19 mm

## PLAN PLPOLI INFINITY CORRECTED IOS OBJECTIVES FOR POLARIZATION without reflected illumination attachment

- IS.7904-T** Plan PLPOLi 4x/0.12 IOS objective with 0.17 mm cover glass correction. WD 15.5 mm
- IS.7910-T** Plan PLPOLi 10x/0.25 IOS objective with 0.17 mm cover glass correction. WD 10 mm
- IS.7920-T** Plan PLPOLi 20x/0.40 IOS objective with 0.17 mm cover glass correction. WD 5.8 mm
- IS.7940-T** Plan PLPOLi S40x/0.65 IOS objective with 0.17 mm cover glass correction. WD 2.9 mm
- IS.7960-T** Plan PLPOLi S60x/0.80 IOS objective with 0.17 mm cover glass correction. WD 0.14 mm
- IS.7900-T** Plan PLPOLi S100x/1.25 IOS objective with 0.17 mm cover glass correction. WD 1 mm

## PLAN PLPOLRI INFINITY CORRECTED IOS OBJECTIVES FOR POLARIZATION with reflected illumination attachment

- IS.7905-R** Plan PLPOLi 4x/0.12 IOS objective without 0.17 mm cover glass correction. WD 15.5 mm
- IS.7910-R** Plan PLPOLi 10x/0.25 IOS objective without 0.17 mm cover glass correction. WD 10 mm
- IS.7920-R** Plan PLPOLi 20x/0.40 IOS objective without 0.17 mm cover glass correction. WD 5.8 mm
- IS.7950-R** Plan PLPOLi S50x/0.65 IOS objective without 0.17 mm cover glass correction. WD 0.92 mm
- IS.7900-R** Plan PLPOLi S100x/0.80 IOS objective without 0.17 mm cover glass correction. WD 2 mm

## 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.9602** Polarizer
- IS.9604** Quartz wedge in slider
- IS.9608** Analyzer 0-360° rotatable
- IS.9610** Lamda plate first red 530 nm in slider
- IS.9612** Lamda/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** Lamda plate first red 530 nm
- IS.9612-R** Lamda/4 retardation plate in slider

## 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

## MISCELLANEOUS

- AE.5130** Universal SLR adapter with built-in 2x lens without T2 ring. For standard 23.2 mm tube
- AE.5040** T2 ring for Canon EOS SLR digital camera
- AE.5025** T2 ring for Nikon D SLR digital camera
- IS.9522** Optional 30 x 40 mm X-Y mechanical stage for round polarization stage
- 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



Ceramic stage ●



bScope®

for materials science

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

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

● BS.1053-PLMi



<b>TRINOCULAR MODEL BS.1053-PLMi</b>	
<b>Dimensions</b>	<b>Weight</b>
(h) 505 x (w) 195 x (d) 470 mm	8.5 kg

HIGHLIGHTS

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



BS.1053-PLMi ●

SPECIFICATIONS

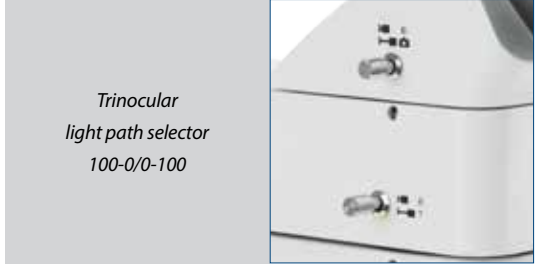
EYEPIECES

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 Ø 30 mm tubes and with 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



Trinocular light path selector 100-0/0-100

NOSEPIECE

Revolving and reversed ball-bearing quintuple nosepiece

OBJECTIVES

The state-of-the-art production techniques and multi layer coatings used for the manufacturing of the bScope® objectives enables 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 oil immersion objectives are spring loaded.

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

## FOCUSING

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

## STAGE

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

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

## CONDENSER FOR BRIGHTFIELD

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

## POLARIZATION

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

## NEOLED™ REFLECTED ILLUMINATION

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

## NEOLED™ TRANSMITTED ILLUMINATION

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

## KÖHLER ILLUMINATION

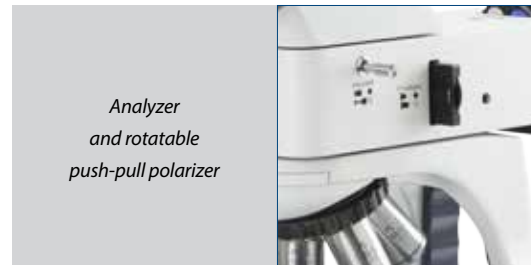
Köhler illumination ensures for all infinity corrected IOS models the highest possible contrast and the maximum achievable resolving power. Generates a uniform illumination of the sample and eliminates all interference from dust on lenses and side glare of the light source

## CORDLESS USE

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

## CSS – CABLE STORAGE SYSTEM

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



*Analyzer and rotatable push-pull polarizer*



*Reflected illumination with rotating color filter disc*



*Ergonomic carrying grip for easy transportation*

## CARRYING GRIP

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

## ANTI-THEFT SLOT

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

## MODELS

	Binocular	Trinocular	WF 10x/22 mm eyepieces	PLMi 5x/10x/20x/50x IOS objectives	PLMi 100x IOS objective	Transmitted NeoLED™ Köhler illumination	Reflected NeoLED™ Köhler illumination
BS.1052-PLMi	•		•	•		•	•
BS.1053-PLMi		•	•	•		•	•
BS.1152-PLMi	•		•	•	•	•	•
BS.1153-PLMi		•	•	•	•	•	•

## ACCESSORIES AND SPARE PARTS

### EYEPIECES

**BS.6310** WF 10x/22 mm eyepiece, Ø 30 mm tube

**BS.6310-M** WF 10x/22 mm eyepiece, Ø 30 mm tube with 10/100 micrometer

**BS.6315** WF 15x/12 mm eyepiece, Ø 30 mm tube

**BS.6399** Pair of eyecups, Ø 30 mm tube

### OBJECTIVES

**BS.8105** Plan M-IOS DIN 5x/0.12 infinity corrected objective. WD 26.1 mm

**BS.8110** Plan M-IOS DIN 10x/0.25 infinity corrected objective. WD 20.20 mm

**BS.8120** Plan M-IOS DIN 20x/0.40 infinity corrected objective. WD 8.80 mm

**BS.8150** Plan M-IOS DIN 50x/0.70 infinity corrected objective. WD 3.68 mm

**BS.8180** Plan M-IOS DIN 80x/0.80 infinity corrected objective. WD 1.25 mm

**BS.8100** Plan M-IOS DIN 100x/0.85 infinity corrected objective. WD 0.40 mm

### POLARIZATION

**BS.9602** Analyzer in mount for under nosepiece

**BS.9645** Polarizer, for lamphouse

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

## PACKAGE CONTENT

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

### MISCELLANEOUS

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

**BS.9170** Darkfield stop for standard Abbe condenser with slot

**AE.1370** Set of rechargeable batteries, three pieces

**BS.9515** Metal plain insert for mechanical stage

**BS.9518** Glass plain insert for mechanical stage

**AE.5130** Universal Ø 23.2 mm tube adapter with built-in 2x lens for SLR photo camera with APS-C sensor. Needs T2 adapter

**AE.5025** T2 ring for Nikon D SLR digital camera

**AE.5040** T2 ring for Canon EOS SLR digital camera

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

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

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

**PB.5245** Lens cleaning paper, 100 sheets per pack

**PB.5255** Immersion oil (25 ml). n = 1.482

**PB.5274** Isopropyl alcohol 99% (200 ml)

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

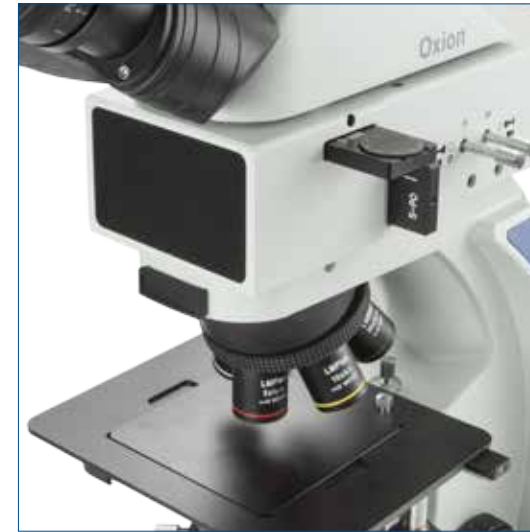


## Oxion for materials science

Oxion microscopes for materials science are specifically designed for the observation of many types of materials in research laboratories of universities, professionals and in industrial research centers. Thanks to the high resolution optics and state-of-the-art components, these microscopes can be widely used for routine and fundamental applications

● OX.3245

<b>OX.3245</b>	
<b>Dimensions</b>	<b>Weight</b>
(h) 430x (w) 180 x (d) 430 mm	9.9 kg



● OX.3245

## 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

## 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)

### NOSEPIECE

Reversed nosepiece for a maximum of 5 objectives on ball bearings

### OBJECTIVES

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

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

### FOCUSING

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

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



Reflected illumination unit with oblique lighting feature

## STAGE

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

## CONDENSER FOR TRANSMITTED ILLUMINATION

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

## TRANSMITTED ILLUMINATION

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

## REFLECTED EPI-ILLUMINATION

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

## PACKAGE CONTENT

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



OX.3240 ●



Detail of reflected illumination

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

## ACCESSORIES AND SPARE PARTS

- AE.3210** HWF 10x/22mm eyepiece
- AE.3215** HWF 15x/13mm eyepiece
- AE.3223** HWF 10x/22mm eyepiece with 10mm/100 micrometer
- AE.3225** Pair of eyecups
- AE.3172** Plan achromatic M-IOS DIN PL 5x/0.14 objective. WD 10.8 mm
- AE.3173** Plan achromatic M-IOS DIN PL 10x/0.25 objective. WD 10 mm
- AE.3175** Plan achromatic M-IOS DIN PL 20x/0.40 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
- AE.3185** Slider with darkfield stop for transmitted illumination (only for objectives 10x, 20x and S40x)
- 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)
- 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)
- OX.9515** Metal plain insert for mechanical stage
- OX.9518** Glass plain insert for mechanical stage
- AE.5120** Standard 23.2 mm diameter tube for Oxion photo port
- AE.5130** Universal SLR camera adapter with 2x projection lens for 23.2 mm tubes Needs T2 adapter and AE.5120
- AE.5025** T2 adapter for Nikon D digital SLR cameras
- AE.5040** T2 adapter for Canon EOS digital SLR cameras
- OX.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
- AE.3199** Glass fuses 3.15 A 250 V, 10 pieces
- 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





## 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 from metal, wood or plastics

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



OX.2153-PLM ●



OX.2153-PLM / OX.2653-PLM	
<b>Dimensions</b>	<b>Weight</b>
(h) 488 x (w) 231 x (d) 555 mm	10.8 kg

## HIGHLIGHTS

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



OX.2153-PLM ●

## SPECIFICATIONS

### EYEPIECES

Pair of DIN HWF plan 10x/22 mm eyepieces

### NOSEPIECE

Revolving quintuple nosepiece on ball-bearings

### HEAD

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

### OBJECTIVES

Infinity color corrected long WD 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 standard with Ø 12 mm diameter hole and Ø 25 mm diameter 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 supplied in an aluminum transport case

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

LWD = long working distance

## ACCESSORIES AND SPARE PARTS

### EYEPIECES

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

### OBJECTIVES

- OX.8205** Plan achromatic PLM 5x/0.14 IOS objective. WD 10.8 mm
- OX.8210** Plan achromatic PLM 10x/0.25 IOS objective. WD 10 mm
- OX.8220** Plan achromatic PLM 20x/0.40 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

### STAGE AND ACCESSORIES

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



Large stage with  
X-Y mechanical stage

### MISCELLANEOUS

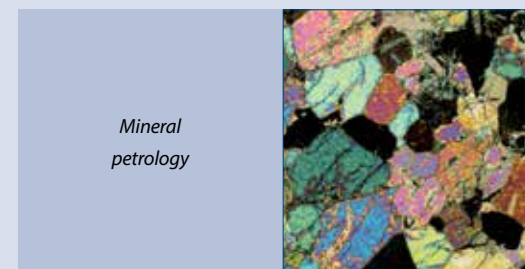
- AE.3199** Glass fuses 3.15 A 250 V, 10 pcs
- SL.3679** Halogen spare bulb 12 V 50 W
- AE.5120** Standard 23.2 mm diameter tube for Oxion Inverso photo port
- AE.5130** Universal SLR camera adapter with 2x projection lens for 23.2 mm tube. Needs T2 adapter and AE.5120
- AE.5025** T2 adapter for Nikon D digital SLR cameras
- AE.5040** T2 adapter for Canon EOS digital SLR cameras
- AE.3199** Glass fuses 3.15 A 250 V packed, per 10 pieces
- PB.5155** Microscope slides 76 x 26 mm, ground edges, 50 pieces
- PB.5165** Cover glasses 18 x 18 mm, thickness 0.13 - 0.17 mm, 100 pieces
- PB.5168** Cover glasses 22 x 22 mm, thickness 0.13 - 0.17 mm, 100 pieces
- PB.5245** Lens cleaning paper, 100 sheets per pack
- PB.5255** Immersion oil, n = 1.482 (25 ml)
- PB.5274** Isopropyl alcohol 99% (200 ml)
- PB.5275** Cleaning kit: lens cleaning fluid, lint free lens tissue, brush, air blower and cotton swabs

## About Petrological microscopy

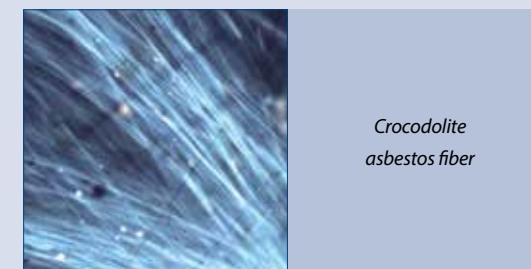
Euromex microscopes for polarization are intensively used in petrology and optical mineralogy to identify rocks, minerals in thin sections and asbestos fibers

Conventional brightfield microscopes are turned into a petrological microscope by:

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



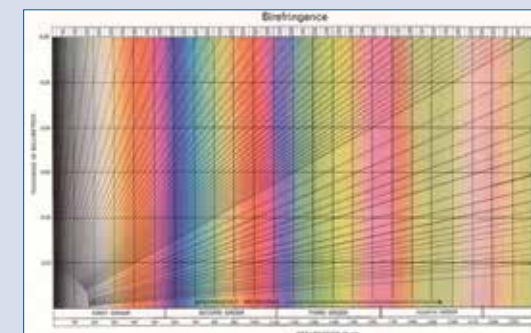
Mineral  
petrology



Crocoidolite  
asbestos fiber

The most common compensators are:

- 1 λ wave plate is often referred to 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
- Other attachments such as DSO (Dispersion Staining Objectives) and phase contrast equipment can be added for specific identification of asbestos fibers
- 1/4 λ wave plate is often referred to as a mica plate and is usually made from quartz or muscovite crystals sandwiched between two glass windows. Introduce an optical path difference of circa 140 nm
- quartz wedge is the simplest compensator, which is utilized to vary the optical path length difference to match that of the specimen



Michel-Levy chart ●

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

# Digital Solutions

## Industry



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# Digital Solutions

## Industry

The Euromex digital industrial solution product range allows you to create your personal digital workstation. If your objective is measuring and reporting a wide range of samples such as grain analysis, particle analysis and other material or industry samples, Euromex offers you the perfect matching solution

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

# USB CAMERAS

CAMERAS FOR INDUSTRY



● CMEX-1

# USB CAMERAS

ADVANCED CAMERAS FOR INDUSTRY

FEATURED



● CMEX-18 Pro

## CMEX USB-2 cameras with CMOS sensor

The CMEX-1, CMEX-3 and CMEX-5 are equipped with a CMOS sensor with 10 bits grayscale conversion and a 24 bits color rendering. The CMEX cameras are equipped with USB-2 data interface and supplied with ImageFocus 4 software

Besides capturing images and videos, the software allows measurements on still and live images and annotations on captured images. Compatible with Windows 7, 8 and 10, both 32 and 64 bits configurations. A Mac OS Light version is also available for capturing images. PC requirements: Intel Core2 2.8 GHz or higher or equivalent, 2 GB memory, USB-3 port, 17 inch display

MODELS	Number of pixels (MP)	Sensor	Sensor size (inches)	Pixels size (µm)	Resolutions	Max. frames (p/sec)	Grayscale conversion	Color rendering	Signal/ Noise(db)	Dynamic (db)	Sensibility V/lux-sec (at 550 nm)	Product number
CMEX- 1	1.3	CMOS	1/2.5"	2.2x2.2	1272x952	15	10 bits	24 bits	55	72	1.3	DC.1300c
					632x472	30						
CMEX- 3	3.2	CMOS	1/2"	3.2x3.2	2048 x 1536	10	10 bits	24 bits	44	72	1.3	DC.3000c
					1024 x 768	25						
					640 x 480	40						
CMEX- 5	5.0	CMOS	1/2.5"	2.2x2.2	2592x1944	5	10 bits	24 bits	42	65	1.3	DC.5000c
					1280x960	21						
					1024x768	25						
					640x480	38						

The CMEX cameras are supplied with USB-2 cable, 30.0 and 30.5 mm to 23.2 mm conversion adapters for use with stereo microscopes, 1mm/100 (10µm/division) calibration slide. The CMEX-1 (DC.1300c) camera is supplied with a 0.35x C-mount objective, the CMEX-3 with a 0.5x C-mount objective and the CMEX-5 with a 0.45x C-mount objective

## Advanced CMEX USB-3 cameras with CMOS sensor

The CMEX-3 Pro, -5 Pro, -10 Pro and -18 Pro cameras are equipped with a 3, 5, 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 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 Light version is also available for capturing images

MODELS	Sensor	Sensor size (inch)	Pixels size (µm)	Resolutions	Max. frames (p/sec)	Grayscale conversion	Color rendering	Signal/ Noise(db)	Dynamic (db)	Sensibility V/lux-sec	Product number
CMEX-3 Pro	CMOS	1/3"	2.2x2.2	2048x1534	28	12 bits	24 bits	39	100	1.9	DC.3000p
				1024x770	53						
CMEX-5 Pro	CMOS	1/2.5"	2.2x2.2	2560x1922	14	12 bits	24 bits	39	68.	1.76	DC.5000p
				1270x960	39						
				640x480	100						
CMEX-10 Pro	CMOS	1/2.3"	1.67x1.67	3584x2746	8	12 bits	24 bits	35.5	63.5	0.31	DC.10000p
				1792x1372	25						
CMEX-18 Pro	CMOS	1/2.3"	1.25x1.25	4912x3684	6	12 bits	24 bits	42	65	1.3	DC.18000p
				2456x1842	18						
				1228x922	32						

The CMEX-3 Pro, -5 Pro, -10 Pro and -18 Pro cameras are supplied with USB-3 cable, 30.0 and 30.5 mm adapters to use with stereo microscopes, 1mm/100 (10µm/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

INDUSTRY DIGITAL SOLUTIONS

9

INDUSTRY DIGITAL SOLUTIONS

9

# USB CAMERAS

SCIENTIFIC GRADE  
CAMERAS FOR  
INDUSTRY

FEATURED



● sCMEX

## sCMEX USB-3 cameras with Scientific grade sCMOS sensor

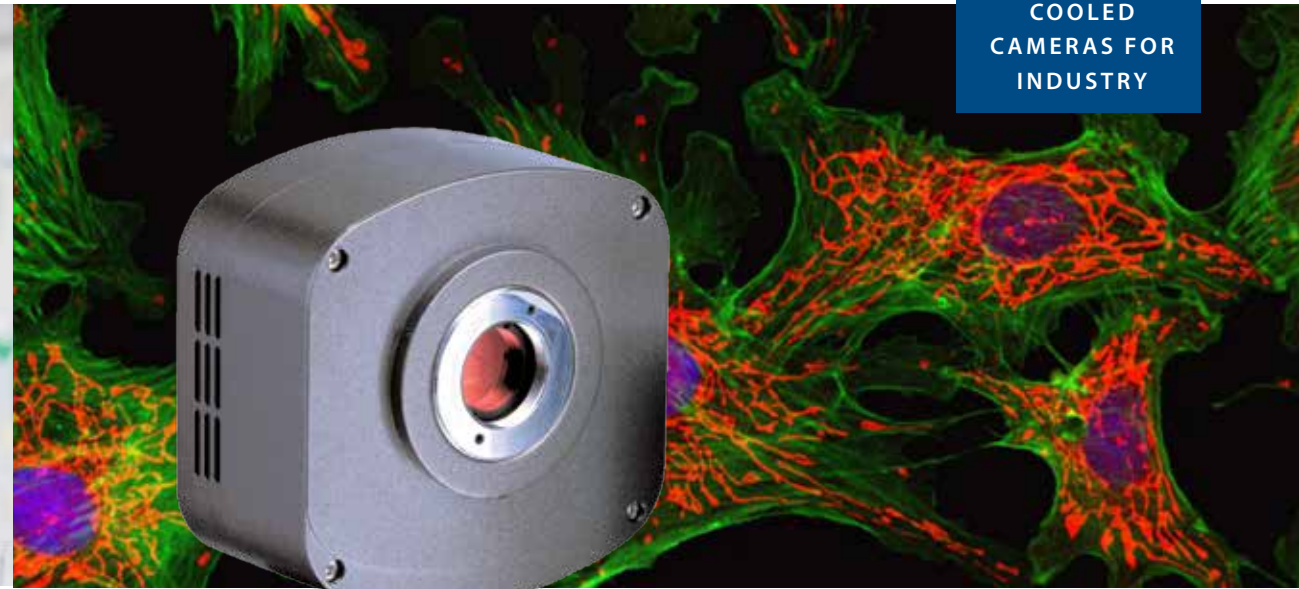
The sCMEX-3, sCMEX-6 and sCMEX-20 cameras are equipped with a scientific grade back illuminated sCMOS sensor with 16 bits grayscale conversion and an outstanding 36 bits color rendering. Suitable for brightfield, darkfield and fluorescence. The sCMEX cameras are equipped with a USB-3 data interface and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

Besides capturing images and videos, the software allows measurements on still and live images and annotations on captured images. Compatible with Windows 7, 8 and 10, both 32 and 64 bits configurations  
PC requirements: Intel Core2 2.8 GHz or higher or equivalent, 2 GB memory, USB-3 port, 17 inch display

MODELS	Number of pixels (MP)	Sensor	Sensor size (inches)	Pixels size (µm)	Resolutions	Max. frames (p/sec)	Grayscale conversion	Color rendering	Sensibility V/lux-sec	Product number
sCMEX- 3	3.1	sCMOS	1/2.8"	2.5x2.5	2048x1536	50	16 bits	36 bits	0.15	DC.3000s
					1920x1080	58				DC.6000s
sCMEX- 6	6.3	sCMOS	1/1.8"	2.5x2.5	3072 x 2048	30	16 bits	36 bits	0.15	DC.6000s
					3072 x 2048	38				DC.20000s
sCMEX-20	20	sCMOS	1"	2.4x2.4	5440x3648	15	16 bits	36 bits	0.21	DC.20000s
					2736x1824	50				0.21
					1824x1246	60				16 bits

The sCMEX cameras are supplied in a carton box with USB-2 cable, 30.0 and 30.5 mm to 23.2 mm conversion adapters for use with stereo microscopes, 1mm/100 (10µm/division) calibration slide. The DC.3000s is supplied with a 0.37x objective, the DC.6000s with a 0.5x objective and the DC.20000s is supplied with a 1.0x adapter

COOLED  
CAMERAS FOR  
INDUSTRY



● DC.5000i

## Euromex 5.0 MP camera CCD cooled color

The Euromex 2/3 inch CCD Peltier cooled camera is equipped with a Peltier cooling element that allows the camera to be suitable for fluorescence applications. The camera has a USB-2 interface for connection with a computer and is supplied with ImageFocus 4 software

Besides capturing images and videos, this software allows measurements on still and live images and annotations on captured images. The software has specific functions for fluorescence such as combining captured fluorescence images. Compatible with Windows 7, 8 and 10, both 32 and 64 bits configurations. A Mac OS Light version is also available for capturing images

MODEL	Number of pixels (MP)	Sensor	Sensor size (inches)	Pixels size (µm)	Resolutions	Max. frames (p/sec)	Grayscale conversion	Color rendering	Signal/ Noise(db)	Dynamic (db)	Sensibility V/lux-sec	Product number
CCD cooled	5.0	CCD	2/3"	3.4 x 3.4	2580 x 1944 1280 x 932	3 12	16 bits	36 bits	55	74	0.5	DC.5000i

The Euromex CCD cooled camera (DC.5000i) is supplied in an aluminum box and with USB-2 cable, 30.0 and 30.5 mm to 23.2 mm conversion adapters for use with stereo microscopes, 1mm/100 (10µm/division) calibration slide and external 5 Vdc/4 A power supply

The Euromex CCD cooled camera (DC.5000i) is equipped with a female C-mount thread and can be mounted directly on microscopes with a C-mount adapter. A 1x C-mount adapter is recommended, see adapter guide

# HD AND HD-AUTOFOCUS CAMERAS

CAMERAS FOR SCIENCE AND INDUSTRY

FEATURED



VC.3036

## High definition HD1080p and 720p CMOS color cameras with HDMI and USB-2 interfaces

The Euromex 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 HD screen, TV-HD or HD-beamer with a HDMI input and the system is ready to go. The mouse-driven built-in software of the camera enables captured images and recorded videos <sup>(1)</sup> to be saved on the integrated SD memory card

With the HD-Ultra, HD-Lite and HD-Autofocus cameras, the captured images or recorded video's (1) can be very easily reviewed or replayed on the HD screen. The HD-Ultra even offers a full range of measuring functions on live and captured images. The HD-Autofocus offers measuring functions on live image only

<sup>(1)</sup> video function only available with HD-Ultra and HD-Lite 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 4 software. It runs on Windows 7, 8 and 10, both 32 and 64 bits

## 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
- C-mount interface
- HDMI, USB-2 and SD memory card
- Autofocus model available
- Compatible with ImageFocus 4 software



Back panel of VC.3036

Euromex supplies free software updates on [www.euromex.com](http://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 4 software

MODELS	HD-Ultra	HD-Lite	HD-Mini	HD-Autofocus
<b>Sensor</b>	Sony sensor	Aptina sensor	Aptina sensor	Sony sensor
<b>Format</b>	1/2.8", HDTV 1080p (50/60 Hz)	1/2.5", HDTV 1080p (50/60 Hz)	1/3", HDTV 720p (50/60 Hz)	1/1.9", HDTV 1080p (50/60Hz)
<b>Pixels</b>	3264 x 1836 (capture mode), 1920 x 1080 pixels (live view), HDMI 60 fps USB 30 fps	2592 x 1944 pixels (capture mode), 1920 x 1080 pixels (live view), HDMI 15 fps, USB 15fps	1280 x 720 pixels (capture mode), 1280 x 720 pixels (live view), 30 fps	1920 x 1080 pixels, HDMI, 60 fps
<b>Video</b>	1080p pixels video recording mode	1080p pixels video recording mode		1080p pixels video recording mode
<b>Scan mode</b>	Progressive scan	Progressive scan	Progressive scan	Progressive scan
<b>Noise</b>	3D Noise Reduction function	3D Noise Reduction function	Standard noise reduction	Standard noise reduction
<b>Color rendering (bits)</b>	36	24	24	24
<b>Signal/Noise(db)</b>	55	40.5	44	50
<b>Dynamic (db)</b>	69	60	85	65
<b>Interfaces</b>	Digital HDMI, USB 2	Digital HDMI, USB 2	Digital HDMI	Digital HDMI
<b>Storage</b>	High speed 8 GB SD memory card or to USB-2	High speed 4 GB SD memory card or to USB-2	High speed 4 GB SD memory card	High speed 4 GB SD memory card
<b>Camera buttons</b>	On/Off	On/Off		On/off
<b>Mounting</b>	C-mount interface	C-mount interface	C-mount interface	C-mount interface
<b>Power supply</b>	External mains adapter 100-240 Vac to 12Vdc/2A	External mains adapter 100-240 Vac to 12Vdc/2A	External mains adapter 100-240 Vac to 12Vdc/1A	External mains adapter 100-240 Vac to 12Vdc/2A
<b>Operation</b>	0 – 60° C, 45-85 % humidity	0 – 60° C, 45-85 % humidity	-10 – 40° C, 30-80 % humidity	-10-40°C, 45-85% humidity
<b>Storage temperature</b>	-20 to 70° Celsius	-20 to 70° Celsius	-20 to 60° Celsius	-20°C to 60° Celsius
<b>Product number</b>	<b>VC.3036</b>	<b>VC.3031</b>	<b>VC.3020</b>	<b>VC.3034</b>

## PACKAGE CONTENT

MODELS	HD-Ultra	HD-Lite	HD-Mini	HD-Autofocus
Software	ImageFocus 4	ImageFocus 4		
Languages	6 <sup>(1)</sup>	6 <sup>(1)</sup>	English	English
Compatible	Win 7, 8 and 10	Win 7, 8 and 10		
C-mount with objective	0.37x	0.45x	0.37x	0.5x
HDMI & USB cable	•	•	•	•
30 and 30.5 mm conversion adapters (stereomicroscopes)	•	•	•	•
SD card	8 GB	4 GB	4 GB	4 GB
Calibration 10mm/100 slide	•	•	•	•
External power netadapter	12V 2A	12V 2A	12V 1A	12V 1A
Dimensions (wxdxh)	80 x 70 x 90	80 x 70 x 90	50 x 50 x 60	80 x 65 x 80
Weight (grams)	440	280	150	500

<sup>(1)</sup> One language can be selected during initial installation of the ImageFocus 4 software: English, German, French, Dutch, Spanish or Russian

## BUILT-IN SOFTWARE FEATURES

MODELS	HD-Ultra	HD-Lite	HD-Mini	HD-Autofocus
Capture images	JPEG 3261x1840 pixels	JPEG 2592x1944 pixels	JPEG 2592x1944 pixels	JPEG 1920x1080 pixels
Video recording	AVI 1920x1080 pixels	AVI 1920x1080 pixels	no	ASF 1920x1080 pixels
Browse saved images	•	•	no	•
Browse saved video s	•	•		
SD card storage	8 GB	4 GB	4 GB	4 GB
Mouse driven	•	•	•	•
Auto Exposure	•	•	•	•
Exposure time	0.001s - 10 s	0.001s - 10 s	0.2 - 2000 ms	0.06 - 918 ms
Gain	•	•	•	•
RGB & white balance	•	•	•	•
Gamma	•	•	•	•
Sharpness	•	•	•	•
Noise reduction	3D algorithm	3D algorithm	Standard	Standard
Saturation & contrast	•	•	•	•
Horiz. & vert. flip	•	•	•	•
Grids	cross and multi grid	multi grid	multi grid	multi grid
Autofocus				•
Compare function	•	•		
Measurement functions	live and captured images	no	no	live image only
Calibration table	•			•
Line & free curve	•			•
Polygon & rectangle	•			•
Angle	•			•
Circle 3 points	•			•
Circle radius	•			•
Export function	CSV, Txt			CSV

## WIFI CAMERA

WIFI CAMERAS  
FOR INDUSTRY

FEATURED



● CMEX-WiFi 5

## 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

Apps for Android for this camera are supplied on cd or can be downloaded from the App store (free of charge). ImageFocus Alpha software can be used for Windows-based devices and WiFi connected PC's

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	Signal/ Noise(db)	Dynamic (db)	Sensibility 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 cable, 30.0 and 30.5 mm adapters to use with stereo microscopes, and a 0.45x C-mount objective



TABLET CAMERAS



ProPad tablet

with microscope camera and keyboard-docking station

The ProPad Full HD (1280x800) display reveals bright colors and crisp, microscopic 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-1, ProPad-3 and ProPad-5 are supplied with ImageFocus 4. ProPad-WiFi is supplied with ImageFocus Alpha software for image and video capturing and measuring on a Windows-based PC. On IOS and Android systems the WiFi camera can be operated through the app. A Mac OS Light version is also available for capturing images



HIGHLIGHTS

- 10.1" Tablet with microscope camera
- 1280 x 800 pixels HD touch screen
- Windows 10 Home
- ImageFocus 4 capture software for PC
- ImageFocus Alpha for WiFi enabled PC and Android devices
- Tablet can be fully detached from camera
- Including keyboard
- The snap-on keyboard uses a magnetic docking system



ProPad and keyboard-docking station ●

SPECIFICATIONS

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

Specifications can be changed by Euromex microscopen bv without prior notice

MODELS	Camera (MP)	Sensor size	Resolution	Pixels size (µm)	ADC	Color rendering	Signal/ Noise(db)	Dynamic (db)	Sensibility V/lux-sec	Interface	Product number
ProPad-1	1.3	1/2.5"	1272x952	2.2x2.2	10 bits	24 bits	55 db	72 db	1.3	USB-2	PP.1300c
ProPad-3	3.2	1/2"	632x472	3.2 x3.2	10 bits	24 bits	44 db	72 db	1.3	USB-2	PP.3000c
ProPad-5	5	1/2.5"	2592x1944	2.2 x 2.2	10 bits	24 bits	42 db	65 db	1.3	USB-2	PP.5000c
ProPad-WiFi	5	1/2.5"	2592x1944	2.2 x 2.2	12 bits	24 bits	43 db	61 db	1	WiFi	PP.5000-WiFi

# CCD CAMERA

CAMERA FOR SCIENCE AND INDUSTRY



## CCD color camera

580 lines  
with composite and S-video output



● VC.3032

### REALTIME

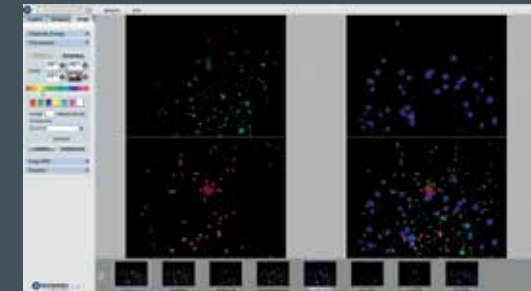
The real-time images generated with this camera provide extremely well true-to-live colors without any delay. Most camera settings are done automatically, a feature that makes the cameras ideal for real-time inspection, education and demonstrations. Connection is done using BNC (composite), SCART or S-video for connection to TV, monitors or beamers

The Euromex analog camera VC.3032 offers the perfect solution to modern microscopy for industry and laboratories where real-time images are needed. These high resolution cameras can be used for either biological or stereo microscopes. The cameras are equipped with very sensitive sensors with brightfield and darkfield applications and suitable for phase contrast and coaxial illumination

MODEL	Sensor	Sensor size (inches)	Number of pixels	Number of image lines	White balance	Sensitivity	Output	Connection
VC.3032	CCD	1/2"	473.280	580	auto/manual	auto/manual	Composite/S-Video	C-mount

# SOFTWARE

FREE UPDATES AVAILABLE ON EUROMEX.COM



## ImageFocus 4 software

The software is compatible with all mentioned USB-2 cameras Besides live imaging the software captures images in Jpeg, Tiff or Bmp formats or video recording in Avi format

ImageFocus4 has a wide range of functions:

- Measurements can be done on still and live image
- 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

IMAGE FOCUS 4	
DC.1300c	DC.5000i
DC.3000c	VC.3031
DC.5000c	VC.3036

## ImageFocus Alpha software

The ImageFocus Alpha software is compatible with the mentioned USB-3 and WiFi cameras Besides live imaging the software captures images in several formats such as Jpeg, Tiff or Bmp or video recording in Avi format

ImageFocus Alpha has a wide range of functions:

- Measuring, segmentation & counting, stichting of images, extended depth of focus, stacking etc
- 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

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

# ADAPTERS

FOR ALL  
MICROSCOPE  
CAMERAS



OX.9850 ●



## 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 an other microscope brand, please find adapter references below:

MODELS	1/3 inch camera	1/2 inch camera	2/3 inch camera	1 inch camera
Leica <sup>(1)</sup>	AE.9835-L (0.35x)	AE.9855-L (0.55x)	AE.9870-L (0.70x)	AE.9810-L (1x)
Olympus <sup>(2)</sup>	AE.9835-O (0.35x)	AE.9855-O (0.55x)	AE.9863-O (0.63x)	AE.9810-O (1x)
Zeiss <sup>(3)</sup>	AE.9835-Z (0.35x)	AE.9855-Z (0.55x)	AE.9870-Z (0.70x)	AE.9810-Z (1x)
Nikon <sup>(4)</sup>	AE.9835-N (0.35x)	AE.9855-N (0.55x)	AE.9870-N (0.70x)	AE.9810-N (1x)

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

<sup>(2)</sup> Olympus CX, CX2, BX, BX2, IX, MX, GX, SZX, STM, 35 mm to 25.4 mm C-mount, anodized aluminum

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

<sup>(4)</sup> Nikon E100, E200, 50i, 55i, 80i, 90i, Ni series, Ti Series, SMZ800, SMZ1000, SMZ15000, 38 mm to 25.4 mm C-mount, stainless steel



AE.9835-O ●

### STANDARD PLUG & PLAY

C-mount adapters for standard  $\varnothing$  23.2 mm tube

- DC.1321** C-mount adapter without objective, 1x magnification
- 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.1326** C-mount adapter with 0.35x objective for 1/3" camera
- DC.1353** C-mount adapter with 0.37x objective, fixed focal length and short barrel<sup>(1)</sup>. For 1/3" camera
- DC.1355** C-mount adapter with 0.50x objective, fixed focal length and short barrel<sup>(1)</sup>. For 1/2" camera
- DC.1357** C-mount adapter with 0.75x objective, fixed focal length and short barrel<sup>(1)</sup>. For 2/3" camera
- DC.1359** C-mount adapter 1.0x, for 1" camera
- DC.1330** 30 mm to 23.2 mm conversion adapters
- DC.1335** 30.5 mm to 23.2 mm conversion adapters

<sup>(1)</sup> for increased light efficiency

### DIGITAL SLR ADAPTERS

Digital single 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 tubus with built-in 2x magnification lens. Needs T2 adapter
- AE.5120** Standard 23.2 mm diameter tube for Oxion photo port (revision 2)
- 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



● DC.1555



● DC.1330 / DC.1335



● DC.1324



● AE.5130



● AE.5120

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

# Accessories

for microscopy



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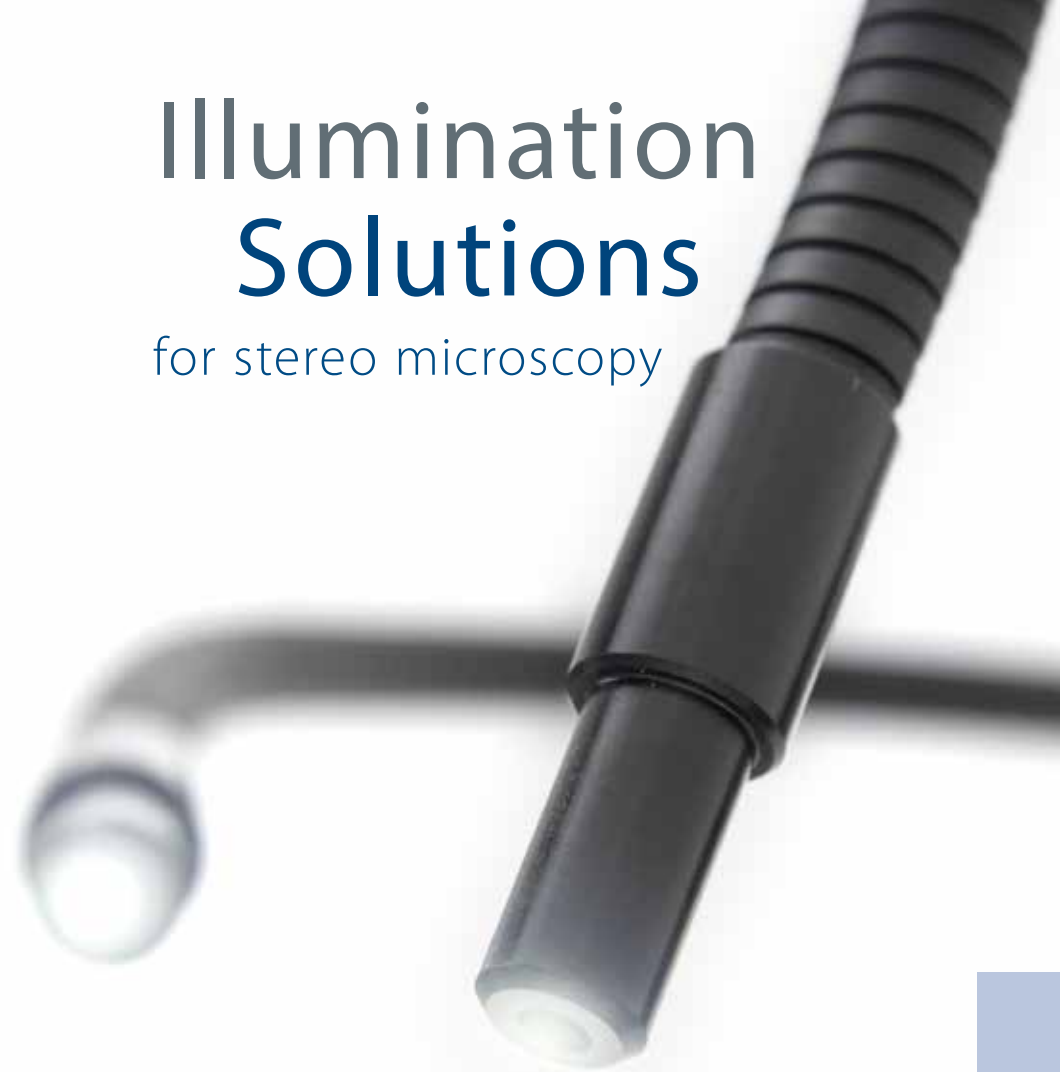


# Accessories

for microscopy

Euromex offers a solution for all microscopy related accessories needed during microscopy sessions. From dissection instruments to stains, cold light sources to LED ring light illuminators, Euromex can provide a wide selection of product accessories

Extend the life of your microscope(s) with our dedicated tools to clean and maintain the mechanical and optical parts



# Illumination Solutions

for stereo microscopy

For stereo microscopes choosing the right illumination is essential to obtain a perfect image with maximum resolution. LED light sources have a much longer lifetime, 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 kind of applications in industry, Life Sciences and Materials Sciences

## ILLUMINATION SOLUTIONS

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



## Multifunctional 150 W halogen or 30 W PowerLED 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 ●

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

<sup>1)</sup> with LE.5214 dual arm light conductor

## Multifunctional 100 W halogen cold light source

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



<b>Power</b>	100 W halogen
<b>Luminous flux</b>	20,000 lux max. <sup>1)</sup>
<b>Color temperature</b>	3,000 K
<b>Operating voltage</b>	100 and 240 V AC / 12 V DC (50/60 Hz)
<b>Dimensions</b>	(h) 115 x (w) 320 x (d) 215 mm
<b>Weight</b>	3.8 kg
<b>Model</b>	<b>LE.5210</b>

<sup>1)</sup> 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



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

## Economical and compact dual 2 W LED light source

Economical dual LED intensity adjustable light source with two 44 cm flexible Gooseneck arms each mounted with a 1 W LED. Ideal for applications in Life and Materials Sciences, various industrial applications and for stereo microscopy



<b>Power</b>	2x 1 W LED = 2x 20 W halogen equivalent
<b>Luminous flux</b>	18,000 lux max. (2 LED's)
<b>Color temperature</b>	6,500 K
<b>Operating voltage</b>	100-240 V AC / 12 V DC (50/60 Hz)
<b>Dimensions</b>	(h) 70 x (w) 120 x (d) 170 mm
<b>Weight</b>	1.6 kg
<b>Model</b>	<b>LE.5208</b>

## 144 LEDs ring light source with segment illumination

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



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

## Compact 72 LEDs ring light source

Compact 20,000 lux LED ring light source



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

## Professional high Power LED ring light sources LE.1980/ LE.1981

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



MODELS	Number of LEDs	Color temperature	Illuminance	For mounting diameters	Internal/ external diameter	Controls	Required power supply
LE.1980	48	6,000 K	17,000 lux	from 30 to 66 mm	45/90 mm	Analog controller, Intensity adjustable from 0-100 %	LE.1992
LE.1981	48	6,000 K	17,000 lux	from 30 to 66 mm	45/90 mm	Digital segments controller for 8, 4 or 1 segment, intensity adjustable from 0-100 %	LE.1993

## 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	Controls	Required power supply
LE.1990	72	6,000 K	21,000 lux	from 40 to 66 mm	60/110 mm	Analog controller, Intensity adjustable from 0-100 %	LE.1992
LE.1991	72	6,000 K	21,000 lux	from 40 to 66 mm	60/110 mm	Digital segments controller for 8, 4 or 1 segment, intensity adjustable from 0-100 %	LE.1993

## Fluorescence 40 Hz ring light source for Z series stereo zoom microscopes

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



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



## ACCESSORIES AND SPARE PARTS

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

#### FIBER LIGHT CONDUCTORS

- LE.5213** Single arm fiber light conductor, Gooseneck self-sustaining, 50 cm long, 4 mm diameter
- LE.5214** Dual arm fiber light conductor, Gooseneck self-sustaining, 50 cm long, 4 mm diameter
- LE.5215** Triple arm fiber light conductor, Gooseneck self-sustaining, 50 cm long, 4 mm diameter
- LE.5219** Dual arm fiber light conductor, Gooseneck self-sustaining, 70 cm long, 4 mm diameter
- LE.5239** Slit ring-shaped fiber light conductor 60 cm long, 8 mm diameter
- LE.5240** Slit ring shaped fiber light conductor 100 cm long, 8 mm diameter
- LE.5241** Flexible fiber light conductor, curved 90°, 60 cm long, 4 mm diameter
- LE.5216** Single arm flexible fiber light conductor, 100 cm long, 4 mm diameter
- LE.5235** Dual arm flexible fiber light conductor, 100 cm long, 4 mm diameter
- LE.5235-3** Dual arm flexible fiber light conductor, 300 cm long, 4 mm diameter
- LE.5217** Triple arm flexible fiber light conductor, 100 cm long, 4 mm diameter
- LE.5218** Single arm flexible fiber light conductor, 100 cm long, 8 mm diameter
- LE.5220** Single arm flexible fiber light conductor, 200 cm long, 8 mm diameter
- LE.5222** Focusing head for focusing lens LE.5224, LE.5228 or filters LE.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.1863

- SL.1864** Spare fluorescence lamp

#### FOR LE.1980 AND LE.1981

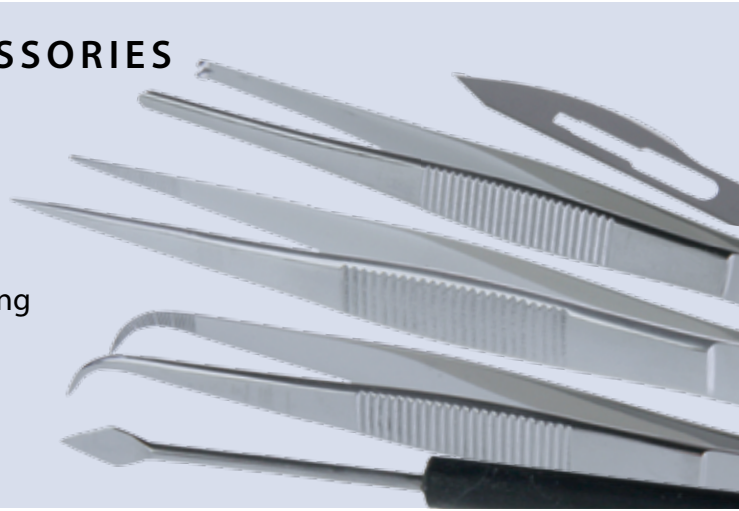
- LE.1984-050** Fresnel lens, WD from 40 to 80 mm
- LE.1984-100** Fresnel lens, WD from 80 to 150 mm
- LE.1984-200** Fresnel lens, WD from 150 to 240 mm
  
- LE.1984** Diffusing filter, for WD from 40 to 300 mm
- LE.1985** Glass protection window
- LE.1987** Polarizing filter
- LE.1888** Rotatable polarizing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

#### FOR LE.1990 AND LE.1991

- LE.1994-050** Fresnel lens, WD from 40 to 80 mm
- LE.1994-100** Fresnel lens, WD from 80 to 150 mm
- LE.1994-200** Fresnel lens, WD from 150 to 240 mm
  
- LE.1994** Diffusing filter, for WD from 40 to 300 mm
- LE.1995** Glass protection window
- LE.1997** Polarizing filter
- LE.1998** Rotatable polarizing filter
  
- LE.1992** 100-230 V power supply analog controller. Intensity adjustable from 0-100%
- LE.1993** 100-230 V power supply digital segment controller. Intensity adjustable from 0-100%

## 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



## SCISSORS AND BLADES

- PB.5080 Dressing scissors with blunt/sharp tip, length 14 cm
- PB.5084 Dissecting scissors, sharp tips, length 11 cm
- PB.5092 Scalpel with blunt tip, length 15 cm
- PB.5094 Scalpel handle no. 4 (for blades PB.5095 and PB.5096)
- PB.5095 Scalpel blades with sharp tip, 5 pieces per set
- PB.5096 Scalpel blades with blunt tip, 5 pieces per set
- PB.5103 Strop, double sided for stropping of scalpels, microtome knives. Includes stropping paste
- PB.5105 Razor plano/concave, for sectioning. With plastic handle
- PB.5106 Microtome knife plano/concave. With fixed handle, length 17 cm

## HANDHELD MICROTOMES

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



## DISSECTION KITS

### 4-PC Dissection kit PB.5110 in imitation leather case

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



PB.5110 ●

### 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



PB.5111 ●

### 10-PC Dissection kit PB.5112 in imitation leather case

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



PB.5112 ●

### 9-PC Dissection kit PB.5114 in wooden cabinet

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



PB.5114 ●

### 6-PC Dissection kit for Koi fish PB.5115 in plastic case

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



PB.5115 ●

### Professional slide preparation kit PB.5125 in plastic deluxe case

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



PB.5125 ●



## 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

### 25 Slides

## set of histology, zoology and botany

PB.5211 for education

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

#### HISTOLOGY

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

#### ZOOLOGY

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

#### BOTANY

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

## 25 Slides set of histology, zoology and botany

PB. 5212 for education

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

#### HISTOLOGY

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

#### ZOOLOGY

- SZ.1520** Paramecium, w.m.
- SZ.1625** Schistosoma Japonicum, fluke eggs, bilharziose
- SZ.1630** Taenia, tapeworm pig, 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** Pieris brassicae, cabbage-white butterfly, mouth, w.m.
- SZ.1750** Periplaneta, cockroach, spiracle of insect, w.m.

#### BOTANY

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

#### USED ABBREVIATIONS

<b>c.s.</b>	cross section
<b>l.s.</b>	longitudinal section
<b>w.m.</b>	whole mount

## 25 Slides set of histology, zoology and botany

PB. 5213 for education

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

#### HISTOLOGY

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

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

## ZOOLOGY

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

## 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** Ceratophyllum Demersum, hornwort, leave with air stomas, c.s.
- SB.2100** Pelargonium hortorum, geranium, stem c.s.
- SB.2337** Mniium, antherial branch, l.s.
- SB.2339** Mniium, archegonial branch, l.s.
- SB.2373** Coprinus, ink caps mushroom, section of pleus
- SB.2380** Spirogyra sp. in conjugation
- SB.2420** 3 types of bacteria, cocci, bacilli, spirelli

# 25 Slides set of histology, zoology and botany

## PB. 5214 for education

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

### HISTOLOGY OF MAMMALS

- SH.1060** Tendon l.s. (Dense connetive 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** Section through gonads and gills, l.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** Sporophyt w.m.
- SB.2320** Cyrtomium, fern, leaf with sporangia
- SB.2384** Volvox sp. w.m.

# 25 Slides set of histology, zoology and botany

## PB. 5215 for education

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

### HISTOLOGY

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

### ZOOLOGY

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

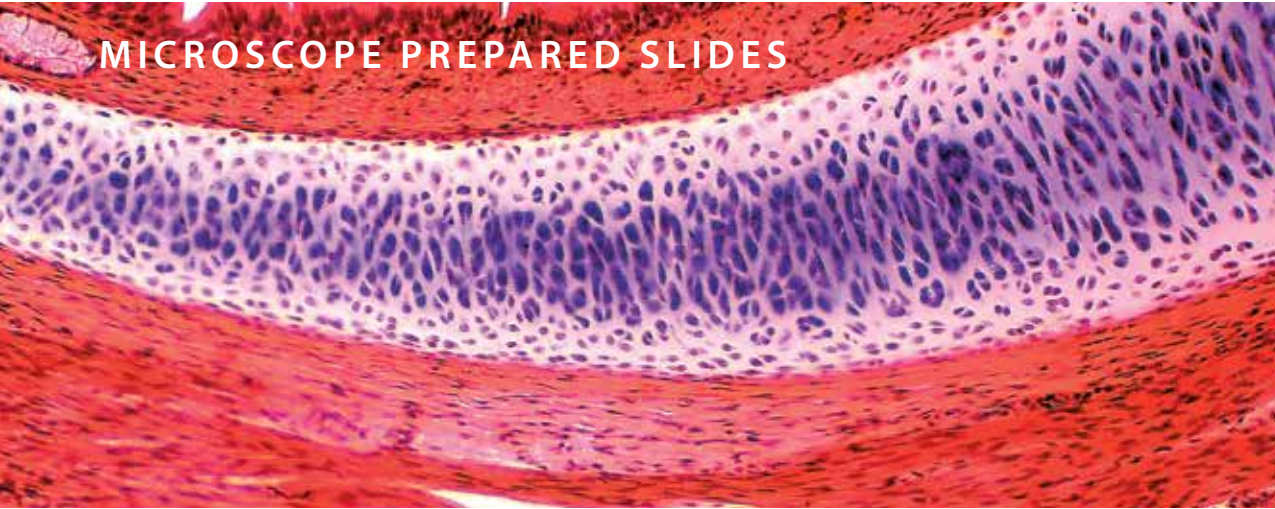
### BOTANY

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

#### USED ABBREVIATIONS

<b>c.s.</b>	cross section
<b>l.s.</b>	longitudinal section
<b>w.m.</b>	whole mount

## MICROSCOPE PREPARED SLIDES



## 23 Slides of mammal histology

PB.5221 set for education

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

### EPITHELIUM AND CONNECTIVE TISSUES

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

### RESPIRATORY, BLOOD CIRCULATION AND ENDOCRINE SYSTEM

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

### DIGESTIVE SYSTEM

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

### URINARY AND GENITAL SYSTEM

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

### NERVOUS SYSTEM AND SENSORY ORGANS

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

## 23 Slides of mammal histology

PB.5222 set for education

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

### EPITHELIUM AND CONNECTIVE TISSUES

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

### RESPIRATORY, BLOOD CIRCULATION AND ENDOCRINE SYSTEM

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

### DIGESTIVE SYSTEM

- SH.1220** Oesophagus dog, c.s.
- SH.1235** Large intestine, dog, c.s.
- SH.1260** Gall bladder, dog, section
- SH.1280** Golgi apparatus in epithelial cells of intestine, dog

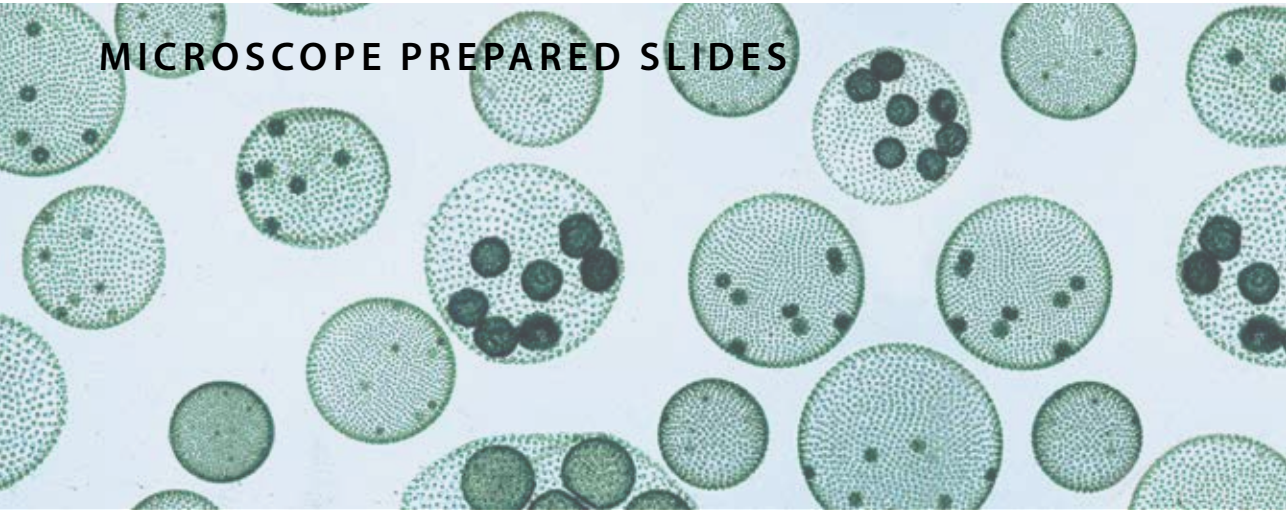
### URINARY AND GENITAL SYSTEM

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

### NERVOUS SYSTEM AND SENSORY ORGANS

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

## MICROSCOPE PREPARED SLIDES



### 10 Slides of zoology and botany

PB.5204 set for hobby

Set with 10 prepared microscopy slides for hobby: zoology and botany.

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

#### ZOOLOGY

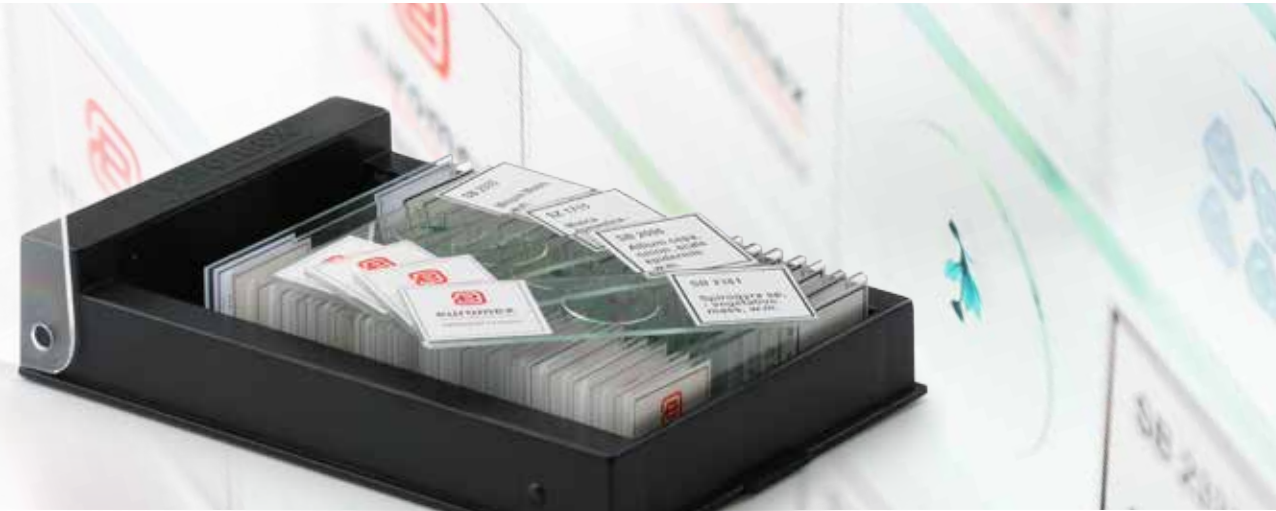
- SH.1040** Smooth muscle, teased preparation, rabbit, l.s. and c.s.
- SH.1110** Lung with injected blood vessels, rabbit, c.s.
- SZ.1708** *Apis mellifica*, honey bee, mouth parts
- SZ.1733** *Pieris brassicae*, cabbage-white butterfly, part of wing
- SZ.1877** *Rana* sp., frog, blood smear
- SB.2015**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

#### BOTANY

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

#### USED ABBREVIATIONS

<b>c.s.</b>	cross section
<b>l.s.</b>	longitudinal section
<b>w.m.</b>	whole mount



### 25 Slides of histology, zoology and botany

PB.5218 set for hobby

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

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

#### HISTOLOGY OF HUMAN AND MAMMALS

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

#### BOTANY

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

#### ZOOLOGY

- SZ.1520** *Paramecium*, w.m.
- SZ.1535** *Euglena virides*, a flagellate with eyespot
- SZ.1580** *Hydra* with bud, w.m.
- SZ.1630** *Taenia*, tapeworm pig, 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** Fruitfly, *Drosophila*, giant chromosomes of salivary gland, w.m.

## 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 box.  
Available in: plastic box PB.5181 (for 25 slides)

## Individual EuroSlides for Histology

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

### EPITHELIUM AND CONNECTIVE TISSUES

- SH.1001** Loose connective tissue, rabbit
- SH.1005** Hyaline cartilage rabbit, section
- SH.1006** Elastic cartilage, rabbit
- SH.1011** Hard bone grinding, human, section
- SH.1012** Hard bone grinding of rabbit, tooth, decalcium
- SH.1040** Smooth muscle, teased preparation, rabbit, l.s. and c.s.
- SH.1045** Skeletal muscle, dog, l.s. and c.s.
- SH.1049** Muscle types, striated, smooth, heart muscle, dog, l.s.
- SH.1060** Tendon, dog, l.s.
- SH.1072** Skin section through hair follicle, human
- SH.1078** Stratified flat epithelium, dog, section
- SH.1080** Ciliated epithelium, trachea, rabbit

### RESPIRATORY, BLOOD CIRCULATION AND ENDOCRINE SYSTEM

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

### DIGESTIVE SYSTEM

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

### URINARY AND GENITAL SYSTEM

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

### NERVOUS SYSTEM AND SENSORY ORGANS

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

#### USED ABBREVIATIONS

<b>c.s.</b>	cross section
<b>l.s.</b>	longitudinal section
<b>w.m.</b>	whole mount



# Individual EuroSlides for Zoology

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

## PROTOZOA

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

## COELENTERATA

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

## HELMINTHES

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

## CRUSTACEANS

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

## INSECTS

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

## AMPHIBIANS

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

### 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 box.  
Available is: plastic box PB.5181 (for 25 slides)

# Individual EuroSlides for Botany

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

## ROOTS

- SB.2006** Allium cepa, onion, scale epidermis, w.m.
- SB.2009** Allium cepa, onion, mitosis root tip, l.s.
- SB.2015** Ranunculus, buttercup, root, c.s.
  
- SB.2020** Helianthus, sunflower, old root, c.s.
- SB.2025** Monocot/dicot plant roots, zea mays/helantius, c.s.
- SB.2040** Solanum tuberosum, potato, starch grains

## STEMS

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

## LEAVES

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

## FLOWERS, FRUITS AND SEEDS

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

## FERNS AND MOSSES

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

## FUNGI

- SB.2360** Saccharomyces sp., yeast, budding, w.m.
- SB.2365** Penicillium sp., w.m.
- SB.2373** Coprinus, ink caps mushroom, section of pileus
- SB.2374** Aspergillus, brown mold, w.m.

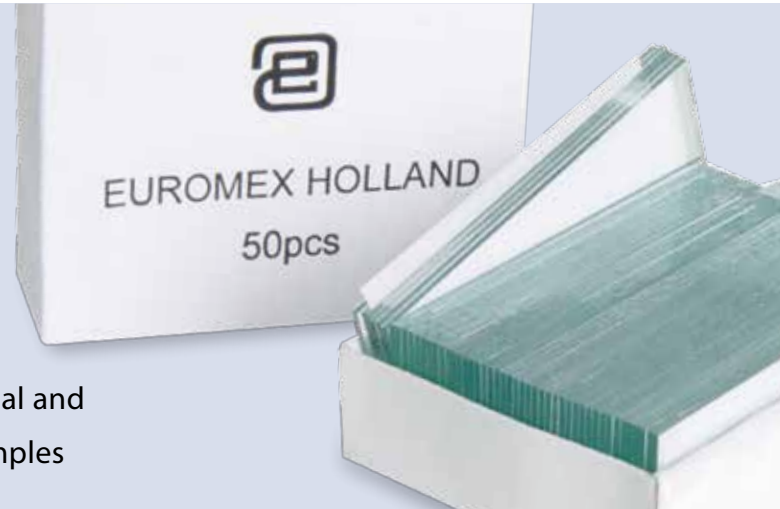
## ALGAE

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

## BACTERIA

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

## DISPOSABLES



Microscope slides are essential and are the platform for your samples

## 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, grinded edges. 50 pieces
- PB.5157-W** Microscope slides 76 x 26 mm, grounded, White frosted side, 50 pieces
- PB.5157-B** Microscope slides 76 x 26 mm, grounded, Blue frosted side, 50 pieces
- PB.5160** Microscope slides 76 x 26 mm with concavity, grinded edges. 10 pieces
- PB.5165** Cover glasses 18 x 18 mm, thickness 0.13-0.17 mm. 100 pieces

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

### MICROSCOPE SLIDE BOXES

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



● PB.5150



● PB.5180



● PB.5168 / PB.5170

## STAINS

Stained samples/cells enable better visualization under the microscope. Euromex offers a range of common stains



### MISCELLANEOUS ACCESSORIES

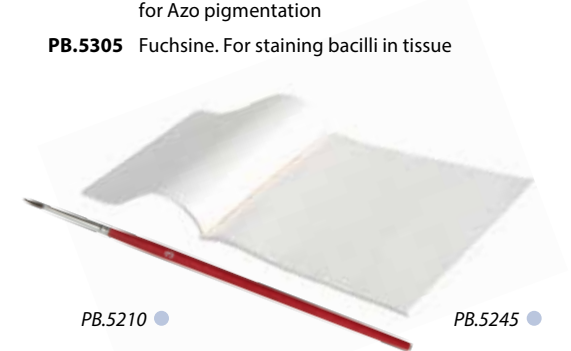
- PB.5200** Staining trough for 10 slides
- PB.5210** Fine pointed brush
- PB.5245** Lens paper. 100 sheets
- PB.5250** Solid paraffin. Melting point 60°C, 200 grams packed
- PB.5255** Immersion oil, refractive index nD = 1.482. In bottle (25 ml)
- PB.5265** Entellan, quick drying Canada balsam. In bottle (25 ml)
- PB.5270** Xylol (bottle), lens cleaner, intermediate agent for section slide preparation. In bottle (100 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.5275



● PB.5280 / PB.5274



● PB.5210

● PB.5245

### (DISSOLVED) STAINS

Supplied in 25 ml bottles

- PB.5280** Azo carmine-G. Biological stains for animal tissues. Also suitable for bacteria pigmentation
- PB.5283** Eosin yellow. Stain for general overall-view coloring
- PB.5286** Haematoxylin according to Ehrlich. General purpose nuclear stain
- PB.5289** Astra Blue. Stain for vegetal cells. To be used in combination with safranin
- PB.5292** Orange-G, stain for most elementary structures of animal tissues
- PB.5295** Safranin. A general stain for showing nuclei and cellulose walls. To be used in combination with Astra Blue
- PB.5297** Methylene Blue. Biological and bacteriological stain
- PB.5300** Analin Blue, to be used as third color for Azo pigmentation
- PB.5305** Fuchsin. For staining bacilli in tissue

# OtherProducts

Magnifiers

Optical instruments

USB microscopes



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 334  
REFRACTOMETERS • PAGE 339  
POLARIMETERS • PAGE 347  
SPECTROSCOPES • PAGE 348  
PATHOLOGY SCANNER • PAGE 350

# MAGNIFIERS & MEASURING MICROSCOPES



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

## Handheld magnifiers and magnifiers with handles

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

**PB.5021** Magnifier with handle 10x, aplanatic lens Ø 25 mm and handle Ø 8 mm. Fits on PB.5022

**PB.5022** Heavy stand with adjustable cross clamp, base Ø 70 mm. Weight 450 grams. For PB.5022 and PB.5021

**PB.5026** Handheld magnifier 10x with illuminator, aplanatic lens Ø 28 mm. Field of view 30 mm. Supplied without batteries



● PB.5020

● PB.5021

● PB.5026

● PB.5022

## FOLDING MAGNIFIERS

**PB.5016** Aplanatic magnifier 6x, doublet.  
Lens Ø 20 mm. Field of view 25 mm

**PB.5018** Aplanatic magnifier 15x, doublet.  
Lens Ø 18 mm. Field of view 14 mm

**PB.5032** Achromatic magnifier 10x, triplet.  
Lens Ø 21 mm. Field of view 15 mm

**PB.5033** Achromatic magnifier 20x, triplet.  
Lens Ø 21 mm. Field of view 8 mm



● PB.5032

**PB.5036** Aplanatic magnifier 10x, doublet.  
Lens Ø 20 mm. Field of view 20 mm

**PB.5037** Achromatic diamond magnifier 10x with four lenses Ø 21 mm. Field of view 25 mm



● PB.5016



## FOLDING MAGNIFIERS WHITE LED ILLUMINATION

**PB.5034-LED** Achromatic magnifier 10x triplet.  
Lens Ø 21 mm. White LED illumination

**PB.5018-LED** Achromatic magnifier 15x triplet.  
Lens Ø 21mm. White LED illumination

**PB.5033-LED** Achromatic magnifier 20x, triplet.  
Lens Ø 21 mm. White LED illumination

**PB.5035-LED** Achromatic magnifier 30x triplet.  
Lens Ø 21 mm. White LED illumination



● PB.5034-LED

## FOLDING MAGNIFIERS WHITE LED AND UV ILLUMINATION

**PB.5034-LUV** Achromatic magnifier 10x triplet.  
Lens Ø 21 mm. White LED and UV illumination

**PB.5018-LUV** Achromatic magnifier 15x triplet.  
Lens Ø 21mm. White LED and UV illumination

**PB.5033-LUV** Achromatic magnifier 20x, triplet.  
Lens Ø 21 mm. White LED and UV illumination

**PB.5035-LUV** Achromatic magnifier 30x triplet.  
Lens Ø 21 mm. White LED and UV illumination



● PB.5034-LUV

# MAGNIFIERS & MEASURING MICROSCOPES

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



## Magnifiers & measuring microscopes

### TABLE MAGNIFIERS

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



● PB.5039 / PB.xxxx



● PB.5043 / PB.5040

### MISCELLANEOUS MAGNIFIERS

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



● PB.5030



● PB.5049

### MEASURING MAGNIFIERS WITH RETICLE

- PB.5044** Measuring magnifier 7x.  
Eyepiece Ø 18 mm. Field of view 24 mm.  
Measuring scale 10-0-10 mm divided into 0.1 mm and cross hair
- 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 cross hair. 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 32 mm.  
Measuring scale 13-0-13 mm



● PB.5044 / PB.5048



● PB.5046 / PB.5047



### MEASURING MICROSCOPES

- 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 cross hair
- PB.5008** Measuring microscope 20x with LED illumination. Field of view 7.2 mm
- PB.5010** Measuring microscope 40x with LED illumination. Field of view 3.6 mm
- PB.5012** Measuring microscope 60x with LED illumination. Field of view 1.75 mm
- PB.5014** Measuring microscope 100x with LED illumination. Field of view 1.1 mm



● PB.5008



● PB.5045

# RefractoMeters



Refractometers are used for the identification of substances and concentration measurement 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



RF.5562

## Handheld refractometers

### Sugar concentration

A few drops on the measurement prism of the refractometer are sufficient to read the refraction index of a liquid under test. The reflected light beam projects a shadow line onto a small glass reticle inside the instrument. The line and scale can be read through a magnifying eyepiece. The reading of most refractometers are corrected with an automatic temperature compensation (ATC)

The food industry intensively uses refractometers to determine the exact Brix concentration in marmalades, fruit, fruit juices, honey, treacle, wine and other food products. In the chemistry and oil industry refractometers are used to measure water/oil emulsions

All refractometers are equipped with an ATC (except RF.5190) and are supplied with specific scales

Concentrations of sugar in marmalades, fruits, honey, syrups, wine and monitoring of oil emulsions

MODELS	Scales	Accuracy	ATC	Analog	Model	Scales	Accuracy	ATC	Analog
RF.5190	0-90 Brix	0.2 Brix		•	RF.5562	28-62 Brix	0.2 Brix	•	•
RF.5510	0-10 Brix	0.1 Brix	•	•	RF.5580	0-80 Brix	0.5 Brix	•	•
RF.5520	0-20 Brix	0.1 Brix	•	•	RF.5582	40-82 Brix	0.5 Brix	•	•
RF.5532	0-32 Brix	0.2 Brix	•	•	RF.5592	58-92 Brix	0.5 Brix	•	•

# HIGHLIGHTS

- Portable
- Accurate
- Fast
- Automatic Temperature Correction (ATC)



RD.6535

## Digital handheld refractometers

### Sugar concentration in juices

A focused light beam of a LED source is reflected by the substance on a linear array of photo diodes. The refractometer correlates the position of the light beam on the array of photo diodes to refractive index or to another unit of measurement related to the substance under observation. The value can be read from a digital LCD readout. The digital refractometers are equipped with an automatic temperature compensation (ATC)

Especially designed to measure sugar concentrations in fresh fruit juices. Latest technology for measuring refractive indices. The sample is illuminated by LED light source while an optical sensor measures the percentage of reflection from the sample. With the refractive index the device calculates the concentration

Units in Brix, °Oe (Oechsle) and °KMW. With ATC

Concentrations of grapes and fruit

MODEL	Scales	Accuracy	Remarks	ATC	Digital
RF.5635	0-140 °Oe	1 °Oe	Oechsle units	•	•
	0-32 Brix	0.2 Brix	Sugar concentration	•	
	0-25 °KMW	0.2 °KMW	Babo units	•	

Concentrations of sugar, nD indices (only for sugar)

MODELS	Scales	Accuracy	ATC	Digital
RD.5635	0-35 Brix	0.1 Brix	•	•
RD.5645	0-45 Brix	0.1 Brix	•	•
	1.33-1.40 R.I.	0.0001 R.I.		
RD.5665	28-65 Brix	0.1 Brix	•	•

# REFRACTOMETERS



● 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. The Abbe refractometer is also suitable for determination of the refractive index of solid samples, such as glass, plastics, and polymer films. The instrument is equipped with a built-in thermometer and water connection to control fluid temperatures. Also equipped with a Brix and a refraction index scale and supplied with a test plate

Abbe refractometers are more accurate with an extended scale to measure concentrations of sugar and refractive indices. 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, thermometer 0-50° Celsius, calibration plate and adjusting tool

*Substance identification of sugar concentration*

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

# HIGHLIGHTS

- Portable
- Accurate
- Fast
- Automatic Temperature Correction (ATC)



● RF.5381

## Gemological refractometer Gemstones

Gemological refractometers are the key instruments for research in gemological laboratories. Gemstones can be examined using the optical principles on which these refractometers are based

Refractive index, one of the principal properties used in determining the type of a gemstone, is a material constant, dependent on the chemical composition of a substance. This allows users to identify gem materials by measuring their refractive index

Determination of the refractive index is done at the wavelength of the sodium line D-line (NaD) of ~589 nm. This is filtered out from daylight with a dedicated optical filter

*Identification of precious stones*

MODEL	Scales	Accuracy	Remarks	Bench-top instrument	Analog
RF.5381	1.30-1.81 I.R.	0.01 I.R.	With filter 590 nm	•	•



## REFRACTOMETERS

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



### Handheld Refractometers

#### Alcohol and alcohol-sugar solutions

Measure concentrations of alcohol, sugar and alcohol-sugar % solutions. Using refractometers permit the growers to choose the moment of the vintage by monitoring the "must". With ATC



*Sugar concentration, % alcohol and alcohol/sugar solutions*

MODEL	Scales	Accuracy	ATC	Analog
RF.5625	0-25% 0-40 Brix	0.2 % 0.2 Brix	•	•

#### Sugar and salt

For concentrations of salt, water-soluble salt solutions of sugar. The handheld refractometers are equipped with a Brix scale. With ATC

*Substance identification of sugar concentration*

MODEL	Scales	Accuracy	ATC	Analog
RF.5610	0-100 ‰ 0-10 Brix	1 ‰ 0.1 Brix	•	•

*Substance identification of sugar concentration*

MODEL	Scales	Accuracy	ATC	Digital
RD.5728	0-28 % 0-35 Brix 1.30-1.39 RI	0.1% 0.1 Brix 0.0001 RI	•	•

## Battery acid and Coolant

Testing water-soluble coolants and battery acid solutions. The refractometer features a coolant temperature scale for ethylene glycol and propylene glycol. It also has a specific acid. With ATC



*For testing water-soluble coolants and battery acid solutions.*

MODEL	Scales	Accuracy	Remarks	ATC	Analog
RF.5650	1.15-1.30 RI 0/-50 °C 0/-50 °C	0.01 RI 5 °C 5 °C	Battery acid Ethylene glycol Propylene glycol	•	•

### Clinical applications

Clinical refractometers are commonly used to measure Serum Protein, Specific Gravity of Urine and Refractive Index. With ATC



*For measuring clinical applications as Serum Protein, Specific Gravity of Urine and Refractive Index*

MODEL	Scales	Accuracy	Remarks	ATC	Analog	MODEL	Scales	Accuracy	Remarks	ATC	Digital
RF.5612	0-12 g/dl 1-1.05 sg 1.333-1.360 RI	0.2 g/dl 0.002 sg 0.0005 RI	Proteins in Serum Urine specific gravity	•	•	RD.5712 <sup>(1)</sup>	0-12 g/dl 1-1.05 sg 1.33-1.39 RL	0.2 g/dl 0.001 sg 0.0001 RL	Proteins in Serum Urine specific gravity	•	•

<sup>(1)</sup> With this model the value can be read from a digital display

### 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)

# Polarimeters & Spectroscopes



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

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

Spectroscopes are used to visualize the light spectrum of light sources



## POLARIMETERS

### Polarimeter

● 99.400

Polarimeters are suitable for fast and accurate measurements of sugars, glucose, perfume, chemical substances and medical drugs. Equipped with a built-in 230 V 589.3 nm sodium lamp with ballast for 230 volt operation with cable and plug

Polar scale, range  $\pm 180^\circ$  with  $0.1^\circ$  readings. Supplied with observation tubes of 100 mm and 200 mm. Bright light measuring field permits reading with accuracy of  $0.1^\circ$  with aid of Vernier

Range  $0-180^\circ$  to left and right. Accuracy  $0.1^\circ$ . Polarizing device: Glan Thomson prism and Laurent Quartz plate

#### HIGHLIGHTS

- The polarimeters are delivered with 100 and 200 mm observation tubes
- Equipped with a built-in 230 V 589.3 nm sodium lamp
- Fast and accurate
- Short warm-up time

#### ACCESSORIES FOR 99.400

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

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

# SPECTROSCOPES

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



## Euromex handheld spectrometer

SP.5200

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

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



• SP.5200

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

## Euromex handheld spectrometer

SP.5155

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

- Comparison prism
- Mirror
- Five glass cuvettes

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



• SP.5155

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

## Handheld spectrometer

SP.5150

Handheld spectrometer with adjustable slit from 0 to 1 mm

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



• SP.5150

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

## Handheld spectrometer

SP.5100

Handheld spectrometer with fixed slit

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



• SP.5100

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

## PATHOLOGY SCANNER



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 ImageFocus Alpha basic microscopy analysis software, see chapter 9.

PS.1001	
<b>Dimensions</b>	<b>Weight</b>
(h) 70 x (w) 150 x (d) 260 mm	1.0 kg

## HIGHLIGHTS

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



PS.1001 / PS.3001 ●

## SPECIFICATIONS

<b>Resolution</b>	10,000 x 10,000 dpi
<b>Scan mode</b>	Color
<b>Dynamic Range</b>	3.8
<b>Scanning Area</b>	24.3 x 36.5 mm (H x W)
<b>Scanning medium</b>	76 x 26 mm slides
<b>File Format</b>	Saving in JPG, TIFF format
<b>Light Source</b>	Transmission white LED
<b>Operating System</b>	Windows 7/8/10 Intel-based Mac OS X 10.5/10.6 /10.7/10.8
<b>Power supply</b>	100- 240 AC Adapter, 12 V 1.5 A
<b>Supplied with</b>	Double slide holder, 100-240 V power supply, USB-2 cable, PathoView scanning software and user manual
<b>Model</b>	<b>PS.1001</b>

#### MODELS

PS.1001	PathoScan 10,000 DPI slide scanner
PS.3001	Double slide holder
PS.3002	Polarization slide holder, for one slide

# USB MICROSCOPES

**Q-scope®**  
DIGITAL MICROSCOPE

**FEATURED**

**Q-scope®**

## Discover the new world of handheld digital microscopy

Q-scope® is a revolution in handheld microscopy. A digital microscope with up to 500x magnification can now be used from the palm of your hand. These flexible and precise instruments have been designed in such way that it fits perfectly in your hand. This makes the usage of the Q-scope® very easy and effortless. Ease of use is crucial, this is why the Q-scope® only needs one finger to focus, grab a picture and select illumination settings. There is a Q-scope® for every application, use the white power led versions for standard applications, or choose one of the special application models

Connect your Q-scope® via USB to your Windows or Mac computer to observe and analyze captured or live images with the powerful user-friendly (free of charge) software for advanced image processing. The WiFi models can also easily be connected to tablet computers. The Q-scope® series consists of models with numerous magnification ranges and a variety of image sensors



Qs.MS10  
with Qs.20200-P



### GENERAL APPLICATIONS



MODELS	QS.13200-P	QS.20200-P	QS.20500	QS.90200-P	QS.13100-W
<b>Illumination</b>	White power LEDs	White power LEDs	White high power LEDs	White high power LEDs	White high power LEDs
<b>Connection</b>	USB 2.0	USB 2.0	USB 2.0	USB 2.0	WiFi/USB 2.0
<b>Magnification</b>	10-50, 200x	10-50, 200x	500x	10-40, 200x	WiFi: 10-25x, 100x USB: 10-25, 200x
<b>Zoom</b>	Yes, distance controlled	Yes, distance controlled		Yes, distance controlled	Yes, distance controlled
<b>Focus range</b>	10-500mm	10-500mm	4mm	10-200mm	10-500mm
<b>Polarizer</b>	yes	yes	no	yes	yes
<b>CMOS sensor</b>	1.3 Megapixel	2 Megapixel	2 Megapixel	9 Megapixel	1.3 Megapixel
<b>Resolution</b>	1280x1024, 1280x960, 640x480	1600x1200, 1280x960, 800x600, 640x480	1600x1200, 1280x960, 800x600, 640x480	3488x2616, 2560x1920, 2048x1536, 800x600	1280x960, 1024x768, 640x480
<b>Max. frame rate</b>	30 fps	30 fps	30 fps	15 fps	25 fps

### SPECIAL APPLICATIONS



MODELS	QS.UV-370	QS.UV-400	QS.IR-940	QS.DERMO
<b>Illumination</b>	high power UV 370nm LEDs	high power UV 400nm LEDs	Infrared (940nm) and white power LEDs,	high power CR++ LEDs
<b>Connection</b>	USB 2.0	USB 2.0	USB 2.0	USB 2.0
<b>Magnification</b>	10-50 and 200x	10-50 and 200x	10-50 and 200x	10-50 and 200x
<b>Zoom</b>	distance controlled	distance controlled	distance controlled	distance controlled
<b>Focus range</b>	10-500mm	10-500mm	10-500mm	5-520mm
<b>Polarizer</b>	no	no	yes	no
<b>CMOS sensor</b>	2 Megapixel	2 Megapixel	2 Megapixel	2 Megapixel
<b>Resolution</b>	1600x1200, 1280x960, 800x600, 640x480	1600x1200, 1280x960, 800x600, 640x480	1600x1200, 1280x960, 800x600, 640x480	1600x1200, 1280x960, 800x600, 640x480
<b>Max. frame rate</b>	30 fps	30 fps	30 fps	32 fps
<b>Applications</b>	Industry, medical, scientific, forensic research and counterfeit detection		Industry, scientific and forensic research	Dermatology

# Q-SCOPE® STANDS

## DESIGNED FOR MANY APPLICATIONS

The Q-scope® stands are designed to be stable, well balanced and provide smooth adjustment and positioning of the Q-scope® digital microscopes

The desktop models consist of a black coated metal base with a chromed steel post. **The Q-scope® Metal Gooseneck Stand** has a black coated metal boomerang-shaped base with a chromed flexible gooseneck with holder. With each stand a cable clamp is provided in order to secure the USB cable of the wired Q-scope® models

**The Q-scope® Metal Boom-arm Stand** offers an extra steady and precise positioning of the microscope

The large pillar and long articulated arm of the **Q-scope® Metal Articulated-arm Stand** enables users to place large objects under the Q-scope®. Use the fixed or the 3D-positioning holder to position the Q-scope® in any three dimensional position effortlessly

**The fine focus adjustment system** allows accurate positioning and focusing of the Q-scope® for precise microscope height control

**The Cradle Stand** offers a hands-free usage of the Q-scope® to view at a fixed WD. You can easily put the Q-scope® into the cradle for close inspection at a high magnification  
See [www.qscope.com](http://www.qscope.com) for more models and information

## Q-SCOPE® BASIC STANDS



MODELS	QS.MS10	QS.MS20	QS.CS10
<b>Stand</b>	Metal Positioning Stand with easy 3D positioner	Metal Gooseneck stand with fixed positioner	Cradle Stand
	Stable height adjustable stand with 3D positioner for accurate microscope control, ergonomic stable design	Ergonomic hands-free operation. Large WD and positioning options. Designed for maximum flexibility, ergonomic stable design	Transparent cradle for easy movement across flat surfaces and fast inspection at a fixed working distance
<b>Applications</b>	All	All	Surface inspection such as printing and fabrics
<b>Dimensions</b>	(w) 146 x (l) 176 x(h) 160 mm	(w) 329 x (l) 138 x(h) 265 mm	(d) 98 x(h) 50 mm
<b>Working distance</b>	0 - 105 mm	0 - 120 mm	15 mm
<b>Weight</b>	620 grams	580 grams	35 grams
<b>Compatible with</b>	All Q-scope models	All Q-scope models	All Q-scope models
<b>Package content</b>	Stand, 3D positioner holder, wrench, cable guiding clamp, user manual	Stand, fixed positioner holder, wrench, cable guiding clamp, user manual	Stand, holder, user manual

## 3D POSITIONER

Check out the easy 3D positioner for effortless positioning of the Q-scope® in all possible angles

A unique feature optional of the Q-scope® stands range is the **3D positioner**, which enables very easy and precise three-dimensional positioning and focusing using only one hand! We invite you to experience this fully rotatable state-of-the-art positioning tool while using your Q-scope® digital microscope



## Q-SCOPE® PROFESSIONAL STANDS



MODELS	QS.MS40-B	QS.MS40-D	QS.MS45-B
<b>stand</b>	Metal Boom-arm stand with 3D positioner	Metal Boom-arm Stand with fine focus adjustment 3D positioner	Metal Articulated-arm Stand with 3D positioner
	Extra stable and height adjustable stand with 3D positioner for accurate control, suitable for large objects	Extra stable and height adjustable stand with fine focus adjustment, and fixed positioner for precise control in height, for large objects	Extra stable and height adjustable articulated stand with 3D positioner for accurate control, for large objects
<b>Applications</b>	all	all	all
<b>Dimensions</b>	(w) 220 x (l) 250 x(h) 287 mm	(w) 220 x (l) 250 x(h) 287 mm	(w) 220 x (l) 250 x(h) 287 mm
<b>WD</b>	0 - 230 mm	0 - 235 mm	0 - 230 mm
<b>Working range (X/Y)</b>	190/190 mm	45/137 mm	335/335 mm
<b>Focusing range</b>	-	44 mm	-
<b>Weight</b>	1600 grams	1700 grams	1800 grams
<b>Compatible with</b>	all Q-scope models	all Q-scope models	all Q-scope models
<b>Package content</b>	Stand, fixed position holder, wrench, cable guiding clamp, user manual	Stand, fine focus unit, fixed position holder, wrench, cable guiding clamp, user manual	Stand, fixed positioner holder, wrench, cable guiding clamp, user manual

# Choose the right EuromexMicroscope

INDUSTRY	FIELD OF APPLICATION	RECOMMENDED MODELS
• Aerospace	Manufacturing and quality inspection of rockets and space vehicles related parts	iScope® (material), Oxion (material), 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
• Asbestos control	Research of asbestos fibers, environmental protection during restauration of older buildings	iScope® (asbestos and polarization), NexiusZoom, DZ series, Z series
• Automotive	Manufacturing and quality inspection of automotive related parts	iScope® (material), Oxion Inverso (material), NexiusZoom, DZ series, Z series
• Avionics	Manufacturing and quality inspection of aircrafts related parts	iScope® (material), 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® (material), Oxion (material)
• Cosmetics	Research, development and testing (safety) of substances for make-up or perfume	bScope® (material), iScope® (material), Oxion (material), NexiusZoom, DZ series
• Digital imaging	Observation and perform analysis on microscope images, save and captured the images and videos	CMEX cameras, CCD cameras, HD cameras, ProPad
• Electronics	Development, production, assembling and inspection of electronic components or circuitry	iScope® (material), Oxion (material), NexiusZoom, DZ series, Z series, BE-50 LED
• Environmental	Monitoring of environmental conditions such as water, atmosphere, ecosystems, soil and pollution control	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® (material), iScope®, iScope® (material and polarization), Oxion, Oxion (material), Oxion Inverted, Oxion Inverted (material), NexiusZoom, DZ series, Z series
• Geology, mineralogy	Earth science that study the solid, rocks and processes. Identification and classification of rocks and minerals	iScope® (material), Oxion (material), Oxion Inverso (material), B+ (material), StereoBlue, NexiusZoom, DZ series

INDUSTRY	FIELD OF APPLICATION	RECOMMENDED MODELS
• 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® (material), Oxion (material), Oxion Inverso (material), bScope® (material), StereoBlue, NexiusZoom, DZ series
• Horticulture	Selective breeding of plants and fruit for production of food	BioBlue.Lab, bScope®, iScope®, Oxion, StereoBlue, NexiusZoom, DZ series
• 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® (material), Oxion (material), Oxion Inverso (material), bScope® (material), StereoBlue, NexiusZoom, DZ series
• Metallurgy	Manufacturing and quality inspection of metallic elements, intermetallic compounds and alloys	iScope® (material), Oxion (material), Oxion Inverso (material), bScope® (material), StereoBlue, NexiusZoom, DZ series
• Mining	Extraction of minerals such. Identification, quantitative and qualitative evaluation of minerals	iScope® (material and polarization), Oxion (material and polarization), Oxion Inverso (material), bScope® (material), StereoBlue, NexiusZoom, DZ series
• Paper industry	Production of paper related products. Quality inspection	iScope® (material), Oxion (material), bScope® (material), StereoBlue, NexiusZoom, DZ series
• Petrochemical	Research and transformation of crude oil and natural gas	iScope® (material), Oxion (material), bScope® (material), StereoBlue, NexiusZoom, DZ series
• Petrology	Study of the composition and structure of rocks as branch of geology. Identification by means of polarization microscopes	iScope® (polarization), StereoBlue, NexiusZoom, DZ series
• Pharmaceuticals	Development and production of drugs for medication. Quality assurance and inspection of produced products	iScope® (polarization), StereoBlue, NexiusZoom, DZ series
• Plastics	Development and production of plastics and plastic based compounds. Quality assurance and inspection	iScope® (material), Oxion (material), Oxion Inverso (material), bScope® (material), StereoBlue, NexiusZoom, DZ series
• Printing industry	Production of relief printing, lithography	iScope® (material), Oxion (material), bScope® (material), AP series, StereoBlue, NexiusZoom, DZ series
• Textile	Development and production of all kind of textile based products. Quality assurance and inspection	iScope® (material), Oxion (material), Oxion Inverso (material), B+ (material), AP series, StereoBlue, NexiusZoom, DZ series
• 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® (material), Oxion (material), Oxion Inverso (material), B+ (material), AP series, StereoBlue, NexiusZoom, DZ series

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Designed in Holland

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