



CATALOG
2026

education
life science
industry



contents

euromex MICROSCOPE COLLECTION 2026



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about euromex

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EDUCATION | BIOLOGICAL MICROSCOPES

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

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EDUCATION | STEREO MICROSCOPES

EduBlue • StereoBlue
NexiusZoom • AP series

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LIFE SCIENCE | BIOLOGICAL MICROSCOPES

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

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LIFE SCIENCE | FLUORESCENCE MICROSCOPES

bScope • iScope • Achios-X Observer • Delphi-X Observer • Achios-X Inverso
Delphi-X Inverso • Oxion Inverso • fluorescence LED light sources • fluorescence filter sets

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LIFE SCIENCE | STEREO MICROSCOPES

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

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INDUSTRY | STEREO MICROSCOPES

NexiusZoom, -EVO and -ESD • NexiusZoom for gemology
UltraZoom • StereoBlue • DZ series • Z series • BE-18 series

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INDUSTRY | MATERIALS SCIENCE MICROSCOPES

bScope • bScope large samples • iScope • Achios-X Observer
Delphi-X Observer • Oxion Inverso • Achios-X Inverso • Delphi-X Inverso

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DIGITAL SOLUTIONS

digital microscopes • MacroZooms • USB cameras • WiFi camera
cooled cameras • HD cameras • tablet cameras • software • adapters

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ACCESSORIES | FOR MICROSCOPY

illumination solutions • preparation accessories • dissection kits
microscope prepared slides • Globe professional microscope slides • disposables • stains

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OTHER OPTICAL PRODUCTS

magnifiers & measuring microscopes
refractometers • polarimeters • spectrosopes

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

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

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

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

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

production of optical components and optical assemblies. The offering varies from custom plan and curved optics to uniquely shaped optical elements, provided with optical coatings, covering wavelengths from deep ultraviolet (DUV) to infrared (IR). Euromex draws on the extensive expertise of Physix engineers to meet the stringent requirements for optical components used in microscopy manufacturing. For comprehensive details about Physix Photonics, please visit www.physix.com

Euromex Microscopes and Physix Photonics are both subsidiaries of **GSI Group Holdings**, a collection of leading brands serving the biotech, clinical diagnostics, life sciences, education and industrial sectors with a broad array of mission-critical laboratory-related consumable supplies, benchtop equipment and related accessories. GSI Group Holdings is headquartered in Irvine, California, USA. For more details about the brands and activities of the companies under GSI Group Holdings, please visit www.gsigroupholdings.com



euromex.academy



View the product videos on YouTube

Visit our academy for video tutorials and manuals

choose the right microscope



microscope selector

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

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

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UltraZoom

FEATURED

industry

stereo microscopes



UltraZoom

*Discover the new UltraZoom stereo microscopes
for materials science, page 242*

stereo microscopes



product information

- NEXIUSZOOM, -EVO AND -ESD • 228
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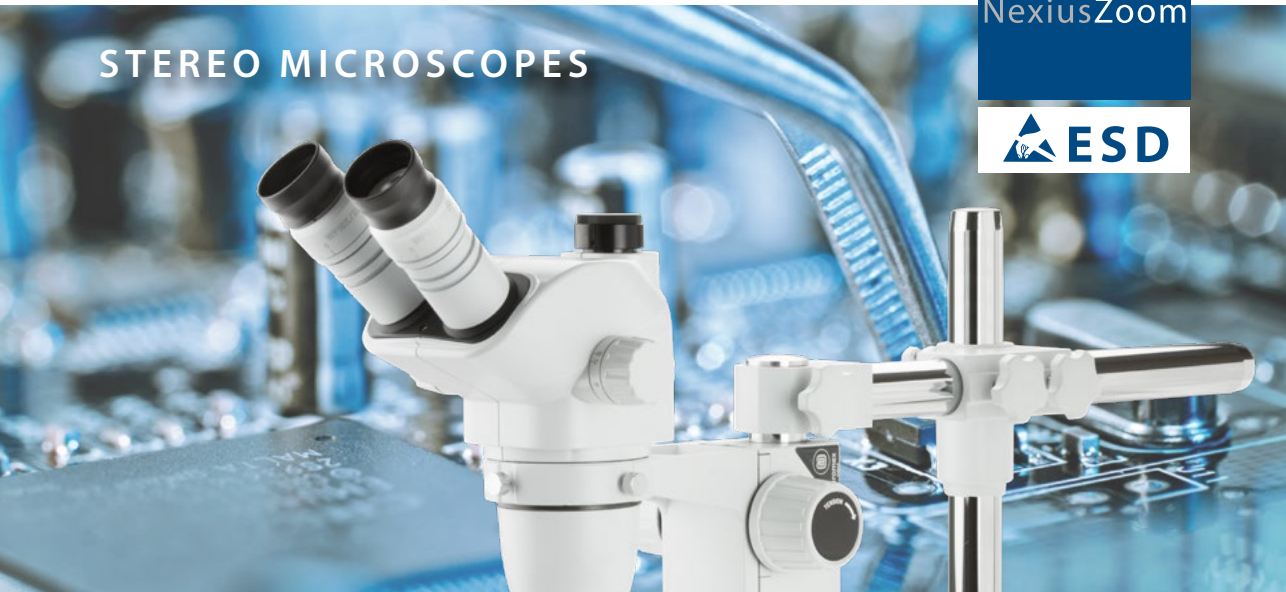
Stereo microscopes of Euromex are designed to provide high resolution three-dimensional images

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

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



STEREO MICROSCOPES



NexiusZoom, -EVO and -ESD

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



NZ.1903-U ESD



product information

Bino	Trino	360°	Transmitted	Incident	LED
Zoom	APL	Dark	100-240V	ESD	Anti-theft
10 Years Warranty					

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

HIGHLIGHTS

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

SPECIFICATIONS

EYEPIECES

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

HEAD

Binocular or trinocular heads with 45° inclined tubes. Both eyepieces with ± 5 diopter adjustments. Interpupillary distance adjustable between 54 mm and 75 mm. Trinocular head is supplied with a fixed light path beam splitter. The NexiusZoom EVO models are now equipped with click-stops

OBJECTIVES

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



NZ.1902-PG

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

AUXILIARY LENSES

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

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



NZ.1703-AP

NZ.1902-A

POLARIZATION

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

STAND

- Ergonomic pillar or rack & pinion stand with 3 W incident and 3 W transmitted LED illuminations (-P and -S stands)
- Ergonomic pillar stand with two 3 W gooseneck type incident LED illuminations on each side and a 3 W transmitted LED illumination (-PG stand)
- Ergonomic pillar stand with rotating mirror and 3 W LED transmitted and incident illuminations (-M stand)
- Ergonomic universal or boom stands, without illumination (-U and B stands)
- Articulated arm stand for table mounting or with heavy desktop stand, both without head holder, without illumination (-A and -AP stands)
- Lightweight articulated arm stand, with head holder, without illumination (NZ.9047)

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

More illumination options see chapter 9 (Accessories)

STAGE

180 x 155mm mechanical X-Y 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 or with the LE.5212 illumination station, ideal for creating or lifting shades

ESD SAFE MICROSCOPES

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

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

ANTI-THEFT SLOT

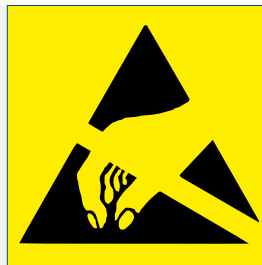
At the back of the microscope a Kensington Security slot is placed, which can be used to secure the instrument from theft (only on th P-, PG- and S-models)

PACKAGE CONTENT

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

Electrostatic discharge (ESD)

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



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

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

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

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

ESD SAFE

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

MAGNIFICATIONS

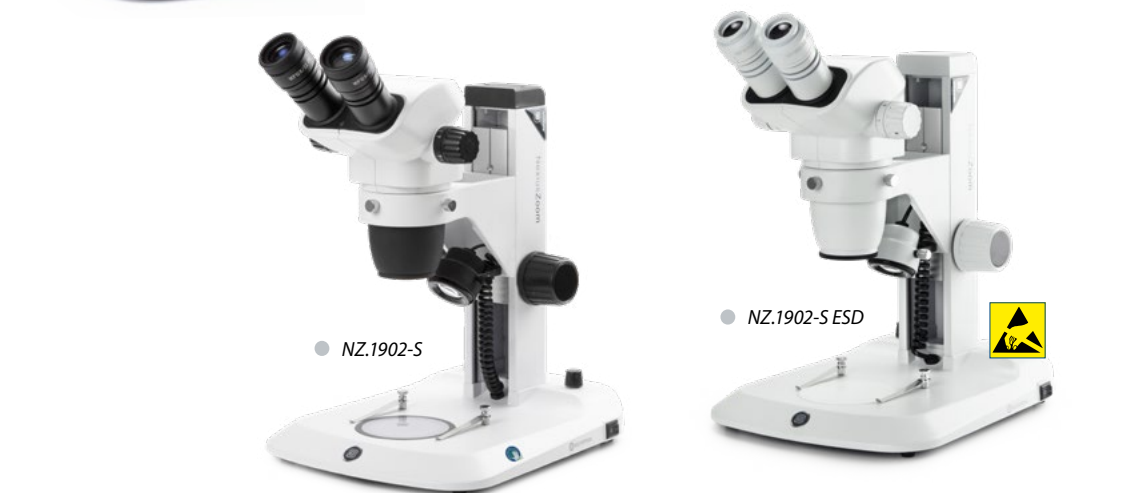
NexiusZoom and NexiusZoom ESD: working distance and field of view with standard high wide field (HWF) 10x / 22 eyepieces

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

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

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

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



ACCESSORIES AND SPARE PARTS

HEADS & EYEPIECES

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

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

WD = working distance

STANDS

- NZ.9000** Ergo pillar stand, 35 cm, without illumination
- NZ.9005** Ergo pillar stand with adjustable transmitted 3 W LED illumination, height 35 cm
- NZ.9010** Ergo rack & pinion stand with incident and transmitted 3 W LED illuminators
- NZ.9015** Ergo pillar stand with incident and transmitted 3 W LED illuminators
- NZ.9018** Ergo pillar stand with two 3 W gooseneck type incident LED illuminations on each side and a 3 W transmitted LED illumination
- NZ.9020** Universal one-arm stand without NZ head holder
- NZ.9025** Black universal stand with table clamp without NZ head holder
- NZ.9027** Black universal stand with heavy baseplate*
- NZ.9030** Universal double-arm boom stand*
- NZ.9032** Universal two-arm stand with table clamp*
- NZ.9042** Stand with rotating mirror and indirect transmitted LED illumination
- NZ.9047** Lightweight articulated arm stand, with head holder, without illumination

* Without NZ head holder

HEAD HOLDERS

- NZ.9081** Head 76 mm holder for NexiusZoom head on articulated arm stand NZ.9025 and NZ.9027
- NZ.9090** Head holder, suitable for NZ.9000/9005/9015/9017/9020/9030 stands
- NZ.9095** Head holder, ADD-ON, with fine and coarse adjustment. For NZ.9000/9005/9015/9018/9020/9030/9032 and NZ.9042 stands. Only available with new microscopes

NZ = NexiusZoom

ILLUMINATION

- LE.5207** Multi-functional dual 3 W LED adjustable light source. Equipped with two flexible gooseneck arms with LED illuminator
 - LE.5212** Euromex illumination station with two independently controlled goosenecks, a ringlight and a transmitted stage illuminator
 - LE.5260** Interchangeable high power (standard) white 6,500K light guide for NZ.9018/LE.5207/LE.5212, 1 pc
 - LE.5261** Interchangeable high power 365 nm flexible arm for NZ.9018/LE.5207/LE.5212, 1 piece
 - LE.5262** Interchangeable high power 395 nm flexible arm for NZ.9018/LE.5207/LE.5212, 1 piece
 - LE.5263** Interchangeable high power 420 nm flexible arm for NZ.9018/LE.5207/LE.5212, 1 piece
 - LE.1974** Ring illuminator with 72 LEDs with adjustable light intensity. External power supply 110-240 Vac / 12 Vdc (50/60 Hz). With segment controller. Brightness of 20,000 Lux at 100 mm distance and color temperature of 6,500 K. Mounting for stereo head with diameter from 25 to 61 mm
 - LE.1973** Ring illuminator with 144 LEDs with adjustable light intensity. External power supply 100-240 Vac / 12 Vdc (50/60 Hz). With segment controller. Brightness of 23,000 Lux at 100 mm distance and color temperature of 6,500 K. Mounting for stereo head with diameter from 25 to 61 mm
 - LE.5210** Euromex cold light illuminator EK-1, 100 W. 110 V and 230 V models available
 - LE.5211** Euromex cold light illuminator, 150 W halogen. 110 V and 230 V models available
 - LE.5211-LED** Euromex cold light illuminator LED, 30 W high power LED
 - LE.5214** Dual arm light conductor, gooseneck self-sustaining, 50 cm long, 4 mm diameter core
 - LE.5215** Triple arm light conductor, gooseneck self-sustaining, 50 cm long, 4 mm diameter core
 - LE.5222** Focusing head suitable for focusing lens LE.5214 and LE.5215. Needs LE.5224
 - LE.5224** Aspherical focusing lens for mounting in LE.5222
- More illumination options, see chapter 9

POLARIZATION ATTACHMENTS

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

DARKFIELD ATTACHMENT

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

STAGES

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

CAMERA ACCESSORIES

- NZ.9850** C-mount adapter with 0.5x lens for 1/2 inch cameras
 - AE.5130** Universal SLR adapter with built-in 2x lens for standard 23.2 mm tube. Needs T2 adapter
 - AE.5025** T2 adapter for Nikon D SLR digital camera
 - AE.5040** T2 adapter for Canon EOS SLR digital camera
- Other T2 adapters on request

MISCELLANEOUS

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



● NZ.5302 / NZ.5303

AUXILIARY LENSES

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

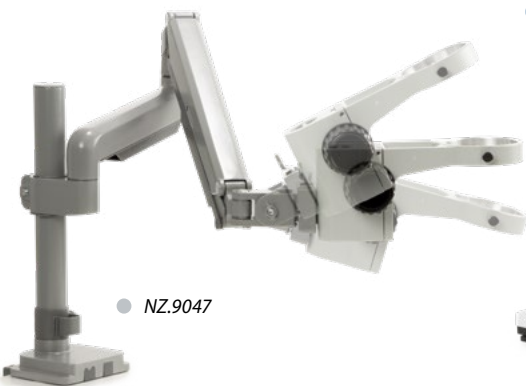
how to set up a stereo microscope

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.9958** Standard glass object plate, opaque, Ø 95 mm
- NZ.9983-R** 3 W LED replacement unit for NZ, incident illumination
- NZ.9983** 3 W LED replacement unit for NZ, transmitted illumination
- AE.1112** Object micrometer 50 mm (divided in 500 parts on glass slide 76 x 26 mm)

DISPOSABLES

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



NZ.9047



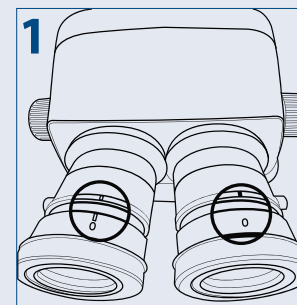
NZ.9005



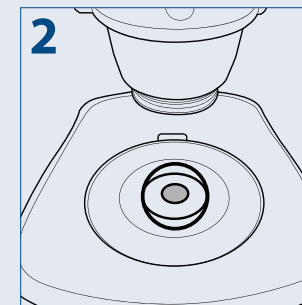
NZ.9000



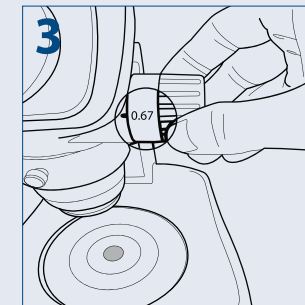
The LE.5212 in two different configurations



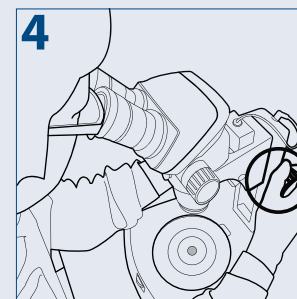
1 Turn the diopter adjustment rings of both eyepieces to position "0"



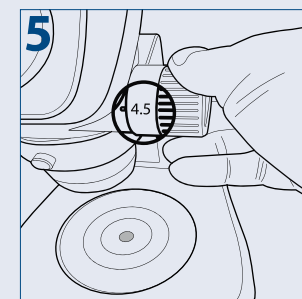
2 Put a specimen on the stage plate



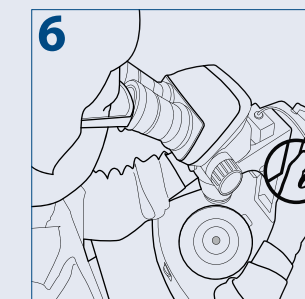
3 Turn the zoom adjustment knob to the lowest magnification



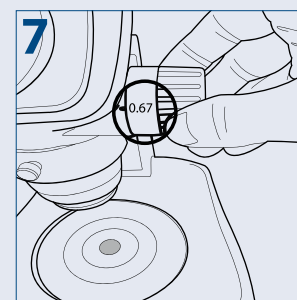
4 Rotate the focus adjustment knob to bring the specimen into focus



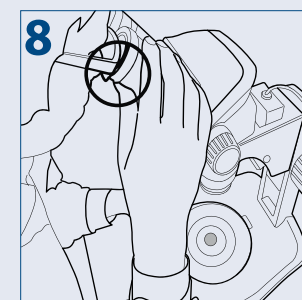
5 Turn the zoom adjustment knob to the highest magnification



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



7 Turn the zoom adjustment knob to the lowest magnification



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

PLEASE NOTE

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

If not, please repeat steps 3 to 8

MICROSCOPES FOR GEMOLOGY

NexiusZoom for gemology

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



product information



NZ.1902-GEML

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



NZ.1902 with backwards tilting stand

HIGHLIGHTS

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



SPECIFICATIONS

EYEPIECES

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

HEAD

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

OBJECTIVES

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

The NexiusZoom EVO is supplied with a 1:8.4 zoom objective with 0.65x to 5.5x magnifications, a field of view from 35.4 mm to 4.2 mm. Working distance approx. 110 mm
Auxiliary lenses 0.75x, 1.5x and 2.0x are available
All optics are anti-fungus treated and anti-reflection coated for maximum light throughput

STAND

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

STAGE

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

ILLUMINATION

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

PACKAGE CONTENT

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

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

MAGNIFICATIONS

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

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

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

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

ACCESSORIES AND SPARE PARTS

HEADS & EYEPIECES

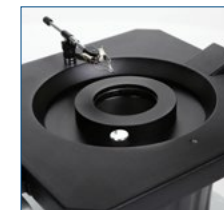
- NZ.5302** NexiusZoom binocular head with eyepieces
- NZ.5303** NexiusZoom trinocular head with eyepieces
- NZ.5312** NexiusZoom EVO binocular head with eyepieces
- NZ.5313** NexiusZoom EVO trinocular head with eyepieces
- NZ.6010** Pair of HWF 10x / 22 mm eyepieces
- NZ.6210** Pair of HWF 10x / 23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

AUXILIARY LENSES

- NZ.8907** Auxiliary lens 0.75x. WD 105 mm
- NZ.8915** Auxiliary lens 1.5x. WD 53 mm
- NZ.8920** Auxiliary lens 2.0x. WD 34 mm

Not suitable for NZ.1902-S and NZ.1903-S

WD = working distance



- 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

CAMERA ACCESSORIES

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

MISCELLANEOUS

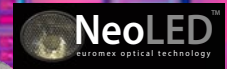
- NZ.8950** Protection glass for NexiusZoom head
Not suitable with auxiliary lenses
- NZ.9525** 360° rotatable analyzer in mount to be screwed under head of NexiusZoom
- NZ.9527** Polarization filter for NexiusZoom GEML and GEMF
- NZ.9572-G** Adjustable GEM object clamp for NexiusZoom with tilting stand for gemology
- AE.1112** Object micrometer 50 mm (divided in 500 parts on glass slide 76 x 26 mm)
- SL.3678** Halogen spare bulb 6 V, 30 W for NexiusZoom GEML and GEMF
- NZ.9962** Spare FL-bulb 7 W for NexiusZoom GEMF



● NZ.5302 / NZ.5303

STEREO MICROSCOPES

UltraZoom



UltraZoom

Industrial zoom microscope

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

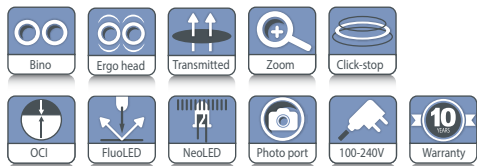
● UZ.1808

Oblique Contrast Illumination

Unmatched clarity for complex transparent samples. The Oblique Contrast Illumination (OCI) feature on our industrial stereo microscope is a must have for inspecting intricate or highly detailed specimens. Perfect for highlighting minute structures, subtle textures, micro-defects. It is an invaluable tool for quality control, failure analysis, or any task requiring extreme precision



product information



● Oblique Contrast Illumination

UZ.1803	469 (h) x 295 (w) x 365 mm (d) | 12.6 kg
UZ.1808	503 (h) x 295 (w) x 365 mm (d) | 12.8 kg

HIGHLIGHTS

- Ergonomic tilting head from 0 to 30°
- Binocular 20° head
- Swiveling eyepiece tubes for two heights
- EWF 10x/23 mm eyepieces
- Plan-apo lens for superb imaging
- Fine and coarse focus controls
- Zoom Ratio: 1:18
- Magnification 7.5 to 135x
- Oblique Contrast Illumination
- Transmitted 8 W LED illumination
- 10 years warranty



● Binocular head (UZ.1803)

SPECIFICATIONS

EYEPIECES

Pair of EWF 10x/23 mm eyepieces

HEAD

- Ergonomic 0-30° tilting head or binocular 20° head
- Diopter ± 5 adjustment on both eyepieces and interpupillary distance from 55 to 75 mm
- Both heads have a photo port with 1x c-mount for 1" cameras

CENTRAL ZOOM UNIT

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

COMMON MAIN OBJECTIVE

Standard supplied with a 1x plan apochromatic Common Main Objective, working distance 60 mm
The objective has an anti-reflection coating for maximum light throughput and is anti-fungus treated

STAND

- Large ergonomic stand with 180 mm object plate
- Oblique Contrast Illumination slider
- Coaxial coarse and fine adjustment
- Internal 100-240 Vac power supply

MAGNIFICATIONS

Objective with 60 mm working distance, standard outfit

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

ILLUMINATION

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

OBLIQUE CONTRAST ILLUMINATION

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

PACKAGE CONTENT

Supplied with power cord, dust cover, tools and user manual
All packed in sturdy box
See UltraZoom in chapter 5 for accessories

STEREO MICROSCOPES



● SB.1903

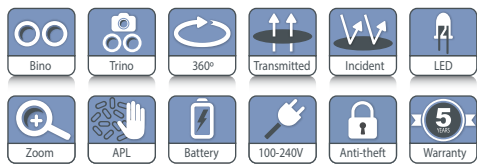


StereoBlue

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



product information



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

HIGHLIGHTS

- Binocular and trinocular models
- WF 10x/21 mm eyepieces
- Dual 1x/3x or 2x/4x magnification objectives
- Zoom stereo 0.7x to 4.5x objective/
0.5x to 5.5 objective
- Ergonomic stands
- Available in ergonomic rack & pinion, pillar, universal and boom stands
- 3 W LED illuminators
- Also available with batteries
- Built-in ringlight
- Ergonomic carrying grip
- 5 Years warranty

SPECIFICATIONS

EYEPIECES

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

HEAD

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

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

DUAL MAGNIFICATION OBJECTIVES

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

ZOOM OBJECTIVE

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



● Boom stand (SB.1903-B)

● Universal stand (SB.1902-U)



Built-in ringlight with 30 intensity adjustable LED's

EVO ZOOM OBJECTIVE

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

STAND

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

- The U- and B-stand can be equipped with ring illuminators LE.1974 and LE.1973 with respectively 72 or 144 power LEDs controlled in segments, ideal for creating or lifting shades
 - The stands are alloy metal casted with hardened coating
- More illumination options see chapter 9 (Accessories)*

ILLUMINATION

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

ANTI-THEFT SLOT

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

PACKAGE CONTENT

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



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

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

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

MODELS	Bino	Trino	0.7 - 4.5x zoom	0.5 - 5.5x zoom EVO	Rack & pinion stand 3 W LED	Pillar stand 3 W LED	Universal stand	Boom stand on heavy base plate	30 LED right light	Weight (kg)
SB.1902	•		•		•					3.6
SB.1902-P	•		•			•				4.4
SB.1902-U	•		•				•			15.4
SB.1902-B	•		•					•		21.9
SB.1903		•	•		•					3.7
SB.1903-P		•	•			•				4.5
SB.1903-U		•	•				•			15.5
SB.1903-B		•	•					•		22.0
SB.3903	•	•	•		•				•	3.7
SB.3903-P	•	•	•			•			•	4.5
SB.1702	•			•	•					3.6
SB.1702-P	•			•		•				4.4
SB.1702-U	•			•			•			15.4
SB.1702-B	•			•				•		21.9
SB.1703		•		•	•					3.7
SB.1703-P		•		•		•				4.5
SB.1703-U		•		•			•			15.5
SB.1703-B		•		•				•		22.0

ACCESSORIES AND SPARE PARTS

EYEPIECES

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

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

AUXILIARY LENSES

- SB.8903** Auxiliary 0.3x lens for zoom models, WD 247 mm. Only suitable for boom and articulated stands
- SB.8905** Auxiliary 0.5x lens for zoom models, WD 169 mm. Not suitable for SB.1X02, SB.1X03, SB.3903 and SB.3903-P
- SB.8907** Auxiliary 0.75x lens for zoom models, WD 105 mm
- SB.8915** Auxiliary 1.5x lens for zoom models, WD 48 mm. Not suitable for SB.39xx

WD = working distance

CAMERA ACCESSORIES

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

DISPOSABLES

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

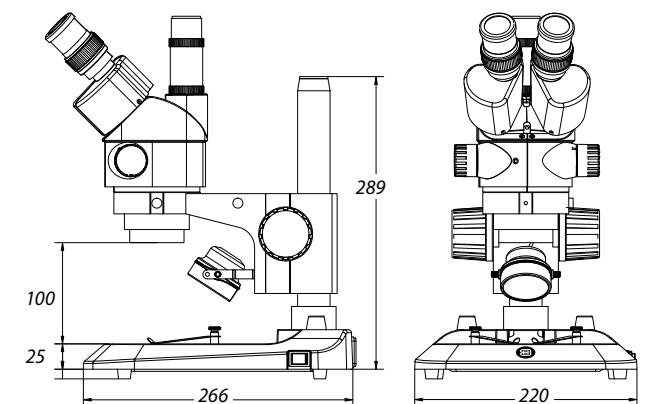
POLARIZATION ATTACHMENT

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

MISCELLANEOUS

- SB.8950** Protection glass window
- SB.9020** Universal single-arm stand without head holder and without illumination
- SB.9030** Universal double-arm stand without head holder and without illumination
- SB.9090** Head holder for SB.9020

DIMENSIONS



STEREO MICROSCOPES

DZ series



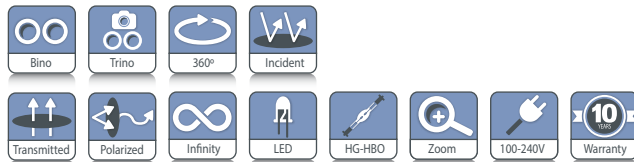
DZ series

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

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



product information



DZ.1100 / DZ.1600 / DZ.1800
305 (h) x 330 (w) x 285 mm (d) | 6.0 kg

DZ.1105 / DZ.1605 / DZ.1805
305 (h) x 330 (w) x 285 mm (d) | 5.2 kg

For weight of other products see table 'Models'

HIGHLIGHTS

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

SPECIFICATIONS

EYEPIECES

Pair of EWF 10x/22 mm eyepieces

HEAD

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

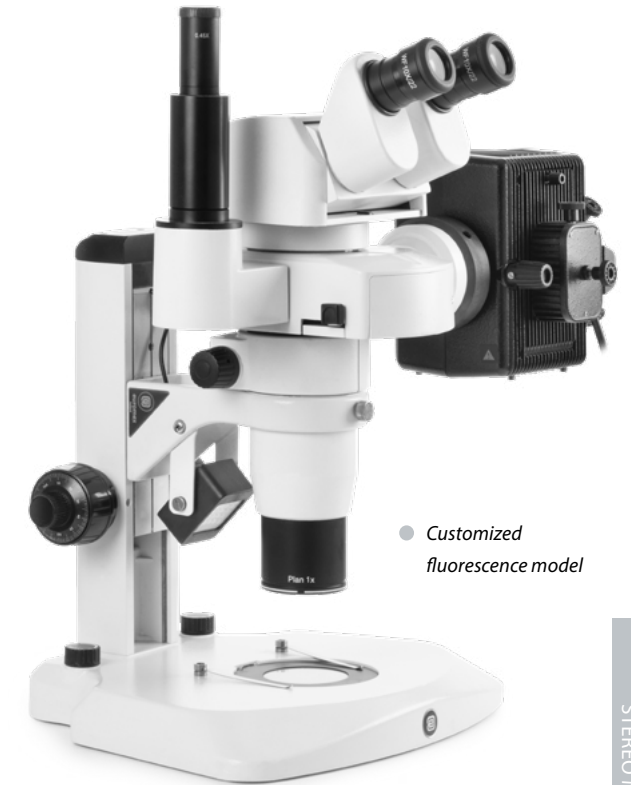
CENTRAL ZOOM UNIT

Three central zoom units are available:

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

COMMON MAIN OBJECTIVE

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



● Customized fluorescence model

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

STAND

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

ILLUMINATION

The transmitted and incident 3 W LED illuminations are supplied with a built-in 100-240 V power supply.

Both illuminators can be used simultaneously and the light intensities can be adjusted separately

PACKAGE CONTENT

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

STANDARD CONFIGURATIONS

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

DZ SERIES STANDARD

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

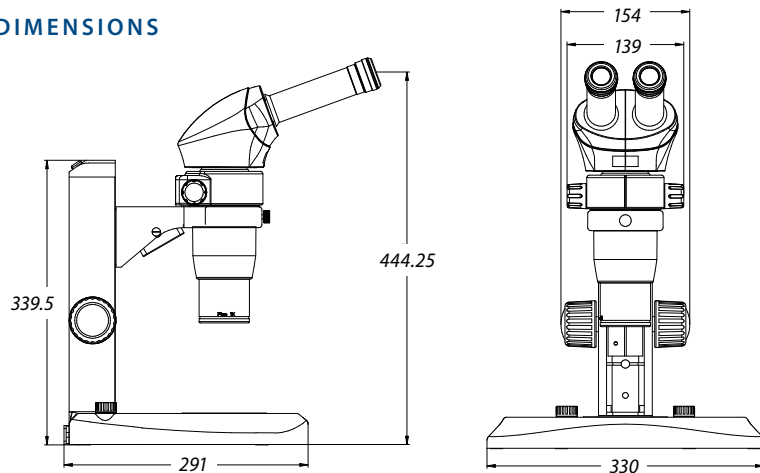
All equipped with EWF 10x/22 mm eyepieces

MAGNIFICATIONS AND FIELDS OF VIEW FOR STANDARD CONFIGURATIONS

MODELS	Zoom indication	0.5x Objective WD 126 mm		1.0x Objective WD 78 mm		2.0x Objective WD 33 mm	
		Total magnification	Field of view	Total magnification	Field of view	Total magnification	Field of view
DZ.1100 / DZ.1105 DZ.1800 / DZ.1805 DZ.1600 / DZ.1605	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
DZ.1100 / DZ.1105	6.4x	32x	6.8	64x	3.4	128x	1.7
	7.0x	35x	6.3	70x	3.1	140x	1.5
DZ.1100 / DZ.1105	8.0x	40x	5.5	80x	2.75	160x	1.4

All equipped with EWF 10x/22 mm eyepieces

DIMENSIONS



BUILD YOUR OWN MICROSCOPE

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

ACCESSORIES/SPARE PARTS

CENTRAL ZOOM UNITS

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

- DZ.4010** Plan apochromatic common main objective 1.0x. WD 78 mm
- DZ.4020** Plan apochromatic common main objective 2.0x. WD 33 mm

All optics are anti-fungus treated and anti-reflection coated for maximum light throughput
WD = working distance

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

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)

EYEPIECES

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



IRIS DIAPHRAGMS

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

OBJECTIVES

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

- NZ.9025** Articulated arm stand with table clamp (without DZ head holder 65.981)
- NZ.9027** Articulated arm stand with heavy stand (without DZ head holder 65.981)
- NZ.9042** Stand with rotating mirror and transmitted LED illumination
- NZ.9030** Boom (double arm) stand with heavy stand (without head holder NZ.9090)
- NZ.9032** Boom (double arm) stand with table clamp (without head holder NZ.9090)
- NZ.9090** Head holder, suitable for NZ.9000/9005/9015/9017/9020/9030 stands

FLUORESCENCE ATTACHMENT

- DZ.9050** Attachment for fluorescence with 100 W mercury vapor illumination with GFP-B and GFP-LP filter sets and one 23.2 mm photo port. Supplied with power supply
- DZ.9060** Filter cube with GFP-B band-pass filter set for blue excitation, EX 460-500, DM 505, EM 510-560
- DZ.9061** Filter cube with GFP-L long-pass filter set for blue excitation, EX 460-500, DM 505, EM 510
- DZ.9049** Empty filter cube

Other fluorescence filters available on request

Each cube needs two emission fluorescence filters

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

POLARIZATION ATTACHMENTS

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

CAMERA ACCESSORIES

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

Other T2 adapters on request

MISCELLANEOUS

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

DISPOSABLES

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

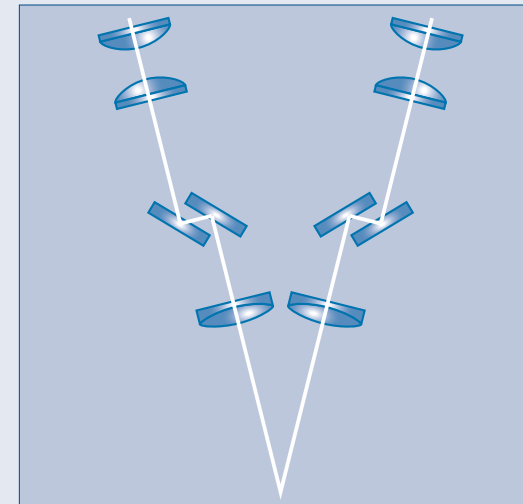


about stereo microscopes

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

greenough

principle



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

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

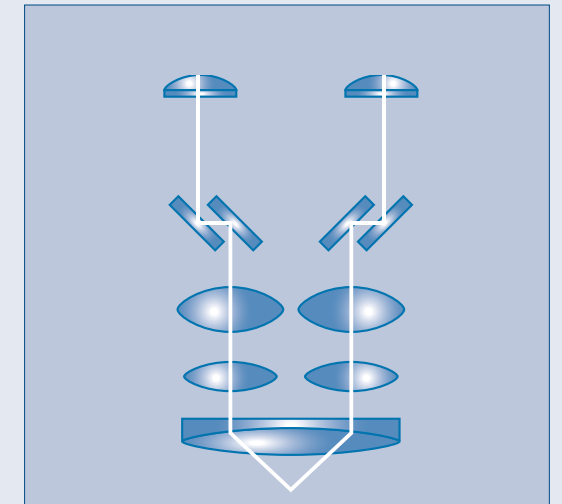
⁽¹⁾ Objective without auxiliary lenses and with 10x eyepieces

⁽²⁾ With 10x eyepieces

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

common main objective (CMO)

principle



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

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

STEREO MICROSCOPES

Z series

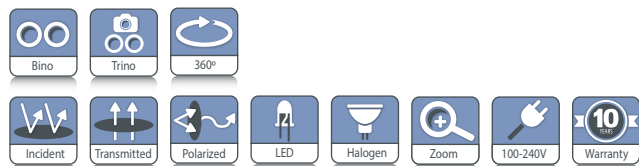
These versatile high-end stereo microscopes are highly appreciated by the professional research teams and industry for the excellent optical and mechanical characteristics. Indispensable for a reliable quality inspection of industrial products.

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



product information



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

ZE.1654
210 (h) x 155 (w) x 210 mm (d) | 2.5 kg
ST.1720
780 (h) x 270 (w) x 740 (max) mm (d) | 19 kg

HIGHLIGHTS

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

SPECIFICATIONS

EYEPIECES

Pair of SWF 10x/23 mm eyepieces

HEAD

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

ZOOM MAGNIFICATION OBJECTIVES

- Zoom objective with magnifications from 0.4x to 2.5x
- Zoom objective with magnifications from 0.7x to 4.5x
- Zoom objective with magnifications from 1x to 7x

Zoom objectives with click stops are also available on request
All optics have an anti-reflection coating for maximum light throughput and are anti-fungus treated

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



• ZE.1657 - ST.1710

STANDS WITHOUT ILLUMINATION

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

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

STAND WITH ILLUMINATION

St.1735 LED stand with rotating mirror.
 Pillar 240 x 160 x 60 mm (L x W x H) stand with head holder for height adjustment.
 Rotatable mirror for oblique LED illumination

BOOM STANDS

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

HEAD HOLDERS

Other optional head holders for boom stands

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

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

** Only suitable for boom stand ST.1720

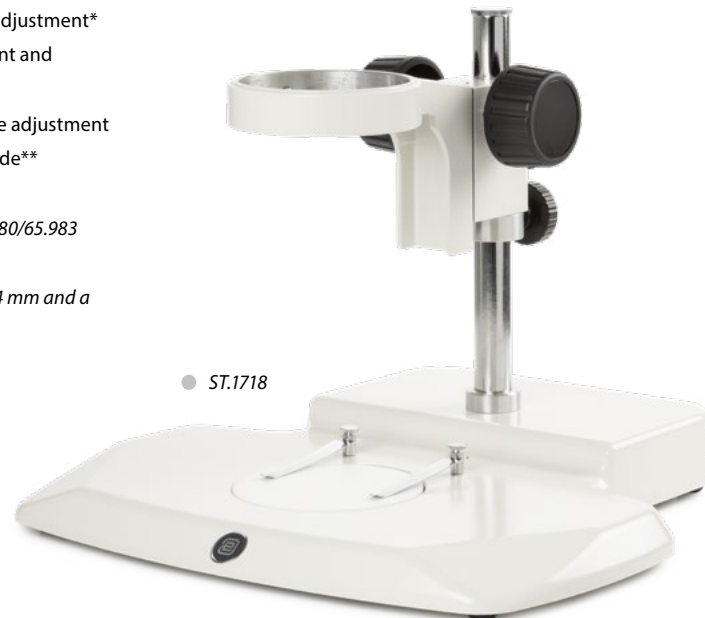
All head holders have an internal diameter of 84 mm and a friction adjustment

FOCUSING

Coarse adjustment and friction adjustment for head holders for ST.1790, ST.1794, ST.1796. The head holder ST.1796 is 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

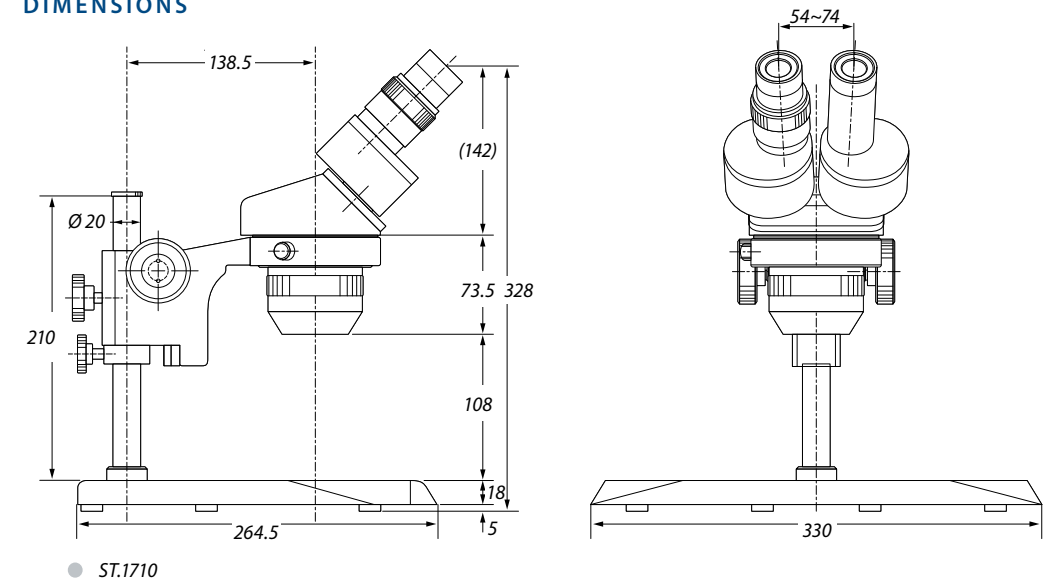


STANDS

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

* Length with the two arms totally extended

DIMENSIONS



ZOOM STEREO HEADS

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

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

ACCESSORIES AND SPARE PARTS

EYEPIECES

(without eyecups)

- AE.1836** Pair of SWF 10x/23 mm eyepieces
- AE.1834** Pair of SWF 12.5x/20 mm eyepieces
- AE.1840** Pair of SWF 30x/7.5 mm eyepieces
- AE.5439** Pair of eyecups

MICROMETER EYEPIECES

(with adjustable lens)

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

MICROMETER SLIDE

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

ADDITIONAL LENSES

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

- AE.1856** Additional 0.5x lens. WD 150 mm.
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 LENS

(for ZE.1657)

- AE.1818** Additional 1.5x lens. WD 57 mm

WD = working distance

PROTECTION WINDOW

(to be screwed under the objectives)

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

MECHANICAL STAGES

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

OBJECT PLATES - Ø 94 MM

- AE.1882** Acrylic black/white object plate

FILTERS - Ø 40 MM

- AE.1897** Frosted glass filter

FUSES

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

CAMERA ACCESSORIES

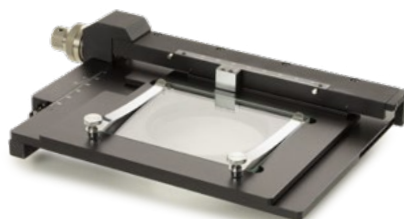
- DC.1320** Projection 1x objective with C-mount
- DC.1324** Projection 0.5x objective with C-mount*
- DC.1326** Projection 0.33x objective with C-mount*
- AE.5130** Universal SLR camera adapter with 2x projection lens for 23.2 mm tubes. Needs T2 adapter
- AE.5025** T2 adapter for Nikon D digital SLR cameras
- AE.5040** T2 adapter for Canon EOS digital SLR cameras

Other T2 adapters on request

* For cameras with 1/2" sensor. To be inserted into a 23.2 mm tube



● AE.1877



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



● AE.1876

about magnifiers

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



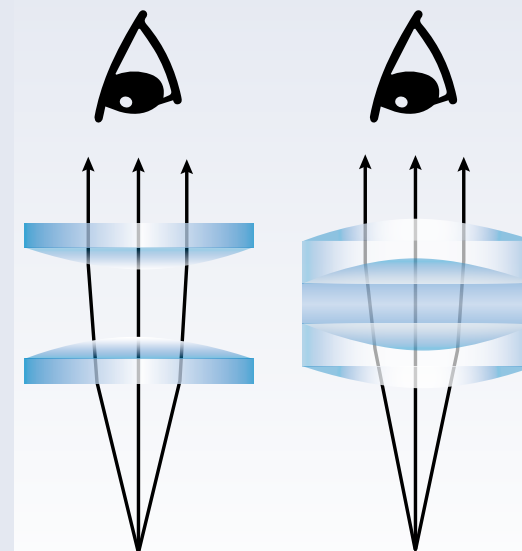
Basic magnifying glasses have low magnifications from 2 to 6 times. The magnification of such a basic magnifier depends upon the position between the user's eye, the object being viewed and the total distance between them

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



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

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



● doublet

● triplet

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

For magnification beyond 30 times, a stereomicroscope must be used

STEREO MICROSCOPES



BE-18 series

Stereo microscopes of the BE-18 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



product information



BE-18
345 (h) x 130 (w) x 410 mm (d) | 7.0 kg

● BE.1812

HIGHLIGHTS

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



● BE.7405 / BE.7410 / BE.7420

SPECIFICATIONS

EYEPIECES

Pair of WF 10x/20 mm

HEAD

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

STAND

Stable overhanging heavy base stand with pillar

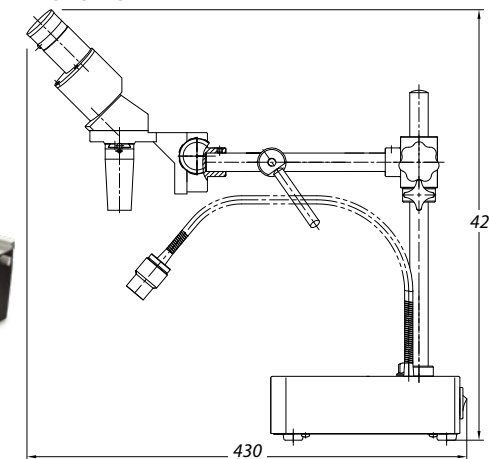
FOCUSING ADJUSTMENT

Coarse adjustment with tension control

ILLUMINATION

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

DIMENSIONS



OBJECTIVES

The BE-18 series comes with two of the following objectives depending on the specific model. Also see modelblock below

- 0.5x fixed magnification objective, magnification 5x, field of view 40 mm. Working distance 250 mm (BE.7405)
- 1x fixed magnification objective, magnification 10x, field of view 20 mm. Working distance 230 mm (BE.7410)
- 2x fixed magnification objective, magnification 20x, field of view 10 mm. Working distance 119 mm (BE.7420)

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

ACCESSORIES AND SPARE PARTS

- | | | | |
|----------------|--|----------------|---|
| BE.6005 | Pair of HWF 5x/22 mm eyepieces | BE.6099 | Pair of eyecups |
| BE.6010 | Pair of HWF 10x/20 mm eyepieces | BE.7405 | 0.5x objective for BE-18 LED. WD 250 mm |
| BE.6015 | Pair of HWF 15x/12 mm eyepieces | BE.7410 | 1.0x objective for BE-18 LED. WD 230 mm |
| BE.6020 | Pair of HWF 20x/10 mm eyepieces | BE.7420 | 2.0x objective for BE-18 LED. WD 119 mm |
| BE.6110 | HWF 10x/20 mm eyepiece with micrometer | AE.1112 | Micrometer slide, 50 mm/50 divisions |

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

Achios-X
observer

FEATURED

industry
materials science



Achios-X Observer

Discover the new Achios-X Observer microscopes
for materials science, page 280

materials science



product information

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

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

- BSCOPE • 264
- BSCOPE LARGE SAMPLE • 268
- ISCOPE • 272
- ACHIOS-X OBSERVER • 280
- DELPHI-X OBSERVER • 284
- OXION INVERSO • 292
- ACHIOS-X INVERSO • 296
- DELPHI-X INVERSO • 300

MATERIALS SCIENCE MICROSCOPES

bscope

NeoLED™
euromex optical technology



● BS.1053-PLMi

bScope

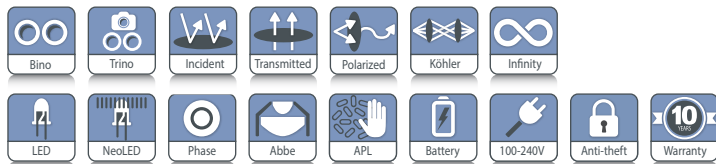
for materials science

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

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



product information



TRINOCULAR MODEL BS.1053-PLMi
515 (h) x 195 (w) x 431 mm (d) | 8.5 kg

HIGHLIGHTS

- Materials science microscopes
- Diopter adjustment on both eyepieces
- 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 mechanical X-Y stage
- Color coded condenser
- 3 W NeoLED™ adjustable transmitted and reflected NeoLED™ illumination
- Integrated carrying grip
- Cable Storage System and anti-theft system
- 10 Years warranty

SPECIFICATIONS

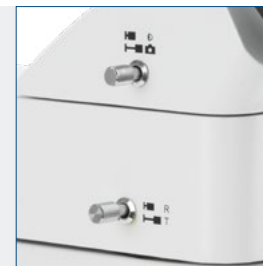
EYEPIECES

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

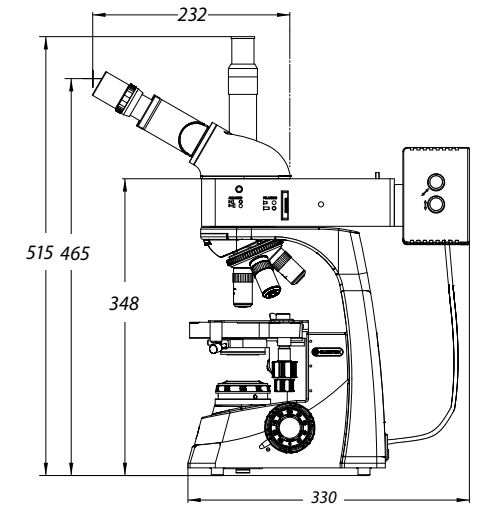
HEAD

The bScope is equipped with a Siedentopf type head, 360° rotatable and equipped with 30° inclined tubes, sporting a ± 5 diopter adjustment on left eyepiece. The interpupillary distance is adjustable between 48 to 76 mm. The trinocular head comes with a Ø 23.2 mm tube, ensuring maximum flexibility. The prisms inside the heads are designed to minimize the light absorption for perfect digital imaging. The trinocular head has a light path selector (100:0 / 0:100) and generates an erect image. Models with an integrated USB-2.0 camera are supplied with a 5.0 MP 1/2.5" CMOS sensor with a resolution of 2592 x 1944 pixels (see chapter 8)

Trinocular
light path selector
100-0/0-100



DIMENSIONS



NOSEPIECE

Revolving and reversed ball-bearing quadruple nosepiece

OBJECTIVES

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

Infinity corrected achromatic 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 oil/0.85 IOS objective are also available

*The S80x and S100x oil 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 rackless mechanical X-Y stage, Vernier scale, soft-close removable specimen holder.

The rackless stage has no protruding parts, enables smoother 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. The condenser is color coded. Optionally available swing-out Abbe condenser (BS.9105)

POLARIZATION

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

NEOLED™ REFLECTED ILLUMINATION

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

NEOLED™ TRANSMITTED ILLUMINATION

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

KÖHLER ILLUMINATION

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

CORDLESS USE

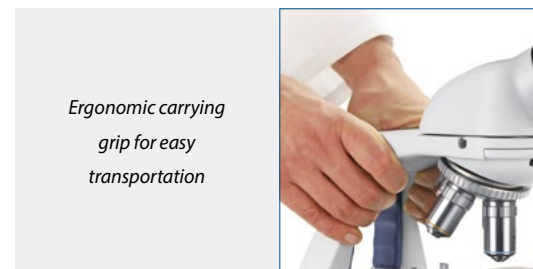
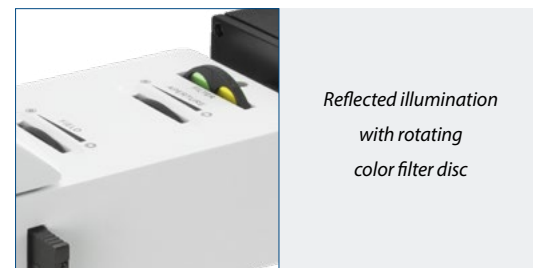
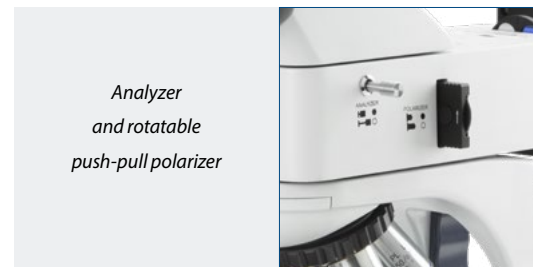
The optional rechargeable AA batteries turn the bScope into a cordless system (only available for the transmitted illumination)

CSS – CABLE STORAGE SYSTEM

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

CARRYING GRIP

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



ANTI-THEFT SLOT

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

PACKAGE CONTENT

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

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

Optional: PLMi 100x IOS objective

ACCESSORIES AND SPARE PARTS

EYEPIECES

Ø 30 mm tube

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

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

OBJECTIVES

Plan infinity corrected PLMi, IOS 45 mm parfocal*

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

WD = working distance

*No coverglass correction

POLARIZATION

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

MISCELLANEOUS

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

CAMERA ACCESSORIES

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

DISPOSABLES

- PB.5155** Microscope slides 76 x 26 mm, ground edges, 50 pieces
- PB.5165** Cover glasses 18 x 18 mm, thickness 0.13-0.17 mm, 100 pieces
- PB.5168** Cover glasses 22 x 22 mm, thickness 0.13-0.17 mm, 100 pieces
- PB.5245** Lens cleaning paper, 100 sheets per pack
- PB.5255** Immersion oil (25 ml). n = 1.515
- PB.5274** Isopropyl alcohol 99% (200 ml)
- PB.5275** Cleaning kit: lens cleaning fluid, lint free lens tissues/paper, brush, air blower, cotton swabs

WD = working distance

MATERIALS SCIENCE MICROSCOPES

bscope

NeoLED™
euromex optical technology

7 INDUSTRY MATERIALS SCIENCE

bScope

large samples materials science

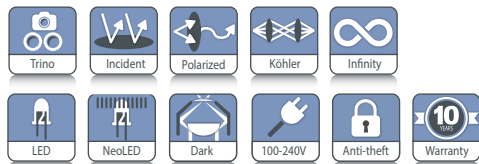
Optimized for large sample analysis.

This bScope microscope is designed for advanced materials science applications that require the inspection of large or irregular samples. Unlike conventional metallurgical microscopes, the bScope features a high-clearance stand and spacious stage, allowing unmatched freedom of movement and easy positioning of sizable specimens

Equipped with wide field-of-view eyepieces and high-performance objectives in brightfield - or combined brightfield/darkfield configurations - the bScope produces precise, high-contrast imaging, with exceptional clarity. Its advanced optical system ensures accurate analysis of surface structures, coatings and defects, even on complex or bulky materials



product information



BS.4053-PLMRi
380 (h) x 415 (w) x 345 mm (d) | 15 kg



● BS.4053-PLMRi

HIGHLIGHTS

- Suitable for extra-large samples
- Materials science microscopes
- Long WD brightfield and brightfield/darkfield objectives
- WF 10x/22 mm eyepieces
- Polarizer and analyzer filters
- Integrated mechanical X-Y stage
- 5 W NeoLED™ reflected NeoLED™ brightfield/darkfield illumination



SPECIFICATIONS

EYEPIECES

(Ø 30 mm tube)

Wide field WF 10x/22 mm eyepieces with 22 mm field of view

HEAD

The bScope is equipped with:

- A Siedentopf trinocular type head, 30° inclined tubes
- A ± 5 diopter adjustment on left eyepiece
- The interpupillary distance is adjustable between 48 to 76 mm
- A Ø 23.2 mm camera tube
- The prisms inside the head are designed to minimize the light absorption for perfect digital imaging
- Light path selector (100:0 / 0:100). Generates an erect image

NOSEPIECE

Revolving and reversed ball-bearing quadruple nosepiece

OBJECTIVES

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

This line of metallurgical microscope comes in two versions:

- The brightfield model that suits most materials science applications
- The model with brightfield and darkfield illumination for the most advanced analysis

OBJECTIVES

	Series	2x/0.7	5x/0.12	10x/0.25	20x/0.40	50x/0.70	80x/0.80	100x/0.85
Plan PLMi (BF)	BS.81xx	WD 11 mm	WD 26.1 mm	WD 20.2 mm	WD 8.8 mm	WD 3.7 mm	WD 1.3 mm*	WD 0.4 mm*
Plan PLMi (BF/DF)	BS.88xx		WD 9.7 mm	WD 9.3 mm	WD 7.2 mm	WD 2.5 mm	WD 0.8 mm*	WD 0.8 mm*

* Optional

All optics are anti-fungus treated and anti-reflection coated for maximum light throughput
WD = working distance

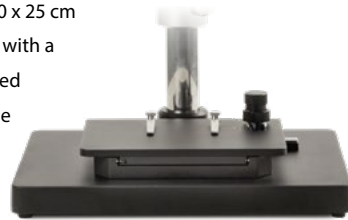
7 INDUSTRY MATERIALS SCIENCE

FOCUSING

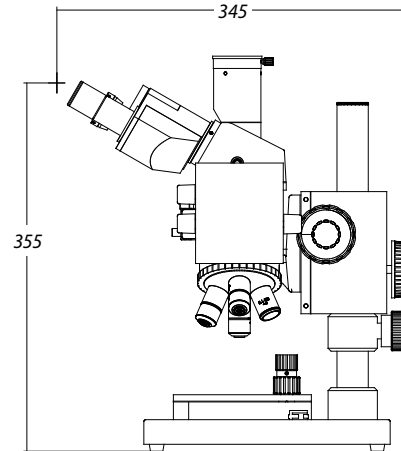
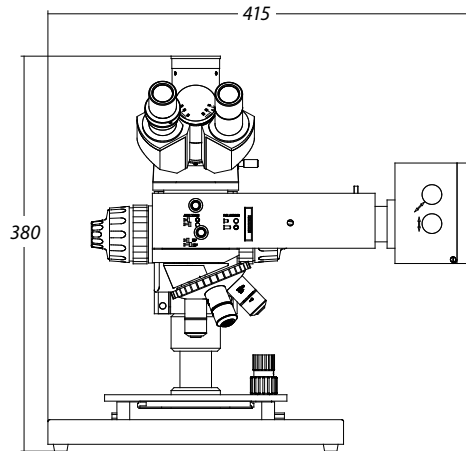
- Double coaxial, low-positioned coarse and fine adjustments with 180 graduations
- Precision 1.3 µm, 130 µm per rotation, total travel range is approximately 20 mm
- Supplied with an adjustable rack stop to prevent damage to sample and objectives. Improved coarse & fine adjustment, which is equipped with tension control

STAGE

The bScope is equipped with a scratch resistant 30 x 25 cm flat base and comes with a 185x140 mm mounted mechanical X-Y stage with 35x30 mm travel



DIMENSIONS



MODELS

	Trino WF 10x/22 mm eyepieces	5x/10x/20x/50x IOS brightfield objectives	5x/10x/20x/50x IOS brightfield/darkfield objectives	Brightfield illumination	darkfield illumination	Reflected NeoLED™ Köhler illumination
BS.4053-PLMRi	•	•	•	•	•	•
BS.4053-PLMRi-BD	•	•	•	•	•	•

REFLECTED LED ILLUMINATION

Reflected intensity adjustable 5 W LED Köhler illumination with

- External power supply
- Push-pull type rotatable polarizer
- Push-pull analyzer
- Built-in condenser with iris diaphragm and field iris diaphragm
- Integrated rotating filter disc with green, blue, yellow and white filters

POLARIZATION

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

PACKAGE CONTENT

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

ACCESSORIES

EYEPIECES

Ø 23.2 mm tube

- BS.6310** WF 10x/22 mm eyepiece
- BS.6310-M** WF 10x/22 mm eyepiece with micrometer scale
- BS.6315** WF 15x/12 mm eyepiece
- BS.6399** Pair of eyecups

OBJECTIVES FOR BRIGHTFIELD

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

- BS.8102** 2x/0.7 PLMi objective. WD 11 mm
- BS.8105** 5x/0.12 PLMi objective. WD 26.1 mm
- BS.8110** 10x/0.25 PLMi objective. WD 20.2 mm
- BS.8120** 20x/0.40 PLMi objective. WD 8.8 mm
- BS.8150** 50x/0.70 PLMi objective. WD 3.7 mm
- BS.8180** S80x/0.80 PLMi objective. WD 1.3 mm
- BS.8100** S100x/0.85 oil objective. WD 0.4 mm

OBJECTIVES FOR BRIGHTFIELD AND DARKFIELD

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

- BS.8805** 5x/0.12 PLMi objective. WD 9.7 mm
- BS.8810** 10x/0.25 PLMi objective. WD 9.3 mm
- BS.8820** 20x/0.40 PLMi objective. WD 7.2 mm
- BS.8850** 50x/0.70 PLMi objective. WD 2.5 mm
- BS.8880** 80x/0.80 PLMi objective. WD 0.8 mm
- BS.8800** 100x/0.85 PLMi objective. WD 0.8 mm

WD = working distance

*No coverglass correction

CAMERA ACCESSORIES*

- BS.5120** standard 23.2mm photo port**
- BS.9810** C-mount with 1x magnification for 1 inch sensor cameras
- BS.9850** C-mount with 0.5x magnification for 1/2 inch sensor cameras
- BS.9865** C-mount with 0.65x magnification for 2/3 inch sensor cameras

* Only for BS.40xx series

** Included

MISCELLANEOUS

- AE.5226** Glass fuses 3A 250V, 10 pieces
- BS.9047** Stand extension pole 28cm
- BS.9986-R** Spare 5W LED



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

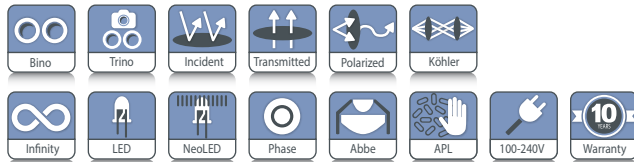
There are two types of materials science microscopes; metallurgical and polarization microscopes



IS metallurgical



IS polarization



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

HIGHLIGHTS

- EWF 10x/20 mm and EWF 10x/22 mm eyepieces
- HWF 12.5x/15 mm eyepieces for PLAi models
- Binocular and trinocular models
- Reversed revolving nosepiece
- Infinity corrected IOS objectives for material observation and polarization
- 150 x 140 mm rackless stage equipped with metal and glass inserts
- Ø 160 mm rotatable circular stage for polarization models
- Diascopic 3 W NeoLED™ 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

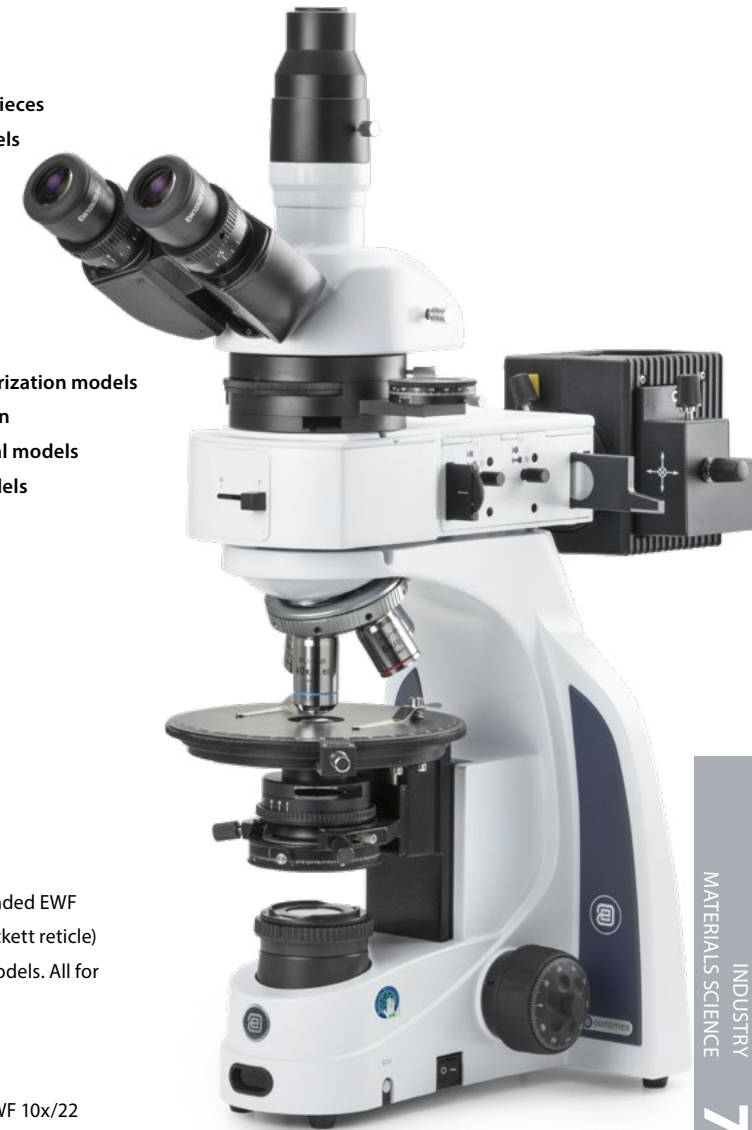
The metallurgical models are supplied with extended EWF 10x/20 mm eyepieces (one includes a Walton-Beckett reticle) and with HWF 12.5x/15 mm eyepieces for PLAi models. All for Ø 30 mm tube

HEAD

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

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

OBJECTIVES

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

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

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

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

⁽⁴⁾ Infinity corrected objectives for asbestos research. With 0.17 mm cover glass correction

⁽⁵⁾ Optional objectives

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

STAGE

- 150 x 140 mm stage. Supplied with a plain metal and plain glass insert
- Ø 160 mm circular stage for polarization models, 360° rotatable with Vernier and two object clamps; an optional 30 x 40 mm mechanical X-Y stage is available

STANDARD CONDENSER

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

CONDENSER

for polarization

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

For PLAi models: height adjustable Abbe N.A. 1.25 phase contrast condenser supplied with slider (10/40 annuli), green filter and alignment telescope

FOCUSING

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

TRANSMITTED ILLUMINATION

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

The Köhler setting provides homogeneous illumination and high contrast. Polarisation models with transmitted light only are supplied with: 360° rotatable polarization filter, 360° rotatable analyzer with 180 increments and nonius for 0.2 degree readout, Bertrand lens (build-in), 1 λ first red and 1/4 λ retardation plate, a quartz wedge, 45 mm green and blue filters for lamp house

REFLECTED ILLUMINATION

for metallurgical models

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

REFLECTED ILLUMINATION

for polarization models

Polarization models are equipped with a 50 W 12 V halogen epi-illumination and external 100-240 V power supply. Supplied with 360° rotatable polarization filter, 360° rotatable analyzer with 180 increments and nonius for 0.2 degree readout, Bertrand lens (build-in), 1 λ first red plate, 1/4 λ retardation plate, a quartz wedge, sliders with green/blue and white/neutral density filter. 45 mm green and blue filters for lamp house

ICARE SENSOR

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

CSS – CABLE STORAGE SYSTEM

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

PACKAGE CONTENT

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

For PLAi models:

Supplied with green filter, phase centering telescope, power cord, dust cover, spare fuse where available and user manual. All packed in polystyrene boxes. All packed in polystyrene boxes



● IS.1052-PLPOLi

ISCOPE POLARIZATION MODELS

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

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

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

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

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

ISCOPE METALLURGICAL MODEL

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

*Objectives without cover glass correction

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

ISCOPE MODELS FOR ASBESTOS RESEARCH

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

* Cover glass correction

Note:
the iScope metallurgical is equipped with a 150 x 140 mm stage. Supplied with a plain metal and plain glass insert



ACCESSORIES AND SPARE PARTS

EYEPIECES

Ø 30 mm tube

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

OBJECTIVES

Metallurgical

Plan Phase infinity corrected PLMi, IOS 45 mm parfocal*

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

Asbestos

Plan Phase infinity corrected PLPHi, IOS 45 mm parfocal**

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

Polarization, with reflected illumination attachment

Plan infinity corrected PLPOLRi, IOS 45 mm parfocal*

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

Polarization without reflected illumination attachment

Plan infinity corrected PLPOLi, IOS 45 mm parfocal*

IS.7905-T	5x/0.12 PLPOLi objective. WD 15.5 mm
IS.7910-T	10x/0.25 PLPOLi objective. WD 10 mm

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

IS.7920-T	20x/0.40 PLPOLi objective. WD 5.1 mm
IS.7940-T	S40x/0.65 PLPOLi objective. WD 0.54 mm
IS.7960-T	S60x/0.80 PLPOLi objective. WD 0.14 mm
IS.7900-T	S100x/1.25 PLPOLi oil immersion objective. WD 0.13 mm

WD = working distance

IOS = Infinite Optical System

*No coverglass correction

**0.17 mm cover glass correction

TRANSMITTED KÖHLER ILLUMINATION

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

PHASE CONTRAST

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

POLARIZATION ATTACHMENT

without reflected illumination

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

POLARIZATION ATTACHMENT

with reflected 50W/12V halogen illumination

IS.9602-R Polarizer

IS.9604-R Quartz wedge in slider

IS.9608-R 360° Rotatable analyzer in slider

IS.9610-R Lambda plate first red 530 nm

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

AE.3679 Halogen spare bulb 12 V 50 W

MATERIALS SCIENCE ATTACHMENT

with reflected NeoLED™ epi-illumination

IS.9230 Reflected NeoLED™ epi-illumination attachment with for materials science with 5x, 10x, 20x and 550x objectives. Supplied with a 0-90° polarizer mounted in a slider, a fixed analyzer in slider, a white, yellow and blue filter, all mounted in a slider. With external 100-240 Vac/ 7.5 Vdc power adapter

IS.9720 Blue filter in slider

IS.9722 Green filter in slider

IS.9724 Yellow filter in slider

IS.9726 White filter in slider

IS.9727 Polarizer 0-90° in slider for materials science attachment (IS.9230)

IS.9728 Analyzer 0-360° rotatable in slider for materials science attachment (IS.9230)

IS.9731 Slider with green and blue filters

IS.9515 Metal plain insert for mechanical X-Y stage

IS.9518 Glass plain insert for mechanical X-Y stage

IS.9993 NeoLED™ replacement unit

IS.9994 Halogen-NeoLED™ replacement unit

CAMERA ACCESSORIES

AE.5130 Universal SLR adapter with built-in 2x lens without T2 adapter. For standard 23.2 mm tube

AE.5040 T2 adapter for Canon EOS SLR digital camera

AE.5025 T2 adapter for Nikon D SLR digital camera



● IS.9608-R 360° Rotatable analyzer in slider



● IS.9602-R Polarizer



● IS.9604-R Quartz wedge in slider



● IS.9610-R Lambda plate first red 530 nm



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



● IS.9727 Polarizer 0-90° in slider

MISCELLANEOUS

IS.9501 Stage with ergonomic low-positioned X-Y adjustments of mechanical X-Y stage.

Right handed. Add-on price, only with new microscopes

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

DISPOSABLES

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

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

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

PB.5245 Lens cleaning paper, 100 sheets per pack

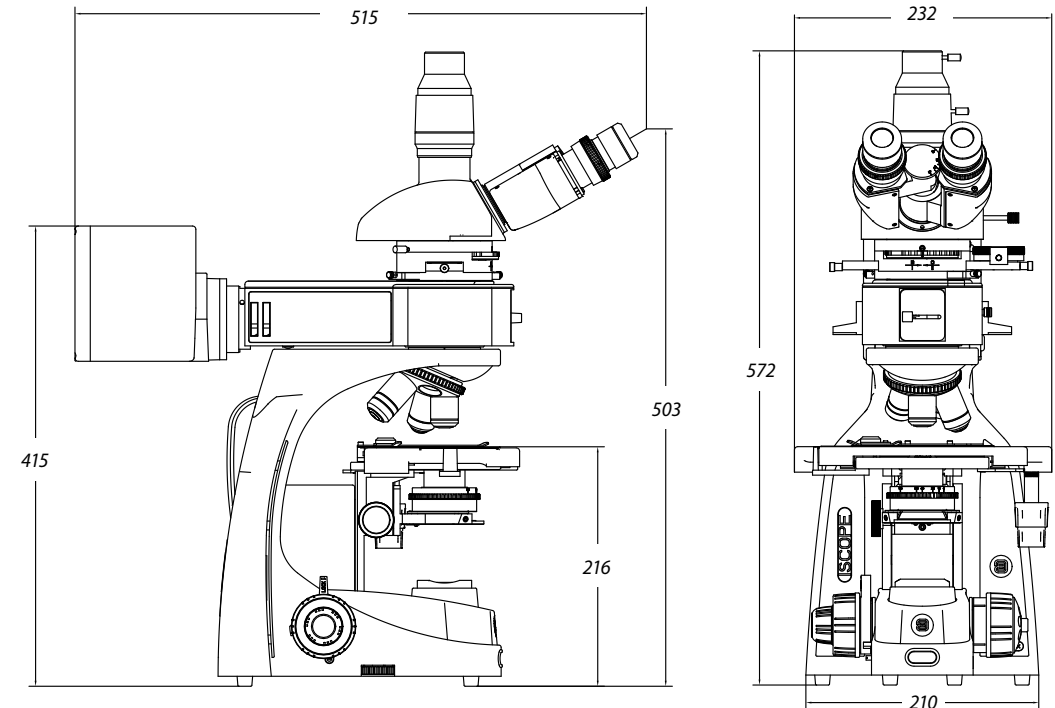
PB.5255 Immersion oil, n = 1.515 (25 ml)

PB.5274 Cleaning liquid, isopropanol alcohol 99% (200 ml)

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



DIMENSIONS



Achios-X
observer

NeoLED™
euromex optical technology

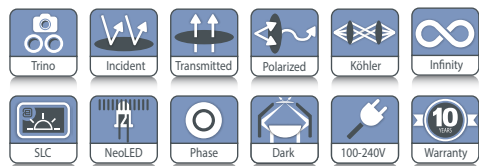


Achios-X Observer for advanced materials science applications

The ergonomic design and cutting-edge optics of the Achios-X Observer make it the perfect choice for advanced materials science applications. With 22 mm field of view eyepieces and semi-plan and plan apochromatic objectives, the Achios-X Observer delivers exceptional color fidelity and high-resolution imaging for precise and reliable observations



product information



AX.1053-APLMRi 513 (h) x 255 (w) x 487 mm (d) | 15.6 kg
AX.1058-APLMRi 586 (h) x 255 (w) x 487 mm (d) | 17.5 kg

● AX.1053-APLMRi

HIGHLIGHTS

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

SPECIFICATIONS

EYEPIECES

EWF 10x/22 mm eyepiece, with diopter adjustment

HEAD

Standard Siedentopf trinocular with 30° inclined tubes (50:50)

ERGONOMIC TILTING HEAD

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

NOSEPIECE

- A quintuple or an optional sextuple nosepiece on ball-bearings, equipped with gripped ring
- With 25 mm objectives mounting threads

OBJECTIVES - 45 MM PARFOCAL

The Achios-X observer comes with

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



● AX.1058-APLMRi

Plan Semi-Apo (PL-SAMi)	5x/0.15, WD 20 mm	10x/0.30, WD 11 mm	20x/0.45, WD 3.1 mm
Plan Apo (PLAMi)		50x/0.80, WD 1 mm	100x/0.90, WD 1 mm*

* Optional

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

STAGE

- Rackless mechanical stage. The stage is 238 x 140 mm, the mechanical X-Y stage 78 x 54 mm
- Hard coated
- A glass inlay and a metal inlay

LONG WD CONDENSER

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

POLARIZATION

The microscope comes with an analyzer and a polarizer, which can easily be inserted into the free slots of the Epi-Illuminator, for high quality polarized images

LIGHT AND COLOR TEMPERATURE CONTROL

The Achios-X Observer sports Smart Light Control:

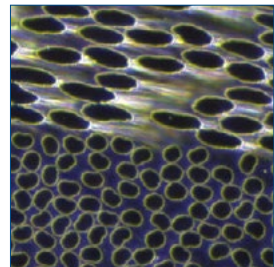
- Adjustment and memorization of the light intensity level for each objective
- Adjustment and memorization of the color temperature for each objective
- The eco-friendly NeoLED™ light source is both environmentally conscious and built to endure

ILLUMINATION

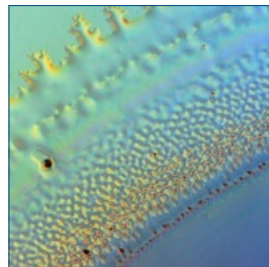
- The Achios-X Observer materials science microscope is equipped with Epi and Diascopic intensity adjustable 3 W NeoLED™ illumination, with internal 100-240 Vac power supply
- A rotating cassette is implemented for quick changing between reflected darkfield, reflected brightfield and transmitted brightfield

NEOLED™

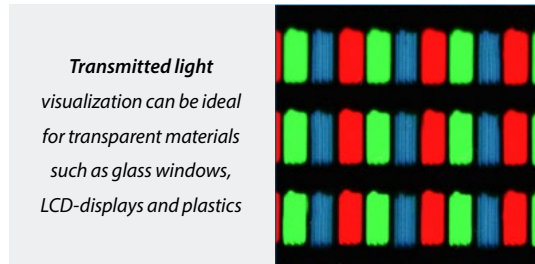
The innovative NeoLED™ design is a combination of a custom LED and a specially designed thin lens with a short focal length in order to obtain four main benefits:



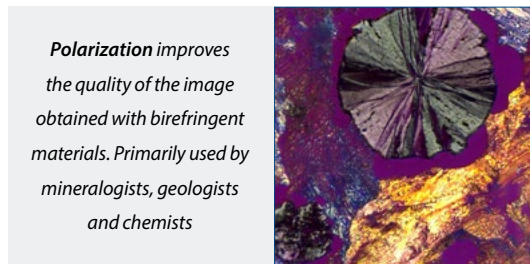
Darkfield is an effective visualization technique for surface imperfections



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



Transmitted light visualization can be ideal for transparent materials such as glass windows, LCD-displays and plastics



Polarization improves the quality of the image obtained with birefringent materials. Primarily used by mineralogists, geologists and chemists

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

NOMARSKI DIC (OPTIONAL)

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

CSS – CABLE STORAGE SYSTEM

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

CARRYING GRIP

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

PACKAGING

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

ACCESSORIES AND SPARE PARTS

EYEPIECES

Ø 30 mm tube

AX.6010 EWF 10x/22 mm eyepiece for Achios-X observer.

With diopter adjustment

OBJECTIVES BRIGHTFIELD AND DARKFIELD

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

AX.8105 5x/0.15 PL-SAMi BD objective. WD 20 mm

AX.8110 10x/0.30 PL-SAMi BD objective. WD 11 mm

AX.8120 20x/0.45 PL-SAMi BD objective. WD 3.1 mm

Plan Apochromatic PL-AMI infinity corrected, IOS 45 mm parfocal*

AX.8150 50x/0.5 PL-AMI BD objective. WD 1 mm

AX.8100 100x/0.8 PL-AMI BD objective. WD 1 mm

WD = working distance

BD = Brightfield/Darkfield

*M26 mounting thread, no coverglass correction

HEAD

AX.5313 Trinocular Siedentopf head 100:0 / 0:100 without eyepieces for Achios Observer

PHOTO ADAPTERS

AX.9850 C-mount adapter 0.5x (standard included)

AX.9810 C-mount adapter 1x

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

o = optional



Delphi-X
observer

NeoLED™
euromex optical technology

MATERIALS SCIENCE MICROSCOPES



Delphi-X Observer for materials science

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

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



DX metallurgical



DX polarization



● DX.2053-PLMRI

DX.2053-PLMRI
510 (h) x 261 (w) x 367 mm (d) | 21.1 kg

HIGHLIGHTS

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

SPECIFICATIONS

EYEPIECES

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

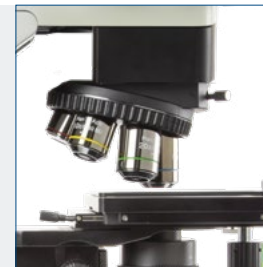
STANDARD HEAD

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

ERGONOMIC TILTING HEAD

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

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



● Revolver with slot for Nomarski DIC slider

NOSEPIECE

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

ENHANCED INFINITY SYSTEM (EIS)

The enhanced infinity system (EIS) of the Delphi-X Observer consists of super wide field SFWF 10x25 mm eyepieces, high numerical aperture objectives and a 200 mm focal length tube lens. This tube lens reduces the angle of the light rays passing through the optics and as a direct result significantly improves the chromatic aberration corrections and contrast. The objectives with larger diameter enable much higher numerical apertures improving the overall resolving power of the optical system

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

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



INDUSTRY MATERIALS SCIENCE

7

INDUSTRY MATERIALS SCIENCE

7

OBJECTIVES

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

Plan Semi-Apo PL-SAMi (BF/DF)	DX.81xx	5x/0.15, WD 20 mm	10x/0.30, WD 11 mm	20x/0.45, WD 3.1 mm			
Plan Apo PL-AMi (BF/DF)	DX.81xx				50x/0.80, WD 1 mm	100x/0.90, WD 1 mm ⁽¹⁾	
Plan Semi-Apo PL-SAPOLRi ⁽²⁾ strain-free	DX.79xx-R	5x/0.15, WD 20 mm	10x/0.30, WD 11 mm	20x/0.45, WD 3.0 mm			
Plan Apo PL-APOLRi ⁽²⁾ strain-free	DX.79xx-R				50x/0.80, WD 1 mm	S100x oil/0.90 ⁽¹⁾ WD 1 mm	
Plan PL-POLi (BF/POL) ⁽³⁾ strain-free	DX.79xx-T	4x/0.10 WD 20 mm	10x/0.25, WD 10.2 mm	20x/0.40, WD 12 mm	S40x/0.65 WD 0.7 mm	50x/0.95 ⁽¹⁾ WD 0.19 mm	S100x oil/1.25 ⁽¹⁾ WD 0.2 mm

¹⁾ Optional

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

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

DX.81xx objectives are 45 mm parfocal and have a M26 x 0.7 mounting thread

DX.79xx objectives are 60 mm parfocal and have a M25 x 0.7 mounting thread

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

WD = working distance

STAGE

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

CONDENSER FOR POLARIZATION

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

FOCUSING

Coaxial coarse and fine adjustment, 100 graduations, 1 µm precision, 100 µm per rotation, total travel range is approximately 35 mm. Supplied with an adjustable rack stop to prevent damage to sample and objectives. The coarse adjustments are equipped with friction control. The focusing knobs can be switched from left to right according to the user's preference

LONG WORKING DISTANCE CONDENSER

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

ILLUMINATION

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

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

NOMARSKI DIC (OPTIONAL)

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

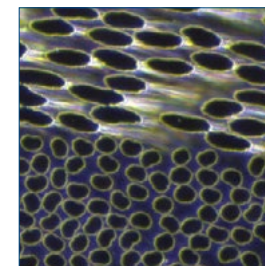
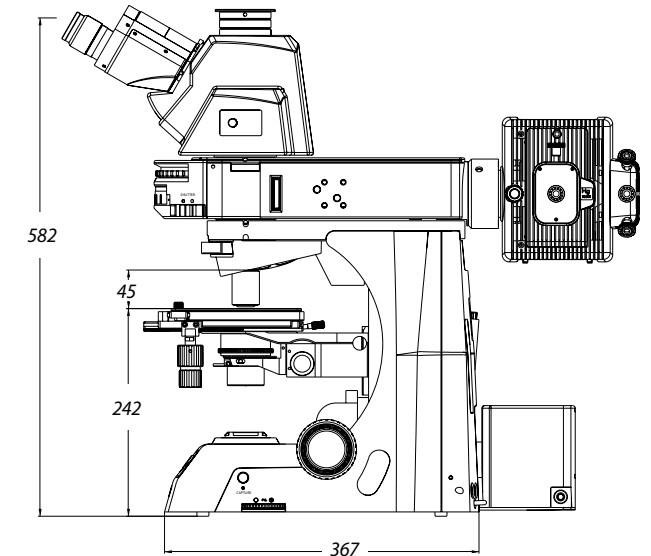
CARRYING GRIP

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

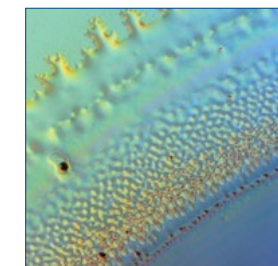
PACKAGE CONTENT

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

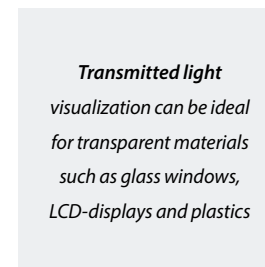
DIMENSIONS



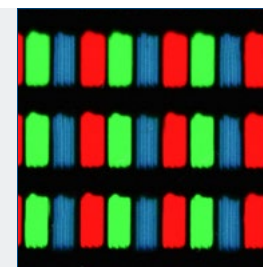
Darkfield is an effective visualization technique for surface imperfections



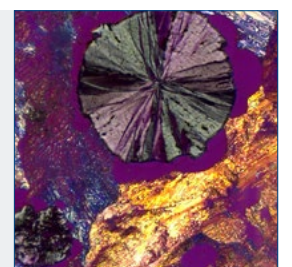
A 3-dimensional or relief-like image produced with the DIC-module



Transmitted light visualization can be ideal for transparent materials such as glass windows, LCD-displays and plastics



Polarization improves the quality of the image obtained with birefringent materials. Primarily used by mineralogists, geologists and chemists



MODELS	Fixed 30° Siedentopf head	Ergo tilting head	Objectives*						(DIC)	100 W 12 V transmitted halogen Köhler illumination	100 W 12 V reflected halogen Köhler illumination
			PL-SAMi 5x/0.15 10x/0.30 20x/0.45	PL-AMi 50x/0.80	PL-AMi 100x/0.90	PL-POLi 4x/0.10 10x/0.25 40x/0.65	PL-POLi 50x/0.95 and/or S100x oil/1.25	PL-SAPOLRi 5x/0.15 10x/0.30 20x/0.45 50x/0.80				PL-APOLRi 50x/0.80 and/or S100x oil/0.80
DX.2053-PLMRi	•		•	•	o			•		•	
DX.2058-PLMRi		•	•	•	o			•		•	
DX.2053-PLMi	•		•	•	o			•	•		
DX.2058-PLMi		•	•	•	o			•	•		
DX.2053-PLPOLRi	•								•	o	
DX.2058-PLPOLRi		•							•	o	
DX.2053-PLPOLi	•				•	o			•		
DX.2058-PLPOLi		•			•	o			•		

* All objectives are infinity corrected EIS objectives
o = optional



● DX.2053-PLPOLRi

ACCESSORIES AND SPARE PARTS

EYEPIECES

∅ 30 mm tube

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

OBJECTIVES

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

- DX.8105** 5x/0.15 objective. WD 20 mm
- DX.8110** 10x/0.30 objective. WD 11 mm
- DX.8120** 20x/0.45 objective. WD 3.0 mm
- DX.8150** 50x/0.80 objective. WD 1 mm
- DX.8100** 100x/0.90 oil objective. WD 1 mm

Plan Semi-Apochromatic infinity corrected reflected polarization PL-SAPOLRi, EIS 60 mm parfocal, M25 mounting thread*

- DX.7905-R** 5x/0.15 PL-SAPOLRi objective. WD 20 mm
- DX.7910-R** 10x/0.30 PL-SAPOLRi objective. WD 11 mm
- DX.7920-R** 20x/0.45 PL-SAPOLRi objective. WD 3.1 mm

Plan Apochromatic infinity corrected reflected polarization PL-APOLRi, EIS 60 mm parfocal, M25 mounting thread*

- DX.7950-R** 50x/0.80 PL-APOLRi objective. WD 0.3 mm
- DX.7900-R** S100x/0.90 PL-APOLRi oil-immersion objective. WD 1 mm***

Plan infinity corrected transmitted polarization PL-POLi, EIS 60 mm parfocal, M25 mounting thread**

- DX.7904-T** 4x/0.10 PL-POLi objective. WD 30 mm
- DX.7910-T** 10x/0.25 PL-POLi objective. WD 10.2 mm
- DX.7920-T** 20x/0.40 PL-POLi objective. WD 13 mm
- DX.7940-T** S40x/0.65 PL-POLi objective. WD 0.7 mm***
- DX.7950-T** 50x/0.95 PL-POLi objective. WD 0.19 mm
- DX.7900-T** S100x/1.25 PL-POLi oil-immersion objective. WD 0.2 mm***

* Strain-free, no cover glass correction,

** Strain-free, with 0.17 mm cover glass correction

*** Spring loaded

WD = working distance

POLARIZATION ATTACHMENT

with transmitted illumination

- DX.9604** Slider with quartz wedge plate
- DX.9608** Slider with 0-360° rotatable analyzer, 0.1° divisions
- DX.9610** Slider with Lambda plate first red
- DX.9612** Slider with Lambda/4 plate
- DX.9602** Slider with rotatable polarizer to be inserted in condenser of transmitted illumination

POLARIZATION ATTACHMENT

with incident illumination

- DX.9602-R** Slider with rotatable polarizer to be inserted in reflected illumination attachment
- DX.9604-R** Slider with quartz wedge plate for reflected illumination attachment
- DX.9608-R** Slider with 0-360° rotatable analyzer, 0.1° divisions
- DX.9610-R** Slider with 1 lambda first plate red for reflected illumination attachment

MATERIALS SCIENCE STAGES

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

CAMERA ACCESSORIES

- DX.9800** Side single photo port attachment
- DX.9810** C-mount with 1x magnification for C-mount camera
- DX.9835** C-mount with high resolution relay 0.35x objective for 1/3 inch C-mount camera
- DX.9850** C-mount with high resolution relay 0.50x objective for 1/2 inch C-mount camera
- DX.9863** C-mount with high resolution relay 0.63x objective for 2/3 inch C-mount camera



● DX.9810



● DX.9835



● DX.9850



● DX.9863

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

MISCELLANEOUS

- DX.5701** Siedentopf binocular ergo head
- DX.9696** DIC attachment for materials sciences Delphi-X Observer models
- DX.9704** Yellow filter for lamphouse, diameter 45 mm
- DX.9885** 25.4 mm eye-level riser (1 inch)
- DX.9887** 40 mm nosepiece and stage lowering attachment
- DX.9961** 100 Watt 12 V halogen bulb for Delphi-X Observer (revision-2 models)
- AE.5216** Fuses 5A 250 V, per 10 pieces for models with halogen illumination
- DX.9522** Optional 30 x 30 mm mechanical X-Y stage for polarization microscopes

DISPOSABLES

- PB.5245** Lens cleaning paper, 100 sheets per pack
- PB.5255** Immersion oil, 25 ml. Refraction index $n = 1.515$
- PB.5274** Isopropyl alcohol 99%, 200 ml
- PB.5275** Cleaning kit: lens fluid, lint free lens tissues paper, brush, air blower, cotton swabs
- PB.5276** Microscope maintenance and servicing kit, 16 pieces: cleaning brush, screwdriver set of 6, air blower, 3 Allen keys, 1.5, 2, 2.5 mm, lens cleaning fluid 20 ml, cleaning cloth 140 x 140 mm, 100 lens tissue sheets, tube of maintenance grease, 10 ml bottle of oil, packed in a nice toolbox



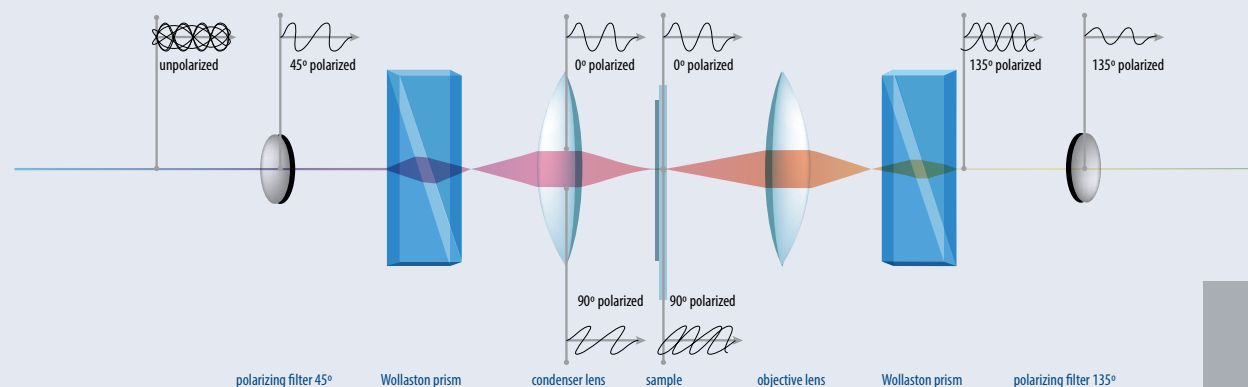
euromex.academy



about differential interference contrast (DIC)

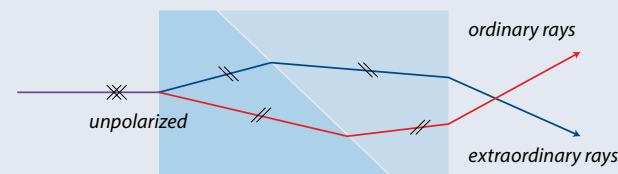
Differential interference contrast (DIC) technique helps in microscopy to enhance the contrast of samples

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



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

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



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

MATERIALS SCIENCE MICROSCOPES

Oxion
inverso

Oxion Inverso for materials science

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

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



product information



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

● OX.2153-PLM

HIGHLIGHTS

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

SPECIFICATIONS

EYEPIECES

Ø 30 mm tube

Pair of HWF plan 10x/22 mm eyepieces

NOSEPIECE

Revolving quintuple nosepiece on ball-bearings

HEAD

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

OBJECTIVES

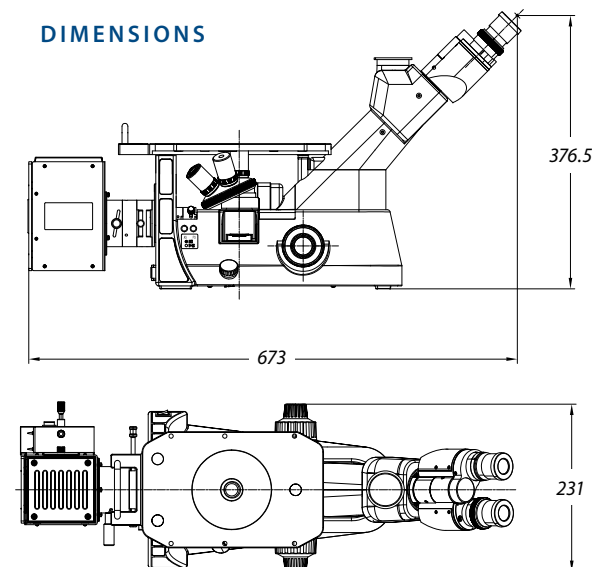
Infinity color corrected long working distance 5x/0.15, 10x/0.14, 20x/0.45 plan achromatic IOS objectives and a plan semi apochromatic S50x/0.55 IOS objective. Model OX.2153-PLM also has a plan semi apochromatic S100x/0.80 IOS oil objective. No cover glass correction

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:

DIMENSIONS



- metallic insert with Ø 12 mm hole and Ø 25 mm hole
- metallic insert with hole for mechanical X-Y stage

FOCUSING

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

ILLUMINATION

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

POLARIZATION

Standard polarization filter and 360° rotating analyzer

FILTERS - Ø 30 MM

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

PACKAGE CONTENT

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

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

LWD = long working distance

ACCESSORIES AND SPARE PARTS

EYEPIECES

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

OBJECTIVES

Plan Achromatic infinity corrected PLMi, IOS 45 mm parfocal*

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

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

- OX.8250** semi S50x/0.55 PL-SAMi objective. LWD 7.9 mm
- OX.8200** semi S100x/0.80 PL-SAMi oil objective. LWD 2.1 mm

LWD = Long working distance

*No cover glass correction

STAGE AND ACCESSORIES

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



Large stage with
mechanical X-Y stage

FILTERS - Ø 30 MM

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

C-MOUNT ADAPTERS

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

MISCELLANEOUS

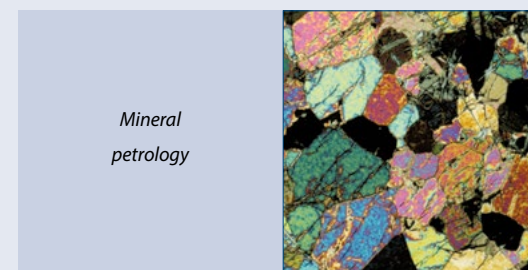
- AE.3199** Glass fuses 3.15 A 250 V, 10 pieces
- SL.3679** Halogen spare bulb 12 V 50 W
- AE.5120-2** Standard 23.2 mm diameter tube for Oxion Inverso photo port revision-2
- AE.5130** Universal SLR camera adapter with 2x projection lens for 23.2 mm tube. Needs T2 adapter and AE.5120-2
- AE.5025** T2 adapter for Nikon D digital SLR cameras
- AE.5040** T2 adapter for Canon EOS digital SLR cameras
- AE.3199** Glass fuses 3.15 A 250 V packed, per 10 pieces
- PB.5155** Microscope slides 76 x 26 mm, ground edges, 50 pieces
- PB.5275** Cleaning kit: lens cleaning fluid, lint free lens tissue, brush, air blower and cotton swabs

about petrological microscopy

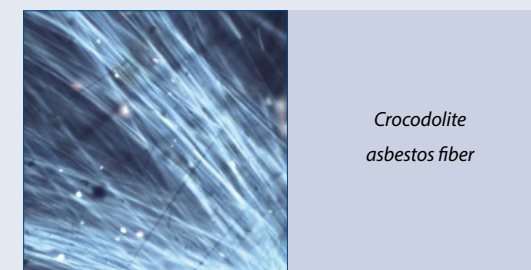
Euromex microscopes for polarization are intensively used in petrology and optical mineralogy to identify rocks, minerals in thin sections and asbestos fibers

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



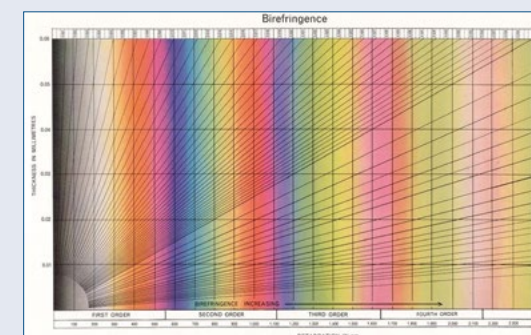
Crocokolite
asbestos fiber

The most common compensators are:

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

- 1/4 λ Wave plate is often referred to as a mica plate and is usually made from quartz or muscovite crystals sandwiched between two glass windows. Introduce an optical path difference of circa 140 nm

Quartz wedge is the simplest compensator, which is utilized to vary the optical path length difference to match that of the specimen



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

MATERIALS SCIENCE MICROSCOPES

Achios-X
inverso

NeoLED™
euromex optical technology



Achios-X Inverso for materials science

The Achios-X Inverso is a high-performance inverted microscope designed for demanding materials science applications. It supports brightfield, darkfield and polarization, with long working distance plan and apochromatic objectives for superior imaging without cover glass correction. Ergonomic features include a tilting head and low-positioned controls. The Smart Light Control system saves intensity settings per objective, enhancing

efficiency. NeoLED™ illumination delivers high-contrast, high-resolution images with minimal energy use. With robust construction, intuitive operation and advanced optics, the Achios-X Inverso is ideal for examining metals, polymers and complex materials in research and industrial environments

● AI.1058-PLMi



product information



AI.1058-PLMi

444 (h) x 244 (w) x 655 mm (d) | 20 kg

HIGHLIGHTS

- Brightfield, darkfield, polarization
- Head with ergo tilting 5° - 35° tubes
- Long working distance IOS plan and apochromatic objectives
- Low positioned stage adjustment knobs
- 3 W NeoLED™
- LCD screen for Smart Light Control

SPECIFICATIONS

EYEPIECES

Ø 30 mm tube

SWF 10x/22 mm widefield eyepieces with adjustable diopter, ø 30 mm tubes and -5/+5 diopter

HEAD

Binocular ergo head with 5-35° tilting tubes. Interpupillary distance of 48 to 75 mm. Side photo port with 80:20 beamsplitter, C-mount lenses optional

NOSEPIECE

Revolving quintuple nosepiece on ball-bearings, coded

BRIGHTFIELD/DARKFIELD OBJECTIVES

Plan infinity corrected PLi, IOS 45 mm parfocal, high numerical, long working distance, no cover glass correction, M26 mount

- 5x/0.12 WD 20 mm BD
- 10x/0.30 WD 11 mm BD
- 20x/0.45 WD 3.1 mm BD

Plan Apochromatic infinity corrected PL-AMi, IOS 45 mm parfocal, high numerical, long working distance, no cover glass correction, M26 mount

- 50x/0.80 WD 1 mm BD
- 100x/0.90 WD 1 mm BD (optional)

BD = Brightfield/Darkfield

WD = working distance

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



● Stage with Vernier scale

STAGE

- Stage 226 x 178 mm with Vernier scale
- Equipped with a coaxial mechanical 50 x 50 mm X-Y stage
- Maximum weight for sample: 5 kg

Supplied with:

- Metal insert with hole ø 10 mm
- Metal insert with hole ø 15 mm
- Metal insert with hole ø 25 mm
- Metal insert that can support an object clamp

FOCUS ADJUSTMENT

- Low positioned for more comfort
- Coaxial 37.5 mm coarse and fine adjustments with 200 graduations
- Precision 1 µm, 0.2 mm per rotation
- Fine focus knobs are left/right interchangeable

ILLUMINATION AND FILTERS

- Transmitted 3 W NeoLED™ illumination with adjustable intensity
- Internal power supply 100-240 V (CE)
- Fuse 500 mA 250 Vac

- Adjustable field diaphragm and condenser aperture
- Adjustable color temperature
- Slot for filter. Blue, green, yellow and white frosted filters included

POLARISATION

- Slot for 360° rotatable polarizer (included)
- Polarizer built in the illumination turret

SMART LIGHT CONTROL

This intelligent function:

- memorizes the light intensity level for each objective
- memorizes field and aperture diaphragm position
- memorizes color temperature
- increases comfort
- saves valuable time during routine magnification shifts
- includes a sleep function

NEOLED™

The innovative NeoLED™ design is a combination of a custom LED and a specially designed thin lens with a short focal length

Four main benefits:

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

PACKAGE CONTENT

4 Metal inserts for stage with 10/15/25 mm hole, 1 metal insert for holding an object clamp, 1 object clamp, 4 filter sliders: blue/green/yellow/frosted white, a rotatable polarizer slider, a 1x C-mount adapter, power cord, dust cover and user manual

CAMERA ACCESSORIES

- AI.9810-4** C-mount photo Adapter 1x (included)
- AI.9870-4** C-mount photo Adapter 0.7x
- AI.9850-4** C-mount photo Adapter 0.5x

FILTERS

- AI.9720** Blue filter in slider
- AI.9722** Green filter in slider
- AI.9724** Yellow filter in slider
- AI.9726** Frosted filter in slider
- AI.9609** Polarizer in slider

MISCELLANEOUS

- AI.9513-10** Steel insert for stage with Ø 10 mm hole
- AI.9513-15** Steel insert for stage with Ø 15 mm hole
- AI.9513-25** Steel insert for stage with Ø 25 mm hole
- AI.9571-C** Metal insert that can support object clamp
- AI.9571** Object clamp for AI.9571-C
- AI.9984-R** Spare 3 W LED module adjustable color temperature

about

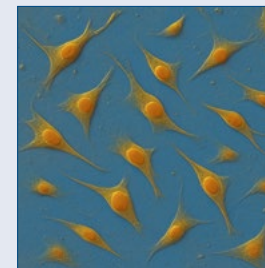
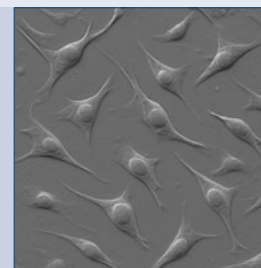
Hoffman modulation contrast (HMC)

INTRODUCTION

Hoffman Modulation Contrast microscopy. It enhances contrast in unstained, transparent specimen's live cells, embryos, tissue culture, while producing a pseudo-3D relief appearance with shadowing effects, dependent on slit orientation. Particularly useful in live-cell imaging

● Fibroblast cells

The picture is not colored because it mimics shadows and highlights to reveal transparent structures that are usually invisible in brightfield microscopy



Colored HMC picture, colors were artificially added for visual clarity

PRINCIPLE

Hoffman Modulation Contrast works by converting differences in the refractive index within a specimen into variations in light intensity. The system consists of three essential optical components:

- A special condenser with a slit aperture: a narrow slit at the condenser focuses a beam of oblique light onto the specimen
- Modulation plate in the objective lens: each objective designed for HMC includes a special plate that partially modulates light
- Polarized illumination (optional in some setups): polarization can fine-tune contrast but is not always necessary

The slit aperture projects an oblique beam onto the specimen. As the beam passes through regions of different refractive indices, it experiences phase shifts. The modulation plate then converts these phase shifts into intensity changes, creating areas of light and shadow in the image. As a result, the specimen appears as if it is topographically three-dimensional



The modulation plate typically has three zones:

- a clear zone through which light passes unobstructed
- a neutral density zone through which light is slightly dimmed
- an opaque zone where light is strongly attenuated

These zones allow selective suppression or enhancement of certain directions of light, amplifying phase differences into detectable intensity variations

APPLICATIONS

Embryology: Studying transparent embryos

Cell culture: Imaging living adherent cells without staining

Materials science: Examining semi-transparent films or polymer structures

Industrial inspection: Observing optically clear materials or layered structures

Conclusion: HMC offers an effective method for transparent samples without the need to stain samples. It works well with thick specimens, produces images with natural coloration and the operation is relatively simpler compared to DIC systems

ACCESSOIRES

EYEPIECES

Ø 30 mm tube

- AI.6010** WF 10x/22 mm eyepiece
- AI.6015** WF 15x/16 mm eyepiece
- AI.6020** WF 20x/12 mm eyepiece
- AI.6099** Pair of eyeshades

OBJECTIVES

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

- AI.8105** 5x/0.15 PL-SAMi BD objective, WD 20 mm
- AI.8110** 10x/0.30 PL-SAMi BD objective, WD 11 mm
- AI.8120** 20x/0.40 PL-SAMi BD objective, WD3.1 mm
- AI.8150** 50x/0.80 PL-SAMi BD objective, WD 1 mm
- AI.8100** 100x/0.90 PL-SAMi BD objective, WD 1 mm

BD = brightfield/darkfield

WD = working distance

Delphi-X Inverso
for materials science

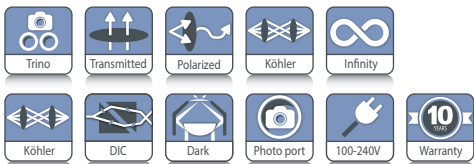
Delphi-X Inverso for materials science is an inverted microscope for the professional with demanding applications for materials sciences samples



● DI.2053-PLMI



DI metallurgical



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

HIGHLIGHTS

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



● Bertrand lens and trino/eyepieces selector

SPECIFICATIONS

EYEPIECES

Pair of HWF plan 10x/22 mm

HEAD

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

NOSEPIECE

Revolving sextuple nosepiece on ball-bearings. With DIC slot

OBJECTIVES – 45 MM PARFOCAL

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

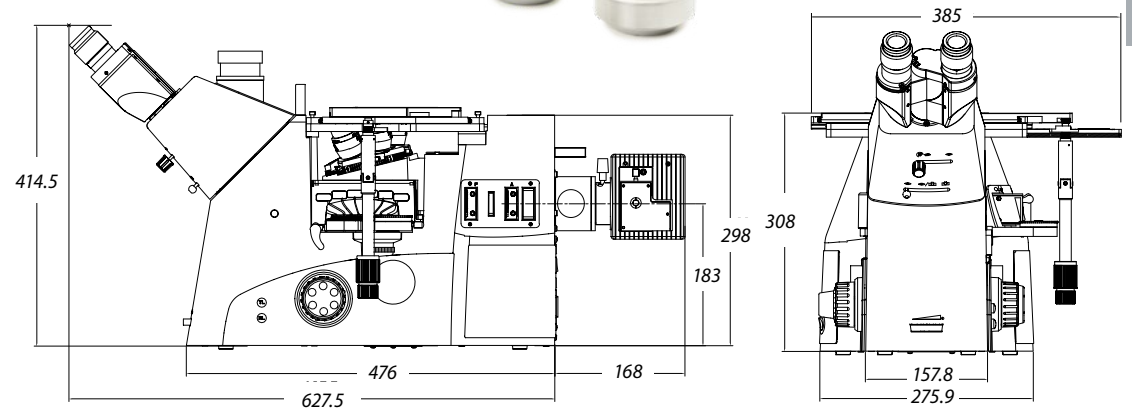
- Plan Semi-Apochromatic (SAMi): 5x/0.15 WD 20 mm, 10x/0.30 WD 11 mm, 20x/0.45 WD 3.1 mm
- Plan Apochromatic (Plan Apo (PLAMi)): 50x/0.80 WD 1 mm and optional 100x/0.90 WD 1 mm

WD = working distance

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



DIMENSIONS



STAGE

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

Supplied with:

- Metal insert with hole \varnothing 20 mm
- Metal insert with hole \varnothing 28 mm
- Metal insert with drop-shaped hole

Maximum weight for sample: 30 kg

MAGNIFICATION CHANGER

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

MULTIFUNCTIONAL WHEEL

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

ADDITIONAL SLIDER SLOTS

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

FOCUS ADJUSTMENT

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

CAMERA PORTS

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

ILLUMINATION

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



MODEL

DI.2053-PLMI

o = optional

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

ACCESSOIRES

EYEPIECES

\varnothing 30 mm tube

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

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

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

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

DI.6010-SG Super wide field SWF 10x/25 mm eyepiece with 20 x 20 square grid reticle

DI.6210 Super wide field SWF 10x/22 mm focusable eyepiece for Delphi-X Inverso

DI.6012 Wide field WF 12.5x/17.5 mm eyepiece

DI.6015 Wide field WF 15x/16 mm eyepiece

DI.6020 Wide field WF 20x/12 mm eyepiece

DI.6099-L Eyeshade for eyepieces

DIFFERENTIAL INTERFERENCE CONTRAST (DIC)

DI.9691-52 DIC prism for nosepiece of materials science Delphi Inverso model. To be used with Plan Semi-Apochromatic 5x/20x objectives

DI.9691-51 DIC prism for nosepiece of materials science Delphi Inverso models. To be used with Plan Apochromatic 50x/100x objectives

DI.9698 DIC analyzer for nosepiece for life science Delphi-X Observer DIC

MISCELLANEOUS

DI.9810 C-mount with 1x magnification for 1 or 2/3 inch C-mount camera

DI.9840 C-mount with 0,4x magnification for 1/3 inch C-mount camera

DI.9850 C-mount with 0,5x magnification for 1/2 inch C-mount camera

OBJECTIVES

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

DI.8105 5x/0.15 PL-SAMi BD objective, LWD 20 mm

DI.8110 10x/0.30 PL-SAMi BD objective, LWD 11 mm

DI.8120 20x/0.40 PL-SAMi BD objective, LWD 3.1 mm

DI.8150 50x/0.80 PL-SAMi BD objective, LWD 1 mm

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

BD = brightfield/darkfield

LWD = Long working distance

iScope

FEATURED

digital solutions

education • life science • industry



iScope

Discover the new digital heads for the iScope, Achios-X Observer, - Inverso and Delphi-X Observer, page 322

digital solutions



product information

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

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

DIGITAL SOLUTIONS

8

DIGITAL SOLUTIONS

8

DIGITAL MICROSCOPES



MicroBlue

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

The modern MicroBlue is an entry-level microscope, especially appreciated when budgets are limited. There are two versions of the digital MicroBlue; one with a built-in digital camera, the other with an LCD screen. Available with plain or integrated mechanical X-Y stage. All models are equipped with 35 mm achromatic objectives



- Mono
- 360°
- Transmitted
- LED
- Abbe
- ImageFocus
- APL
- Digital
- LCD
- USB
- Battery
- 100-240V
- Anti-theft
- 2 Years Warranty
- 5 Years Warranty



● MB.1055

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

HIGHLIGHTS

- New back panel with smart storage solutions
- Dual Illumination System: white & halogen colored LED
- Universal USB-C 5V Power
- Economic microscopes for education
- Built-in digital 1.3 or 5.0 MP USB-2.0 camera
- 7 inch LCD screen
- Ergonomic carrying grip
- 5 Years warranty (2 years on camera)



● Back panel of the MicroBlue

SPECIFICATIONS

CAMERA

All the MicroBlue build-in digital camera microscopes are equipped with:

- 1.3 MP 1/2.5" CMOS USB-2.0 camera, 2560 x 1920, max. 30 fps*, ImageFocus 4 software
- a 5.0 MP 1/2.8" CMOS USB-2.0 camera, 1720 x 952 pixels, max. 30 fps*, ImageFocus Plus software
- USB-2.0 cable and a 1 mm/100 calibration slide
- Warranty for the camera is two years

SOFTWARE

- The capture and analysis ImageFocus software allows to save images in .jpg, .tif, .bmp or .dicom formats as well as .avi format videos
- Measurements and annotations can be done on live or captured images

- Compatible with Windows 10 and higher, both 32 and 64 bits configurations. A MacOS version is also available
 - Free software can be downloaded on our website
- For full microscope specifications and accessories see chapter 1: Biological microscopes

LCD SCREEN

- All the MicroBlue LCD microscopes are equipped with 7" IPS LCD screen
 - Screen resolution 1920 x 1080 @ 30 fps*
 - Save images and videos directly to micro SD card
 - Image resolution up to 1844 x 1080 in .JPEG format
 - Video resolution 1280 x 720 .AVI format
 - Basic measurement function (line) with calibration. Calibration slide available as option
 - Warranty for the screen is 2 years
- *Frame rates were determined at optimal conditions

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

-X = -1; model equipped with 1.3 MP camera
-X = -5; model equipped with 5.0 MP camera

DIGITAL MICROSCOPES



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

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



● EC.1005



product information

EC.1105 / EC.1005
355 (h) x 270 (w) x 220 mm (d) | 2.6 kg



HIGHLIGHTS

- Economic microscopes for education
- Monocular and binocular models
- Built-in digital 5.0 MP USB-2.0 camera
- Color coded condenser
- Dual illumination system: white & halogen colored (Neo)LED
- All models have rechargeable AA batteries and external 100-240 Vac mains/charger adapter
- Ergonomic carrying grip
- 5 Years warranty (2 years on camera)



SPECIFICATIONS

CAMERA

All the EcoBlue digital microscopes are provided with a 5.0 MP 1/2.8" CMOS USB-2.0 camera, a maximum of resolution 2560 x 1920, 24 bits color depth, up to 30 fps*. USB-2.0 cable and a 1 mm/100 calibration slide

SOFTWARE

The capture and analysis ImageFocus Plus software allows you to save images in .jpg, .tif, .bmp or .dicom formats as well as .avi format videos. Measurements and annotations can be

- EcoBlue supplied with achromatic objectives

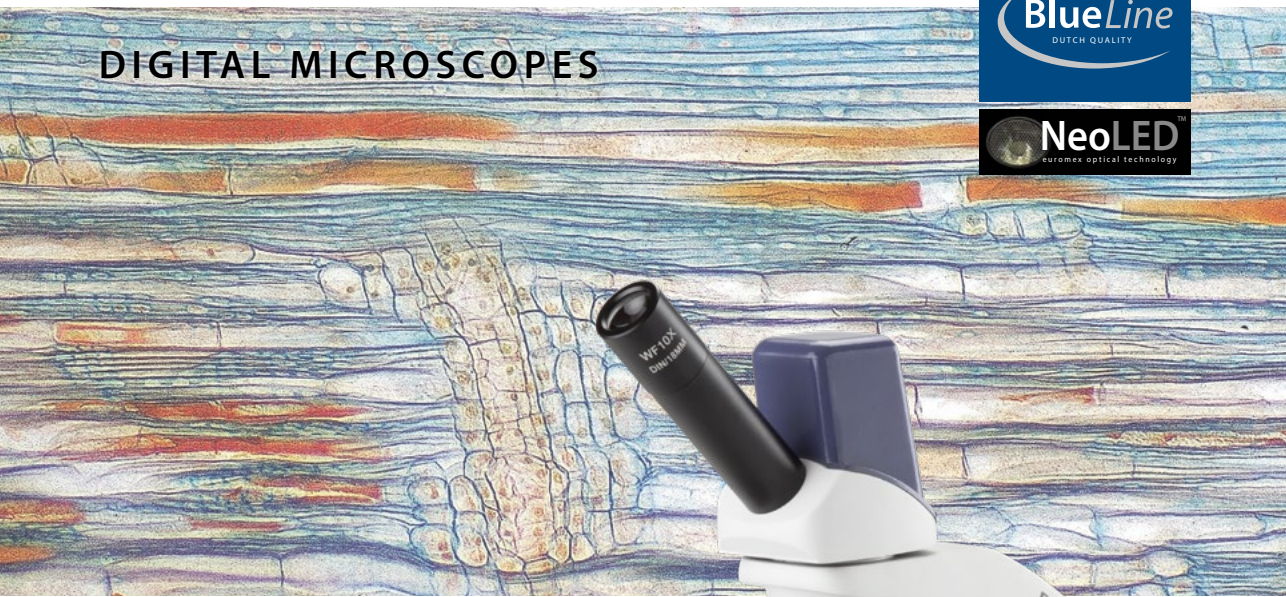
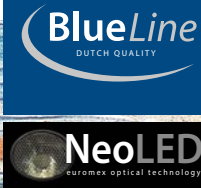
done on live or captured images. Compatible with Windows 10 and higher, both 32 and 64 bits configurations. A MacOS version is also available. Free software can be downloaded from our website

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

* Frame rates were determined at optimal conditions

MODELS	Monocular	Binocular	4x, 10x, 540x objectives	S60x objective	S100x oil objective	Mechanical X-Y stage	1 W Dual color LED	1 W Dual color NeoLED™
EC.1005	•		•				•	
EC.1105	•		•		•		•	
EC.1607		•	•	•				•
EC.1055	•		•			•	•	
EC.1155	•		•		•		•	
EC.1157		•	•		•	•		•
EC.1657		•	•	•		•		•

DIGITAL MICROSCOPES



BioBlue

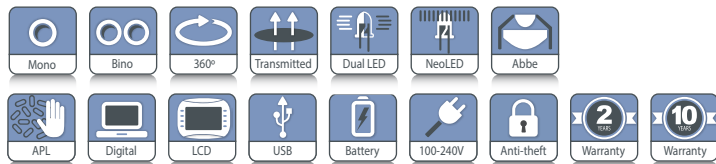
digital microscopes

Digital microscopes are available with the traditional eyepieces included, with or without a windows tablet and a fully digital version that is supplied with an LCD screen only

The digital models of the BioBlue set a new standard in digital microscopy, with high quality imaging, both optically and digitally. The general microscope specifications, like the mechanical X-Y stage and objectives are identical to the non-digital microscopes, found in chapter 1



product information



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



● BB.4225



HIGHLIGHTS

- New back panel with smart storage solutions
- Dual Illumination System: white & halogen colored LED
- Universal USB-C 5V Power
- Monocular and binocular models
- Models with a 7" LCD screen
- Reserved quadruple nosepiece for semi plan objectives
- Built-in digital 5.0 MP USB-2.0 camera
- Integrated mechanical X-Y stage
- LED and NeoLED™ illumination
- Cordless operation
- 10 Years warranty (2 years on camera)

SPECIFICATIONS

MODELS WITH 5 MP CAMERA

All the BioBlue digital microscopes are equipped with a 5.0 MP 1/2.8" CMOS USB-2.0 camera, a maximum of resolution 2560 x 1920, 24 bits color depth, up to 30 frames per second* Supplied with USB-2.0 cable and a 1 mm/100 calibration slide

SOFTWARE

The capture and analysis ImageFocus Plus software allows to save images in .jpg, .tif, .bmp or .dicom formats as well as .avi format videos. Measurements and annotations can be done on live or captured images. Compatible with Windows 10 and higher, both 32 and 64 bits configurations. A MacOS version is also available. Free software can be downloaded from our website



● BB.4220-LCD

MODELS WITH LCD SCREEN

The BioBlue is also available with a 7" LCD screen, with all the features of the regular BioBlue. This screen allows live viewing, saving images and videos directly to a micro SD card and even has a basic line measurement function included. The LCD screen can only be operated as a stand alone.

Screen resolution 1920 x 1080 @ 30 fps*, image resolution up to 1844 x 1080 in JPG and video resolution 1280 x 720 AVI format
 For full microscope specifications and accessories see chapter 1: Biological microscopes

* Frame rates were determined at optimal conditions

MODELS	Mono	Bino	LCD	Tablet	4/10/40x SMP objectives	Semi plan S60x objective	Semi plan S100x oil objective	Integrated X-Y stage	1 W Dual color LED	1 W Dual color NeoLED™
BB.4205	•				•					
BB.4225	•				•			•		
BB.4245	•				•	•		•		
BB.4255	•				•		•	•		
BB.4267		•			•		•	•		•
BB.4269		•			•		•	•		•
BB.4200-LCD			•		•				•	
BB.4220-LCD			•		•			•	•	
BB.4267-T	•			•	•		•	•		•
BB.4269-T	•			•	•	•		•		•

MODELS WITH TABLET AND 5 MP CAMERA

The 5.1 MP CMOS camera ensures excellent color reproduction and is connected to a Windows tablet PC with vivid color graphic display for enabling visualisation of microscopic samples and enjoying the great features of our ImageFocus image analysis software. The tablet represents a 2-in-1 solution as it can be disconnected and used as a real windows tablet. Being Windows-based and due to its large touch screen of 12.1" users are sure to have responsive and smooth control

SPECIFICATIONS

Software and camera as above (5 MP + ImageFocus Plus)

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

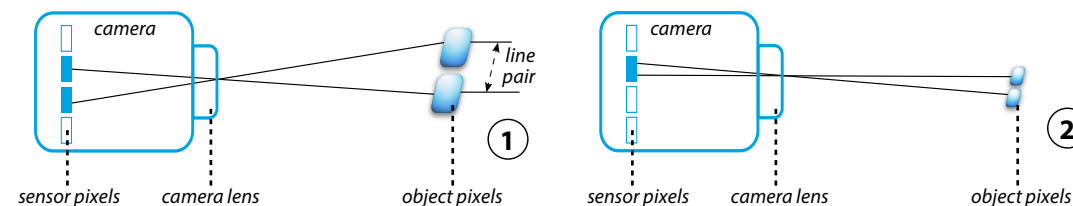


about

camera resolution and limits

Resolution of a camera system is the ability to reproduce object detail on screen. In practice it is depending on factors such as the good lighting of the object, the sensor pixel size and the capabilities of the optics. The smaller the object detail, the higher the required resolution

The highest frequency – expressed as line pair per mm that can be resolved – is 2 pixels or one line pair, the so-called **Nyquist frequency**



① Space between objects is large enough to be detected by minimum two pixels of the camera sensor

② Space between objects is too small to be detected by minimum two pixels of the camera sensor

THE LIMITING SENSOR RESOLUTION

(image space resolution) of a camera is commonly calculated as:

$$\left(\frac{1 \text{ lp}}{2 \times s} \right) \times \left(\frac{1000 \mu\text{m}}{1 \text{ mm}} \right)$$

whereby s = pixel size (in μm) and expressed as line pair per mm (Lp/mm)

The formula shows that a sensor with smaller pixels will have higher image space resolution:

Pixel size	Image Space resolution
1.67	229 LP/mm
2.2	227 LP/mm
3.45	145 LP/mm
5.5	90 LP/mm

Considering the Euromex DC.18000-Pro 2/3 inch camera which is equipped with 4921 x 3684 pixels camera on a 8.6 x 6.6 mm large sensor

THE NYQUIST IMAGE SPACE RESOLUTION

can also be calculated as 1/2 x sampling pixels/mm (Lp/mm) or:

- **Horizontal**
4921 / 8.6 = 572 (sampling pixels) x 0.5 = 286 Lp/mm
 - **Vertical**
3684 / 6.6 = 558 (sampling pixels) x 0.5 = 279 Lp/mm
- The Nyquist object space resolution or the smallest detail that could be theoretically resolved is then equal to:
- 1000 mm / (286 Lp/mm) or 3.5 μm**

However, taken into account the manufacturing limitations and inevitable optical aberrations, the real image space resolution can be calculated as:

1/2 x Kell factor (approx 0.70) x sampling pixels (Lp/mm) or:

- **Horizontal**
4921 / 8.6 = 572 (sampling pixels) x 0.35 = 200 Lp/mm
 - **Vertical**
3684 / 6.6 = 558 (sampling pixels) x 0.35 = 195 Lp/mm or approx. 1000 mm / 200 Lp/mm or 5 μm
- In comparison, the by physics diffraction limited object space resolution (smallest detail that ever can be observed through the eyepieces of a optical compound microscope, is around 0.20 μm)



DIGITAL MICROSCOPES



BlueScope

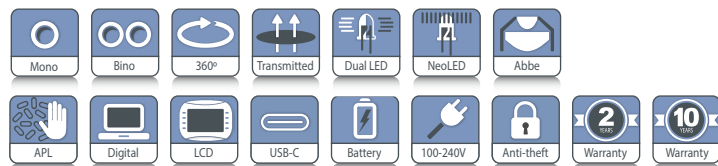
digital microscopes

The digital models of the blueScope are among the advanced in digital microscopy, with high quality imaging, both optically and digitally. Versions with traditional eyepieces and a digital camera, fully digital versions or a combination with a windows tablet are available

The general microscope specifications, like the mechanical stage and objectives are identical to the non-digital microscopes found in chapter 1 or 2



● BL.1057-T



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

HIGHLIGHTS

- Monocular and binocular models
- Full digital models with a 7" LCD screen
- Models with a windows tablet
- Dual Illumination System: white & halogen colored LED
- Universal USB-C 5V Power
- Built-in digital 5.0 MP USB-2.0 camera
- 10 Years warranty (2 years on camera)

SPECIFICATIONS

CAMERA

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

SOFTWARE

The capture and analysis ImageFocus Alpha software allows to save images in .jpg, .tif, .bmp or .dicom formats as well as .avi format videos. Measurements and annotations can be done on live or captured images. Compatible with Windows 10 and higher, both 32 and 64 bits configurations. A MacOS version is also available. Free software can be downloaded from our website

MODELS WITH TABLET AND 5 MP CAMERA

The 5.0 MP CMOS camera ensures excellent color reproduction and is connected to a Windows tablet PC with vivid color graphic display for enabling visualization of microscopic samples and enjoying the great features of our ImageFocus image analysis software. The tablet represents



● BL.1050-LCD

a 2-in-1 solution as it can be disconnected and used as a real windows tablet. Being Windows-based and due to its large touch screen of 10.1" users are sure to have responsive and smooth control

SPECIFICATIONS

Software and camera as above (5 MP + ImageFocus Alpha)

MODELS WITH LCD SCREEN

The BlueScope is also available with a 7" LCD screen, with all the features of the regular BioBlue. This screen allows live viewing, saving images and videos directly to a micro SD card

and even has a basic line measurement function included. The HD LCD screen can only be operated as a stand alone.

Screen resolution 1920 x 1080 @ 30 fps, image resolution up to 1844 x 1080 in JPG and video resolution 1280 x 720 AVI format

* Frame rates were determined at optimal conditions

For full microscope specifications and accessories see chapter 1 or 3

DIGITAL MICROSCOPES



EduBlue

digital microscopes with built-in 4.0 MP USB-2.0 camera

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

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

ED.1X05-S / ED.1X05-SW
260 (h) x 175 (w) x 220 mm (d) | 2.4 kg



ED.1805-SW



Triple magnification

SPECIFICATIONS

USB CAMERA

These EduBlue digital microscopes are provided with a 4.0 MP 1/1.8" CMOS USB-2.0 camera, a maximum of resolution of 2688 x 1512, 24 bits color depth, up to 30 frames per second*. Supplied with USB-2.0 cable and a 1 mm/100 calibration slide

SOFTWARE

The capture and analysis ImageFocus Alpha software allows to save images in .jpg, .tif, .bmp or .dicom formats as well as .avi format videos. Measurements and annotations can be done on live or captured images. Compatible with Windows 10 and higher, both 32 and 64 bits configurations. A MacOS version is also available. Free software can be downloaded from our website

HIGHLIGHTS

- Economical binocular models
- Universal USB-C 5V Power
- Dual illumination system (see EduBlue chapter 2)
- Dual and triple magnification objectives
- Cordless operation
- Built-in digital 4.0 MP USB-2.0 camera
- Models with and without WiFi
- LED illuminators
- Ergonomic carrying grip
- 5 Years warranty (2 years on camera)

WIFI + USB CAMERA

These EduBlue digital microscopes are provided with a 4.0 MP 1/1.8" CMOS USB-2.0 WiFi camera, a maximum resolution of 2688 x 1512, 24 bits color depth, up to 30 frames per second. Connects to ethernet, computer or mobile device. Supplied with USB-2.0 cable and a 1 mm/100 calibration slide

SOFTWARE

The capture and analysis ImageFocus Alpha software allows to save images in .jpg, .tif, .bmp or .dicom formats as well as .avi format videos. Measurements and annotations can be done on live or captured images. Compatible with Windows 10 and higher, both 32 and 64 bits configurations. A MacOS version is also available. Free software can be downloaded from our website

*Frame rates were determined at optimal conditions
For full microscope specifications and accessories see chapter 2: Stereo microscopes

MODELS	Binocular	2x/ 4x objectives	1x/ 2x/ 4x objectives	USB + WiFi + LAN camera	Software	Connectivity	Rack & pinion stand
ED.1405-SW	•	•		•	IF Alpha	Windows, Apple, Android, USB 2.0, WiFi	•
ED.1805-SW	•		•	•	IF Alpha	Windows, Apple, Android, USB 2.0, WiFi	•

DIGITAL MICROSCOPES



EduBlue LCD

digital microscope
with built-in
5.0 MP camera

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

The EduBlue LCD is equipped with a built-in 5 MP high-definition CMOS camera with 2592 x 1944 pixels



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● ED.3000

ED.3000
425/475 (h) x 180 (w) x 230 mm (d) | 2.3 kg



● Adjustable screen

HIGHLIGHTS

- MonoZoom stand-alone digital microscope
- Magnification 8x up to 54x optically and up to 540x digitally
- 91 mm working distance
- Built-in 21 LED incident ringlight, five intensity positions
- Built-in 7 LED transmitted, two intensity positions
- Built-in 5 MP HD camera
- HD 9-inch screen
- Universal USB-C 5V Power
- Metal stand
- 3 Years warranty (2 years on camera)

SPECIFICATIONS

CENTRAL ZOOM OBJECTIVE

The EduBlue LCD ED.3000 features a single optical zoom objective with a 0.7 to 4.5 zoom. This allows an on-screen magnification from 8 to 54x. Zoom adjustments engravings on 0.7x 0.8x 1x 1.5x 2x 3x 4x and 4.5x. The working distance is 91 mm. A digital zoom up to 10x is available within the software, allowing a digital magnification up to 540x

STAND

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

ILLUMINATION

- Two types of illumination are available;
- An integrated 21 LED incident ringlight illumination (5.500 K) with five intensity positions
 - A 7 LED transmitted illumination (5.785 K) with two intensity positions, integrated in the base

BUILT-IN CAMERA

Built-in HD 5 MP CMOS high speed (60 fps) camera with attached 9" screen. There is one USB port for a max. 16 GB SD storage card for captured images. The operator can take and save images to the SD card by pressing on a capture button at the left side of the screen. Images are saved in the .jpg format and videos are saved in .avi format

BUILT-IN SOFTWARE

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

PACKAGE CONTENT

Supplied with 16 GB SD card, black/white object plate, a glass transparent object plate and external 12V / 2A power supply

DIGITAL MICROSCOPES

bscope

NeoLED™
euromex optical technology



bScope

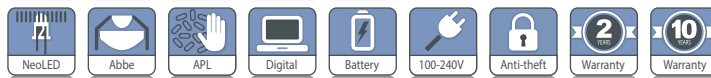
digital microscopes
with built-in
5.0 MP USB-2.0 camera

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

The digital bScope comes with WF 10x/20 mm eyepieces and is exclusive available in binocular versions. Complete with E-plan IOS and Plan IOS infinity corrected objectives for brightfield observations



product information



● BS.1157-EPLi



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

HIGHLIGHTS

- Binocular model
- Color coded condenser
- Diopter adjustment on both tubes
- Integrated 5.0 MP CMOS color USB.2 camera
- 2592 x 1944 pixels
- 7 frames per second (2592 x 1944 pixels)*
- 27 frames per second (1280 x 960 pixels)*
- 10 Years warranty (2 years on camera)

SPECIFICATIONS

CAMERA

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

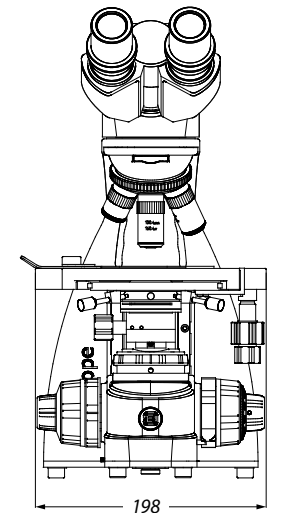
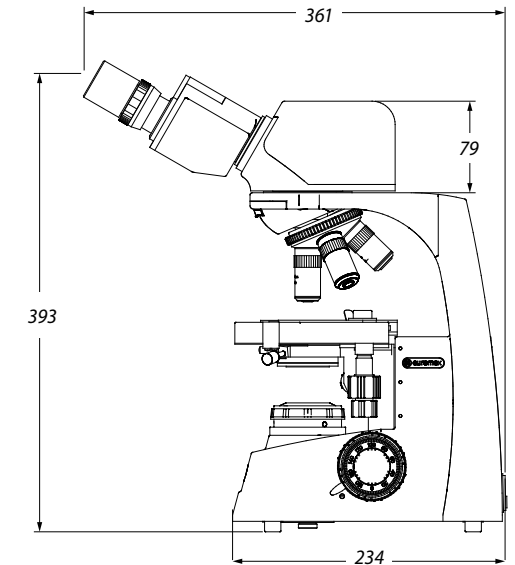
SOFTWARE

The capture and analysis ImageFocus Alpha software allows to save images in .jpg, .tif, .bmp or .dicom formats as well as .avi format videos. Measurements and annotations can be done on live or captured images. Compatible with Windows 10 and higher, both 32 and 64 bits configurations. A MacOS version is also available. Free software can be downloaded from our website

* Frame rates were determined at optimal conditions

For full microscope specifications and accessories see chapter 1 or 3

DIMENSIONS



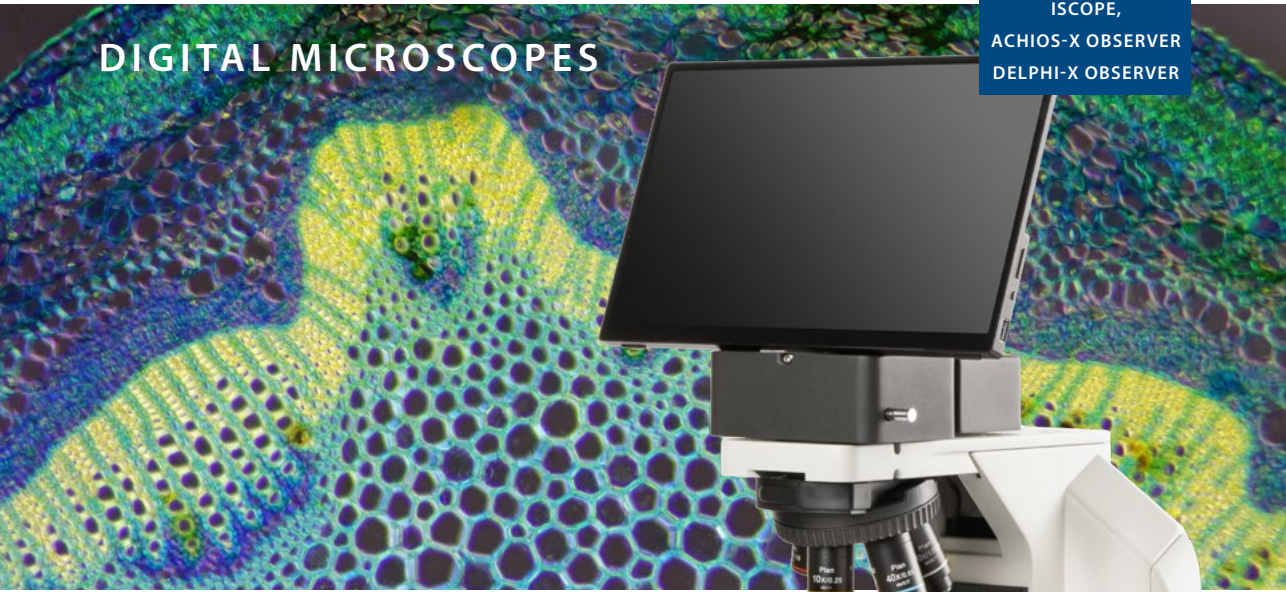
MODELS

	binocular head	HWF 10x/20 mm eyepieces	Quintuple nosepiece E-plan IOS 4/10/S40/S100x oil	Quintuple nosepiece plan IOS 4/10/S40/S100x oil	Köhler NeoLED™
BS.1157-EPLi	•	•	•		•
BS.1157-PLi	•	•		•	•

All models can optionally be supplied with three rechargeable AA batteries

DIGITAL MICROSCOPES

ISCOPE,
ACHIOS-X OBSERVER
DELPHI-X OBSERVER



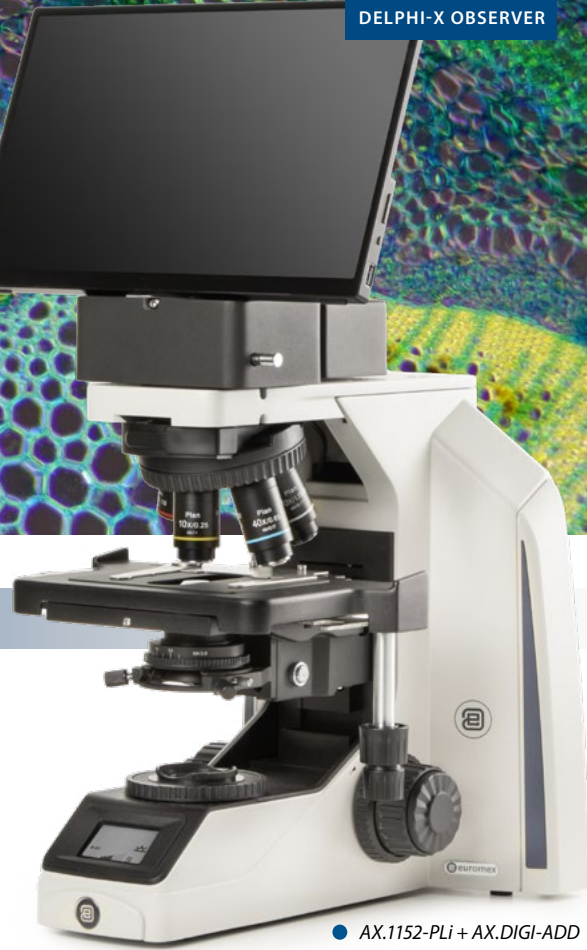
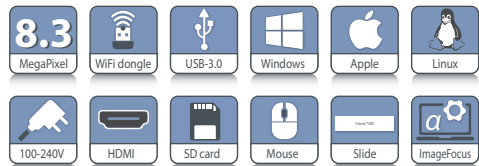
Digital microscopes

iScope, Achios-X Observer, Achios-X Inverso and Delphi-X Observer

This digital solution for the iScope, Delphi-X Observer, Achios-X Observer and Achios-X Inverso microscopes uses an Ultra HD camera together with a high resolution 13" screen, to bring the most vivid images directly to you. This is extremely useful for demonstrations or for educational applications

This digital solution can work in two modes:

- A stand-alone mode, where the mouse driven built-in software enables the capturing of images and recording of videos as well as a full range of measuring functions and playback functions



● AX.1152-PLi + AX.DIGI-ADD

No PC startup delay and no need for any computer knowledge

- The option either to be connected to a PC, or to stream images to different WiFi enabled devices, such as smartphones, tablets or computers

HIGHLIGHTS

- Extremely useful for discussions, demonstrations and education
- Real time images directly on 13"HD screen
- 3840 x 2160 pixels, 60 fps*, H264 codec
- Ultra HD 2160p, 8.3 MP, 1/8 inch color 4K Sony sensor
- Built-in mouse-driven software
- Interfaces: HDMI, USB-3, Ethernet, WiFi
- Stand alone mode or with computer



● IS.1152-PLi + IS.DIGI-ADD



● DX.1152-PLi + DX.DIGI-ADD

* Frame rates were determined at optimal conditions

COMPUTER CONTROLLED MODE

Besides working in the stand alone mode of the camera, you can also choose to connect the camera to a computer. Thus enjoying even more features of the Euromex ImageFocus Alpha software. Such as saving captured images in JPG, TIFF or BMP formats and recording videos in .avi format directly on the hard drive. The software offers different measurement features on live and captured images and also full control over the camera parameters

WIFI MODE

The system streams high resolution images simultaneously to several WiFi enabled smartphones, tablets or computers with iOS, Android or Windows operating systems. Ideal for demonstrations where remote viewing is needed

An Android app for this camera is available on www.euromex.com. IOS app can be downloaded from the App Store (free of charge)

MODELS

Ordering is based on the standard iScope, Achios-X Observer, Delphi-X Observer and Achios-X Inverso model references, together with the corresponding DIGI-ADD reference

For example

IS.xxxx-xxx + IS.DIGI-ADD

AX.xxxx-xxx + AX.DIGI-ADD

DX.xxxx-xxx + DX.DIGI-ADD

AI.xxxx-xxx + AI.DIGI-ADD

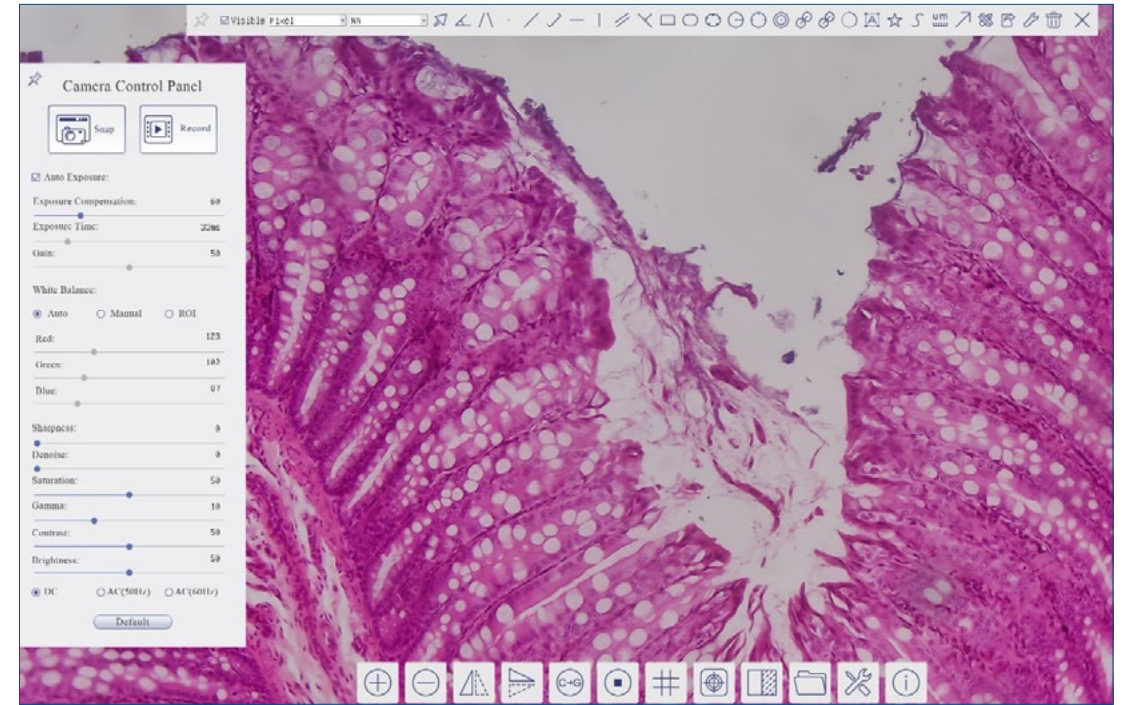
For further information on the microscope models, please refer to the specific microscope section in this catalog



● Control of the camera



● AI.4058-PLPHi + AI.DIGI-ADD



● Actual view of the screen. The menus pop-up automatically by mouse control

Camera List

HD4K

Capture & Resolution

Live: 3840 x 2160

Snap: 3840 x 2160

Format: RGB24

Exposure & Gain

White Balance

Color Adjustment

Power Frequency (Anti-flicker)

Color/Gray

Flip

Dark Field Correction

Flat Field Correction

Bitrate (Mbps)

Misc

CAMERA HIGHLIGHTS

- Ultra HD /4K, 8.3 MP
- 1/1.8 inch color 4K Sony sensor
- 3840 x 2160 pixels, 60 fps
- Real time images directly on TV, monitor or beamer
- Stand alone or used via PC or Mac
- C-mount interface
- 4K HDMI 2.0 standard
- Works with ImageFocus Alpha software

MACROZOOMS



MZ.4500
macrozoom

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

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



● MZ.4500

MZ.4500
313 (h) 320 (w) 285 mm (d) | 3.06 kg



product information



HIGHLIGHTS

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



SPECIFICATIONS

CENTRAL ZOOM OBJECTIVE

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

STAND

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

CAMERA SYSTEMS

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

PACKAGING

Supplied with dust cover and packed in a polystyrene box



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

MACROZOOMS



MZ.4600

digital macrozoom

This entry-level digital MacroZoom is equipped with a 0.7 to 5x zoom objective enables direct inspection of objects on external HD screen (not supplied). The mouse-driven built-in software control the camera parameters and enables measurements on screen, capturing and saving .jpg or .bmp format pictures and .mp4 format video on an USB memory stick

The MZ.4600 has a built-in high-definition 1080p 2 MP camera which can deliver up to 60 images per seconds and needs to be connected to an external stand-alone HD screen



● MZ.4600

MZ.4600
323 (h) 320 (w) 260 mm (d) | 4.4 kg



product information



HIGHLIGHTS

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

SPECIFICATIONS

MACROZOOM OBJECTIVE

The Digital MacroZoom MZ.46000 features a single zoom objective with a 0.7 to 5x zoom magnification. Zoom adjustment engravings on 0.7, 1, 1.5, 2, 2.5, 3, 4 and 5x. The working distance is 100 mm. An optional 3D attachment enables a 45° angle observation

STAND

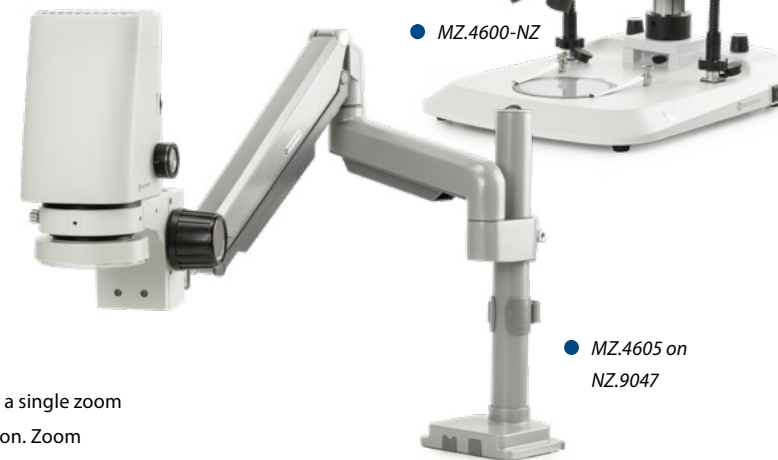
- Standard pillar stand (Ø 32 mm) that sits on a large 320 x 260 mm metal stand without illumination
- Travel range is 50 mm, max. object height 22 cm
- The MacroZoom objective can also be mounted on the NexusZoom stands. (for instance, the NZ.9047, see dedicated datasheet on the website)

ILLUMINATION

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

BUILT- IN CAMERA

Built-in HD 1080p high-definition 2 MP 1/2.8" CMOS high speed camera, 1920 x 1080 pixels, 2.9 µm x 2.9 µm pixels and 60 images per seconds. Magnification on screen from 2.5x up to 19x with field of view from 210 x 120 mm up to 27 x 15 mm



● MZ.4600-NZ

● MZ.4605 on NZ.9047

based on a 24 inch HD screen. The camera has one HDMI output that needs to be connected to an external HD screen (not supplied). Two USB ports accept the supplied 32 GB USB memory stick (up to 64 GB) and a supplied wireless mouse that drives the built-in on-screen software. The operator can take .jpg or .bmp images and .mp4 video's and save them to an external supplied memory stick

BUILT- IN SOFTWARE

The built-in on-screen software (only English language) is mouse driven and features functions such as capture or record images, automatic or manual white balance, color adjustments, file manager, grids, flip/mirror, freeze image, WDR (white dark regulation), crosshair and crosslines, text annotations. Camera settings such as automatic or manual exposition time, gain, brightness, saturation, contrast, sharpness, digital 1-6x zoom are available. Measurement functions are also available from the software such as line, polygon circle, rectangle, angle, arc. Images are saved in .jpg or .bmp format and video in .mp4 videos format

PACKAGE CONTENT MZ.4600

- Supplied with
- Digital MacroZoom body with ringlight illumination
 - 32 GB memory stick, mouse, HDMI cable for HD screen, external 100-240 Vac / 12Vdc / 3A power supply
 - Standard pillar stand with head holder, without illumination (MZ.4610)

ORDER PRODUCT REFERENCES:

- MZ.4600** MacroZoom body with standard stand
- MZ.4600-NZ** MacroZoom body with NexiusZoom stand (NZ.9018), equipped with two 2 W gooseneck LED illuminations
- MZ.4605** MacroZoom body with ringlight illumination
- MZ.4610** Standard* stand for MZ body MZ.4605
- MZ.4615** 3D attachment for observation under 45° angle*
- MZ.4625** Additional 0.5x lens working distance 165 mm
- MZ.4627** Additional 0.7x lens working distance 128 mm
- MZ.4622** Additional 2x lens working distance 40 mm



● 3-D attachment MZ.4615
Below: view from above and from a 45° angle



OPTIONAL LIGHT SOURCES:

- LE.1973** Ringlight with 144 LEDs with adjustable light intensity. External power supply 100-240. Vac / 12 Vdc (50/60 Hz). With segment controller. Luminous flux of 23,000 Lux and color temperature of 6500 K
- LE.1974** Ringlight with 72 LEDs with adjustable light intensity. External power supply 110-240 Vac / 12 Vdc (50/60 Hz). With segment controller. Luminous flux of 20,000 Lux and color temperature of 6500 K
- LE.5207** Light source with 2x 3W LED light source mounted on two self-sustaining Gooseneck-type 56 cm long guide. Luminous flux 25.000 Lux, 6500K
- LE.5212** Multiple light source station with
 - two self-sustaining gooseneck-type 56 cm long guides with 2x 3 Watt white 6500 K power LEDs, each with a 3-lens focusing heads
 - 60 LEDs ringlight, 6.500 K, 24.000 Lux
 - transmitted 42 LEDs light stage, 6.500 K, 8.000 Lux. Stage diameter 94.5 mm, 15 mm thick



● MZ.4600 with LE.1973

how to match
camera resolution

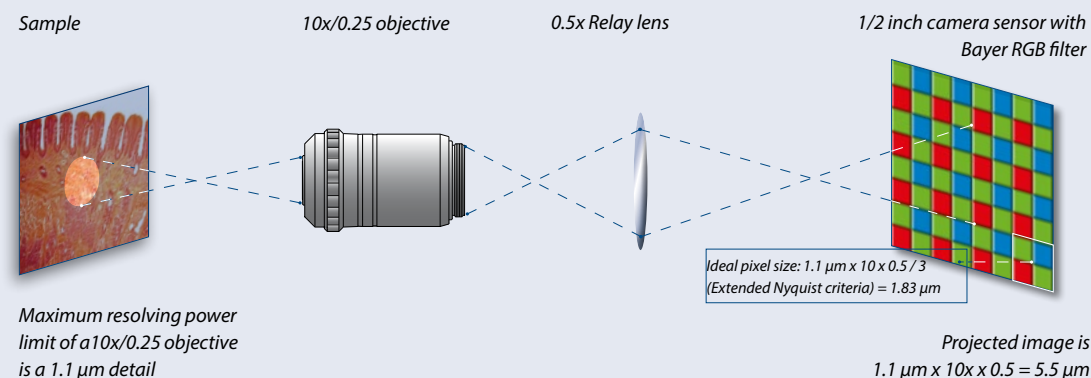
In microscopy, the image of the sample under observation is projected by the optical components of the microscope (objective lenses, eyepiece lenses, intermediate lens or camera relay lenses) onto the surface of a camera sensor or the retina of a human eye

a more important specification is the pixel size of the camera sensor. What might be astonishing to know about digital resolution of camera's is the fact, that the higher the magnification, the fewer pixels the chip of a camera needs!

Not the total amount of pixels – which basically determines the field of view of the camera image - is primordial but

To optimize the transfer of the details of the sample (resolving power) to the camera, the pixel size of the photodiodes of the camera sensor is a key element

EXAMPLE OF A 10X/0.25 OBJECTIVE WITH 1/2 INCH CAMERA SYSTEM



MAXIMUM AND OPTIMUM PIXEL SIZE REQUIREMENTS:

Obj. Magn.	NA	Resolving power ⁽¹⁾ (μm)	Projected size (μm)	Projected size with 0.5x lens (μm)	Maximum ⁽²⁾ camera pixel size (μm)	Optimum ⁽²⁾⁽³⁾ camera pixel size (μm)
1x	(0.04)	6.90	6.90	3.45	1.72	1.15
2x	(0.06)	4.60	9.20	4.60	2.30	1.53
4x	(0.10)	2.80	11.2	5.60	2.80	1.86
10x	(0.25)	1.10	11.0	5.50	2.75	1.83
20x	(0.40)	0.69	13.8	6.90	3.45	2.30
40x	(0.65)	0.42	16.8	8.40	4.20	2.80
60x	(0.80)	0.34	20.4	10.2	5.10	2.40
100x	(1.25)	0.22	22.0	11.0	5.50	3.67

⁽¹⁾ Resolving power of the objectives: $r = 1.22 \cdot \lambda / (NA \text{ Objective} + NA \text{ Condenser})$. With NA = numerical aperture, λ = wavelength and r = optical resolving power. The resolving power limits are based on various theoretical calculations. Low specimen contrast, improper or low illumination conditions, etc, may serve to lower resolving power limits, more often than not, the real-maximum values are not realized in practice

⁽²⁾ The Nyquist criterion states that the maximum camera pixel size can't exceed half of the resolving limit of the objective. For high resolution images, the Nyquist criterion is even extended to 2.5 to 3 pixels per detail and thus the optimum camera pixel size (3) is calculated as maximum 1/3 of the resolving limit of the objective

⁽³⁾ Although smaller pixel size of photodiodes of the camera sensor improve the resolution, smaller pixel sizes lower signal to noise ratios, lower the dynamic range and collect less light! Binning techniques can compensate for lower signal to noise ratios



MZ.4700(-HDS)

digital autofocus macrozoom 4K/1080p

The MZ.4700 is an integration of a 1080p HDMI camera, an electrically controlled continuous zoom auto-focus objective together with a stand and illumination system. The MZ.4700 enables direct inspection of objects on a HD screen. The mouse-driven built-in software controls the camera parameters and enables measurements on screen, capturing and saving .jpg or .bmp format pictures and .mp4 format video on a USB memory stick



MZ.4705

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



product information



HIGHLIGHTS

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

SPECIFICATIONS

ZOOM OBJECTIVE

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

CAMERA

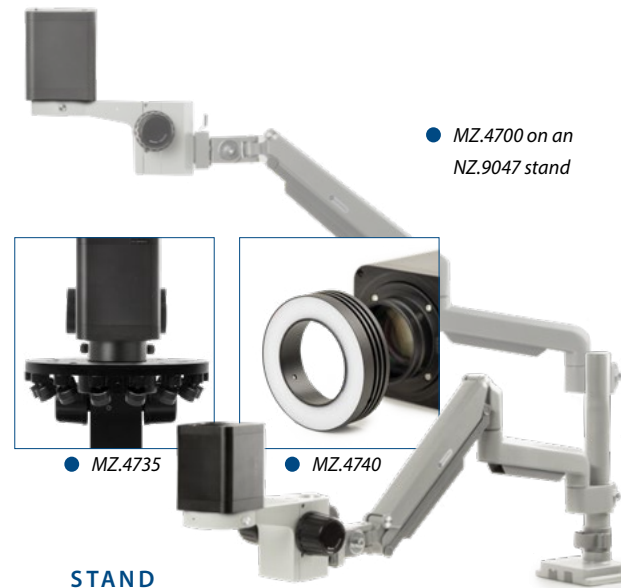
- The 8.3 MP camera is equipped with a Sony 1/2.8 inch 4K UHD/1080P CMOS high-definition sensor with high signal-to-noise ratio. This generates a 3840 x 8160 pixels video streaming, up to 60 images per second*
- The 4K/UHD signal fits the HDMI input of an HD screen
- A built-in SD card is used for image and video storage
- Stand-alone or PC operated (ImageFocus Alpha)

BUILT-IN SOFTWARE

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

ILLUMINATION

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



MZ.4700 on an NZ.9047 stand

STAND

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

PACKAGE CONTENT

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

ORDER PRODUCT REFERENCES

- MZ.4700** Stand-alone digital autofocus MacroZoom ⁽¹⁾ with standard stand
- MZ.4700-HDS** Stand-alone digital autofocus MacroZoom ⁽¹⁾ with standard stand and HD screen
- MZ.4705** Stand-alone digital autofocus MacroZoom ^(1,2)
- MZ.4710** Standard stand for MZ.4705
- MZ.4712** 11 inch HD screen for MZ.4710 inclusive pillar attachment
- MZ.4740** Standard LED ringlight
- MZ.4735** Directional 12 x 1W LEDs ringlight

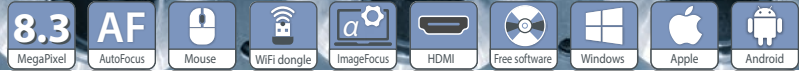
⁽¹⁾ Supplied with a 32 GB SD card, mouse, WiFi dongle, HDMI cable and External 100-240 Vac / 12Vdc / 3A power supply

⁽²⁾ The MZ.4705 can also be mounted on NexiusZoom stands

* Frame rates were determined at optimal conditions

MACROZOOMS

MZ series



MZ.4702(-HDS)

Long WD AF macrozoom 4K/1080p

The MZ.4702 integrates a high-definition HDMI camera, an electrically controlled continuous zoom auto focus lens, along with a stable stand

Designed for direct inspection on an HD screen, the MZ.4702 allows effortless, real-time viewing with smooth 60 fps performance. Its built-in software provides full access to camera settings, on-screen measurement tools and the ability to capture and save images and videos

With an extended working distance and an ultra-wide field of view, the MZ.4702 delivers unmatched versatility and clarity for precision inspection tasks



product information



MZ.4702 675 (h) x 380 (w, base plate)
560 (w, all in) x 260 mm (d) | 4.6 kg



● MZ.4702-HDS

HIGHLIGHTS

- Long working distance up to 67 cm
- Autofocus
- Stand-alone or PC operated
- Sony 8.3 CMOS sensor
- 18x optical zoom ratio
- Auto or manual focus
- Great for QC or production sites
- 400-670 mm extra-large working distance
- Built-in mouse-driven software
- 1 Year warranty

SPECIFICATIONS

ZOOM OBJECTIVE

- The 16 elements objective has a 18x zoom ratio with manual or automatic focusing function
- Fields of view from 65 x 37 cm (1x zoom) to 3.6 x 2 cm (18x zoom)
- On-screen magnification 0.8-14.5x @600 mm WD. (24" screen)
- Focusing range is between 400 and 670 mm
WD = working distance

CAMERA

- The 8.3 MP camera is equipped with a Sony 1/2.8 inch 4K UHD/1080P CMOS high-definition sensor with high signal-to-noise ratio generating a 3840 x 2160 pixels video streaming up to 60 images per second
- The 4K/UHD signal fits the HDMI input of a HD screen
- Image and video storage is done on a built-in SD card or USB flash drive (not included)
- Stand-alone or PC operated (ImageFocus Alpha)

ILLUMINATION

For illumination we recommend using Euromex LE.5207 or LE.5212



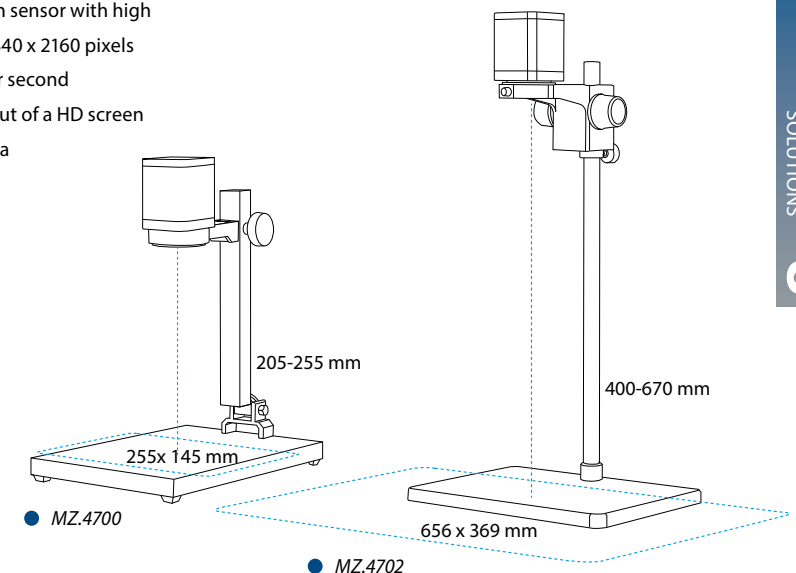
● MZ.4707

PC/MAC SOFTWARE

Operates with ImageFocus Alpha imaging and measuring software for Windows 10 and higher (32 and 64 bit configurations) MacOS and Linux for a full range of image management tools

PACKAGE CONTENT

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



● MZ.4700

● MZ.4702

ORDER PRODUCT REFERENCES

- MZ.4702** Stand-alone long working distance digital autofocus MacroZoom* with stand
- MZ.4702-HDS** Stand-alone long working distance digital autofocus MacroZoom* with stand and HD screen
- MZ.4707** Stand-alone long working distance digital autofocus MacroZoom, camera only*

- MZ.4714** Standard stand with camera holder for MZ.4702/4707
- MZ.4716** 11 inch HD screen for MZ.4702/4705, pillar attachment for MZ.4714 included

* Supplied with a 32 GB SD card, mouse, WiFi dongle, HDMI cable and power supply
MZ.4707 can also be mounted on NexusZoom stands such as NZ.9047

ACCESSORIES

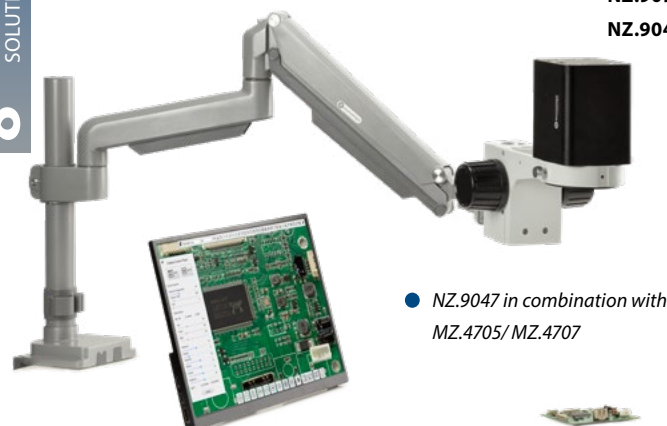
- LE.5207** Economical dual LED intensity adjustable light source with two 44 cm flexible gooseneck arms, each mounted with a 3 W LED
- LE.5112** Light source station with multiple power supply connections for two self-sustaining gooseneck-type guides, one ringlight and one transmitted stage illumination. For stand-alone usage or mounted on stereo microscope pillar stands with diameters up to 44 mm or with 35- and 25-mm pole mounting adapter rings



STANDS

- NZ.9025** Black articulated stand with table clamp (needs holder NZ.9081)
- NZ.9027** Articulated arm stand with heavy stand (needs holder NZ.9081)
- NZ.9081** 76 mm holder for articulated arm stands NZ.9025 and NZ.9027

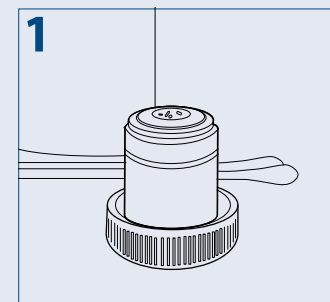
- NZ.9030** Universal double-arm stand, needs holder (NZ.9090/9095)
- NZ.9032** Universal double-arm stand with table clamp, needs holder (NZ.9090/9095)
- NZ.9090** Holder, with coarse control suitable for NZ.9030/9032 stands
- NZ.9095** Holder with fine coarse for NZ.9030/9032 stands
- NZ.9047** Articulated stand with adjustable tilt, swivel and rotating functions. With desktop clamp for mounting on 10-85 mm tabletops. Can also be fixed on tables with drilled holes. Supplied with 76 mm holder



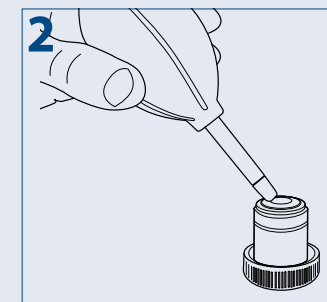
● NZ.9047 in combination with MZ.4705/ MZ.4707

how to keep the optics clean PB.5275 cleaning kit

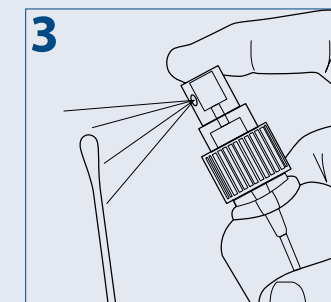
Dust and dirt particles have a negative affect on image quality. Keeping the optical system of your microscope clean is essential for the best image quality and overall life span of your microscope. Dust and dirt on optical elements such as lenses, prisms and filters that are left unattended can become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



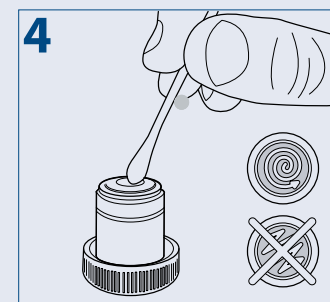
Place your objective or eyepiece on a secure location. One can use the objective's cap or eyepieces can be placed in the cut-outs within the storage box. Condensers and collector lenses can remain on the microscope



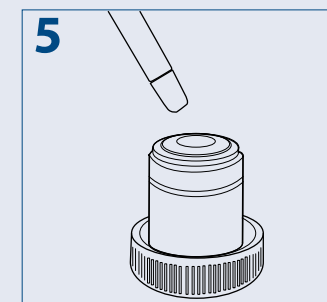
To prevent scratches on coatings and optical glass, first try to remove dirt and dust that sticks to the optical surface with an air-blower or pressurized dry air (oil-free and under moderate pressure version only)



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



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



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

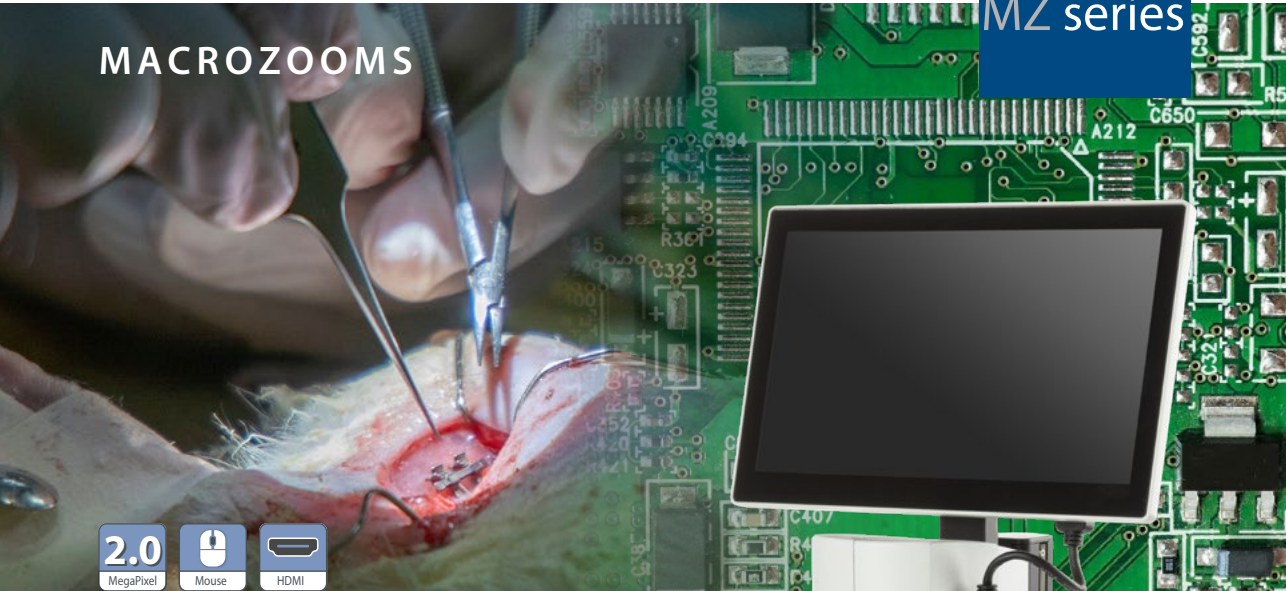
6 Check with the help of a magnifying glass if the surface is clean and place the cleaned item back on the nosepiece of the microscope



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

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

MACROZOOMS



MZ.5000
digital macrozoom

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

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



● MZ.5000

MZ.5000
445/635 (h) x 320 (w) x 260 mm (d) | 4.6 kg



product information



HIGHLIGHTS

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



● Adjustable screen

SPECIFICATIONS

CENTRAL ZOOM OBJECTIVE

The digital MacroZoom MZ.5000 features a single zoom objective with a 0.7 to 5x zoom magnification. Zoom adjustment engravings on 1, 1.5, 2, 3, 4 and 5x. The working distance is 105 mm. Supplied with a 0.5x additional lens with a working distance of 110 mm

STAND

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

ILLUMINATION

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

BUILT-IN CAMERA

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

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

BUILT-IN SOFTWARE

The built-in on-screen software is mouse driven and features functions such as Capture image, Freeze image, Automatic white balance, Automatic exposition, File manager, Grids and camera settings such as exposure time, gain, saturation, contrast, sharpness, HDR

Measurement functions are also available from the software such as line, area, angle. Images are saved in .jpg format and videos are saved in .avi format. With the digital zoom function, objects can be observed with a magnification up to 70 times

PACKAGE CONTENT

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

* Frame rates were determined at optimal conditions

CAMERA FOR
EDUCATION AND
LABORATORIES

USB CAMERAS



CMEX USB-2.0 cameras with fast CMOS sensor

The CMEX-2f, CMEX-5f and CMEX-12f are equipped with a fast CMOS sensor. The CMEX cameras are equipped with USB-2.0 data interface

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



HIGHLIGHTS

- Entry level camera for amateurs, education and laboratories
- 2.0, 5.0 or 12.0 MP
- 1920 x 1080 - 4000 x 3000 pixels
- Color depth 24 bits
- Low signal/noise ratio
- USB 2.0 interface



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

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

DIGITAL SOLUTIONS 8

DIGITAL SOLUTIONS 8

ALL HD-CAMERAS

MODELS	HD-Mini	HD-Lite	HD-Pro HDMI	HD-Ultra	UHD-4K Touch	UHD-4K	UHD-4K-16
Sensor	Sony	Sony	Sony	Sony	Sony 4K	Sony 4K	Sony 4K
Format	1/2.8", HDTV 1080p	1/2.8", HDTV 1080p	1/2.8", HDTV 1080p	1/2.8", HDTV 1080p	1/1.8", HDTV 4K	1/1.8", HDTV 4K	1/1.1", HDTV 4K
Resolution*	1920 x 1080 ^(1,2) 60 fps*	2592 x 1944 ⁽¹⁾ 1920 x 1080 ⁽²⁾ 15 fps*	3840 x 2160 ⁽¹⁾ 1920 x 1080 ⁽²⁾ 26-60 fps*	3264 x 1836 ⁽¹⁾ 1920 x 1080 ⁽²⁾ 30-60 fps*	3840 x 2160 ^(1,2) 20-30 fps*	3840 x 2160 ^(1,2) 30-60 fps*	5440 x 3060 ⁽¹⁾ 5440 x 3060 (USB 3.0) ⁽²⁾ 20-30 fps*
Pixel size	2.9 x 2.9 (µm)	2.0 x 2.0 (µm)	1.45 x 1.45 (µm)	2.8 x 2.8 (µm)	2.0 x 2.0 (µm)	2.0 x 2.0 (µm)	2.4 x 2.4 (µm)
Video output	HDMI	HDMI, USB-2.0	HDMI, USB-C	HDMI, USB-2.0	HDMI, USB-2.0	HDMI, USB-3.0 ⁽³⁾ , Ethernet, WiFi	HDMI, USB-3.0 ⁽³⁾ , Ethernet, WiFi
Exposure	Automatic/manual	Automatic/manual	Automatic/manual	Automatic/manual	Automatic/manual	Automatic/manual	Automatic/manual
White balance	Automatic/manual	Automatic/manual	Automatic/manual/ROI	Automatic/manual	Automatic/manual/ROI	Automatic/manual/ROI	Automatic/manual/ROI
Sensitivity lux-sec	1300 mV	1000 mV	300 mV (1/30s)	510 mV	505 mV	3541 mV with 1/30 s	1847 mV with 1/30 s
Color rendering	12 bits	24 bits	24 bits	36 bits	32 bits	36 bits	36 bits
Signal/Noise (db)	42	40.5	38	55	40.5	40.5	40.6
Dynamic (db)	69	60	66	69	60	60	48
Interface	HDMI	HDMI, USB-2	HDMI, USB-C	HDMI, USB-2	HDMI, USB-2	HDMI, USB-3 ⁽³⁾ , Ethernet, WiFi	HDMI, USB-3 ⁽³⁾ , Ethernet, WiFi
Camera buttons	--	on/off	on/off	on/off	on/off	on/off	on/off
Mounting	C-mount	C-mount	C-mount	C-mount	C-mount	C-mount	C-mount
Storage	32 GB SD card (max.128 GB)	16 GB SD card (max. 32 GB)	32 GB SD card (max. 128 GB)	16 GB SD card (max. 32 GB)	32 GB SD card (or USB drive)	32 GB SD card (or USB drive)	32 GB SD card (or USB drive)
Software	--	ImageFocus Plus	ImageFocus Alpha	ImageFocus Plus	ImageFocus Alpha	ImageFocus Alpha	ImageFocus Alpha
Software languages	--	13 ⁽⁵⁾	15 ⁽⁶⁾	13 ⁽⁵⁾	15 ⁽⁶⁾	15 ⁽⁶⁾	15 ⁽⁶⁾
External power supply	100-240 Vac to 12Vdc/1A	100-240 Vac to 12Vdc/2A	100-240 Vac to 12Vdc/2A	100-240 Vac to 12Vdc/2A	100-240 Vac to 12Vdc/2A	100-240 Vac to 12Vdc/1A	100-240 Vac to 12Vdc/1A
Relative humidity	30 - 80 %	45 - 85 %	30 - 80%	45 - 85 %	30 - 80 %	30 - 80 %	30 - 80 %
Temperature Operation Storage	-10 - 50° C -20 - 60° C	0 - 60° C -20 - 70° C	-10 - 50° C -20° C - 60° C	0 - 60° C -20 - 70° C	-10 - 50° C -20 - 60° C	-10 - 50° C -20 - 60° C	-10 - 50° C -20 - 60° C
Compatible	--	Win 10 + higher MacOS	Win 10 + higher MacOS, Linux	Win 10 + higher MacOS	Win 10 + higher MacOS, Linux	Win 10 + higher MacOS, Linux	Win 10 + higher MacOS, Linux
Product number	VC.3023 VC.3024-HDS ⁽⁴⁾	VC.3031 VC.3031-HDS ⁽⁴⁾	VC.3039 VC.3039-HDS ⁽⁴⁾	VC.3036 VC.3036-HDS ⁽⁴⁾	VC.3043 VC.3043-HDS Touch ⁽⁴⁾	VC.3045 VC.3045-HDS ⁽⁴⁾	VC.3048 VC.3048-HDS

* Frame rates depend on resolution and output mode and have been determined at optimal conditions

⁽¹⁾ capture mode (resolution depends on output mode)

⁽²⁾ live view (resolution depends on output mode)

⁽³⁾ USB-2.0 compatible but limitations in speed and resolution

⁽⁴⁾ model with attached HD screen, 1080p

⁽⁵⁾ English, Chinese Simplified, Traditional Chinese, Thai, German, Italian, French, Korean, Japanese, Russian, Polish and portugese

⁽⁶⁾ English, Catalan, Indonesian, Polish, Chinese Simplified,

Traditional Chinese, Thai, German, Italian, French, Korean, Japanese, Russian, Turkish, Spanish

BUILT-IN SOFTWARE FEATURES (HDMI MODE)

MODELS	HD-Mini	HD-Lite	HD-Pro HDMI	HD-Ultra	UHD-4K Touch	UHD-4K	UHD-4K-16
Image capturing (JPEG)	1920 x 1080	2592 x 1944	3840 x 2160	3261 x 1840	3840 x 2160	3840 x 2160	5440 x 3060
Video recording	1920 x 1080 MP4	1920 x 1080 AVI	1920 x 1080 MP4	1920 x 1080 AVI	3840 x 2160 MP4	3840 x 2160 MP4	3840 x 2160 MP4
Browse saved images	.	.	.	.	.	.	.
Browse saved video's	.	.	.	.	.	.	.
Mouse driven	.	.	.	.	.	.	.
Auto exposure	.	.	.	.	.	.	.
Exposure time	0.01 ~ 1000 ms	0.001s ~ 10 s	0.04 ~ 1000 ms	0.001s ~ 10 s	0.04 ~ 1000 ms	0.04 ~ 1000 ms	0.04 ~ 1000 ms
Gain	.	.	.	.	.	.	.
RGB & white balance	.	.	.	.	.	.	.
Gamma	.	.	.	.	.	.	.
Sharpness	.	.	.	.	.	.	.
Noise reduction	3D algorithm	3D algorithm	3D algorithm	3D algorithm	standard noise reduction	3D algorithm	3D algorithm
Saturation & contrast	.	.	.	.	.	.	.
Horiz. & vert. flip	.	.	.	.	.	.	.
Grids	multi	multi	User defined	cross/multi	cross/multi	cross/multi	cross/multi
Autofocus	--	--	--	--	--	--	--
Compare function	--	.	.	.	.	.	.
Measurement functions	captured & live images	--	captured & live images	captured & live images	captured & live images	captured & live images	captured & live images
Line & free curve	--	--	.	.	.	.	.
Polygon & rectangle	--	--	.	.	.	.	.
Angle	--	--	.	.	.	.	.
Circle 3 points	--	--	.	.	.	.	.
Circle radius	--	--	.	.	.	.	.
Export function	--	--	CSV	CSV, Txt	CSV	CSV	CSV
Languages	10 ⁽⁴⁾	9 ⁽³⁾	10 ⁽⁴⁾	9 ⁽³⁾	10 ⁽⁴⁾	10 ⁽⁴⁾	10 ⁽⁴⁾
Product number	VC.3023 VC.3024-HDS ⁽⁴⁾	VC.3031 VC.3031-HDS	VC.3039 VC.3039-HDS	VC.3036 VC.3036-HDS	VC.3043 VC.3043-HDS Touch	VC.3045 VC.3045-HDS	VC.3048 VC.3048-HDS

HDMI mode

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

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

WIFI CAMERA

WIFI CAMERA



CMEX-5 WiFi-4

digital WiFi camera with 1/1.8 inch 4 MP CMOS sensor

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

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

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

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

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

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

MODEL	Sensor	Sensor size (inches)	Pixels size (µm)	Resolutions	Grayscale conversion	Color rendering	Signal/ Noise(dB)	Dynamic (dB)	Sensitivity V/ lux-1/30 s	Product number
CMEX-5 WiFi-4	4.0 MP CMOS	1/1.8"	2.9 x 2.9	2688 x 1512	12 bits	24 bits	44	48	921	DC.5000-WIFI-4

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

COOLED CAMERAS

COOLED CAMERAS FOR EDUCATION



DC.20000i and DC.6000i



Cooled color camera with CCD or CMOS sensor

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

ImageFocus Alpha software has specific functions for fluorescence like combining capture fluorescence images. Furthermore it allows capturing of images and videos, doing measurements and annotations, generating reports, live image stitching etc. Compatible with Windows 10 and higher, both 32 and 64 bits configurations. Free software is available on www.euromex.com. A MacOS version is also available (with a few differences in features)

MODELS	Sensor	Sensor size (inches)	Pixel size (µm)	Resolutions	Max. frames (p/sec)*	USB-3	Dynamic range (dB)	S/N Ratio	Sensitivity @ 1/30 sec	Peltier cooling
DC.6000i	6.0 MP CCD	1"	4.54 x 4.54	2748 x 2200 2748 x 1092	7.5 14	•	62.34	41.6	880 mV	•
DC.20000i	20 MP CMOS	1"	2.4 x 2.4	5440 x 3648 4096 x 2160 2736 x 1824 1824 x 1216	5 10 15 30	•	66.3	41.74	462 mV	•

* Frame rates have been determined at optimal conditions

HD AND HD-AUTOFOCUS CAMERAS



(Ultra) high-definition cameras

CMOS color cameras

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

STAND-ALONE MODE

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

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

COMPUTER CONTROLLED MODE

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

HIGHLIGHTS

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



VC.3036-HDS on stereo microscope



VC.3034-HDS on the BioBlue

PACKAGE CONTENT*

MODELS	HD-Mini 2.0 MP	HD-Lite 5.0 MP	HD-Pro 8.0 MP	HD-Ultra 6.0 MP	UHD-4K Touch 8.0 MP	UHD-4K 8.3 MP	UHD-4K-16 16 MP
C-mount with objective	0.37x	0.45x	0.37x	0.37x	0.5x	0.5x	1x
30 and 30.5 mm adapters	•	•	•	•	•	•	•
SD card	32 GB	16 GB	32 GB	16 GB	32 GB	32 GB	32 GB
Caibration slide 10mm/100	•	•	•	•	•	•	•
External power supply	12V 1A	12V 2A	12V 1A	12V 2A	12V 2A	12V 1A	12V 1A
Dimensions (w x d x h)	51ø x 60 50 x 50 x 60	80 x 70 x 90	81 x 65 x 78	80 x 70 x 90	88 x 78 x 65	88 x 78 x 65	88 x 78 x 65
Product number	VC.3023	VC.3031	VC.3039	VC.3036	VC.3043	VC.3045	VC.3048
With HD screen	13" VC.3024-HDS	11.6" VC.3031-HDS	13" VC.3039-HDS	11.6" VC.3036-HDS	13" Touch VC.3043-HDS	13" VC.3045-HDS	13" VC.3048-HDS

ALL HD-CAMERAS

MODELS	HD-Mini	HD-Lite	HD-Pro HDMI	HD-Ultra	UHD-4K Touch	UHD-4K	UHD-4K-16
Sensor	Sony	Sony	Sony	Sony	Sony 4K	Sony 4K	Sony 4K
Format	1/2.8", HDTV 1080p	1/2.8", HDTV 1080p	1/2.8", HDTV 1080p	1/2.8", HDTV 1080p	1/1.8", HDTV 4K	1/1.8", HDTV 4K	1/1.1", HDTV 4K
Resolution*	1920 x 1080 ^(1,2) 60 fps*	2592 x 1944 ⁽¹⁾ 1920 x 1080 ⁽²⁾ 15 fps*	3840 x 2160 ⁽¹⁾ 1920 x 1080 ⁽²⁾ 26-60 fps*	3264 x 1836 ⁽¹⁾ 1920 x 1080 ⁽²⁾ 30-60 fps*	3840 x 2160 ^(1,2) 20-30 fps*	3840 x 2160 ^(1,2) 30-60 fps*	5440 x 3060 ⁽¹⁾ 5440 x 3060 (USB 3.0) ⁽²⁾ 20-30 fps*
Pixel size	2.9 x 2.9 (µm)	2.0 x 2.0 (µm)	1.45 x 1.45 (µm)	2.8 x 2.8 (µm)	2.0 x 2.0 (µm)	2.0 x 2.0 (µm)	2.4 x 2.4 (µm)
Video output	HDMI	HDMI, USB-2.0	HDMI, USB-C	HDMI, USB-2.0	HDMI, USB-2.0	HDMI, USB-3.0 ⁽³⁾ , Ethernet, WiFi	HDMI, USB-3.0 ⁽³⁾ , Ethernet, WiFi
Exposure	Automatic/manual	Automatic/manual	Automatic/manual	Automatic/manual	Automatic/manual	Automatic/manual	Automatic/manual
White balance	Automatic/manual	Automatic/manual	Automatic/manual/ROI	Automatic/manual	Automatic/manual/ROI	Automatic/manual/ROI	Automatic/manual/ROI
Sensitivity lux-sec	1300 mV	1000 mV	300 mV (1/30s)	510 mV	505 mV	3541 mV with 1/30 s	1847 mV with 1/30 s
Color rendering	12 bits	24 bits	24 bits	36 bits	32 bits	36 bits	
Signal/Noise (db)	42	40.5	38	55	40.5	40.5	40.6
Dynamic (db)	69	60	66	69	60	60	48
Interface	HDMI	HDMI, USB-2	HDMI, USB-C	HDMI, USB-2	HDMI, USB-2	HDMI, USB-3 ⁽³⁾ , Ethernet, WiFi	HDMI, USB-3 ⁽³⁾ , Ethernet, WiFi
Camera buttons	--	on/off	on/off	on/off	on/off	on/off	on/off
Mounting	C-mount	C-mount	C-mount	C-mount	C-mount	C-mount	C-mount
Storage	32 GB SD card (max.128 GB)	16 GB SD card (max. 32 GB)	32 GB SD card (max. 128 GB)	16 GB SD card (max. 32 GB)	32 GB SD card (or USB drive)	32 GB SD card (or USB drive)	32 GB SD card (or USB drive)
Software	--	ImageFocus Plus	ImageFocus Alpha	ImageFocus Plus	ImageFocus Alpha	ImageFocus Alpha	ImageFocus Alpha
Software languages	--	13 ⁽⁵⁾	15 ⁽⁶⁾	13 ⁽⁵⁾	15 ⁽⁶⁾	15 ⁽⁶⁾	15 ⁽⁶⁾
External power supply	100-240 Vac to 12Vdc/1A	100-240 Vac to 12Vdc/2A	100-240 Vac to 12Vdc/2A	100-240 Vac to 12Vdc/2A	100-240 Vac to 12Vdc/2A	100-240 Vac to 12Vdc/1A	100-240 Vac to 12Vdc/1A
Relative humidity	30 - 80 %	45 - 85 %	30 - 80%	45 - 85 %	30 - 80 %	30 - 80 %	30 - 80 %
Temperature Operation Storage	-10 - 50° C -20 - 60° C	0 - 60° C -20 - 70° C	-10 - 50° C -20° C - 60° C	0 - 60° C -20 - 70° C	-10 - 50° C -20 - 60° C	-10 - 50° C -20 - 60° C	-10 - 50° C -20 - 60° C
Compatible	--	Win 10 + higher MacOS	Win 10 + higher MacOS, Linux	Win 10 + higher MacOS	Win 10 + higher MacOS, Linux	Win 10 + higher MacOS, Linux	Win 10 + higher MacOS, Linux
Product number	VC.3023 VC.3024-HDS ⁽⁴⁾	VC.3031 VC.3031-HDS ⁽⁴⁾	VC.3039 VC.3039-HDS ⁽⁴⁾	VC.3036 VC.3036-HDS ⁽⁴⁾	VC.3043 VC.3043-HDS Touch ⁽⁴⁾	VC.3045 VC.3045-HDS ⁽⁴⁾	VC.3048 VC.3048-HDS

* Frame rates depend on resolution and output mode and have been determined at optimal conditions

⁽¹⁾ capture mode (resolution depends on output mode)

⁽²⁾ live view (resolution depends on output mode)

⁽³⁾ USB-2.0 compatible but limitations in speed and resolution

⁽⁴⁾ model with attached HD screen, 1080p

⁽⁵⁾ English, Chinese Simplified, Traditional Chinese, Thai, German, Italian, French, Korean, Japanese, Russian, Polish and portugese

⁽⁶⁾ English, Catalan, Indonesian, Polish, Chinese Simplified,

Traditional Chinese, Thai, German, Italian, French, Korean, Japanese, Russian, Turkish, Spanish

BUILT-IN SOFTWARE FEATURES (HDMI MODE)

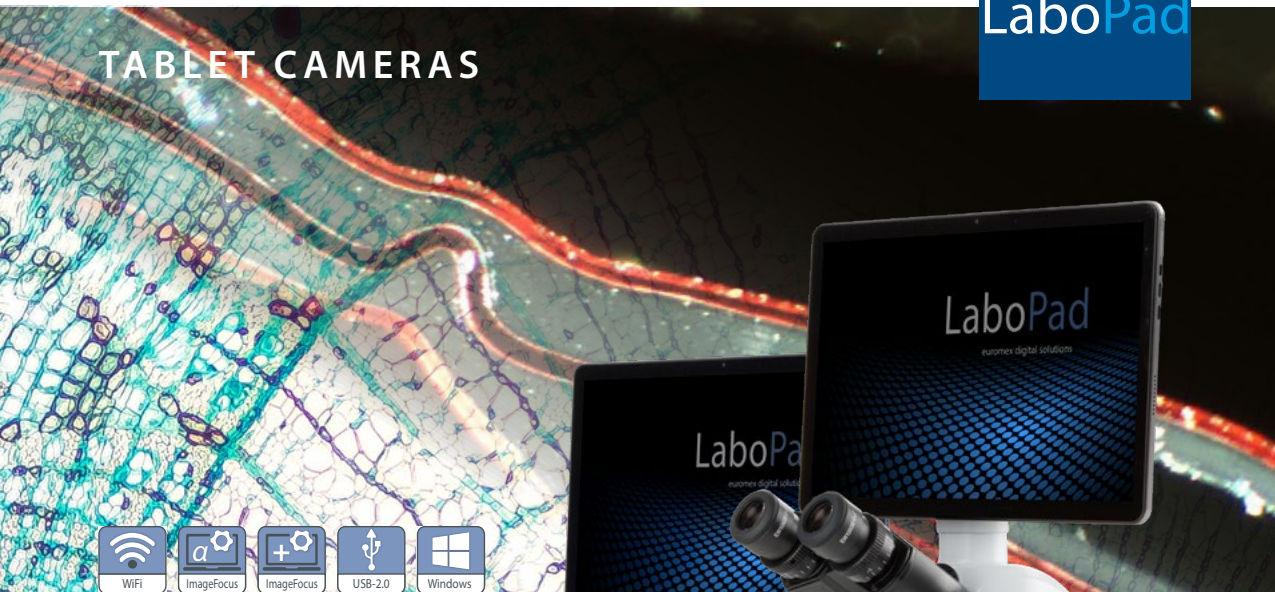
MODELS	HD-Mini	HD-Lite	HD-Pro HDMI	HD-Ultra	UHD-4K Touch	UHD-4K	UHD-4K-16
Image capturing (JPEG)	1920 x 1080	2592 x 1944	3840 x 2160	3261 x 1840	3840 x 2160	3840 x 2160	5440 x 3060
Video recording	1920 x 1080 MP4	1920 x 1080 AVI	1920 x 1080 MP4	1920 x 1080 AVI	3840 x 2160 MP4	3840 x 2160 MP4	3840 x 2160 MP4
Browse saved images	.	.	.	.	.	.	.
Browse saved video's	.	.	.	.	.	.	.
Mouse driven	.	.	.	.	.	.	.
Auto exposure	.	.	.	.	.	.	.
Exposure time	0.01 ~ 1000 ms	0.001s ~ 10 s	0.04 ~ 1000 ms	0.001s ~ 10 s	0.04 ~ 1000 ms	0.04 ~ 1000 ms	0.04 ~ 1000 ms
Gain	.	.	.	.	.	.	.
RGB & white balance	.	.	.	.	.	.	.
Gamma	.	.	.	.	.	.	.
Sharpness	.	.	.	.	.	.	.
Noise reduction	3D algorithm	3D algorithm	3D algorithm	3D algorithm	standard noise reduction	3D algorithm	3D algorithm
Saturation & contrast	.	.	.	.	.	.	.
Horiz. & vert. flip	.	.	.	.	.	.	.
Grids	multi	multi	User defined	cross/multi	cross/multi	cross/multi	cross/multi
Autofocus	--	--	--	--	--	--	--
Compare function	--	.	.	.	.	.	.
Measurement functions	captured & live images	--	captured & live images	captured & live images	captured & live images	captured & live images	captured & live images
Line & free curve	--	--	.	.	.	.	.
Polygon & rectangle	--	--	.	.	.	.	.
Angle	--	--	.	.	.	.	.
Circle 3 points	--	--	.	.	.	.	.
Circle radius	--	--	.	.	.	.	.
Export function	--	--	CSV	CSV, Txt	CSV	CSV	CSV
Languages	10 ⁽⁴⁾	9 ⁽³⁾	10 ⁽⁴⁾	9 ⁽³⁾	10 ⁽⁴⁾	10 ⁽⁴⁾	10 ⁽⁴⁾
Product number	VC.3023 VC.3024-HDS ⁽⁴⁾	VC.3031 VC.3031-HDS	VC.3039 VC.3039-HDS	VC.3036 VC.3036-HDS	VC.3043 VC.3043-HDS Touch	VC.3045 VC.3045-HDS	VC.3048 VC.3048-HDS

HDMI mode

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

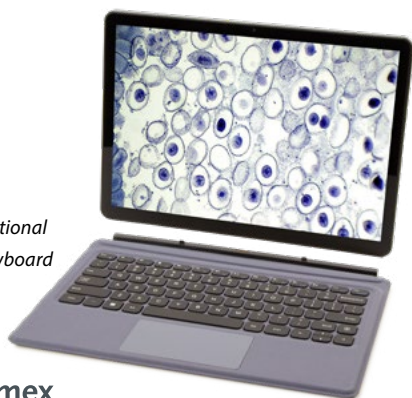
⁽⁴⁾ English, Chinese Simplified, Traditional Chinese, Thai, German, Italian, French, Korean, Japanese, Russian

TABLET CAMERAS



LaboPad

Discover the LaboPad – a versatile **tablet microscope camera system** that can easily be mounted onto your microscope. Capture stunning images and videos, then edit and analyze them with powerful ImageFocus software. The LaboPad can be detached for use as a regular tablet, offering flexibility in and out of the lab. An optional attachable keyboard adds even more functionality, making it the perfect all-in-one solution for modern microscopy



● LP.1000, optional click-on keyboard



product information

SOFTWARE

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



● LaboPad, detachable, take it anywhere

SPECIFICATIONS

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

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

MODELS	Camera (MP)	Sensor size	Resolution	Pixels size (µm)	ADC	Color rendering	Dynamic (dB)	Sensitivity	Software	Product number
LaboPad-2	2.1	1/2.9"	1920 x 1080	2.8 x 2.8	12 bits	24 bits	--	0.51 V/lux-sec	IF Plus	LP.2000f
LaboPad-5	5.1	1/2.8"	2592 x 1920	2.0 x 2.0	12 bits	24 bits	72 dB	2.0 V/lux-sec	IF Plus	LP.5000f
LaboPad-12	12.0	1/2.3"	4072 x 3176	1.33 x 1.33	8 bits	24 bits	60 dB	1.5 V/lux-sec	IF Plus	LP.12000f
LaboPad-WiFi	4	1/1.8"	2688 x 1512	2.9 x 2.9	12 bits	24 bits	48 dB	0.9 V/lux-1/30 sec	IF Alpha	LP.5000-WiFi

All LaboPads have ImageFocus preinstalled
The WiFi model connects to the pad via USB or WiFi, but allows use of the ImageFocus apps (IOS/Android)
All LaboPad models are supplied with a C-mount objective that fits the standard 23.2 mm trinocular tubes

HIGHLIGHTS

- 12.1" Tablet with microscope camera
- 2160 x 1440 pixels touch screen
- Windows 11
- ImageFocus Plus software for PC
- IF Alpha for WiFi enabled PC, Android and iOS devices
- Tablet can be fully detached from camera
- Optional keyboard

SOFTWARE

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

IMAGE FOCUS 4	
DC.1300c	

IMAGE FOCUS PLUS	
VC.3031(-HDS)	DC.2000f
VC.3036(-HDS)	DC.5000f
	DC.12000f

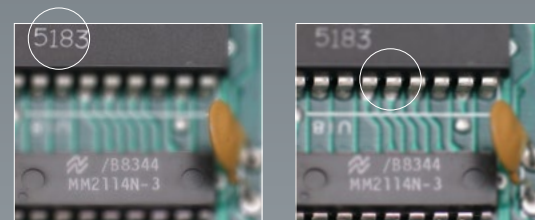
IMAGE FOCUS ALPHA	
MZ.4700(-HDS)	DC.5000-WiFi-4
MZ.4702(-HDS)	DC.6000i
	DC.20000i
VC.3039(-HDS)	DC.6000s
VC.3043(-HDS)	DC.12000s
VC.3045(-HDS)	DC.20000s
VC.3048(-HDS)	DC.5000-Pro
	DC.10000-Pro
	DC.20000-Pro
	DC.32000-PRO

IMAGE STITCHING

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

EXTENDED DEPTH OF FOCUS

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



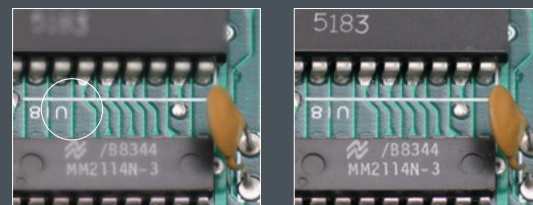
ImageFocus Plus software

ImageFocus Plus has a wide range of functions: Measurements on still and live image
 Extended depth of focus and stitching on still and live image (only with VC.3036 and VC.3031 cameras)
 Images can be saved in .jpg, .tif, .bmp or .dicom formats as well as .avi and mpeg-4 format videos
 The brightness, contrast and saturation of captured images can be adjusted
 Camera parameters for exposure time, white balance and color control are easily accessible
 The software also has specific functions for fluorescence such as combining captured fluorescence images
 Compatible with Windows 10 and higher, both 32 and 64 bits configuration. A MacOS version is also available
 PC requirements: Intel Core2 2.8 GHz or higher or equivalent, 2 GB memory or more, 17" screen

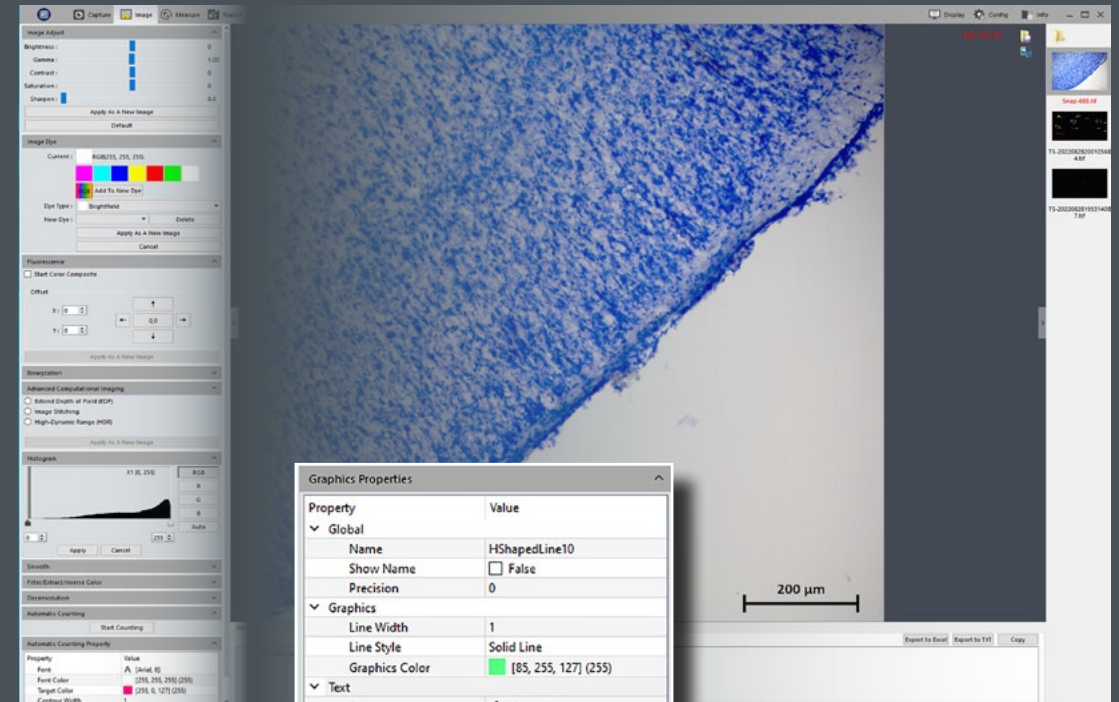
ImageFocus Plus software features English, German, French, Dutch, Spanish and Russian



downloads



FREE UPDATES
 AVAILABLE ON
 EUROMEX.COM



Graphics Properties

Property	Value
Global	
Name	HShapedLine10
Show Name	<input type="checkbox"/> False
Precision	0
Graphics	
Line Width	1
Line Style	Solid Line
Graphics Color	[85, 255, 127] (255)
Text	
Font	A [Arial, 20]
Font Color	[255, 255, 0] (255)
No Background	<input checked="" type="checkbox"/> True
Background Color	[255, 255, 255] (255)

Apply To All Default





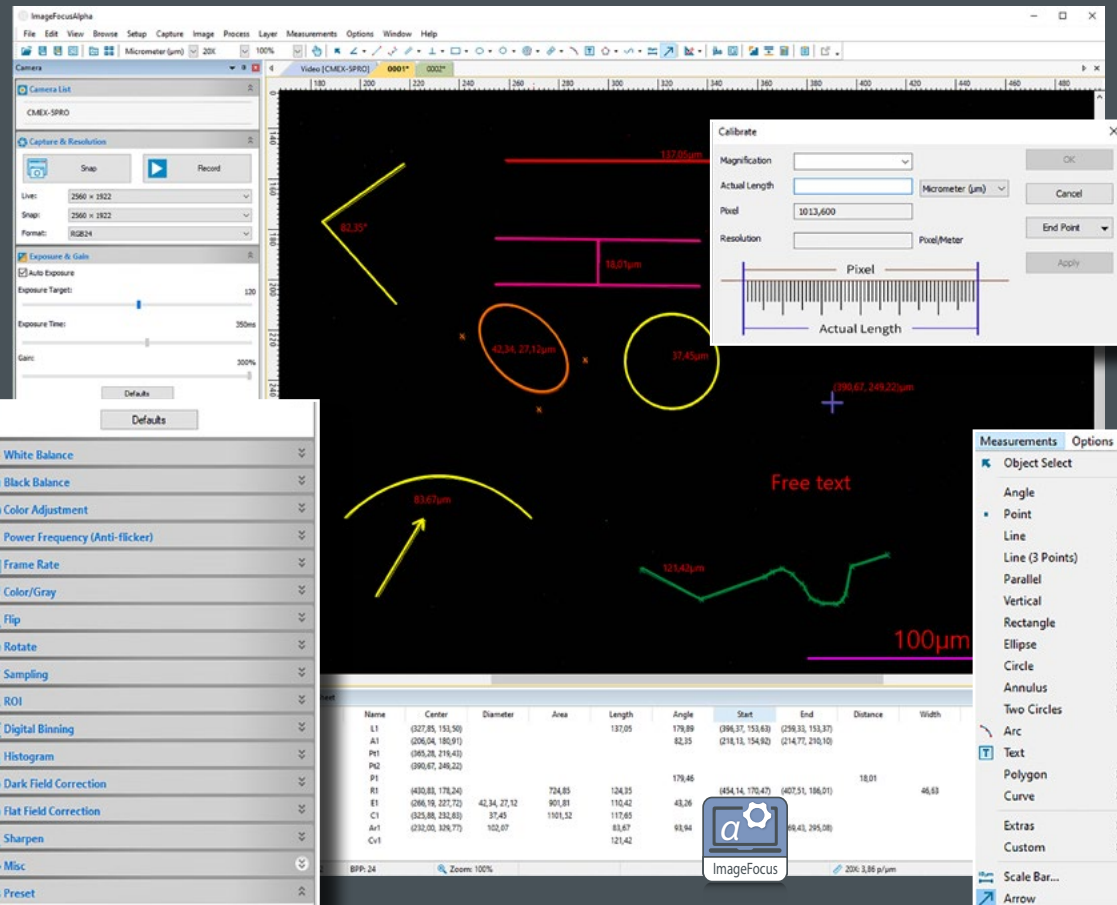
ImageFocus Alpha software

ImageFocus Alpha has a wide range of functions:

- Measuring, segmentation & counting, stitching of images, extended depth of focus, etc
- Images can be saved in .jpg, .tif, .bmp or .dicom formats as well as .avi format videos
- The brightness, contrast and saturation of captured images can be adjusted
- Camera parameters for exposure time, white balance and color control are easily accessible

- The software also has specific functions for fluorescence such as combining captured fluorescence images
- Compatible with Windows 10 and higher, both 32 and 64 bits configuration. A MacOS version is also supplied (with a few differences in features)
- PC requirements: Intel Core2 2.8 GHz or higher or equivalent, 2GB memory or more, 17" screen

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



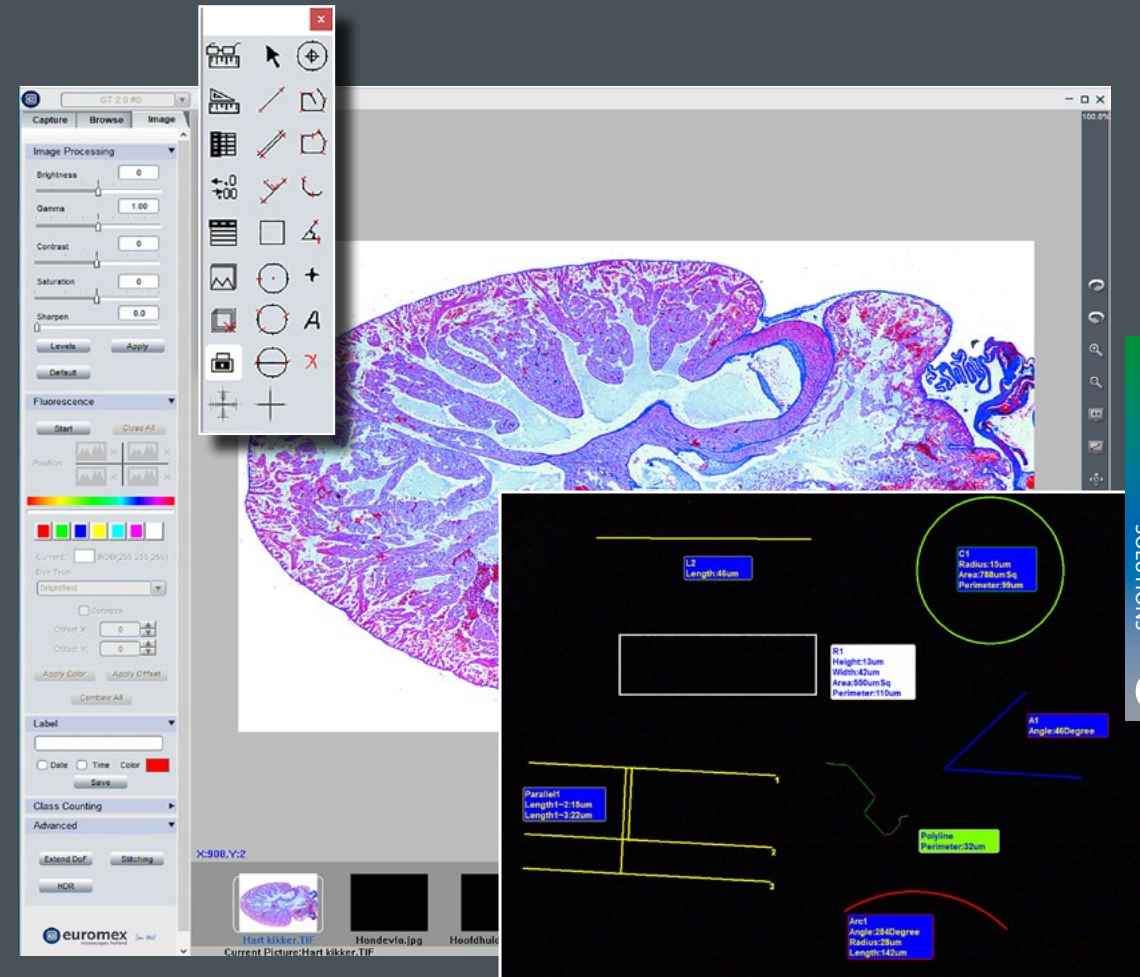
ImageFocus 4 software

ImageFocus 4 has a wide range of functions:

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

- The software also has specific functions for fluorescence such as combining captured fluorescence images
- Compatible with Windows 10 and higher, both 32 and 64 bits configuration. A MacOS 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

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





ImageFocusLabs

software for materials science

ImageFocusLabs is specifically designed to support your daily microscopy routines, micro-imaging and microstructure analysis. With an intuitive and user-friendly interface, the software streamlines your quality control procedures, improving both accuracy and consistency

Easy to use control panels guide you step-by-step through each analysis, removing guesswork and ensuring reliable, repeatable results

TWO EDITIONS – SCALABLE TO YOUR NEEDS

ImageFocusLabs is available in two versions. These two options ensure a tailored solution for every laboratory. Software is supplied on a encrypted, licensed USB-dongle.

ImageFocusLab Grain size:
Includes Image capture +
Manual and Auto Measurements tools
Manual Count, Annotations
ASTM Grain Size analysis as per ASTM E112
Product number: SW.1051-G

ImageFocusLab Cast iron size:
Includes Image capture +
Manual and Auto Measurements tools
Manual Count, Annotations
Cast Iron analysis as per ASTM A247
Product number: SW.1051-C

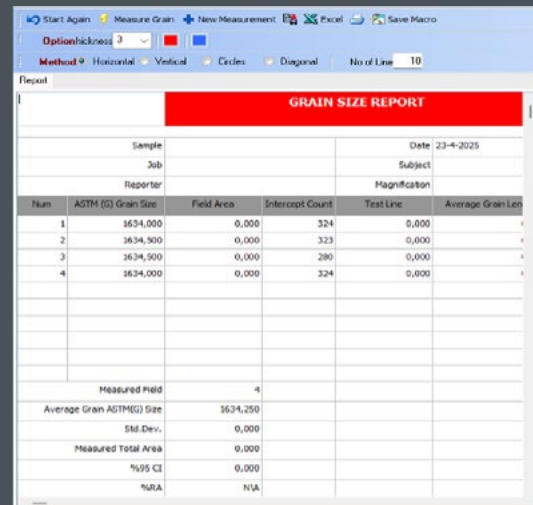
OPTIMIZED FOR EUROMEX MICROSCOPY SYSTEMS

ImageFocusLabs is engineered for seamless integration with Euromex CMEX-PRO and sCMEX cameras, as well as the full range of Euromex metallurgical and stereo microscopes. With this perfect synergy between hardware and software, Euromex delivers a complete turnkey solution for high-performance metallurgical analysis and documentation

Key features

CUSTOMIZED REPORTING & USER SUPPORT

- Automatically compiled report sheets for all measurements according to industry standards
- Easy export to Excel
- Add your company logo, calibration scale, annotation text and arrows
- Save images with measurement overlays
- Access the built-in user manual with one click

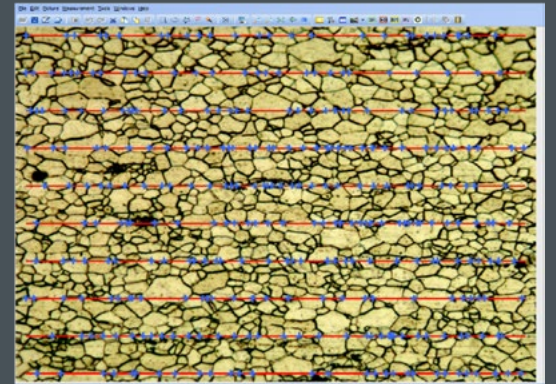


Grain size analysis

Grain boundaries are detected automatically

Calculates grain size using:

- Horizontal, vertical, diagonal and circular intercept methods
- ASTM Grain Size Number (G value)
- 95% Confidence Interval and Relative Accuracy (RA)
- Comprehensive reporting included

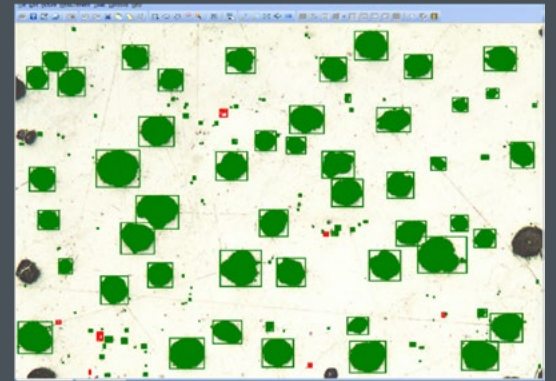


Cast iron size analysis

NODULARITY ANALYSIS

Conforms to ASTM A247, automatically measures graphite percentage, nodule density per mm², nodularity by area and count, classification and color-coding from class 1 to 8, ferrite and pearlite matrix percentages

Results are automatically compiled into a clear, structured report with multi-image statistics



PHASE ANALYSIS (%)

Segment and quantify metallurgical phases like Ferrite, Pearlite and Graphite using threshold-based selection.



SPHERICITY

Calculates the percentage of round (spheritized) graphite particles: (based on ASTM A247)

Adjustable shape factor (default 0.6), counts spherical and non-spherical particles, includes pore/particle size distribution tables and color-coded classifications



PARTICLE SIZE & PORE ANALYSIS

Detect and measure micro-objects or pores, categorize by radius and diameter and export full results to Excel.

GRAY IRON & FLAKE ANALYSIS

Analyzes and classifies graphite flakes:

Measures flake length and class

Calculates average % graphite, Ferrite and Pearlite

All data integrated into a single report

FOR ALL
MICROSCOPE
CAMERAS

ADAPTERS



adapters



● AE.5130

● NZ.9850

adapter guide

microscope and camera

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

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

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

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

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

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

⁽⁴⁾ Zeiss PrimoStar, C-mount, anodized aluminum

⁽⁵⁾ Zeiss 60N-C, 60N-T2 photo ports of Axio examiner, Axio Imager, Axio Lab, Axio Observer, Axio Scope, Axio Zoom, Stemy 508 and SteREO Discovery

⁽⁶⁾ Nikon E100, E200, 50i, 55i, 80i, 90i, Ni series, Ti Series, SMZ800, SMZ1000, SMZ15000, 38 mm to 25.4 mm C-mount, stainless steel
Standard C-Mount: 25.4 mm (1 inch) diameter with 32 threads per inch

● AE.9835-L



23.2 MM PHOTO PORT C-MOUNT ADAPTERS

Suitable for all Ø 23.2 mm (photo) tubes

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



● DC.1355 ● DC.1330 / DC.1335 ● DC.1324



● AE.5130 ● AE.5120-2

PHOTO PORT ADAPTERS

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

Achios-X Observer

- AX.9850** C-mount adapter 0.5x (standard included)
- AX.9810** C-mount adapter 1x

Achios-X Inverso, AI.1053 and AI.3153 models

- AI.9810-3** C-mount photo adapter 1x
- AI.9850-3** C-mount photo adapter 0.5x

Achios-X Inverso, AI.4058 and AI.4158 models

- AI.9810-4** C-mount photo Adapter 1x
- AI.9870-4** C-mount photo Adapter 0.7x
- AI.9850-4** C-mount photo Adapter 0.5x

bScope materials BS.40XX models

- BS.9810** C-mount with 1x magnification for 1 inch sensor cameras
- BS.9850** C-mount with 0.5x magnification for 1/2 inch sensor cameras
- BS.9865** C-mount with 0.65x magnification for 2/3 inch sensor cameras

Delphi-X Inverso

- DI.9840** C-mount with high resolution 0.40x objective for 1/3 inch C-mount camera

- DI.9850** C-mount with high resolution 0.50x objective for 1/2 inch C-mount camera

- DI.9810** C-mount with 1x magnification for C-mount camera

Delphi-X Observer

- DX.9835** C-mount with high resolution relay 0.35x objective for 1/3 inch C-mount camera

- DX.9850** C-mount with high resolution relay 0.50x objective for 1/2 inch C-mount camera

- DX.9863** C-mount with high resolution relay 0.63x objective for 2/3 inch C-mount camera

- DX.9810** C-mount with 1 magnification for C-mount camera

Oxion Inverso

- 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

NexiusZoom

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

StereoBlue

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

accessories

for microscopy



accessories



product information

- ILLUMINATION SOLUTIONS • 362
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LE.1975

FEATURED



LE.1975

Discover the LE.1975, a polarizing LED ringlight
page 366

illumination solutions

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

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

illumination solutions



education



university



life science



industry

ACCESSOIRES
FOR MICROSCOPY

9

ILLUMINATION SOLUTIONS

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



Illumination solutions

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



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

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

Power	150 W halogen	30 W PowerLED (equivalent to 120 W halogen)
Luminous flux	21,000 lux max ¹⁾	30,000 lux max.*
Color temperature	3,000 K	6,500 K
Operating voltage	230 V ac / 15 V dc (50/60 Hz)	230 V ac / 12 V dc (50/60 Hz)
Dimensions	(h) 150 x (w) 150 x (d) 230 mm	150 (h) x 150 (w) x 230 mm (d)
Weight	3,9 kg	2.8 kg
Model	LE.5211	LE.5211-LED

* with LE.5214 dual arm light conductor

MULTIFUNCTIONAL 100 W HALOGEN • COLD LIGHT SOURCE

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



Power	100 W halogen
Luminous flux	20,000 lux max.*
Color temperature	3,000 K
Operating voltage	110 and 230 V ac / 12 V dc (50/60 Hz)
Dimensions	115 (h) x 320 (w) x 215 mm (d)
Weight	3.8 kg
Model	LE.5210

* with LE.5214 dual arm light conductor

COMPACT SINGLE 20 W LIGHT SOURCE

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



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

ECONOMICAL AND COMPACT DUAL 3 W LED • LIGHT SOURCE

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

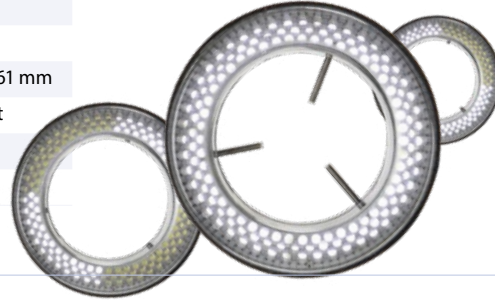


Power	2x 3 W LED = 2x 28 W halogen equivalent
Luminous flux	25,000 lux
Color temperature	6,500 K
Operating voltage	100-240 V ac / 5 V dc (50/60 Hz)
Dimensions	70 (h) x 106 (w) x 140 mm (d)
Weight	1.5 kg
Model	LE.5207

144 LEDS RINGLIGHT SOURCE • LE.1973

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

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



COMPACT 72 LEDS • LE.1974

Compact 20,000 lux LED ringlight source



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

LED RINGLIGHT • LE.1979

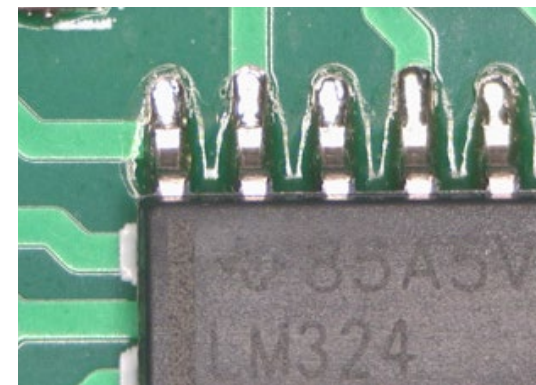
Ring illumination	144 LEDs with adjustable intensity and diffuser
Color temperature	6,500 K
Illuminance	21,000 lux at 100 mm distance
working distance:	50 to 180 mm
Mounting	for stereo head with diameter from 45 to 77 mm
Power supply	290-240 V ac / 12 V dc (50/60 Hz)
External diameter	120 mm
Model	LE.1979



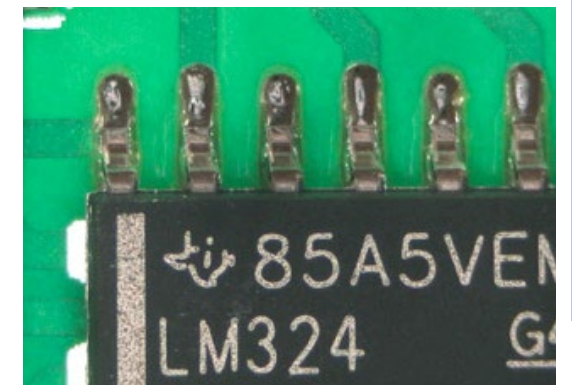
POLARIZING LED RINGLIGHT • LE.1975

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

Ring illumination	16 high power LEDs with adjustable intensity
Color temperature	6,500-7,500 K
Illuminance	≥ 44000 lux at 100 mm distance
working distance:	from 40 to 120 mm
Mounting	for stereo head with diameter from 25 to 61 mm
Power supply	100-240 V ac / 12 V DC
External diameter	90 mm
Model	LE.1975



● without polarization



● with polarization

ILLUMINATION STATION LE.5212

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

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

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



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.5216** Single arm flexible fiber light conductor, 100 cm long, 4 mm diameter

- LE.5222** Focusing head for focusing lens LE.5224 or filters LE.5229 and LE.5231 (for fiber light conductors)
- LE.5224** Focusing lens. Requires LE.5222 or LE.5228 for mounting on LE.5213 and LE.5214
- LE.5228** Focusing head with iris diaphragm (for fiber light conductors)
- LE.5231** Conversion KB12/80B filter

HALOGEN BULBS AND FUSES

- 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

- LE.5263** Interchangeable self-sustaining gooseneck-type guide with a 420 nm high-power Violet-LED for NZ.9018, LE.5207 or LE.5212, 1 pc (D)
 - LE.5264** Polarization filter, screw on type for Interchangeable self-sustaining gooseneck-type guides for NZ.9018, LE.5207 or LE.5212, 1 pc
- WD = working distance

FOR LE.5212

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



● Dual arm fiber light conductor



● LE.5212 on a NexusZoom stand (NZ.9000) with NexusZoom binocular head (NZ.5302)

PREPARATION ACCESSORIES

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



product information

dissection instruments

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



SCISSORS AND BLADES

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



HANDHELD MICROTOMES

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



ACCESSORIES FOR MICROSCOPY

9

PREPARATION ACCESSORIES



product information



dissection kits

4-PC DISSECTION KIT

PB.5110 IN IMITATION LEATHER CASE

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

6-PC DISSECTION KIT

PB.5111 IN PLASTIC CASE

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

10-PC DISSECTION KIT

PB.5112 IN IMITATION LEATHER CASE

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



● PB.5112

9-PC DISSECTION KIT

PB.5114 IN WOODEN CASE

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



● PB.5114

6-PC DISSECTION KIT FOR KOI FISH

PB.5115 IN PLASTIC CASE

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



● PB.5115

PROFESSIONAL SLIDE PREPARATION KIT

PB.5125 IN PLASTIC DELUXE CASE

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



● PB.5125

● PB.5110

● PB.5111

MICROSCOPE PREPARED SLIDES



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



product information

sets with 25 slides for education

histology, zoology and botany set

PB.5211 FOR EDUCATION

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

HISTOLOGY

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

ZOOLOGY

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

BOTANY

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

histology, zoology and botany set

PB. 5212 FOR EDUCATION

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

HISTOLOGY

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

ZOOLOGY

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

BOTANY

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

USED ABBREVIATIONS

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

histology, zoology and botany set

PB. 5213 FOR EDUCATION

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

HISTOLOGY

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

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

ZOOLOGY

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

BOTANY

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

histology, zoology and botany set

PB. 5214 FOR EDUCATION

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

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

HISTOLOGY OF MAMMALS

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

ZOOLOGY

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

BOTANY

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

histology, zoology and botany set

PB. 5215 FOR EDUCATION

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

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

HISTOLOGY

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

ZOOLOGY

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

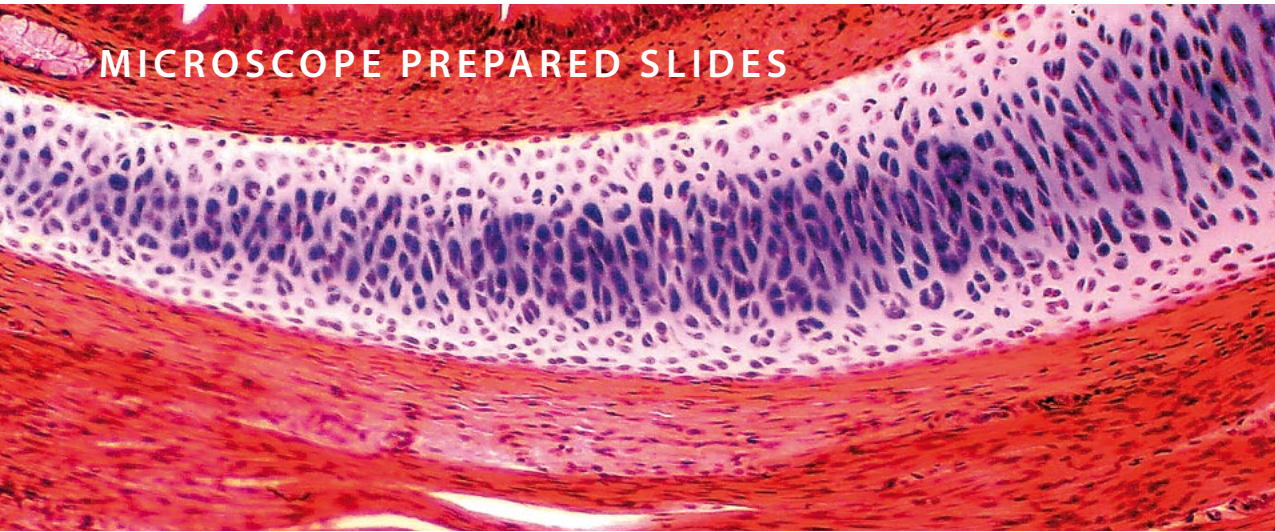
BOTANY

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

USED ABBREVIATIONS

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

MICROSCOPE PREPARED SLIDES



sets with 23 slides for education

mammal histology set

PB.5221 SET FOR EDUCATION

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

EPITHELIUM AND CONNECTIVE TISSUES

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

RESPIRATORY, BLOOD CIRCULATION AND ENDOCRINE SYSTEM

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

DIGESTIVE SYSTEM

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

URINARY AND GENITAL SYSTEM

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

NERVOUS SYSTEM AND SENSORY ORGANS

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

mammal histology set

PB.5222 SET FOR EDUCATION

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

EPITHELIUM AND CONNECTIVE TISSUES

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

RESPIRATORY, BLOOD CIRCULATION AND ENDOCRINE SYSTEM

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

DIGESTIVE SYSTEM

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

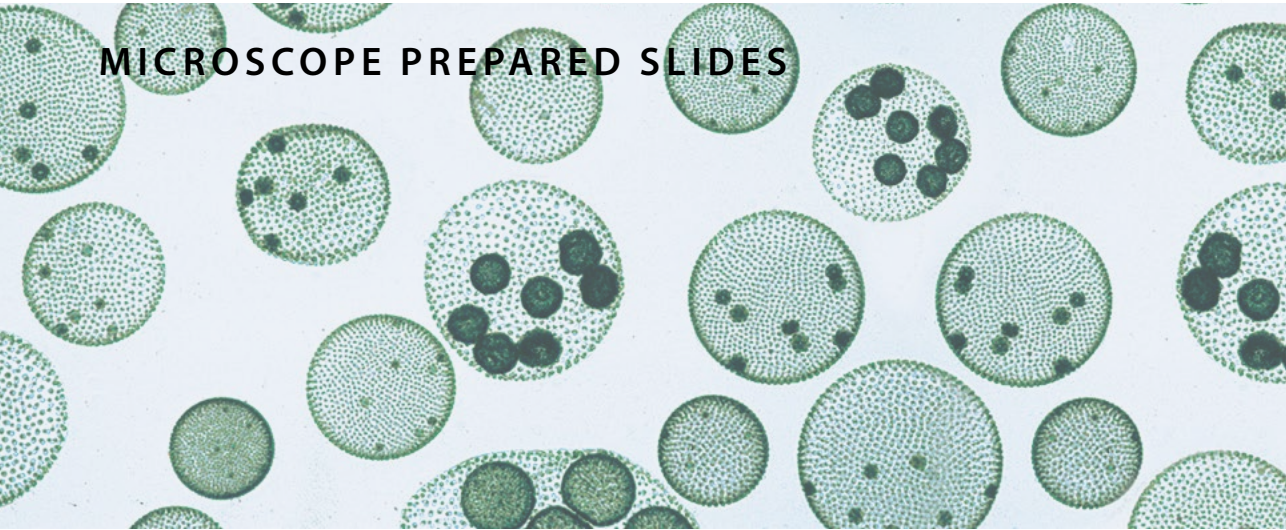
URINARY AND GENITAL SYSTEM

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

NERVOUS SYSTEM AND SENSORY ORGANS

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

MICROSCOPE PREPARED SLIDES



set for hobby 10 slides

zoology and botany set

PB.5204 SET FOR HOBBY

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

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

ZOOLOGY

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

BOTANY

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

USED ABBREVIATIONS

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

set for hobby 25 slides

slides of histology, zoology and botany

PB.5218 SET FOR HOBBY

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

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

HISTOLOGY OF HUMAN AND MAMMALS

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

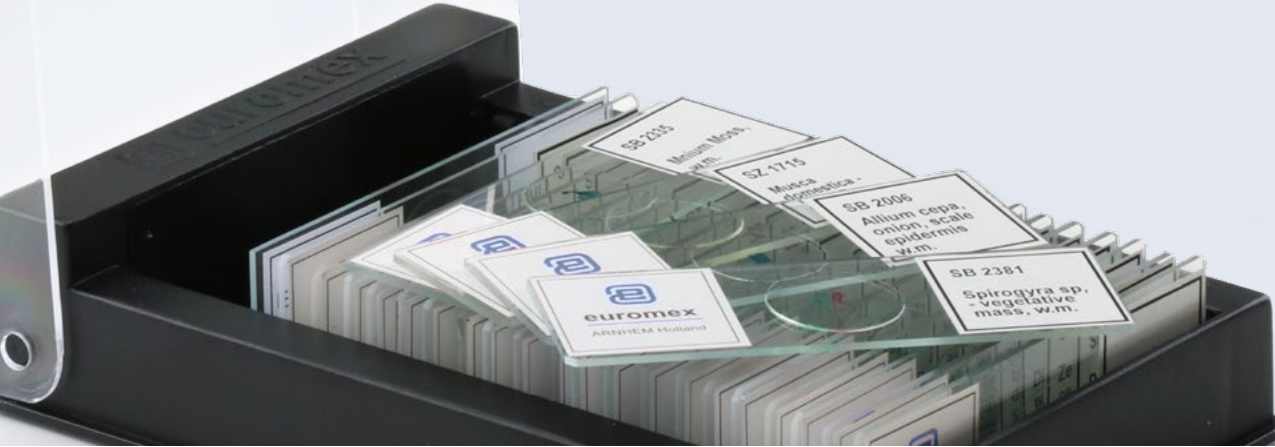
BOTANY

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

ZOOLOGY

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

MICROSCOPE PREPARED SLIDES



individual euoslides prepared slides

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

These high quality microscope slides are usually supplied directly from stock, at the very best prices.

The slides on the next page are separately available



HOW TO ORDER INDIVIDUAL EUOSLIDES

Minimum purchase quantity is 10 pieces of the same slide

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

individual euoslides for histology

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

EPITHELIUM AND CONNECTIVE TISSUES

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

RESPIRATORY, BLOOD CIRCULATION AND ENDOCRINE SYSTEM

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

DIGESTIVE SYSTEM

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

URINARY AND GENITAL SYSTEM

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

NERVOUS SYSTEM AND SENSORY ORGANS

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

USED ABBREVIATIONS

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

individual euroslides for zoology

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

PROTOZOA

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

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

COELENTERATA

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

HELMINTHES

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

CRUSTACEANS

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

INSECTS

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

AMPHIBIANS

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

individual euroslides for botany

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

ROOTS

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

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

STEMS

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

LEAVES

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

FLOWERS, FRUITS AND SEEDS

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

FERNS AND MOSSES

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

FUNGI

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

ALGAE

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

BACTERIA

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

HOW TO ORDER INDIVIDUAL EUROSLIDES

Minimum purchase quantity is 10 pieces of the same slide

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

GLOBE SLIDES



product information

microscope slides

for professional use

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

MICROSCOPE SLIDES

General purpose microscope slides

The economical alternative for less demanding applications

Diamond Essentials microscope slides

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

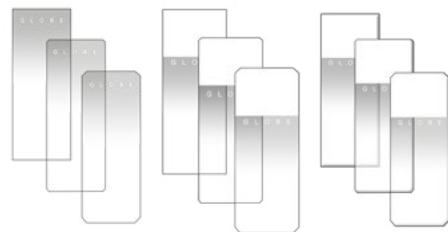
Diamond White Glass microscope slides

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

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

CORNER/EDGE TYPES

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



● Plain ● Frosted ● Frosted and embossed

GENERAL PURPOSE SLIDES

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

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

DIAMOND ESSENTIALS

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

DIAMOND WHITE GLASS

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

ACCESSOIRES FOR MICROSCOPY

9

ACCESSOIRES FOR MICROSCOPY

9

COVER GLASSES

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

KEY FEATURES

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



● Cover glasses

COVER GLASS

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

SLIDE MAILERS

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

RELIABLE PROTECTION

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

KEY FEATURES

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

Cardboard slide mailers

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

Extra sturdy plastic slide mailers

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

Plastic slide mailers with flip top lids

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

Side opening — for 5 slides

The side opening lid provides easy access to the entire length of the slide



● Slide mailers

SLIDE STORAGE

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

KEY FEATURES

- **Secure storage:**
Protects slides from damage, dust and contaminants
- **Organization:**
Various sizes and configurations for efficient workflow
- **Compatibility:**
Accommodates standard microscope slides
- **Space-efficiency:**
Maximizes storage space in laboratories

Slide storage boxes

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

Heavy-duty slide storage boxes with stainless steel clasp

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



SLIDE MAILERS

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

SLIDE STORAGE

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

DISPOSABLES



product information

disposables

Microscope slides for educational use

- PB.5150** Microscope slides 76 x 26 mm, clear glass, cut edges. 50 pieces
- PB.5155** Microscope slides 76 x 26 mm clear glass, ground edges. 50 pieces
- PB.5157-W** Microscope slides 76 x 26 mm, ground white frosted side, 50 pieces
- PB.5157-B** Microscope slides 76 x 26 mm, ground blue frosted side, 50 pieces
- PB.5160** Microscope slides 76 x 26 mm with concavity, ground edges. 10 pieces

- 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

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



product information



MISCELLANEOUS ACCESSORIES

- PB.5200** Staining trough for 10 slides
- PB.5210** Fine pointed brush
- PB.5245** Lens paper. 100 sheets
- PB.5250** Solid paraffin. Melting point 60°C, 200 grams
- PB.5255** Immersion oil, refractive index nD = 1.515. (25 ml)
- PB.5265** Entellan, quick drying Canada balsam. In bottle (25 ml)
- PB.5274** Isopropyl alcohol 99%. In bottle (200 ml)
- PB.5277** Formalin 40%, fixing agent. In bottle (200 ml)
- PB.5275** Cleaning kit: lens cleaning fluid, lint free lens tissue, brush, air blower, cotton swabs
- PB.5276** Microscope maintenance and servicing kit, 16 pieces: cleaning brush, screwdriver set of 6, air blower, 3 Allen keys, 1.5, 2, 2.5 mm, lens cleaning fluid 20 ml, cleaning cloth 140 x 140 mm, 100 lens tissue sheets, tube of maintenance grease, 10 ml bottle of oil, packed in a nice toolbox

(DISSOLVED) STAINS

Supplied in 25 ml bottles

- PB.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



● PB.5276

● PB.5286 - PB.5297

● PB.5210

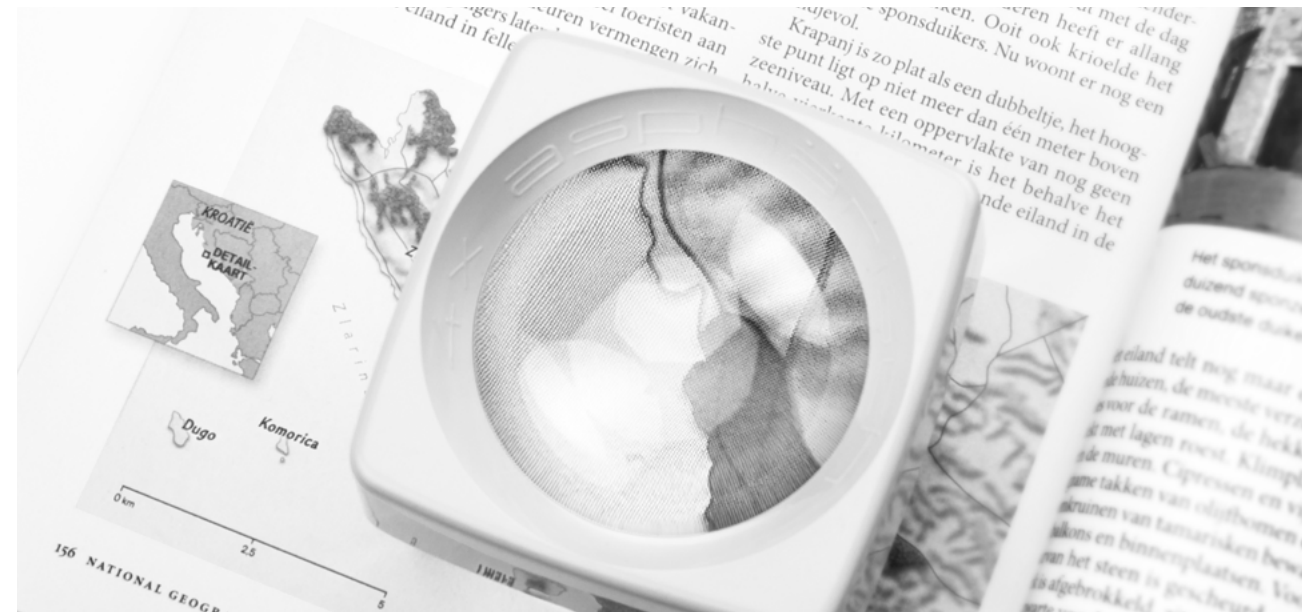
● PB.5245

other products

optical instruments



optical instruments



product information

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 • 396**
- REFRACTOMETERS • 400**
- POLARIMETERS • 406**
- SPECTROMETERS • 408**

MAGNIFIERS & MEASURING MICROSCOPES

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



product information

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.5020

● PB.5021

● 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 20 mm. Field of view 15 mm
- PB.5033** Achromatic magnifier 20x, triplet. Lens Ø 20 mm. Field of view 8 mm



● PB.5032

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



● PB.5016

FOLDING MAGNIFIERS WHITE LED ILLUMINATION

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



● PB.5034-LED

FOLDING MAGNIFIERS WHITE LED AND UV ILLUMINATION

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



● PB.5034-LUV

MAGNIFIERS & MEASURING MICROSCOPES

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



magnifiers & measuring microscopes

TABLE MAGNIFIERS

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



● PB.5039 / PB.5041



● PB.5040

MISCELLANEOUS MAGNIFIERS

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



● PB.5030



● PB.5049

MEASURING MAGNIFIERS WITH RETICLE

- PB.5044** Measuring magnifier 7x. Eyepiece Ø 18 mm. Field of view 24 mm. Measuring scale 10-0-10 mm divided into 0.1 mm and crosshairs
- PB.5045** Measuring magnifier 7x. Eyepiece Ø 18 mm. Field of view 24 mm. 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.5047** Measuring magnifier 10x. Eyepiece Ø 25 mm. Field of view 30 mm. Measuring scale 15-0-15 mm with 0.1, 0.2 and 0.5 mm graduations. White LED-illumination



● PB.5046



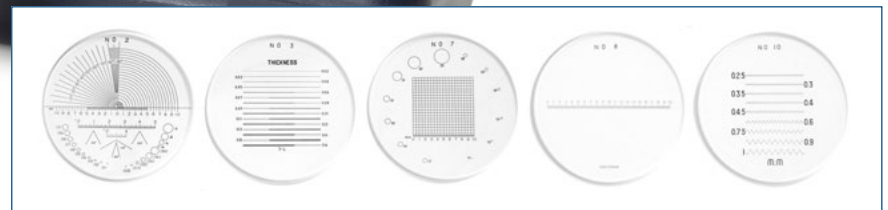
● PB.5047



● PB.5044



● PB.5045



MEASURING MICROSCOPES

- PB.5008** Measuring microscope 20x with LED illumination. Measuring scale 7.2 mm with 0.1 mm graduation
- PB.5010** Measuring microscope 40x with LED illumination. Measuring scale 3 mm with 0.05 mm graduation
- PB.5012** Measuring microscope 60x with LED illumination. Measuring scale 1.75 mm with 0.02 mm graduation
- PB.5014** Measuring microscope 100x with LED illumination. Measuring scale 1.1 mm with 0.01 mm graduation



● PB.5008

refractometers



refractometers



refractometers

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

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

REFRACTOMETERS • PAGE 402
ABBE REFRACTOMETER • PAGE 405

REFRACTOMETERS

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



● Analog refractometer

● Digital refractometer

refractometers handheld and table models

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

A few drops of the liquid that needs to be examined are gently deposited on a measuring prism and covered with a cover glass. The rays of the light source (ambient light, built-in LED light source or external cold-light source) will be bent (refracted) in function of the composition of the liquid under observation

This results in a shadow line between a dark and a light portion. The measured value can be directly read through a focusable eyepiece on a refraction index scale and/or on a specific built-in scale(s) of the refractometer in Brix, Oechsle, Babo units or % volume, specific gravity, protein in serum or in °C

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

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

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

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

ACCESSORIES AND SPARE PARTS

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

● Digital refractometer



● RF.6381



● 98.490

Abbe laboratory refractometer substance identification

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

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

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

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

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

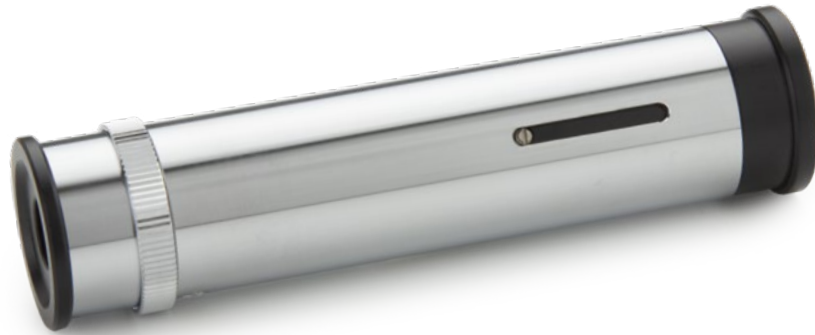


product information

Substance identification of sugar concentration

MODEL	Range	Accuracy	Remarks	Analog
98.490	0-95 Brix	0.1	Abbe table refractometer without light source	•
	1.300-1.700 RI	0.0002		

polarimeters & spectrosopes



polarimeters & spectrosopes

A polarimeter measures the rotation angle of polarized light traveling through an optically active substance.

The rotation angle of the polarization plane of linear polarized light is different for each optical active substance as described in the Law of Biot

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

Spectrosopes are used to visualize the light spectrum of light sources

POLARIMETERS



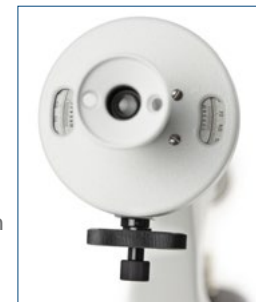
product information

polarimeter

● 99.400-LED

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

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



HIGHLIGHTS

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

ACCESSORIES FOR 99.400

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

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

SPECTROSCOPES

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



product information



handheld spectrosopes

SP.5200

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

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



• SP.5200

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

SP.5155

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

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



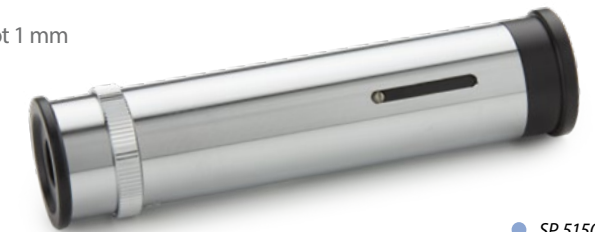
• SP.5155

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

SP.5150

Handheld spectroscope with adjustable slit from 0 tot 1 mm

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



• SP.5150

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

SP.5100

Handheld spectroscope with fixed slit

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



• SP.5100

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

choose the right euromex microscope

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

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



microscope selector

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

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

* materials models, ** fluorescence models, *** polarization models

UNIVERSITY LABS FIELD OF APPLICATION

RECOMMENDED MODELS

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

UNIVERSITY LABS FIELD OF APPLICATION

RECOMMENDED MODELS

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

* materials models, ** fluorescence models, *** polarization models

LIFE SCIENCE
LABORATORIES

FIELD OF APPLICATION

RECOMMENDED MODELS

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

LIFE SCIENCE
LABORATORIES

FIELD OF APPLICATION

RECOMMENDED MODELS

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

** fluorescence models *** polarization models

INDUSTRY	FIELD OF APPLICATION	RECOMMENDED MODELS
• aerospace	Manufacturing and quality inspection of rockets and space vehicles related parts	Delphi-X Observer, Achios-X Observer, bScope large samples, iScope, 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	bScope, bScope large samples, iScope, Achios-X Observer, StereoBlue, NexiusZoom, DZ series, UltraZoom, MacroZoom
• asbestos control	Research of asbestos fibers, environmental protection during restoration of older buildings	iScope, NexiusZoom, DZ series, UltraZoom, Z series
• automotive	Manufacturing and quality inspection of automotive related parts	Achios-X Observer, iScope, Achios-X Inverso, Oxion Inverso, NexiusZoom, DZ series, UltraZoom, Z series
• avionics	Manufacturing and quality inspection of aircraft related parts	Delphi-X Observer, Achios-X Observer, bScope large samples, iScope, NexiusZoom, DZ series, UltraZoom
• biochemistry	Study of chemical processes within living organism. Identification and classification of enzymes and structure of biomolecules	iScope, NexiusZoom, DZ series, UltraZoom
• chemistry	Study of the composition and properties of chemicals	Achios-X Observer, iScope
• cosmetics	Research, development and testing (safety) of substances for make-up or perfume	bScope, iScope, Achios-X Observer, NexiusZoom, DZ series, UltraZoom
• digital imaging	Observation and analysis of microscope images, save and captured the images and videos	CMEX cameras, CCD cameras, HD cameras, ProPad, MacroZoom
• electronics	Development, production, assembling and inspection of electronic components or circuitry	iScope, Achios-X Observer, NexiusZoom, DZ series, UltraZoom, Z series, BE-18 LED, MacroZoom
• environmental	Monitoring of environmental conditions such as water, atmosphere, ecosystems, soil and pollution	BioBlue.Lab, bScope, iScope, Achios-X Observer, 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, Achios-X Observer
• forensics	Analysis of scientific evidence. Toxicology, fingerprints, Forensic anthropology and archeology, forensic botany and entomology	BioBlue.Lab, bScope, bScope large samples, iScope, Achios-X Observer, Oxion Inverso, Oxion Inverso, Achios-X Inverso, NexiusZoom, DZ series, UltraZoom, Z series
• geology, mineralogy	Earth science, studying the solid, rocks and processes. Identification and classification of rocks and minerals	Achios-X Observer, bScope large samples, iScope, Oxion Inverso, StereoBlue, NexiusZoom, DZ series, UltraZoom, MacroZoom
• geology, petrology	Identification by means of a petrographic microscope	iScope (polarization)
• glass industry	Quality control, before, during and after the production of glass and coatings	Achios-X Observer, iScope, Achios-X Inverso, Oxion Inverso, bScope, StereoBlue, NexiusZoom, DZ series, UltraZoom
• horticulture	Selective breeding of plants and fruit for production of food	BioBlue.Lab, bScope, iScope, Achios-X Observer, StereoBlue, NexiusZoom, DZ series, UltraZoom, MacroZoom

INDUSTRY	FIELD OF APPLICATION	RECOMMENDED MODELS
• jewelry	Precise manufacturing of very small decorative items such as brooches, rings, bracelets and more	BE-18 LED series, StereoBlue, NexiusZoom, DZ series, Z series
• mechanics	Manufacturing and quality inspection of mechanical parts	Achios-X Observer, iScope, Achios-X Inverso, Oxion Inverso, bScope, bScope large samples, StereoBlue, NexiusZoom, DZ series, UltraZoom, MacroZoom
• metallurgy	Manufacturing and quality inspection of metallic elements, intermetallic compounds and alloys	Achios-X Observer, iScope, Achios-X Inverso, Oxion Inverso, bScope, bScope large samples, StereoBlue, NexiusZoom, DZ series, UltraZoom, MacroZoom
• mining	Extraction of minerals Identification, quantitative and qualitative evaluation of minerals	iScope (polarization), Achios-X Inverso, Oxion Inverso, bScope, StereoBlue, NexiusZoom, DZ series, UltraZoom
• paper industry	Production of paper related products. Quality inspection	Achios-X Observer, iScope, bScope, StereoBlue, NexiusZoom, DZ series, UltraZoom, MacroZoom
• petrochemical	Research and transformation of crude oil and natural gas	Achios-X Observer, iScope, bScope, StereoBlue, NexiusZoom, DZ series, UltraZoom
• petrology	Study of the composition and structure of rocks as branch of geology. Identification by means of polarization microscopy	iScope (polarization), StereoBlue, NexiusZoom, DZ series, UltraZoom
• pharmaceuticals	Development and production of drugs for medication. Quality assurance and inspection of produced products	Achios-X Observer, iScope, StereoBlue, NexiusZoom, DZ series, UltraZoom
• plastics	Development and production of plastics and plastic based compounds. Quality assurance and inspection	Achios-X Observer, iScope, Achios-X Inverso, Oxion Inverso, bScope, StereoBlue, NexiusZoom, DZ series, UltraZoom
• printing industry	Production of relief printing, lithography	Achios-X Observer, iScope, bScope, AP series, StereoBlue, NexiusZoom, DZ series, UltraZoom, MacroZoom
• textile	Development and production of all kinds of textile based products. Quality assurance and inspection	Achios-X Observer, iScope, Achios-X Inverso, Oxion Inverso, AP series, StereoBlue, NexiusZoom, DZ series, UltraZoom, MacroZoom
• water treatment	Production of drinking water and wastewater treatment. Quality control and disease prevention	BioBlue.Lab, bScope, iScope, Achios-X Observer,
• wood production	Wood production for construction material, fuel. Quality control	Achios-X Observer, bScope large samples, iScope, Achios-X Inverso, Oxion Inverso, AP series, StereoBlue, NexiusZoom, DZ series, UltraZoom, MacroZoom

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