

Euromex Since 1966!

MICROSCOPE

COLLECTION

2016

PART 1

MICROSCOPES FOR EDUCATION

PART 2

MICROSCOPES FOR LABORATORIES

PART 3 MICROSCOPES FOR INDUSTRY



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2016

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

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

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

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

## Choose the right EuromexMicroscope

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

**SEE PAGE 322** 

INDUSTRY | STEREO MICROSCOPES

NexiusZoom (ESD) • StereoBlue • DZ series • Z series • BE-50 series • P series

INDUSTRY | MATERIALS SCIENCE MICROSCOPES

INDUSTRY | DIGITAL SOLUTIONS

USB Cameras • Software • HD cameras • WIFI camera • Tablet camera • CCD camera • Adapters

iScope (material & polarization) • Oxion Inverso (material) • Oxion (material) • B series (material)

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

OTHER | OPTICAL INSTRUMENTS Magnifiers & measuring microscopes • Refractometer • Polarimeter • Spectroscopes • PathoScan

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# StereoMicroscopes

Industry



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# StereoMicroscopes

Industry

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

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



# NexiusZoom

The new standard in stereo microscopy



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

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



objectives and stands, with or without

industrial applications. With additional

from 3.3 up to 180 times can be achieved

ESD safe microscopes for the electronic

industry complete this series

lenses and objectives magnifications

illumination. Ideal for all kinds of

NZ.1903-S FSD

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

For weight of other products see table

### HIGHLIGHTS

- · Binocular and trinocular heads with HWF 10x/22 mm eyepieces
- Zoom 1: 6.7 ratio, 6.7x to 45x standard
- · Ergonomically designed stands
- · 3 W LED illuminations
- Configurations up to 180x magnification
- ESD safe microscopes
- 10 years warranty



### TECHNICAL SPECIFICATIONS

• Pair of HWF 10x/22 mm eyepieces.

### HEAD

**EYEPIECES** 

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

### **OBJECTIVE**

- Zoom 1:6.7 objective with 0.67x to 4.5x magnifications
- Field of view from 33 mm to 4.9 mm
- · Working distance 110 mm
- Additional 0.5x, 0.75x, 1.5x and 2.0x lenses available

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

### STAND

The rack & pinion and pillar stands of the NexiusZoom are equipped with an ergonomically designed, wide flat base. Complete with 2 object clamps and Ø 100 mm transparent and black/white stage plates and double illuminators. The coarse adjustment is equipped with tension control

The ergonomically designed universal single arm stand and double arm boom stand are ideal for looking at large samples or working under the microscope.

Standard supplied without illumination

Suitable for e.g. ring illuminators LE.1972 and LE.1973 with 60 or 144 power LEDs controlled in segments ideal for creating or lift shades

The stands are alloy metal casted with hardened off-white coating. ESD safe coating versions are also available

More illumination options see chapter 10 (Accessories)



### TECHNICAL SPECIFICATIONS

### 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

### **ESD SAFE MICROSCOPES**

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

Euromex therefore now 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

### **PACKAGING**

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

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

Electrostatic discharge (ESD)



### **MODELS**

	Binocular	irinocular	stand	каск & pinion stand	stand	stand	Articulated arm stand	ESD	weight (kg)
NZ.1902-P	•		•						5.0
NZ.1902-P-ESD	•		•					•	5.0
NZ.1902-S	•			•					4.9
NZ.1902-S-ESD	•			•				•	4.9
NZ.1902-U	•				•				15.6
NZ.1902-U-ESD	•				•			•	15.6
NZ.1902-B	•					•			22.1
NZ.1902-B-ESD	•					•		•	22.1
NZ.1902-A	•						•		8.6
NZ.1903-P		•	•						5.3
NZ.1903-P-ESD		•	•					•	5.3
NZ.1903-S		•		•					5.1
NZ.1903-S-ESD		•		•				•	5.1
NZ.1903-U		•			•				15.7
NZ.1903-U-ESD		•			•			•	15.7
NZ.1903-B		٠				•			22.2
NZ.1903-B-ESD		•				•		•	22.2
NZ.1903-A		•					•		8.7

### **MAGNIFICATIONS**

Working distance and field of view with standard HWF 10x / 22 High Wide Field eyepieces

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









### ACCESSORIES AND SPARE PARTS

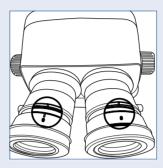
NZ.5302 NZ.5303	NexiusZoom binocular head with eyepieces NexiusZoom trinocular head with eyepieces	NZ.9850	C-mount adapter with 0.5x lens for 1/2" cameras (suitable for trinocular models)
NZ.6010	Pair of HWF 10x / 22 mm eyepieces	AE.5130	Universal SLR camera adapter with 2x projection
NZ.6015	Pair of HWF 15x / 16 mm eyepieces		lens for 23.2 mm tubes. Needs T2 adapter
NZ.6020	Pair of HWF 20x / 12 mm eyepieces	AE.5020	T2 adapter for Nikon D digital SLR cameras
NZ.6110	HWF 10x / 22 mm eyepiece with micrometer	AE.5040	T2 adapter for Canon EOS digital SLR cameras
NZ.6099	Pair of eyecups		Other T2 adapters on request
NZ.8905	Auxiliary lens 0.5x. Working distance 165 mm	LE.1972	Ring illuminator with 60 LEDs with adjustable
	(not suitable for NZ.1902-S and NZ.1903-S)		light intensity. External mains adapter
NZ.8907	Auxiliary lens 0.75x. Working distance 120 mm		100-240 V. With segment controller.
NZ.8915	Auxiliary lens 1.5x. Working distance 45 mm		Brightness of 8.500 Lux at height of 100 mm
NZ.8920	Auxiliary lens 2.0x. Working distance 30 mm		and color temperature of 6.400K.
	(not suitable for NZ.1902-S and NZ.1903-S)		Max. internal mounting diameter 60 mm
NZ.8950	Protection glass for NexiusZoom head	LE.1973	Ring illuminator with 144 LEDs with adjustable
			light intensity. External mains adapter
NZ.9010	Ergonomical rack & pinion stand		100-240 V. With segment controller.
	with transmitted and incident LED illuminators		Brightness of 20.000 Lux at height of 100 mm
NZ.9015	Ergonomical pillar stand		and color temperature of 6.400K.
	with transmitted and incident LED illuminators		Max. internal mounting diameter 60 mm
NZ.9020	Universal (single arm) stand	AE.1112	Object micrometer 50 mm
	without NexiusZoom head holder		(divided in 500 parts on glass slide 76 x 26 mm)
NZ.9030	Boom (double arm) stand		
	without NexiusZoom head holder	50.876	Dark field attachment
NZ.9090	NexiusZoom head holder		m
	(for NZ.9020 and NZ. 9030)		I.
NZ.9025	Articulated arm stand with table clamp		
	(without NexiusZoom head holder)		



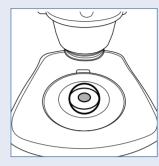
### How to set up a **Stereo Microscope**

QUICK **INSTALLATION** 

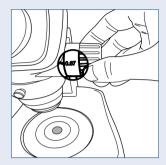
Setting up your stereo microscope properly is essential to getting parfocal images during the entire zoom range. It also prevents head aches, stressful eyes and fatique. Below you will find a set up guide that will help get the best out of your microscope



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



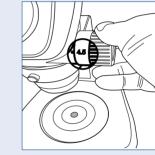
**7** Put a specimen on the stage plate



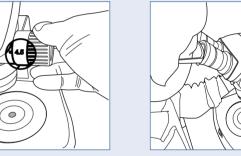
Turn the zoom adjustment knob to the lowest magnification



Rotate the focus adjustment knob to bring the specimen into focus



Turn the zoom adjustment knob to the highest magnification



Rotate the focus adjustment knob to bring the specimen into focus



Turn the zoom adjustment knob to the lowest magnification



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

### **PLEASE NOTE**

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

If not, please repeat steps 3 to 8

NZ.9950

NZ.9956

NZ.9570

NZ.9833

NZ.9081 NexiusZoom head holder

(for articulated arm stand NZ.9025)

**AE.5168-NZ** Heating stage with PID controller up to 50<sup>o</sup>C

Standard opaque stage plate

Pair of object clamps for stage

(suitable for trinocular models)

C-mount adapter with 0.33x lens for 1/3" cameras

Black/white stage plate

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

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

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

For weight of other products see table 'Models'

### HIGHLIGHTS

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



Universal stand model SB.1902-U

### TECHNICAL SPECIFICATIONS

### **EYEPIECES**

Pair of WF10x/20 mm secured eyepieces supplied with eyecups

### **HEAD**

SB.1903

- · Binocular or trinocular 45° inclined tubes
- · Diopter adjustment on both eyepieces, except the models SB.1302-P/1402-P and SB.1302-S/1402-S, which have diopter adjustment on one eyepiece
- Interpupillary distance adjustable between 55 mm and 75 mm

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

### **DUAL MAGNIFICATION OBJECTIVES**

- Nosepiece with dual 1x/3x or 2x/4x revolving objectives
- · Magnifications 10x/30x or 20x/40x
- Field of view 20 mm/6.6 mm or 10 mm/5.0 mm
- · Working distance 100 mm

### **ZOOM OBJECTIVE**

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

### **STANDS**

The rack & pinion and pillar stands of the StereoBlue are equipped with ergonomically designed flat bases, complete with 2 object clamps and Ø 60 mm transparent and black/ white stage plates The coarse adjustment is equipped with tension control

The ergonomically designed universal single arm stand is ideal for looking at large samples or working under the microscope. Standard supplied without illumination. Suitable for e.g. ring illuminators LE.1972 and LE.1973. More illumination options see chapter 10 (Accessories) The stands are alloy metal casted with hardened off-white coating. More ilumination options seer chapter 10

technicians

### TECHNICAL SPECIFICATIONS

### **ILLUMINATION**

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

### **PACKAGING**

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

### YOUTUBE

Check out the product video on YouTube and learn more about the BlueLine



YouTube channel: Euromex Optics Group B.V.







**MODELS** 

SB.1302

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

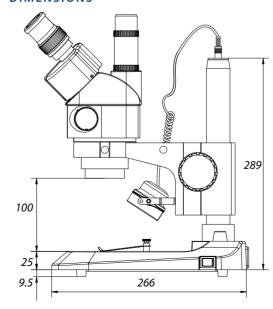
### ACCESSORIES AND SPARE PARTS

SB.6010	Pair of HWF 10x/20 mm eyepiece	SB.9570	Pair of object clamps for stage
SB.6015	Pair of HWF 15x/15 mm eyepiece	SB.9833	C-mount adapter with 0.33x lens for 1/3" cameras.
SB.6020	Pair of HWF 20x/10 mm eyepiece		Only for trinocular models
SB.6110	HWF 10x/20 mm eyepiece with micrometer	SB.9850	C-mount adapter with 0.5x lens for 1/2" cameras.
SB.6099	Pair of eyecups		Only for trinocular models
		SB.9952	Stage plate transparent, Ø 60 mm
SB.8905	Auxiliary 0.5x lens, only suitable for zoom models	SB.9956	Stage plate black/white, Ø 60 mm
	with pillar stands (SB.1902-P & SB.1903-P)		
	With rack- and pinion models the sample	AE.5130	Universal SLR camera adapter with 2x projection
	thickness is max. 2 cm. Working distance 170 mm		lens for 23.2 mm tubes. Need T2 adapter
SB.8907	Auxiliary 0.75x lens for zoom models.	AE.5020	T2 adapter for Nikon D digital SLR cameras
	Working distance 114 mm	AE.5040	T2 adapter for Canon EOS digital SLR cameras
SB.8915	Auxiliary 1.5x lens for zoom models.		
	Working distance 48 mm		Other T2 adapters on request

AE.1112	Micrometer 76 x 26 mm slide, 50 mm/50 divisi
PB.5245	Lens cleaning paper, 100 sheets per pack
PB.5274	Isopropyl alcohol 99% (200 ml)
PB.5275	Cleaning kit: lens cleaning fluid, lint free lens

tissue, brush, air blower, cotton swabs

### **DIMENSIONS**



# Customized specification fluorescence model

### **HIGHLIGHTS**

- Binocular and trinocular models
- · 6 standard configurations or customized configuration
- · Ergonomic tilting head from 5 to 35° tilting or fixed 20° inclined head, EWF10x/22mm eyepieces,
- Three central zoom units from 4 to 320x
- · Field of views from 55 to 1.4 mm
- · Working distances from 126 to 33 mm
- · Ergonomical rack and pinion stands, boom stand or articulated arm stand
- Transmitted and incident LED illumination
- · 100 W epi-fluorescence mercury vapor illuminator
- · 10 years warranty

# **DZ** series

The modular stereo microscopes of the DZ series can be built around no less than 3 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. Choosing a pair of eyepieces, one of the available objectives, stands and other accessories make this series very flexible and adaptive to your needs and applications

STEREO MICROSCOPES

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

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

For weight of other products see table 'Models'



### TECHNICAL SPECIFICATIONS

### **EYEPIECES**

Pair of EWF 10x/22 mm eyepieces

### **HEADS**

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

### **CENTRAL ZOOM UNITS**

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 objectives 1x, working distance 78 mm. Other plan apochromatic Common Main objectives 0.5x (working distance 126 mm) and 2x (working distance 33 mm) are also available

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

### STAND

Large ergonomic stand with ø 100 mm object plate and 2 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

### ILLUMINATIONS

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

### **PACKAGING**

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

### STANDARD CONFIGURATIONS

All 6 standard configurations are equipped with EWF10x/22mm eyepieces, plan achromatic Common Main objective 1x and rack & pinion stand with incident and transmitted LED illumination

### MODELS (STANDARD)

	Binocular 20° head	Binocular Ergo 10 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 EWF10x/22mm eyepieces

### MAGNIFICATIONS AND FIELD OF VIEWS FOR STANDARD CONFIGURATIONS

				0.5x Objec Working distanc		1.0x Objec Working distan		2.0x Object Working distanc	
			Zoom	Total	Field	Total	Field	Total	Field
Mod	el		indication	magnification	of view	magnification	of view	magnification	of view
			0.8x	4x	55	8x	27.5	16x	13.7
			1.0x	5x	44	10x	22	20x	11
		92	1.5x	7.5x	29.3	15x	14.6	30x	7.3
		DZ1600/DZ1605	2.0x	10x	22	20x	11	40x	5.5
	92	٥/٥	3.0x	15x	14.6	30x	7.3	60x	3.6
	Z18	160	4.0x	20x	11	40x	5.5	80x	2.7
9	DZ1800/DZ1805	DZ	5.0x	25x	8.8	50x	4.4	100x	2.2
Z11	180		6.0x	30x	7.3	60x	3.6	120x	1.8
٥/٥	DZ		6.4x	32x	6.8	64x	3.4	128x	1.7
DZ1100/DZ1105			7.0x	35x	6.3	70x	3.1	140x	1.5
DZ			8.0x	40x	5.5	80x	2.75	160x	1.4

All equipped with EWF10x/22mm eyepieces





### BUILD YOUR OWN MICROSCOPE

A customized DZ series stereo microscope can be configured to customer's specifications by choosing one of the three central zoom units DZ.0630, DZ.0800 or DZ.1000 and adding the necessary components for the application. Pair of eyepieces, an ergonomically 5 to 35° tilting head or fix 20° inclined head, a common 0.5x, 1x or 2x main objective, a large ergonomic LED stand, a boom or an articulated arm stand. Other accessories like a photo/camera unit or dual iris diaphragm complete your configuration

CENI.	TDAI	700M	UNITS
CEN	INAL	ZUUM	UNII

DZ.0630	Central Zoom Unit 1:6.3 unit with magnifications
	from 0.8 to 5 times
DZ.0800	Central Zoom Unit 1:8 unit with magnifications
	from 0.8 to 64 times
DZ.1000	Central Zoom Unit 1:10 unit with magnifications
	from 0.8 to 80 times

### **HEADS**

DZ.2020	Ergonomically binocular 5-35° tilting head
DZ.2025	Binocular 20° tilted head
	Interpupillary distance from 55 to 75 mm.

### **EYEPIECES**

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

### **DIAPHRAGMS**

D7 9010	Double iris	dianhragme	for increase	denth of field

### **OBJECTIVES**

DZ.4005	Plan apochromatic Common Main objectives 0.5x.
	Working distance 126 mm
DZ.4010	Plan apochromatic Common Main objectives 1.0x.
	Working distance 78 mm
DZ.4020	Plan apochromatic Common Main objectives 2.0x.
	Working distance 33 mm

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

### **STANDS**

DZ.5020	Universal stand without illumination.
	Dimensions 460 (h) x 280 (l) x 400 (d) mm
DZ.5040	Ergonomic stand with transmitted and
	incident LED illumination
65.890	Articulated arm stand for mounting on table
	without head holder (65.981)
65.981	Head holder 76 mm for DZ series
	and black universal stand 65.980

### **FLUORESCENCE ATTACHMENT**

DZ.9050	Attachment for fluorescence with 100 W mercury
	vapor illumination with GFP-B and GFP-LP filter sets
	Supplied with power supply
DZ.9060	Filter cube with GFP-B for Blue excitation,
	EM band pass filter (EX 460-500, DM 505,
	EM 510-560)
DZ.9061	Filter cube with GFP-L for Blue excitation,
	EM long pass filter (EX 460-500, DM 505, EM 510)
	Other fluorescence filters available on request

### **ACCESSORIES**

DZ.9020	Large 185 x 145 mm stage with mechanical X-Y
	50 x 50 mm stage, to be moved by hand
DZ.9040	Dark field attachment for DZ.5040
DZ.9045	Polarizer, 360° rotatable, to be mounted on
	Common Main objectives of DZ series
DZ.9047	Polarizer, 360° rotatable, to be placed on stage o
	DZ series

### **ACCESSORIES**

DZ.9005 Photo port attachment with one 23.2 mm tube Photo port attachment with two 23.2 mm tubes DZ.9007 DZ.9009 Photo port attachment with one 23.2 mm tube to be used with fluorescence attachment

**DZ.9011** C-mount 0.4x objective for insertion into photo port attachments

**DZ.9013** C-mount 1x objective for insertion into photo port attachments

AE.1900 Glass object-plate, ø 100mm Acrylic white/black object plate AE.1903

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

100 W HBO mercury vapor bulb for fluorescence AE.1385 SL.5520 LED replacement for incident LED illumination of DZ.5040 stand

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

tissue, brush, air blower, cotton swabs

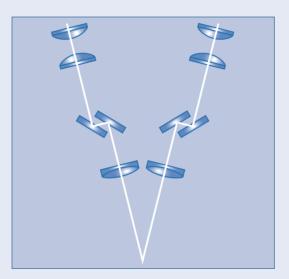


### 2 Concepts of **Stereo Microscopes**

**TECHNICAL FACTS** 

Most modern stereo microscopes are built according to 2 concepts: the Greenough and the Common Main Objective (CMO). The Greenough system is named after the American instrument designer, Horatio S. Greenough, who introduced this concept in the early 1890's, a system that became the workhouse for biological dissection in the 20st century. Much later, in 1957, a stereo zoom microscope with a Common Main Objective was introduced in the United States by the American Optical Company

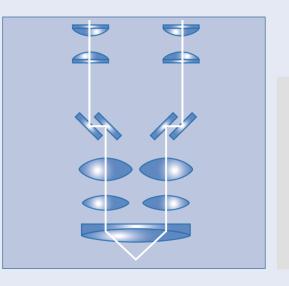
### Greenough principle



Two optical trains with their optical axis under a small angle, between 10° and 12°, generating 2 images of the object

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

### **Common Main Objective** (CMO) principle



Two optical trains with their optical axis parallel to each other, share a last Common Main Objective to generate 2 images under a small angle

- Allows modular systems (infinity optical system)
- Enables higher magnifications<sup>(2)</sup>, up to 300x
- Upgradable<sup>(3)</sup>
- High imaging quality
- Research and development labs
- (1) Objective without additional lenses and with 10x eyepieces
- (2) With 10x eyepieces
- (3) The parallel system allows many accessories like photo and epi-fluorescence attachments, iris diaphragms, beamsplitters to be added



quality inspection of processes in production or of industrial products, these microscopes are also extensively used in research laboratories. Certain components are also integrated in machines. Depending on the application, the microscopes can be configured with fix or variable magnification or zoom heads together with other components such as eyepieces, additional lenses, stands, stages, filters, etc

Dimensions	Weight
(h) 250 x (w) 155 x (d) 210 mm	2.5 kg

ST.1720	
Dimensions	Weight
(h) 780 x (w) 270 x (d) 740 (max) mm	19 kg

	BINO	TRINO	360°	Nddeni	TRANSMITTED	POLARIZED		
LED		HALOGEN					ZOOM	
				100-240V				x 10 x WARRANTY

### **HIGHLIGHTS**

- Modular system
- · Binocular and trinocular models
- · Standard SWF10x/23 mm eyepieces
- · Stereo zoom heads with fix 45°, 60° or 90° inclined tubes
- · Zoom magnification objectives
- · Superior resolution optics
- Multiple stands
- · 10 years warranty



### TECHNICAL SPECIFICATIONS

### **EYEPIECES**

Pair of SWF 10x/23 mm eyepieces

### **HEADS**

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

### ZOOM MAGNIFICATION OBJECTIVES

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

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

ZE.1624 and ST.1735



### STANDS WITHOUT ILLUMINATION

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

ST.1715 Pillar stand with ST.1792 head holder. Pillar height 250 mm, diameter ø 20 mm Dimensions (h) 290 x (w) 150 x (d) 240 mm

ST.1717 Pillar ergonomically flat stand with ST.1790 head holder. Pillar height 250 mm, diameter ø 20 mm Dimensions (h) 290 x (w) 250 x (d) 350 mm**ST.1770** 

Large pillar wooden stand with ST.1790 head holder. Pillar height 360 mm, diameter ø 29mm

> Suitable for SMD inspection. Dimensions (h) 400 x (w) 580 x (d) 500 mm

### STANDS WITH ILLUMINATION

ST.1735

Rack & pinion stand with 3 W LED adjustable illumination and rotatable double-sided coated mirror (one frosted and one aluminium coated side). Especially developed for observation of transparent object. Very suitable equine or porcine embryo collection and transfer. Internal 100-240 V power supply.

Dimensions: (h) 290 x (w) 160 x (d) 240 mm, min/max height 240-290

### TECHNICAL SPECIFICATIONS

### STANDS WITH ILLUMINATION

ST.1740 Rack & pinion stand with 10 W halogen illumination. Supplied with frosted filter for transmitted illumination and a blue filter for incident illumination. Both illuminations are adjustable and can be simultaneously used. With integrated power supply.

> Dimensions: 240 x 160 x 290 (D x W x H), min/max height 240-290

Tilting rack & pinion stand for GEM observation. ST.1750 Round 260 mm base with object clamp AE.5446. Height 300 mm. Halogen 40 W 230 V incandescent illumination.

> Pillar flat stand for dark field. Supplied with AE.1878 dark field attachment and object clamp AE.5446. Cold light illumination by 100 W cold light source LE.5211 and flexible fiber light guide. Pillar height 210 mm, diameter ø 20mm. Supplied with blue filter.

Dimensions: 240 x 150 x 260 (L x W x H). (Not suitable for ZE.1659)

### **BOOM STANDS**

**ST.1720** Articulated one arm boom stand with a 270 x 270 mm base, 610 mm and ø 29mm 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 65.983 a table with 85 mm diameter head holder. Depth positioning of stereo head between

33 and 100 cm. Working distance between

0 and maximum 295 mm

### **HEAD HOLDERS**

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

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

### **700M STEREO HEADS**

### MODELS

ST.1760

MODELS	Binocular	Trinocular	Tilt tubes	objective zoom	Magnifications	Working distance (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		•1	45°	0.7 - 4.5x	7 - 45x	104	32/5.1
ZE.1670	•		45°	1 - 7x	10 - 70x	104	23/3.3
ZE.1671		•1	45°	1 - 7x	10 - 70x	104	23/7.7
ZE.1626	•		60°	0.7 - 4.5x	7 - 45x	93	32/5.1
ZE.1629	•		90°	0.7 - 4.5x	7 - 45x	110	32/5.1
ZE.1659		•1	45°	0.4 - 2.5x	4 - 25x	185	57/12,8

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

### **FOCUSING**

Coarse adjustment and friction adjustment for head holders for ST.1790, St.1792, ST.1794, ST1796. The head holders ST.1796 and ST.1798 are also equipped with a fine focusing adjustment

### **PACKAGING**

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

### ACCESSORIES AND SPARE PARTS

### EYEPIECES (without eyecups)

AE.1835	Pair of SWF5x/26 mm eyepieces
AE.1836	Pair of SWF10x/23 mm eyepieces
AE.1834	Pair of SWF12.5x/20 mm eyepieces
AE.1837	Pair of SWF15x/16 mm eyepieces
AE.1838	Pair of SWF20x/11.5 mm eyepieces
AE.1840	Pair of SWF30x/7.5 mm eyepieces
AE.5439	Pair of eyecups
AE.5425	Pair of eyecups, suitable when wearing

for spectacles

### MICROMETER EYEPIECES (with adjustable lens)

, , , , , , , , , , , , , , , , , , , ,
SWF10x/21mm with 10 mm/100
micrometer reticle and cross hair
SWF10x/21mm with 10 x 10 mm reticle,
400 squares

**AE.1842** SWF10x/21mm with photo corners marks

### STANDS

### MODELC

MODELS							
	Column (mm)	Diameter (mm)	Rack & pinion	l x p base (mm)	Height (mm)	Head holder	Illumination
ST.1710	210	20		240x150	250	ST.1790	-
ST.1715	250	20		240x150	290	ST.1792	-
ST.1717	250	20		320x250	290	ST.1790	-
ST.1720	610	29		780x270	650	ST.1794	-
ST.1735	-		•	240x160	290		3 W LED
ST.1740	-		•	240x160	290		10 W Hal
ST.1750	-		•	ø 260	300		40 W <sup>1</sup>
ST.1760	210	20		240x160	260	ST.1790	100 W Hal <sup>2</sup>
ST.1770	360	29		500x580	400	ST.1790	-
65.980/65.983	-		•	ø 1000 ³	0/295	65.983	-

1) With 40 W incandescent bulb. 2) 100 W cold light illumination with fiber light quide. 3) Length with the 2 arms totally extended The stand ST.1760 is not suitable for head holder ZE.1659

### ACCESSORIES AND SPARE PARTS

### MICROMETER SLIDES

**AE.1112** Object slide 76 x 26 mm with micrometer

50mm/500, 100 um/division

### **ADDITIONAL LENSES**

(for ZE.1659)

AE.1850 Additional 0.7x lens. Working distance 233 mm Additional 0.57x lens. Working distance 300 mm

### **ADDITIONAL LENSES**

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

**AE.1855** Additional 0.3x lens. Working distance 250 mm. Suitable with ST.1720, ST.1770, ST.1780 et ST.1785

stands

AE.1870 Additional 0.44x lens. Working distance 180 mm.

Suitable with ST.1715, ST.1720, ST.1770, ST.1780

and ST.1785 stands

**AE.1856** Additional 0.5x lens. Working distance 150 mm.

Suitable with ST.1740. Maximum object size is 15 mm

AE.1857 Additional 0.75x lens. Working distance 97 mm

Additional 1.5x lens. Working distance 50 mm AE.1858

AE.1859 Additional 2.0x lens. Working distance 34 mm

### **ADDITIONAL LENSES**

(for ZE.1629)

AE.1805 Additional 0.3x lens. Working distance 330 mm.

Suitable with ST.1720, ST.1770, ST.1780 and

ST.1785 stands

Additional 0.5x lens. Working distance 198 mm. AE.1806

Suitable with ST.1715, ST.1720,

ST.1770, ST.1780 and ST.1785 stands

AE.1807 Additional 0.75x lens. Working distance 125 mm

AE.1808 Additional 1.5x lens. Working distance 62 mm

AE.1809 Additional 2.0x lens. Working distance 42 mm

### **ADDITIONAL LENSES**

(for ZE.1657)

AE.1807 Additional 0.35x lens. Working distance 250 mm Additional 0.5x lens. Working distance 174 mm **AE.1808** 

Additional 1.5x lens. Working distance 57 mm

### **PROTECTION WINDOWS**

(to be screwed under the objectives)

Protection window for all heads of ZE series AE.1845

except ZE.1659

AE.1825 Protection window for ZE.1659.

Not suitable with additional lenses

### **DARK FIELD**

Dark field attachment for all stands with AE.1878

transmitted illumination

AE.1879 Iris diaphragm suitable with AE.1878

Object table for AE.1878 with ST.1760 stand. AE.1871

Suitable to observe contact lenses or gems

with an object slide

### **POLARIZATION**

Analyzer, in rotatable mount.

Not suitable with ZE.1659

AE.1891 Polarizer in mount.

Suitable with ST.1740 and ST.1760

AE.1892 Retardation plate gypsum 1st order red.

Suitable with polarizer AE.1891

### **MECHANICAL STAGES**

AE.1876 Plain stage 145 x 115 mm with 75 x 50 mm

X-Y mechanical stage on ball bearings.

Horizontal coaxial adjustment.

Double Vernier with 0.1 mm graduations.

Only with ST.1710, ST.1715 and ST.1740

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

> plate and 75 x 50 mm X-Y mechanical stage on ball bearings. Horizontal coaxial adjustments.

Double Vernier with 0.1 mm graduations.

Only with ST.1740 and ST.1760

AE.1877 Large stage 170 x 155 mm with 100 x 105 mm

X-Y mechanical stage on ball bearings.

For ST.1710, ST.1715 and ST.1740

AE.1950 Large 390 x 390 mm stage with 360 x 360 mm

X-Y mechanical stage.

Only for ST.1720, ST.1770, ST.1780 and ST.1785

### **OBJECT STAGES**

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

Round object low-profile table with frosted glass AE.1885

filter. Interchangeable with dark field ST.1740

### **OBJECT PLATE - ø 94 mm**

Acrylic translucide object plate Glass transparent object plate AE.1881 AE.1882 Arcylic black/white object plate

### FILTERS - ø 40 mm

Frosted glass filter AE.1897

AE.1898 Blue filter

### **OBJECT HOLDER**

AE.5446 Orientable clamp for gems.

Interchangeable with object plate clamp

### SPARE BULB AND FUSES

30 W 230 V incandescent bulb for ST.1750 stand SL.1868 SL.1869 10 W 6 V halogen bulb for ST.1740 illumination

Fuses for ST.1740 stand. Per 10 pieces

### **ACCESSORIES**

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

Optional reticle available

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

Optional reticle available

DC.1320 Projection 1x objective with C-mount

DC.1324 Projection 0.5x objective with C-mount

for cameras with 1/2" sensor.

To be inserted into a 23.2 mm tube DC.1326 Projection 0.33x objective with C-mount

for cameras with 1/3" sensor.

AE.5006 Projection 0.6x objective with C-mount

**AE.5130** Universal SLR camera adapter with 2x projection

To be inserted into a 23.2 mm tube

lens for 23.2 mm tubes. Need T2 adapter

AE.5020 T2 adapter for Nikon D digital SLR cameras

T2 adapter for Canon EOS digital SLR cameras AE.5040

Other T2 adapters on request



ZE.1629 and AE.1796







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 lie varies from 2.5x to 40x

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

BE.1802

	BINO	360°	NCIDENT		
LED					
DIGITAL			100-240V		MARRANTY

### HIGHLIGHTS

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



### TECHNICAL SPECIFICATIONS

### **EYEPIECES**

Pair 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

### **OBJECTIVES**

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

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

### ACCESSORIES AND SPARE PARTS

BE.60	Pair of HWF 5x/22 mm eyepieces	BE.7405	0.5x objective for BE-50 LED.
BE.60	• Pair of HWF 10x/20 mm eyepieces		Working distance 250 mm
BE.60	5 Pair of HWF 15x/12 mm eyepieces	BE.7410	1.0x objective for BE-50 LED.
BE.60	Pair HWF 20x/10 mm eyepieces		Working distance 230 mm
BE.61	<b>0</b> HWF 10x/20 mm eyepiece with micrometer	BE.7420	2.0x objective for BE-50 LED.
BE.60	9 Pair of eyecups		Working distance 119 mm
		AE.1112	Micrometer slide, 50 mm/50 divisions

### **MODELS**

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

# **P** series The microscopes of the P series are specifically designed for industrial purposes and come with both dual 10/30x and 20x/40x magnifications and by using of optional eyepieces this can result in magnifications from 5x to 80x. These microscopes are equipped with a rack & pinion stand and a 360° rotatable head The P series are compact and light weight, NOVEX ideal microscopes for industrial applications

P-20

P-20 (60.200)

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

either in a workplace or be taken to

STEREO MICROSCOPES

### **HIGHLIGHTS**

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



### TECHNICAL SPECIFICATIONS

### **EYEPIECES**

Pair of secured wide field eyepieces WF10x/20 mm. Supplied with eyecups

### HEAD

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

### **OBJECTIVES**

- The P-10 and P-10 LED models are supplied with revolving 1x/3x objectives for total magnification of 10 and 30 times with field of views from 20 to 6.7 mm
- The P-20 and P20-8 LED models are supplied with revolving 2x/4x objectives for total magnification of 20 and 40 times with field of views from 10 to 5 mm

Using additional eyepieces magnification range can be 5 to 80x

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

### STAND

Robust pillar stand with 35 mm coarse adjustment. Supplied with black/white object plate and 2 object clamps

### ILLUMINATION

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

The P-10 LED and P-20 LED models are supplied with high power LED transmitted and incident illumination. With 3 rechargeable batteries for maximum 35 hours continuous cordless operation. Both illuminators can be operated independently or simultaneously. Supplied with external mains adapter

any other location

### TECHNICAL SPECIFICATIONS

### **CAMERAS**

Euromex offers a wide range of industrial and laboratory grade cameras, see chapter 9 (Digital Solutions). For P series, the camera replaces one of the eyepieces

### **PACKAGING**

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

All packed in a polystyrene box

### ACCESSORIES AND SPARE PARTS

50.805	Pair of wide field eyepieces WF 5x/22 mm	AE.1112	Micrometer slide, 50 mm/50 divisions
50.810	Pair of wide field eyepieces WF 10x/20 mm	PB.5245	Lens cleaning paper, 100 sheets per pack
50.811	Micrometer eyepiece WF 10x/20 mm, 10 mm/100	PB.5274	Isopropyl alcohol 99% (200 ml)
50.815	Pair of wide field eyepieces WF 15x/16 mm	PB.5275	Cleaning kit: lens cleaning fluid, lint free lens
50.820	Pair of wide field eyepieces WF 20x/10 mm		tissue, brush, air blower and cotton swabs
50.840	Pair of eyecups		
50.871	Black/white stage plate 94 mm diameter		
50.873	Glass stage plate 94 mm diameter		WEISK
50.875	Adjustable GEM object clamp for P series		
50.876	Dark field attachment	1	
50.882	Spare halogen bulb 12 V 10 W for P series		
	(transmitted illumination)		
50.961	Plastic case for P series		50.815

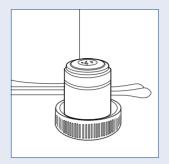
### **MODELS**

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

### How to keep the optics clean? PB.5275 Cleaning kit

**TECHNICAL FACTS** 

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



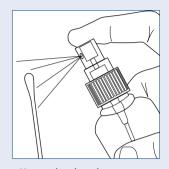
Place your objective or eyepiece on a secure location. Objectives can be screwed into the cover of an objective case, eyepieces can be placed in the microscope box. Condensers and collector lenses can stay in their place in the microscope



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



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



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



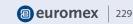
5 Wait until the cleaning fluid is evaporated, or speed up this process by using pressurized dry air

Check and return. With the help of a magnifying glass check if the surface is clean and place the cleaned item back on 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

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



# MaterialsScience

### Industry



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• OXION INVERSO (MATERIAL)	PAGE 240
• OXION (MATERIAL)	PAGE 244
B SERIES (MATERIAL)	<b>PAGE 248</b>



# MaterialsScience

Industry

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

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



### **iScope**® for materials science

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

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

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

1053-PLPOLRi					
Dimensions	Weight				
(h) 590 x (w) 210 x (l) 475 mm	12.3 kg				



	BINO	OO TRINO	INCIDENT	TRANSMITTED	POLARIZED	<b>∢</b> ≫ KöHLER	(NFINITY
IZ. LED	NeoLED			O PHASE	ABBE		
			100-240V				x 10 x

### **HIGHLIGHTS**

- EWF 10x/20 mm and EWF 10x/22 mm eyepieces
- · Binocular and trinocular models
- · Reversed quintuple revolving nosepiece
- · Infinity corrected IOS objectives for material observation, polarization and asbestos research
- · 216 x 150 mm rackless stage equipped with integrated 79 x 52 mm mechanical stage
- Ø 160 mm rotatable round stage for polarization models
- Diascopic 3 W NeoLED™ Köhler illumination
- · Epi-NeoLED illumination for metallurgical models
- · Epi-illumination 50 W for polarization models
- · iCare sensor for energy saving
- · CSS Cable Storage System
- · 10 years warranty



### TECHNICAL SPECIFICATIONS

### **EYEPIECES**

The metallurgical models are supplied with extended EWF 10x/20 mm (Ø 23.2 mm tube) eyepieces. Polarization models are supplied with a pair of EWF 10x/22 mm (Ø 30 mm tube) eyepieces, one eyepiece with cross hair and one eyepiece with a cross hair and micrometer reticle

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

### **HEAD**

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

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

### **NOSEPIECE**

Revolving quintuple reversed nosepiece on ball bearings

### **OBJECTIVES**

Plan PLMi IOS (1)	5x/0.10	10x/0.25	20x/0.40	S50x/0.65		S80x/0.90 <sup>(4)</sup>	S100x/0.80 <sup>(4)</sup>
Plan PLPOLi IOS (2)	4x/0.10	10x/0.25	20x/0.40 <sup>(4)</sup>	S40x/0.65		S60x/0.85 <sup>(4)</sup>	S100x/1.25 <sup>(4)</sup>
Plan PLi IOS (3)	4x/0.10	10x/0.25	20x/0.40 <sup>(4)</sup>		PLPHi S40x/0.65	S60x/0.85 <sup>(4)</sup>	S100x/1.25 <sup>(4)</sup>

- (1) Plan PLMi infinity corrected objectives for material observation
- (2) Plan PLPOLi strain free infinity corrected objectives for polarization
- (3) Plan PLi infinity corrected objectives for asbestos research microscopes the S40x which is a plan phase contrast PLPHi infinity corrected objective
- (4) Optional objectives

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

### TECHNICAL SPECIFICATIONS

### **STAGES**

- 216 x 150 mm rackless stage equipped with double slide holder and integrated 79 x 52 mm mechanical stage. The iScope® rackless stage has no protruding parts, enables more smooth movements and is safer working
- Ø 160 mm round stage for polarization models, 360° rotatable with Vernier and two object clamps. An optional 30 x 40 mm X-Y mechanical stage is available

### STANDARD CONDENSERS

Standard height adjustable Abbe N.A. 1.25 condenser with iris diaphragm. Suitable for slider with dark field stop for magnifications up to maximum 400x.

Optional height adjustable Abbe N.A. 0.9/1.25 swing-out condenser with iris diaphragm

### **CONDENSER FOR POLARIZATION MICROSCOPES**

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

### **CONDENSER FOR ASBESTOS RESEARCH MICROSCOPES**

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

### **FOCUSING**

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

### DIASCOPIC ILLUMINATION

Intensity adjustable 3 W Köhler NeoLED™ illumination with internal 100-240 V power supply. The larger aperture of NeoLED™ allows the optical systems of the iScope®

microscope to produce images at higher resolutions, very close to the theoretical diffraction limit of the optics. Other benefits for choosing the NeoLED™ are the low energy consumption, no heating and a long operating lifetime. The Köhler setting provides homogeneous illumination and high contrast

### 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, simple dark field stop, white, green, blue and yellow filters

### REFLECTED ILLUMINATION FOR **POLARIZATION MODELS**

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

### **ICARE SENSOR**

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

### CSS - CABLE STORAGE SYSTEM

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

### **PACKAGING**

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

### SPECIFICATIONS (MICROSCOPES FOR POLARIZATION)

			IS.1052- PLPOLi	IS.1053- PLPOLi	IS.1052- PLPOLRi	IS.1053- PLPOLRi	Product number
Models	Binocular				•		
	Trinocular			•		•	
Eyepieces	EWF 10x / 22 mm, pair	Ø 30 mm					IS.6210
	EWF 15x / 16 mm, 1 piece	Ø 30 mm	0	0	0	0	IS.6215
	EWF 20x / 12 mm, 1 piece	Ø 30 mm	0	0	0	0	IS.6220
	EWF 10x / 20 mm, 1 piece With crosshair	Ø 30 mm	•	٠	•	•	IS.6210-C
	EWF 10x / 20 mm, 1 piece. With crosshair and micrometer retide	Ø 30 mm	•	•	•	•	IS.6210-CM
Diopter	Adjustment on both sides		•	•	•	•	
Nosepiece	Maximum objectives		4	4	4	4	
Objectives IOS	Plan PLPOLi <sup>(1)</sup>	4x / 0.12	•	•	•	•	IS.7904
	Plan PLPOLi <sup>(1)</sup>	10x / 0.25			•		IS.7910
	Plan PLPOLi <sup>(1)</sup>	20x / 0.40	•	•	•	•	IS.7920
	Plan PLPOLi <sup>(1)</sup>	S40x / 0.65		•		•	IS.7940
	Plan PLPOLi <sup>(1)</sup>	S60x / 0.85	0	0	0	0	IS.7960
	Plan PLPOLi <sup>(1)</sup>	S100x / 1.25	0	0	0	0	IS.7900
Stage	Ø160 mm stage, 360° rotatab	le			•		
Condensers	Swing-out 0.9/1.25 NA conde	О	0	0	0	IS.9105	
	Polarization condenser with gratuated 360° polarizer	•	•	•	•		
Diascopic illumination	3 W NeoLED™, Köhler		•	٠	•	•	
	Filter White	Ø 45 mm	0	0	0	0	IS.9706
	Filter Green	Ø 45 mm	0	0	0	0	IS.9702
	Filter Blue	Ø 45 mm	0	0	0	0	IS.9700
	3 W NeoLED™ replacement unit		0	0	Ο	0	IS.9993
Polarzation attac	chment with 50 W 12 V halogen	epi-illumination with:					
	Polarizer 360°				•	•	IS.9708
	Analyzer			•	•	•	IS.9602
	Quartz wedge		•	•	•	•	IS.9604
	1 λ first red (530 nm) plate		•	•	•	•	IS.9610
	1/4 λ plate		٠	•	•	٠	IS.9612
	Bertrand lens		•	•	•	•	IS.9618
	Slider with green and blue filters				٠	•	IS.9731
	Slider with analyzer and white filters				•	•	IS.9738
1) Strain free	110 and 240 V power supply				•	•	IS.9241

### **SPECIFICATIONS** (METALLURGICAL MICROSCOPES AND MICROSCOPES FOR ASRESTOS IDENTIFICATION)

			IS.1052- PLMi	IS.1053- PLMi	IS.1052- PLAi	IS.1053- PLAi	Product number
Models	Binocular				•		
	Trinocular			•		•	
Eyepieces	EWF 10x / 20 mm, pair	Ø 23.2 mm	•	•			IS.6010
	EWF 15x / 16 mm, pair	Ø 23.2 mm	0	0			IS.6015
	EWF 20x / 12 mm, pair	Ø 23.2 mm	О	0			IS.6020
	WF 10x / 20 mm, 1 piece. With crosshair	Ø 23.2 mm	0	0			IS.6010-C
	WF 10x / 20 mm, 1 piece. With crosshair and micrometer retide	Ø 23.2 mm	0	0			IS.6010-CM
	EWF 10x / 22 mm, pair	Ø 30 mm			0	0	IS.6210
	HWF 12.5x / 15 mm, 1 piece	Ø 30 mm			•	•	IS.6212
	HWF 12.5x / 15 mm, with Walton-Bracket, 1 piece	Ø 30 mm			•	•	IS.6212-W
Diopter	Adjustment on both sides			•	•	•	
Nosepiece	Maximum objectives		5	5	5	5	
Objectives IOS	Plan PLMi <sup>(2)</sup>	5x / 0.12	•	•			IS.8105
	Plan PLMi <sup>(2)</sup>	10x / 0.25	•	•			IS.8110
	Plan PLMi <sup>(2)</sup>	20x / 0.40					IS.8120
	Plan PLMi <sup>(2)</sup>	S50x / 0.70	•	•			IS.8150
	Plan PLMi <sup>(2)</sup>	S80x / 0.90	О	0			IS.8180
	Plan PLMi <sup>(2)</sup>	S100x / 0.80	0	0			IS.8100
	Plan PLi <sup>(3)</sup>	4x / 0.12			•	•	IS.7204
	Plan PLi <sup>(3)</sup>	10x / 0.25			•	•	IS.7210
	Plan PLi <sup>(3)</sup>	20x / 0.40			0	0	IS.7220
	Plan phase PLPHi	S40x / 0.65			•	•	IS.8940
	Plan PLi <sup>(3)</sup>	S60x / 0.85			0	0	IS.7260
	Plan PLi <sup>(3)</sup>	S100x / 1.25			0	0	IS.7200
Stage	216 x 150 mm rackless stage w X-Y mechanical stage	ith 79 x 52 mm	•	•	•	•	
Condensers	Standard Abbe condenser		•	•			IS.9102
	Swing-out 0.9/1.25 NA condens	ser	0	0	0	0	IS.9105
	Phase contrast condenser with	10/40 annuli in slider			•	•	IS.9162
	and green filter $\emptyset$ 45 mm				•	•	IS.9702
	and alignment telescope Ø 30 mm				•		IS.9149
Diascopic illumination	3 W NeoLED™, Köhler		•	•	•	•	
	Filter White 9	Ø 45 mm	0	0	0	0	IS.9706
	Filter Green	Ø 45 mm			0	0	IS.9702
	Filter Blue	Ø 45 mm			0	0	IS.9700
	3 W NeoLED™ replacement unit		0	0	0	0	IS.9993

<sup>(2)</sup> No cover glass correction(3) Cover glass correction

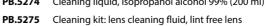
### **SPECIFICATIONS**

### (METALLURGICAL MICROSCOPES AND MICROSCOPES FOR ASBESTOS IDENTIFICATION)

							,
			IS.1052- PLMi	IS.1053- PLMi	IS.1052- PLAi	IS.1053- PLAi	Product number
Metallurgical at					IS.9230		
	Polarizer 0-90°	Ø 45 mm	•	•			IS.9601
	Simple dark field	Ø 45 mm	•	•			IS.9600
	Filter White	Ø 45 mm	•	•			IS.9726
	Filter Yellow	Ø 45 mm		•			IS.9724
	Filter Green	Ø 45 mm					IS.9722
	Filter Blue	Ø 45 mm	•	•			IS.9720
	External mains adapter	100-240 Vac/ 7.5 Vdc	•	•			IS.9975

### ACCESSORIES AND SPARE PARTS

AE.5130	Universal SLR adapter with built-in 2x lens
	without T2 ring. For standard 23.2 mm tube
AE.5040	T2 ring for Canon EOS SLR digital camera
AE.5025	T2 ring for Nikon D SLR digital camera
PB.5155	Microscope slides 76 x 26 mm, ground edges,
	50 pieces
PB.5165	Cover glasses 18 x 18 mm, thickness 0.13 - 0.17 mm,
	100 pieces
PB.5168	Cover glasses 22 x 22 mm, thickness 0.13 - 0.17 mm,
	100 pieces
PB.5245	Lens cleaning paper, 100 sheets per pack
PB.5255	Immersion oil, n = 1.482 (25 ml)
PB.5274	Cleaning liquid, isopropanol alcohol 99% (200 ml)
PB.5275	Cleaning kit: lens cleaning fluid, lint free lens



tissue, brush, air blower and cotton swabs



IS.1053-PLAi/IS.1053-PLPOLi

# MATERIALS SCIENCE MICROSCOPES FEATURED **Oxion Inverso** for materials science The Oxion Inverso inverted microscopes for materials science are intensively used for observation of large pieces of material made from metal, wood, plastics and more OX.2153-PLM The Oxion Inverso is available with a powerful 50 W halogen brightfield

contrast illumination and a large mechanical stage. The polarization and color filters makes this instrument

suitable for a wide variety of applications

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



### **HIGHLIGHTS**

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



### TECHNICAL SPECIFICATIONS

### **EYEPIECES**

Pair of DIN HWF plan 10x/22 mm eyepieces

### **NOSEPIECES**

Revolving quintuple nosepiece on ball-bearings

### **HEADS**

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

### **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 \$50x/0.55 IOS objective. Model OX.2153-PLM also has plan semi apochromatic \$100x/0.80 IOS objective. Not corrected for cover glass thickness. All optics are anti-fungus treated and anti-reflection coated for maximum light troughout

### **STAGE**

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

- · metallic insert standard with Ø 12 mm diameter hole and Ø 25 mm diameter hole
- · metallic insert with hole for mechanical stage

### **CONDENSER**

Abbe condenser with iris diaphragm

### **FOCUSING ADJUSTMENT**

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

### **ILLUMINATION**

Transmitted Köhler 50 W halogen Intensity adjustable with internal 100-240 V power supply. Fuse holder 3.15 A /  $250 \, \text{V}$ 

### **POLARIZATION**

Standard polarization filter and 360° rotating analyzer

### **FILTERS**

Standard blue and green filter

### **PACKAGING**

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



### 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

Large stage with X-Y mechanical stage



### **OBJECTIVES**

**OX.8205** Plan achromatic PLM 5x/0.14 IOS objective. Working distance 20 mm

**OX.8210** Plan achromatic PLM 10x/0.25 IOS objective. Working distance 16 mm

**OX.8220** Plan achromatic PLM 20x/0.40 IOS objective. Working distance 7.8 mm

Working distance 7.9 mm

OX.8250 Plan semi apochromatic PLM S50x/0.55 IOS objective.

OX.8200 Plan semi apochromatic PLM S100x/0.80 IOS objective. Working distance 2.1 mm

### STAGE AND ACCESSORIES

**OX.9500** Mechanical coaxial X-Y 120 x 78 mm stage

**OX.9506** Transparent glass insert with hole

OX.9508 Metal insert with Ø 12 mm hole

OX.9509 Metal insert with Ø 25 mm hole

OX.9535 Metal insert for Petri dish 35 mm diameter

**OX.9599** Universal culture-dish holder for translation stage

### **FILTERS**

OX.9700 Blue filter OX.9702 Green filter OX.9703 IR cut-off filter

### PHOTO ADAPTERS

OX.9810 CS/C mount with 1.0x objective

OX.9833 CS/C mount with 0.33x objective for 1/3" sensors cameras

OX.9850 CS/C mount with 0.5x objective

for 1/2" sensors cameras

### **MISCELLANEOUS**

AE.5120 Standard 23.2 mm diameter tube for Oxion Inverso photo port

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

Needs T2 adapter and AE.5120 AE.5025 T2 adapter for Nikon D digital SLR cameras

AE.5040 T2 adapter for Canon EOS digital SLR cameras

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

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

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

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

PB.5245 Lens cleaning paper, 100 sheets per pack

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

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

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

### **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

### **About** PETROLOGICAL MICROSCOPY

**TECHNICAL FACTS** 

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

Conventional brightfield microscopes are turned into a petrological microscope by:

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

Mineral petrology

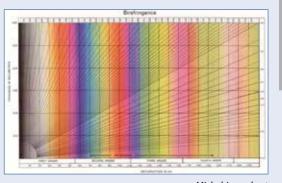




Crocodolite asbestos fiber

### The most common compensators are:

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



Michel-Levy chart

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

Oxion

# TERIALS SCIENCE MICROSCOPES

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

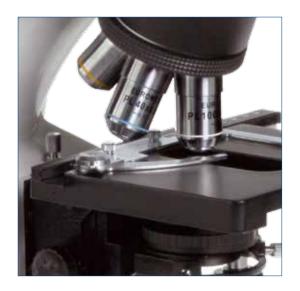
for materials science

### OX.3245 Dimensions Weight (h) 430x (w) 180 x (d) 430 mm 9.9 kg

OX.3245

### **HIGHLIGHTS**

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



### TECHNICAL SPECIFICATIONS

### **EYEPIECES**

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

### **HEAD**

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

### NOSEPIECE

Reversed nosepiece for a maximum of 5 objectives on ball bearings

### **OBJECTIVES** (IOS-INFINITY CORRECTED SYSTEM)

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



### **FOCUSING**

Coaxial coarse and fine adjustments, 200 graduations, 1  $\mu m$  per graduation, 200  $\mu m$  per rotation, total travel approximately 28 mm.

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

### TECHNICAL SPECIFICATIONS

### STAGE

150 x 140 mm stage with integrated mechanical 76 x 50 mm X-Y stage. A ceramic stage is also available on request

### **CONDENSER** (FOR TRANSMITTED ILLUMINATION)

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

Detail of reflected illumination



### TRANSMITTED ILLUMINATION

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

Reflected illumination selector



### REFLECTED EPI-ILLUMINATION

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

### **PACKAGING**

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

Köhler illumination with field diaphragm

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

### ACCESSORIES AND SPARE PARTS

AE.3200 Yellow filter 45 mm, sits on lamp house AE.3202 Green filter 45 mm, sits on lamp house

AE.3	3210	HWF10x/22mm eyepiece	AE.3205	Blue interference 480 nm filter
AE.3	3215	HWF 15x/13mm eyepiece		(for reflected illumination unit)
AE.3	3223	HWF10x/22mm eyepiece	AE.3206	Green interference 520-570 nm filter
		with 10mm/100 micrometer		(for reflected illumination unit)
AE.3	3225	Pair of eyecups	AE.3207	Red interference 630-750 nm filter
				(for reflected illumination unit)
AE.3	3172	Plan achromatic M-IOS DIN PL 5x/0.14 objective.	AE.3208	White color balance interference filter
		Working distance 20.5 mm		(for reflected illumination unit)
AE.3	3173	Plan achromatic M-IOS DIN PL 10x/0.25 objective.		
		Working distance 16 mm	AE.5120	Standard 23.2 mm diameter tube
AE.3	3175	Plan achromatic M-IOS DIN PL 20x/0.40 objective.		for Oxion photo port
		Working distance 7.8 mm	AE.5130	Universal SLR camera adapter with
AE.3	3177	Plan semi apochromatic M-IOS DIN 50x/0.55 objective.		2x projection lens for 23.2 mm tubes
		Working distance 7.9 mm		Needs T2 adapter and AE.5120
AE.3	3179	Plan semi apochromatic M-IOS DIN 100x/0.80 objective.	AE.5025	T2 adapter for Nikon D digital SLR cameras
		Working distance 2.1 mm	AE.5040	T2 adapter for Canon EOS digital SLR cameras
AE.3	3185	Slider with dark field stop for transmitted	OX.9810	C-mount with 1.0x objective
		illumination (only for objectives 10x, 20x and S40x)	OX.9833	C-mount with 0.33x objective
				for 1/3" sensors cameras
AE.3	3190	Polarizer/Analyzer set for transmitted illumination	OX.9850	C-mount with 0.5x objective
AE.3	3192	Polarizer slider for nosepiece		for 1/2" sensors cameras
AE.3	3194	Polarizer for lamp house		
			AE.3199	Glass fuses 3.15 A 250 V, 10 pieces
AE.3	3193	Analyzer for reflected illumination unit		
AE.3	3195	Polarizer, 360° rotatable	PB.5245	Lens cleaning paper, 100 sheets
		(for reflected illumination unit)	PB.5274	Cleaning liquid, isopropanol alcohol 99% (200ml)
			PB.5275	Cleaning kit: lens cleaning fluid, lint free lens
AE.3	3196	Frosted filter 45 mm, sits on lamp house		tissue, brush, air blower and cotton swabs
AE.3	3198	Blue filter 45 mm, sits on lamp house		



The well-equipped microscopes of the B+ series 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 research and quality assurance

B+ series

laboratories

BINOCULAR 86.185 / 86.185-LED Dimensions Weight (h) 375 x (w) 210 x (d) 460 mm 7.0 kg

TRINOCULAR 86.189 / 86.189-	-ED
Dimensions	Weight
(h) 470 x (w) 210 x (d) 460 mm	7.2 kg

# for materials science 86.185

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IZ.		HALOGEN			ABBE		
			BATTERY	100-240V		MASSANTY	

### **HIGHLIGHTS**

- · Binocular and trinocular models
- WF10x/22 mm eyepieces
- · Reversed quintuple nosepiece
- · Plan M-IOS objectives
- · Polarizer and analyzer
- · Integrated mechanical stage
- Reflected NeoLED™ illumination
- · Warranty 5 years



### **EYEPIECES**

Wide field WF10x/22mm eyepieces

### **HEAD**

Binocular and trinocular Siedentopf models have 30° inclined tubes interpupillary distance of 48 to 75 mm and diopter adjustment on left eyepiece

TECHNICAL SPECIFICATIONS

### **NOSEPIECE**

Revolving quintuple reversed nosepiece on ball-bearings

### **OBJECTIVES**

Standard equipped with infinity corrected achromatic DIN plan M-IOS 5x/0.12, 10x/0.25, 20x/0.40, 50x/0.70 IOS objectives. Optional plan M-IOS 80x/0.80 and 100x/0.85 DIN IOS objective are also available.

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

### **FOCUSSING**

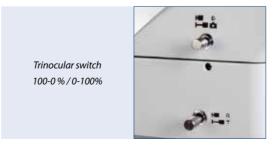
Coaxial coarse and fine adjustments, 200 graduations, 1  $\mu m$  per graduation, 200  $\mu m$  per rotation, total travel approximately 23 mm. Supplied with an adjustable rack stop to prevent damage to sample and objectives. The coarse adjustments are equipped with friction control

### STAGE

Integrated 125 x 135 mm stage with 75 x 35 mm X-Y mechanical stage. Double nonius 0.1mm

### CONDENSER

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



### TECHNICAL SPECIFICATIONS

### ILLUMINATION

Reflected illumination

Transmitted intensity adjustable NeoLED™ illumination with 110-240 V internal power supply /charger and 3 NiMH AA batteries or 20 W halogen illumination with internal power supply (110 V and 230 V versions available)

Reflected intensity adjustable 3W 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





### **PACKAGING**

Supplied with power cord, dust cover, a spare fuse and user manual. Models with a 20 W halogen illumination are supplied with a spare bulb and a blue filter. All packed in a polystyrene box

### **MODELS** Binocular Trinocular Transmitted 20 W Transmitted illumination Reflected illumination LED NeoLED™ halogen illumination 86.185 86.185-LED 86.189 86.189-LED

### ACCESSORIES AND SPARE PARTS

86.573	HWF 15x/12 mm eyepiece	AE.5202	Blue filter ø 32 mm
86.574	HWF 10x/18 mm eyepiece	AE.5203	Yellow filter ø 32 mm
	(with micrometer 10mm/100 reticule)	AE.5204	Neutral density filter ø 32 mm
80.839	Eyecup for ø 28 mm tube	AE.5205	Blue acrylic filter ø 32 mm
		AE.5207	Blue filter acrylic ø 31.8 mm
86.527	Plan M-IOS DIN 5x/0.12 infinity corrected		
	objective. Working distance 26.1 mm	86.889	Spare halogen bulb 20 W / 6 V
86.529	Plan M-IOS DIN 10x/0.25 infinity corrected	86.101	Spare LED module for B series
	objective. Working distance 20.20 mm	AE.5227	Glass fuses 1 A 250 V, 10 pieces
86.531	Plan M-IOS DIN 20x/0.40 infinity corrected		
	objective. Working distance 8.80 mm	PB.5155	Microscope slides 76 x 26 mm, ground edges,
86.535	Plan M-IOS DIN 50x/0.70 infinity corrected		50 pieces
	objective. Working distance 3.68 mm	PB.5165	Cover glasses $18 \times 18$ mm, thickness $0.13$ - $0.17$ mm,
86.538	Plan M-IOS DIN 80x/0.80 infinity corrected		100 pieces
	objective. Working distance 1.25 mm	PB.5168	Cover glasses 22 x 22 mm, thickness 0.13-0.17 mm,
86.539	Plan M-IOS DIN 100x/0.85 infinity corrected		100 pieces
	objective. Working distance 0.40 mm	PB.5245	Lens cleaning paper, 100 sheets
		PB.5274	Cleaning liquid, isopropanol alcohol 99% (200ml)
86.851	Polarizing attachment	PB.5275	Cleaning kit: lens cleaning fluid, lint free lens
	for transmitted halogen illumination		tissue, brush, air blower and cotton swabs
86.852	Polarizing attachment		
	for transmitted LED illumination		
86.806	Mirror adapter for B and B+ series		
	with halogen illumination only		
86.860	Köhler diaphragm with centering,		
	to be mounted on lamp house		
	(only suitable for models with halogen illumination)		
86.172	Dark field stop to be placed in filter holder		
	(transmitted illumination).		
	Suitable for objectives from 10x up to S40x		
AE.5130	Universal SLR camera adapter with		
	2x projection lens for 23.2 mm tubes.		
	L - A		

Need T2 adapter

AE.5020 T2 adapter for Nikon D digital SLR cameras

Other T2 adapters on request

AE.5040 T2 adapter for Canon EOS digital SLR cameras

# DigitalSolutions

Industry



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# DigitalSolutions

Industry

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

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



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

with CMOS sensor

Besides capturing of images and videos, the software allows measurements on still and live images and to perform annotations on captured images. Compatible with Windows XP, Vista, 7, 8 and 10, both 32 and 64 bits configurations

### **MODELS**

	Number of pixels (MP)	Sensor	Sensor size (inches)	Pixels size (μm)	Resolutions	Max. frames (p/sec)	Grayscale conversion	Color rendering	Signal/ Noise(db)	Dynamic (db)	Sensibility V/lux-sec (at 550 nm)	Product number
CMEX- 1	1.3	CMOS	1/3"	3.6x3.6	1280x1024	15	10 bits	24 bits	55	72	1.3	DC.1300c
					640x480	30						
CMEX- 3	3.2	CMOS	1/2"	3.2x3.2	2048x1536	10	10 bits	24 bits	44	72	1.3	DC.3000c
					1024x768	25						
					640x480	40						
CMEX- 5	5.0	CMOS	1/2.5"	2.2x2.2	2592x1944	5	10 bits	24 bits	42	65	1.3	DC.5000c
					1280x960	21						
					1024x768	25						
					640x480	38						

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



### **CMEX Pro USB-2 cameras** with CMOS sensor

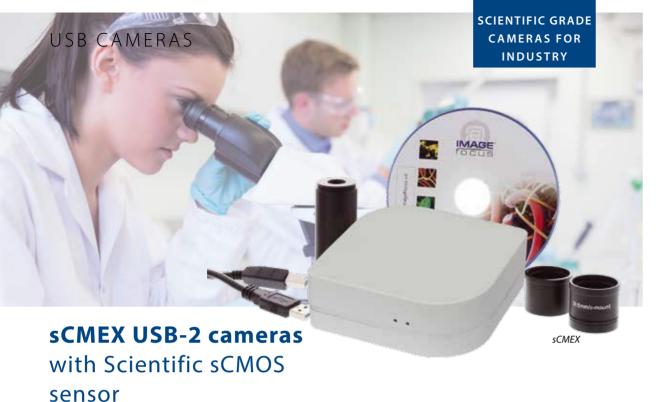
The CMEX-3 Pro and CMEX-5 Pro are equipped with a CMOS sensor with 12 bits grayscale conversion and a 24 bits color rendering. The CMEX cameras are equipped with a USB-2 data interface and supplied with ImageFocus 4 software

Besides capturing of images and videos, the software allows measurements on still and live images and to perform annotations on captured images. Compatible with Windows XP, Vista, 7, 8 and 10, both 32 and 64 bits configurations

### **MODELS**

	Sensor	Sensor size (inches)	Pixels size (μm)	Resolutions	Max. frames (p/sec)	Grayscale conversion	Color rendering	Signal/ Noise(db)	Dynamic (db)	Sensibility V/lux-sec	Product number
3.2	CMOS	1/2"	3.2 x 3.2	2048x1536	10	12 bits	24 bits	45	72	1.5	DC.3000p
				1024x768	25						
				640x480	40						
5.0	CMOS	1/2.5"	2.2 x 2.2	2592x1944	5	12 bits	24 bits	45	65	1.5	DC.5000p
				1280x960	21						
				1024x768	25						
				640x480	38						
	of pixels (MP) 3.2	of pixels (MP) 3.2 CMOS	(MP) 3.2 CMOS 1/2"	of pixels (inches) size (MP) (µm)  3.2 CMOS 1/2" 3.2 x 3.2	of pixels (MP)         (inches)         size (μm)           3.2         CMOS         1/2"         3.2 x 3.2         2048x1536           1024x768         1024x768         640x480           5.0         CMOS         1/2.5"         2.2 x 2.2         2592x1944           1280x960         1024x768	of pixels (MP)         (inches)         size (μμη)         frames (p/sec)           3.2         CMOS         1/2"         3.2 x 3.2         2048x1536         10           1024x768         25         640x480         40           5.0         CMOS         1/2.5"         2.2 x 2.2         2592x1944         5           1280x960         21           1024x768         25	of pixels (MP)         (inches)         size (μm)         frames (p/sec)         conversion (p/sec)           3.2         CMOS         1/2"         3.2 x 3.2         2048x1536         10         12 bits           1024x768         25         640x480         40         40           5.0         CMOS         1/2.5"         2.2 x 2.2         2592x1944         5         12 bits           1280x960         21         1024x768         25         1024x768         25	of pixels (MP)         (inches)         size (μm)         frame (p/sec)         conversion (p/sec)         rendering (p/sec)           3.2         CMOS         1/2"         3.2 x 3.2         2048x1536         10         12 bits         24 bits           1024x768         25         640x480         40         <	of pixels (MP)         (inches)         size (μm)         frames (p/sec)         conversion (p/sec)         rendering (P/sec)         Noise(db)           3.2         CMOS         1/2"         3.2 x 3.2         2048x1536         10         12 bits         24 bits         45           1024x768         25         640x480         40         40         40         45           5.0         CMOS         1/2.5"         2.2 x 2.2         2592x1944         5         12 bits         24 bits         45           1280x960         21         1024x768         25         45         45	of pixels (MP)         (inches)         size (μμμ)         frames (p/sec)         conversion (p/sec)         rendering         Noise(db)         (db)           3.2         CMOS         1/2"         3.2 x 3.2         2048x1536         10         12 bits         24 bits         45         72           1024x768         25         640x480         40         40         45         65           5.0         CMOS         1/2.5"         2.2 x 2.2         2592x1944         5         12 bits         24 bits         45         65           1280x960         21         1024x768         25         45         45         65	of pixels (MP)         (inches)         size (μμμ)         frames (p/sec)         conversion (p/sec)         rendering (P/sec)         Noise(db)         (db)         V/lux-sec           3.2         CMOS         1/2"         3.2 x 3.2         2048x1536         10         12 bits         24 bits         45         72         1.5           1024x768         25         640x480         40         40         45         65         1.5           5.0         CMOS         1/2.5"         2.2 x 2.2         2592x1944         5         12 bits         24 bits         45         65         1.5           1280x960         21         1024x768         25         45         45         65         1.5

The CMEX Pro cameras are supplied in a deluxe carrying case with USB-2 cable, 30.0 and 30.5 mm to 23.2 mm conversion adapters for use with stereo microscopes, 1mm/100 (10µm/division) calibration slide and a 0.45x C-mount objective



The sCMEX-1 and sCMEX-3 cameras are equipped with a scientific sCMOS sensor with 16 bits grayscale conversion and an outstanding 36 bits color rendering. Suitable for brightfield, dark field and fluorescence. The sCMEX cameras are equipped with a USB-2.0 and supplied with ImageFocus 4 software

Besides capturing of images and videos, the software allows measurements on still and live images and to perform annotations on captured images. Compatible with Windows XP, Vista, 7, 8 and 10, both 32 and 64 bits configurations

	Number of pixels (MP)	Sensor	Sensor size (inches)	Pixels size (μm)	Resolutions	Max. frames (p/sec)	Grayscale conversion	Color rendering	Signal/ Noise(db)	Dynamic (db)	Sensibility V/lux-sec	Product number
sCMEX-1	1.3	sCMOS	1/3"	3.6 x 3.6	1278 x 1038	25	16 bits	36 bits	55	72	1.5	DC.1300s
					664 x 512	39						
sCMEX-3	3.0	sCMOS	1/2.8"	2.5 x 2.5	2048 x 1536	11	16 bits	36 bits	55	69	1.5	DC.3000s
					1024 x 768	27						
					684 x 512	38						

The sCMEX cameras are supplied in a carton box with USB-2 cable, 30.0 and 30.5 mm to 23.2 mm conversion adapters for use with stereo microscopes, 1mm/100 (10µm/division) calibration slide and a 0.35x C-mount objective



CCD cooled color

The Euromex 2/3 inch CCD Peltier cooled camera is equipped with a Peltier cooling element that allows the camera to be suitable for fluorescence applications. The camera have a USB-2 interface for connection with a computer and is supplied with ImageFocus4 software

Besides capturing of images and videos, this software allows measurements on still and live images and to perform annotations on captured images. The software has specific functions for fluorescence like combining capture fluorescence images. Compatible with Windows XP, Vista, 7, 8 and 10, both 32 and 64 bits configurations

### MODEL

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

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

The Euromex CCD cooled camera (DC.5000i) is equipped with a female C-mount thread and can be directly mounted on microscopes with a C-mount adapter. For microscopes with a standard 23.2 mm tube, the 0.67x objective for 2/3" cameras is needed (reference DC.1328) sold seperately



equipped with a 10 or 18 MP CMOS sensor with 12 bits grayscale conversion and a 24 bits color rendering. This camera is equipped with a USB-3 data interface enableling fast frame rate and supplied with ImageFocus Alpha software

Besides capturing of images and videos, the software allows measurements on still and live images and to perform annotations on captured images. Compatible with Windows XP, Vista, 7, 8 and 10, both 32 and 64 bits configurations. A 2Gb RAM 2.8 GHz computer and 17 inch display is recommended iScope microscope with the CMEX 18 Pro camera



DC.18000p

	Sensor	Sensor size (inches)	Pixels size (μm)	Resolutions	Max. frames (p/sec)	Grayscale conversion	Color rendering	Signal/ Noise(db)	Dynamic (db)	Sensibility V/lux-sec	Product number
CMEX-10 Pro	CMOS	1/2.3"	1.67x1.67	3584x2746	7.2	12 bits	24 bits	35.5	63.5	0.31	DC. 10000p
				1792x1372	24.5						
CMEX-18 Pro	CMOS	1/2.3"	1.25x1.25	4912x3684	6	12 bits	24 bits	42	65	1.3	DC. 18000p
				2456x1842	18						
				1228x922	32						

The CMEX-18 camera is supplied in a carton box with USB-3 cable, 30.0 and 30.5 mm adapters to use with stereo microscopes,  $1 \text{mm}/100 (10 \mu\text{m/division})$  calibration slide and a 0.5x C-mount objective

### SOFTWARE





# **ImageFocus 4** software

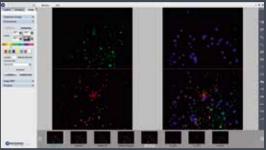
The software is compatible with all above mentioned USB-2 cameras.

Besides live imaging, the software captures images in Jpeg, Tiff or Bmp formats or video recording in Avi format

ImageFocus 4 has a wide range of functions like:

- Measurements can be done on still and live image
- The brightness, contrast and saturation of captured images can be adjusted
- Camera parameters for exposure time, white balance and color control are easily accessible
- The software also has specific functions for fluorescence like combining capture fluorescence images
- Compatible with Windows XP, Vista, Windows 7, 8 and 10, both 32 and 64 bits configuration

IMAGE FOCUS 4
DC.1300c / DC.3000c / DC.5000c
DC.3000p / DC.5000p
DC.1300s / DC.3000s
DC.5000i
VC.3036



FREE UPDATES

**AVAILABLE ON** 

# **ImageFocus Alpha** software

The ImageFocus Alpha software is compatible with the mentioned USB-3 cameras.

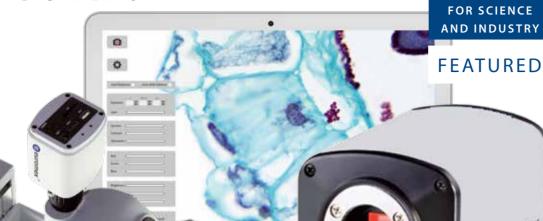
Besides live imaging, the software captures images in several formats like Jpeq, Tiff or Bmp or video recording in Avi format

ImageFocus Alpha has a wide range of functions like:

- Measuring, segmentation & count, stiching of images,
   Extended Dept of Focus, stacking etc
- The brightness, contrast and saturation of captured images can be adjusted
- Camera parameters for exposure time, white balance and color control are easily accessible
- The software also has specific functions for fluorescence like combining capture fluorescence images
- Compatible with Windows XP, Vista, Windows 7, 8 and 10, both 32 and 64 bits configuration

IMAGE FOCUS ALPHA
DC.18000p /DC.10000p
DC.5000-WIFI

HD CAMERAS



High definition HD1080p and 720p CMOS color cameras

with HDMI and USB-2 interfaces

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

The cameras are equipped with high sensitive sensors for low and intense light conditions and also suitable for coaxial illumination and machine vision applications

**CAMERAS** 

VC.3036

#### MODEL

	Sensor	(inches)	Pixels size (μm)	Resolutions	Grayscale conversion	Color rendering	Signal/ Noise(db)	(db)	Sensitivity (V)	Product number
HD-Ultra HDMI/USB2	Sony	1/2.8″	2.8 x 2.8	3264 x 1836 1920 x 1080 1080p video HDMI 60 fps	16 bits	36 bits	55	69	510mV	VC.3036
HD-Lite HDMI/USB2	Aptina CMOS	1/2.5″	2.2 x 2.2	2592 x 1944 1920 x 1080 1080p video HDMI 15 fps	16 bits	24 bits	40.5	60	1V	VC.3031
HD-Mini HDMI	CMOS	1/2.5"	5.7 x 4.28	1080 x 720 HDMI 30 fps	8 bits	24 bits	38	70	1.4V	VC.3030

#### **HIGHLIGHTS**

- · HD 1080p or 720p high definition color cameras
- · Real time images directly on TV, monitor or beamer
- · Stand alone or used via PC
- · Built-in mouse-driven software
- · C-mount interface
- · HDMI, USB-2 and SD memory card
- · Compatible with ImageFocus 4 software



Back panel of VC.3036

The real time images generated with these camera provide excellent color rendering with frame speeds up to 60 fps. All settings are done automatically and therefore very user friendly. Once connected directly to a HDMI screen, TV or beamer with HDMI input, one can use the mouse-driven onboard software of the HD-Ultra and HD-Lite to capture and save images and videos (.avi format) on the integrated SD memory card.

A menu can be displayed right on screen, for live viewing or capturing of images and videos. Captured images and videos can be very easily reviewed without any need of a computer and the HD-Ultra even offers a full range of measuring options. These key properties make the cameras ideal for real time inspection, education and live demonstrations

Cameras are supplied with a C-mount and can be connected to all Euromex microscopes using optional C-mount adapters. The HD-Mini camera is supplied with 0.45x C-mount adapter for standard 23.2 mm tube

Users can also connect the HD-Ultra and HD-Lite camera to a computer using the USB-2 interface. The supplied ImageFocus 4 software allows more camera and image controls, annotations and measuring functions on live and captured images. Compatible with Windows XP, Vista 7, 8 and 10, both 32 and 64 bits

The HD-Mini is solely connected via a HDMI input and controlled by buttons on the camera and comes without software. Captured images and videos (.avi format) are saved to the on-board SD memory card

#### **PACKAGING**

The HD-Ultra and HD-Lite 1080p cameras (ref. VC.3036 & VC.3031) are supplied with USB-2 (A-A type) cable, USB-2 mouse, 30.0 and 30.5 mm to 23.2 mm conversion adapters for use with stereo microscopes, 1mm/100 (10µm/division) calibration slide and external power supply

The HD-Ultra cameras need a 0.35x C-mount adapter and the HD-Lite cameras need a 0.45x C-mount adapter to connect them to microscopes. For microscopes with a standard 23.2 mm tube, the optional 0.33x objective for 1/3" cameras (reference DC.1326) is required. For other microscope tubes, please refer to our camera adapter guide. Supplied with Image Focus 4 software, Window XP and higher

The HD-Mini 720p camera (ref. VC.3030) is supplied in a carton box with USB-2 mouse 30.0 and 30.5 mm to 23.2 mm conversion adapters for use with stereo microscope and with 23.2mm tube C-mount adapter. Supplied without USB-2 cable

#### COMPUTER CONTROLLED VERSUS STAND-ALONE

There are two ways to use the HD-Ultra (ref. VC.3036) and HD-Lite (ref. VC.3031) cameras, computer controlled or as stand-alone system



INDUSTRY DIGITAL SOLUTIONS

#### STAND-ALONE

No need to open or start a computer or any computer knowledge to use a camera. This results in faster, more flexible and compact working conditions. Simply plug the camera to a high resolution HDMI monitor or TV and the system is ready to go. Ideal for quality control systems etc Although most settings are done automatically by the camera, one can use the supplied mouse to control the camera via a user retrievable on-screen menu. The mouse is connected directly to the camera. Very intuitive controls allow users to capture and save images and to record videos on the integrated SD memory card

#### COMPUTER CONTROLLED

Users who want more camera controls and more measurements functions, can connect the camera to a

computer and take benefit of the power of the Euromex ImageFocus v4 software. It runs on Windows XP, Vista 7, 8 and 10, both 32 and 64 bits and is supplied with the camera package.

Euromex supplies free updates on www.euromex.com. Besides live imaging and measuring functions on live and captured images, the software saves images in JPG, TIFF or BMP formats or recording videos in .avi format. The software allows measurements on linear sections, angles and surfaces, and also full control over the camera parameters like manual or automatic exposure time, white balance, adjustments of brightness, contrast and saturation on live and captured images. Specific functions for fluorescence like histogram adjustments and combining captured fluorescence images are also included in ImageFocus 4 software

	HD-Ultra	HD-Lite	HD-Mini
Sensor	Sony sensor	Aptina sensor	-
Format	1/2.8", HDTV 1080p (50/60 Hz)	1/2.5", HDTV 1080p (50/60 Hz)	1/2.5", HDTV 720p (50/60 Hz)
Pixels	3264 x 1836 (capture mode),	2592 x 1944 (capture mode),	-
	1920 x 1080 pixels (live view),	1920 x 1080 pixels (live view),	1080 x 1720 pixels
	HDMI 60 fps	HDMI 15 fps	-
	USB 30 fps	USB 15fps	-
Video	1080p pixels video recording mode	1080p pixels video recording mode	720p pixels video recording mode
Scan mode	Progressive scan	Progressive scan	Progressive scan
Noise	3D Noise Reduction function	3D Noise Reduction function	Noise Reduction function
White balance	Automatic/manual	Automatic/manual	Automatic
Interfaces	Digital HDMI, USB 2	Digital HDMI, USB 2	Digital HDMI
Storage	Standard high speed 8 Gb SD memory card or to USB-2	Standard 4 Gb SD memory card or to USB-2	Standard high speed 4 Gb SD memory card
Camera buttons	On/Off	On/Off	Videostream/freese, AEWB on/ off, save image, cursor on/off
Mounting	C-mount interface	C-mount interface	C-mount interface
Power supply	External main adapter	External main adapter	External main adapter
	100-240 Vac to 12Vdc/2A	100-240 Vac to 12Vdc/2A	100-240 Vac to 5Vdc/1A
Operation	0 – 60° C, 45-85 % humidity	0 – 60° C, 45-85 % humidity	-10 – 40° C, 30-80 % humidity
Storage temperature	-20 to 70° Celsius	-20 to 70° Celsius	-20 to 60° Celsius
Product number	VC.3036	VC.3031	VC.3030



# digital WiFi camera with 1/2.5 inch CMOS sensor

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

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

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





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

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

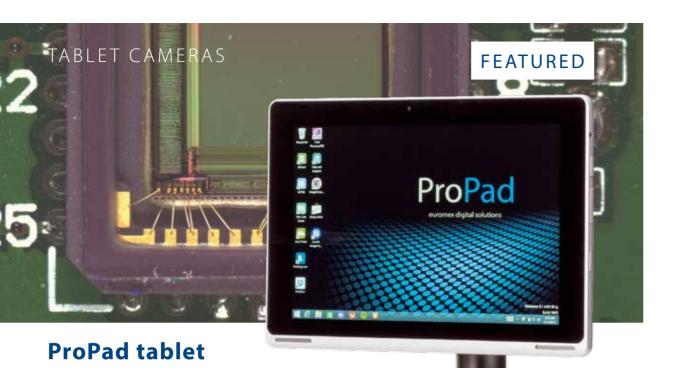
The camera is powered by the included USB charger or a computers USB port. Standard C-mount mounting with 0.45x C-mount objective included

#### MODEL

	Sensor	Sensor size (inches)	Pixels size (µm)	Resolutions	Grayscale conversion	Color rendering	-	•	Sensibility V/lux-sec	Product number
CMEX-WIFI5	CMOS	1/2.5"	2.2 x 2.2	1280 x 720	12 bits	24 bits	43	61	1.0	DC. 5000-WIFI

The CMEX-WIFI 5 camera is supplied in a carton box with USB-2 cable, 30.0 and 30.5 mm adapters to use with stereo microscopes, and a 0.45x C-mount objective





The ProPad Full HD (1280x800) display reveals bright colours and crisp, microscopic images. The ProPad consists out of a high quality microscope camera system and a fully detachable tablet running the latest ImageFocus

with microscope camera and

keyboard-docking station

versions. You can take it anywhere

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

#### SOFTWARE

ProPad-1, ProPad-3 and ProPad-5 are supplied with ImageFocus 4. ProPad-WIFI is supplied with ImageFocus Alpha software for image and video capture and measuring

#### **HIGHLIGHTS**

- 10.1" Tablet with microscope camera
- · 1280 x 800 pixels HD touchscreen
- · Full Windows 8.1, 32 bit system
- ImageFocus 4 capture software for PC
- · ImageFocus Alpha for WiFi enabled PC and Android devices
- · Tablet can be fully detached from camera
- · Including keyboard
- · The keyboard uses a magnetic docking solution so you can loosen it easily and snap on the ProPad





ProPad and keyboard-docking station



#### **SPECIFICATION**

31 ECH TCATTON	
Processor	Quad Core 1.33 GHz with HD graphics processor
Screen	1280 x 800 (WGXA) touchscreen, LED backlight
Memory	2 GB DDR RAM, 2 MB cache
Storage	32 GB intern SDD, micro SD up to 32 GB
Webcam	2 MP, 1600 x 1200 pixels front and rear cameras
Connectivity	Micro USB 2.0, WiFi 802.11 b/g/n and Bluetooth 4.0
Audio	Stereo with 3.5 mm audio jack and internal microphone
Battery	Lithium, 4420 mAh, 17 Wh
Housing	Aluminium, white colour, 214 x 128 x 9.8 mm
Weight	788 gram
System	Windows 8.1, 32 bit
Supplied with	Keyboard-docking station

#### MODELS

MODELS	Camera (MP)	Sensor size	Resolution	Pixels size (μm)	ADC	Color rendering	Signal/ Noise(db)	Dynamic (db)	Sensibility V/lux-sec	Interface	Product number
ProPad-1	1.3	1/3"	1280x1024	3.6 x3.6	10 bits	24 bits	55 db	72 db	1.3	USB-2	PP.1300c
ProPad-3	3.2	1/2"	2048x1536	3.2 x3.2	10 bits	24 bits	44 db	72 db	1.3	USB-2	PP.3000c
ProPad-5	5	1/2.5"	2592x1944	2.2 x 2.2	10 bits	24 bits	42 db	65 db	1.3	USB-2	PP.5000c
ProPad-WIFI	5	1/2.5"	2592x1944	2.2 x 2.2	12 bits	24 bits	40.5 db	66.5 db	0.53	WiFi	PP.5000-WIFI



# **CCD color camera - 580 lines** with composite and S-video output

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

#### DIGITAL

Digitizing the images of this analogue camera can be done using the VC.5491 frame grabber. Connected to PC using USB-2 this device allows storage of images and videos

#### REALTIME

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

MODEL	Sensor	Sensor size (inches)	Number of pixels	Number of image lines	White balance	Sensitivity	Output	Connection
VC.3032	CCD	1/2″	297,984	580	auto/manual	auto/manual	Composite/S-Video	C-mount



# Mini USB-2 Video Grabber for CCD color camera

This mini VC.5491 USB-2 video grabber converts composite or a S-video signal from any analogue camera into digital images and sends them to a computer via a USB-2 connection



Video Window

#### MODEL

Pictures	Saving in BMP, JPG, TIFF format
Image resolution	640 x 480 pixels (fixed image)
Video movies	Saving in AVI, MPEG-2, MPEG-4, VCD, SVCD, WMV format
Video resolution	730 x 480, 640 x 480, 640 x 240, 320 x 240 pixels
Video system	PAL, SECAM, NTSC
Settings	Brightness, contrast, hue and saturation
Video input	Composite and S-video (Y/C)
Audio input	Cinch connection - stereo left/right
Power supply	5 Vdc, max 330 mA via USB-port 2
Minumum requirements	PC Pentium 4, 1 GHz, 128 MB RAM internal memory, a free USB-2 port, soundcard
Operation system	Windows 2000 SP3, Windows XP SP 1 (or higher), Windows Vista, Windows 7 and 8
Product number	VC.5491



MODELS		DC.1300c	DC.1300s / DC.3000s / DC.3000c / DC.5000c / DC.10000p / DC.3000p / DC.5000p / DC.18000p / DC.5000-WIFI / VC.3030	DC.5000i	VC.3032 / VC.3031	VC.3036	DSLR camera (need brand specific T2 adapter)
B and B+ series	Monocular*	Plug & Play	Plug & Play	DC.1323	DC.1324	DC.1326	AE.5130 + T2
B and B+ series	Binocular*	Plug & Play	Plug & Play	DC.1323	DC.1324	DC.1326	AE.5130 + T2
B and B+ series	Trinocular	Plug & Play	Plug & Play	DC.1323	DC.1324	DC.1326	AE.5130 + T2
BE-50 series		Plug & Play**	Plug & Play**	DC.1335 + DC.1323	DC.1335 + DC.1324	DC.1335 + DC.1326	AE.5130 + DC.1335 + T2
DZ series	Binocular*	Plug & Play**	Plug & Play**	DC.1330 + DC.1323	DC.1330 + DC.1324	DC.1330 + DC.1326	AE.5130 + DC.1330 + T2
DZ series	Trinocular	Plug & Play	Plug & Play	DC.1323	DC.9011 or DC.1324	DC.9011 or DC.1324	AE.5130 + T2
iScope	Binocular*	Plug & Play	Plug & Play	DC.1323	DC.1324	DC.1326	AE.5130 + T2
iScope	Trinocular	Plug & Play	Plug & Play	DC.1323	DC.1324	DC.1326	AE.5130 + T2

<sup>\*</sup> Camera substitutes one eyepiece

#### ACCESSORIES AND SPARE PARTS

DC.1320	C-mount adapter with 1x objective	OX.9810	CS/C mount with 1.0x objective
	for standard Ø 23.2 mm tubes	OX.9833	C-mount adapter with 0.33x objective for Oxion
DC.1323	C-mount adapter with 0.67x objective for standard		microscopes and 1/3" cameras
	23.2 mm tubus and 2/3" camera	OX.9850	C-mount adapter with 0.5x objective for Oxion
DC.1324	C-mount adapter with 0.45x objective		and Oxion Inverso microscopes and 1/2" camera
	for standard Ø 23.2 mm tubes and 1/2" camera	NZ.9833	C-mount adapter with 0.33x objective for
DC.1326	C-mount adapter with 0.35x objective		NexiusZoom microscopes and 1/3" cameras
	for standard Ø 23.2 mm tubes and 1/3" camera	NZ.9850	C-mount adapter with 0.5x objective for
			NexiusZoom microscopes and 1/2" cameras
DC.1330	30 mm to 23.2 mm conversion adapters	SB.9833	C-mount adapter with 0.33x objective for
	for stereo microscopes		StereoBlue microscopes and 1/3" cameras
DC.1335	30.5 mm to 23.2 mm conversion adapters	SB.9850	C-mount adapter with 0.5x objective for
	for stereo microscopes		StereoBlue microscopes and 1/2" cameras
OX.5120	Standard 23.2 mm diameter tube for Oxion photo port	AE.5059	C-mount adapter with 0.45x objective
AE.5130	Universal SLR camera adapter for 23.2 mm tubus		for Z series microscopes.
	with built-in 2x magnification lens. Needs T2 adapter		To be placed over the Ø 23.2 mm tube
AE.5025	T2 adapter for Nikon D digital SLR cameras	AE.5063	C-mount adapter with 0.7x objective
AE.5040	T2 adapter for Canon EOS digital SLR cameras		for Z series microscopes and 2/3" sensor cameras
			To be placed over the Ø 23.2 mm tube

MODELS		DC.1300c	DC.1300s / DC.3000s / DC.3000c / DC.5000c / DC.10000p / DC.3000p / DC.5000p / DC.18000p / DC.5000-WIFI / VC.3030	DC.5000i	VC.3032 / VC.3031	VC.3036	DSLR camera (need brand specific T2 adapter)	other available items
iScope IOS	Binocular*	Plug & Play**	Plug & Play**	DC.1330 + DC.1323	DC.1330 + DC.1324	DC.1330 + DC.1326	AE.5130 + DC.1330 + T2	
iScope IOS	Trinocular	Plug & Play	Plug & Play	DC.1323	DC.1324	DC.1326	AE.5130 + T2	
NexiusZoom (ESD)	Binocular*	Plug & Play**	Plug & Play**	DC.1330 + DC.1323	DC.1330 + DC.1324	DC.1330 + DC.1326	AE.5130 + DC.1330 + T2	
NexiusZoom (ESD)	Trinocular	Plug & Play	Plug & Play	NZ.9850 or DC.1323	NZ.9850 or DC.1324	NZ.9833 or DC.1326	AE.5130 + T2	
Oxion	Binocular*	Plug & Play**	Plug & Play**	DC.1330 + DC.1323	DC.1330 + DC.1324	DC.1330 + DC.1326	AE.5130 + DC.1330 + T2	
Oxion	Trinocular	OX.9833	OX.9850	AE.5132 + DC.1323	OX.9850	OX.9833	AE.5120 + AE.5130 + T2	OX.9810
Oxion Inverto	Trinocular	OX.9833	OX.9850	AE.5132 + DC.1323	OX.9850	OX.9833	AE.5120 + AE.5130 + T2	OX.9810
P series	Binocular	Plug & Play**	Plug & Play**	DC.1335 + DC.1323	DC.1335 + DC.1324	DC.1335 + DC.1326	AE.5130 + DC.1335 + T2	
StereoBlue	Binocular*	Plug & Play**	Plug & Play**	DC.1330 + DC.1323	DC.1330 + DC.1324	DC.1330 + DC.1326	AE.5130 + DC.1330 + T2	
StereoBlue	Trinocular	Plug & Play	Plug & Play	DC.1323 or SB.9850	DC.1324 or SB.9850	DC.1326 or SB.9833	AE.5130 + T2	
Z series	Binocular*	Plug & Play**	Plug & Play**	DC.1335 + DC.1323	DC.1335 + DC.1324	DC.1335 + DC.1326	AE.5130 + DC.1335 + T2	
Z series	Trinocular	Plug & Play	Plug & Play	DC.1323	DC.1324	DC.1326	AE.5130 + T2	AE.5059 AE.5063

<sup>\*\*</sup> Using the supplied 30/30.5 mm conversion adapters (DC.1330/DC.1335)

# Accessories

for microscopy



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# Accessories

for microscopy

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

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

# **a** euromex

# Illumination Solutions

for stereo microscopy



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

The major advantage of LED illumination is the constant light spectrum at all light intensity levels. These light sources are suitable for all kind of applications in industry, Life Sciences and Materials Sciences

ILLUMINATION SOLUTIONS

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

# **Multifunctional 150 W halogen or 30 W PowerLED** cold light source

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

The LE.5213, LE.5214 and LE.5215 light conductors can be equipped with a lens holder (LE.5222) and a focusing lens (LE.5224)



Power	150 W halogen	30 W PowerLED (equivalent to 120 W halogen)
Color temperature	3,000 K	6,500 K
Operating voltage	100-240 V AC / 12 V DC (50/60 Hz)	00-240 V AC / 12 V DC (50/60 Hz)
Dimensions	(h) 150 x (w) 150 x (d) 230 mm	(h) 150 x (w) 150 x (d) 230 mm
Weight	2.8 kg	3.9 kg
Model	LE.5211	LE.5211-LED

# 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 like the single LE.5213, dual LE.5214, triple LE.5215 or the LE.5239 or LE.5240 ring light fiber conductors.

The LE.5213, LE.5214 and LE.5215 light conductors can be equipped with a lens holder (LE.5222) and a focusing lens (LE.5224). Ideal for all kind of applications in Life- and Material Sciences, various industrial applications and for stereo microscopy



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

# **Compact single 20 W** light source

Compact cold light source with single 40 cm, 6 mm diameter fibre 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	(h) 80 x (w) 110 x (d) 165 mm
Weight	2.0 kg
Model	LE.5209

# **Economical and compact dual 2 W LED** light source

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



Power	22x 1 W LED = 2x 20 W halogen equivalent
Color temperature	6,500 K
Operating voltage	100-240 V AC / 12 V DC (50/60 Hz)
Dimensions	(h) 70 x (w) 120 x (d) 170 mm
Weight	1.6 kg
Model	LE.5208

# Fluorescence 40 Hz ring light source

# for Z serie zoom objective

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



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

# **Economical 56 LEDs**

# ring light source

Entry-level 8,000 lux LED ring light source



Ring illumination	56 LEDs with adjustable intensity
Color temperature	6,500 K
Illuminance	12,000 Lux at 100 mm distance
Working distance:	from 55 and 120 mm
Mounting	for stereo head with diameter 25 to 60 mm
Power supply	100-240 V AC /12 V DC (50/60 Hz)
External diameter	100 mm
Model	LE.1970

# **Professional high PowerLED ring light sources**

LE.1980/ LE.1981

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

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	Number of LEDs	Color temperature	Illuminance	For mounting diameters	Internal/ external diameter	Controls	Require power supply
LE.1980	48	6,000 K	17,000 lux	from 30 to 66 mm	45/90 mm	Analog controller, Intensity adjustable from 0-100 %	LE.199
LE.1981	48	6,000 K	17,000 lux	from 30 to 66 mm	45/90 mm	Digital segments controller for 8, 4 or 1 segment, intensity adjustable from 0-100 %	LE.199

# 144 LEDs ring light source with segment illumination

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



Ring illumination	144 LEDs with adjustable intensity and
	4 segment illumination
Color temperature	6,500 K
Illuminance	230,000 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)
External diameter	100 mm
Model	LE.1973

# **Compact 60 LEDs** ring light source

Compact 20,000 lux LED ring light source



Ring illumination	60 LEDs with adjustable intensity and
	4 segment illumination
Color temperature	6,500 K
Illuminance	20,000 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)
External diameter	100 mm
Model	LE.1972

# **Professional high PowerLED ring light sources**

LE.1990/ LE.1991

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



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	Number of LEDs	Color temperature	Illuminance	For mounting diameters	Internal/ external diameter	Controls	Required power supply
LE.1990	72	6,000 K	21,000 lux	from 40 to 66 mm	60/110 mm	Analog controller, Intensity adjustable from 0-100 %	LE.1992
LE.1991	l 72	6,000 K	21,000 lux	from 40 to 66 mm	60/110 mm	Digital segments controller for 8, 4 or 1 segment, intensity adjustable from 0-100 %	LE.1993

#### ACCESSORIES AND SPARE PARTS

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

#### FIBER LIGHT CONDUCTOR

FIREK L	IGHT CONDUCTOR
LE.5213	Single arm fiber light conductor,
	Gooseneck self-sustaining,
	50 cm long, 4 mm diameter
LE.5214	Dual arm fiber light conductor,
	Gooseneck self-sustaining,
	50 cm long, 4 mm diameter
LE.5215	Triple arm fiber light conductor,
	Gooseneck self-sustaining,
	50 cm long, 4 mm diameter
LE.5219	Dual arm fiber light conductor,
	Gooseneck self-sustaining,
	70 cm long, 4 mm diameter
LE.5239	Slit ring-shaped fiber light conductor
	60 cm long, 8 mm diameter
LE.5240	Slit ring shaped fiber light conductor
	100 cm long, 8 mm diameter
LE.5241	Flexible fiber light conductor,
	curved 90°, 60 cm long, 4 mm diameter
LE.5216	Single arm flexible fiber light conductor,
	100 cm long, 4 mm diameter
LE.5235	Dual arm flexible fiber light conductor,
	100 cm long, 4 mm diameter
LE.5235-3	Dual arm flexible fiber light conductor,
	300 cm long, 4 mm diameter
LE.5217	Triple arm flexible fiber light conductor,
	100 cm long, 4 mm diameter
LE.5218	Single arm flexible fiber light conductor,
	100 cm long, 8 mm diameter
LE.5220	Single arm flexible fiber light conductor,

200 cm long, 8 mm diameter

I E 5333	Focusing hand for focusing long LF E224 LF E229
LE.5222	Focusing head for focusing lens LE.5224, LE.5228
	or filters LE.5223, LE.5229 and LE.5231
	(for fiber light conductors)
LE.5224	Focusing lens. Requires LE.5222 or LE.5228 for
	mounting on LE.5213, LE.5214 and LE.5215
LE.5228	Focusing head with iris diaphragm
	(for fiber light conductors)
LE.5223	Set of 3 color filters (red, blue, green),
	suitable for LE.5222 and LE.5228
LE.5229	Polarization filter
LE.5231	Conversion KB12/80B filter
HALOGE	N BULBS AND FUSES

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

#### FOR LE.1863

**SL.1864** Spare fluorescence lamp

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

**LE.1984** Diffusing filter, for working distance

LE.1984-050 Fresnel lens, working distance from 40 to 80 mm LE.1984-100 Fresnel lens, working distance from 80 to 150 mm LE.1984-200 Fresnel lens, working distance from 150 to 240 mm

	from 40 to 300 mm
LE.1985	Glass protection window
LE.1887	Polarizing filter
LE.1888	Rotatable polarizing filter
LE.1992	100-230 V power supply analog controller.
	Intensity adjustable from 0-100%
LE.1993	100-230 V power supply digital segment
	controller. Intensity adjustable from 0-100%

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

**LE.1994** Diffusing filter, for working distance from 40 to 300 mm

**LE.1994-050** Fresnel lens, working distance from 40 to 80mm **LE.1994-100** Fresnel lens, working distance from 80 to 150 mm LE.1994-200 Fresnel lens, working distance from 150 to 240 mm

110111 10 to 500 111111
Glass protection window
Polarizing filter
Rotatable polarizing filter
100-230 V power supply analog controller.
Intensity adjustable from 0-100%
100-230 V power supply digital segment
controller. Intensity adjustable from 0-100%

#### **DISSECTION INSTRUMENTS**

length 13 cm

PB.5077

accurate results

Dissecting needle, straight tip with plastic handle PB.5054 Dissecting needle, lancet-shaped with plastic handle PB.5056 Blunt-pointed probe, Ø2 mm, length 140 mm Section lifter with wooden handle PB.5058 PB.5060 Serrated thumb dressing forceps, length 13 mm Dressing forceps with blunt tips, length 13 cm PB.5062 Dressing forceps with blunt tips, length 20 cm PB.5064 PB.5067 Dissecting forceps with sharp tips, length 13 cm Dissecting forceps with finely curved sharp tips, PB.5069

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

microtome knifes. Includes stropping paste

PB.5103 Strop, double sided for stropping of scalpels,

With plastic handle PB.5106 Microtome knife plano/concave.

PB.5105 Razor plano/concave, for sectioning.



PB.5103

HANDHELD MICROTOMES

MT.5500 Cylinder microtome.

Round stage Ø 70 mm with flat black glass top. Height adjustable with micrometer division 0.01 mm. Complete with plano-concave knife PB.5106

and wooden cabinet

MT.5501 Cylinder microtome. Identical to MT.5500 but without knife

and wooden cabinet

MT.5503 Handheld microtome.

Box type with table clamp and razor blade holder.

Thickness adjustment by 0.025 mm intervals.

Complete with wooden cabinet



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

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



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

Kit with two dissecting needles straight (PB.5050), dissecting needle lancet-shaped (PB.5054), dressing forceps (PB.5062), dissecting forceps (PB.5067), scissors (PB.5080), dissecting scissors (PB.5084), 2 scalpels (PB.5094), 5 scalpel blades with straight tip and 5 blades with blunt tip (PB.5095/PB.5096). Supplied with wooden cabinet



# 6-PC Dissection kit PB.5111 in plastic case

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



# 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), 5 scalpel blades with straight tip and 5 blades with blunt tip (PB.5095/PB.5096)



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

Kit with two dissecting needles straight (PB.5050), dissecting needle lancet-shaped (PB.5054), dressing forceps (PB.5062), dissecting forceps (PB.5067), scissors (PB.5080), dissecting scissors (PB.5084), 2 scalpels (PB.5094), 5 scalpel blades with straight tip and 5 blades with blunt tip (PB.5095/PB.5096). Supplied with imitation leather case



Professional slide preparation kit

PB.5125 in plastic deluxe case

Kit with 3 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 box



euromex



MICROSCOPE PREPARED SLIDES

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



25 Slides set of human histology, zoology and botany

PB. 5211 for education

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

	LO	

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.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.
ıds	SB.2405	Dental plaque, smear

SB.2006 Allium cepa, onion, scale epidermis, w.m.

# 25 Slides set of human histology, zoology and botany

# PB. 5212 for education

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

H	HISTOL	OGY	BOTAN	Υ
9	SH.1001	Loose connective tissue, rabbit	SB.2095	Monocot/dicot stem, zea mays/pumpkin, c.s.
9	SH.1005	Hyaline cartilage rabbit, section	SB.2105	Hibiscus, young stem, c.s.
9	SH.1160	Lymph node, rabbit, section	SB.2110	Cucurbita, pumpkin, stem, l.s.
9	SH.1230	Small intestine, dog, c.s.	SB.2115	Sambucus, elderberry or Morus Alba, mulberry
9	5H.1250	Liver, pig, section		stem with cork cambium + lenticels, c.s.
9	5H.1430	Cerebrum section, dog	SB.2160	Lilium, lily leaf, c.s.
			SB.2225	Zea mays, corn, corn seed with embryo, l.s.
7	ZOOLO	GY	SB.2235	Pirus, pear, stone cells, section
9	SZ.1520	Paramecium, w.m.	SB.2240	Triticum aestivum, wheat, kernel, l.s.
9	SZ.1625	Schistosoma Japonicum, fluke eggs, bilharziose	SB.2305	Cyrtomium, holly fern, c.s. of rhizom
9	SZ.1630	Taenia, tapeworm pig, mature proglottid, w.m.	SB.2310	Cyrtomium, holly fern, section
9	SZ.1635	A scar is megalocephala, horse roundworm, female+male, c.s.	SB.2386	Oscillatoria, blue-green algae
9	SZ.1708	Apis mellifica, honey bee, mouth parts		

ι	USED ABBREVIATIONS	
C	s.	cross section
I	I.s. longitudinal section	
٧	v.m.	whole mount

# 25 Slides set of human histology, zoology and botany

# PB. 5213 for education

**SZ.1725** Periplaneta, cockroach, mouth parts of chewing type

Pieres brassicae, cabbage-white butterfly, mouth, w.m. Periplaneta, cockroach, spiracle of insect, w.m.

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

#### HISTOLOGY

SH.1006	Elastic cartilage, rabbit	SH.1130	Artery and vein, rabbit, c.s.
SH.1040	Smooth muscle, teased preparation, rabbit, l.s.+c.s.	SH.1410	Nerve, rabbit, c.s. and l.s
SH.1110	Lung with injected blood vessels, rabbit, c.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 smea

#### **BOTANY**

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

# 25 Slides set of human histology, zoology and botany

PB. 5214 for education

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

#### HISTOLOGY OF HUMAN AND MAMMALS

CII 1075	China a attau with a wat alam di buman	
3H.10/5	Skin section with sweat gland, human	
SH.1330	Testis rabbit, c.s	
SH.1340	Ovary rabbit with developped eggs	
SH.1360	Sperm human, smear	
SH.1490	Retina, rabbit, sec.	

**SH.1060** Tendon I.s. (Dense connetive tissue), dog

#### ZOOLOGY

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

#### BOTANY

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

**SB.2015** Ranunculus, buttercup, root c.s.

# 25 Slides set of human histology, zoology and botany

PB. 5215 for education

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

HISTOLOGY		BOTAN	Υ
SH.1043	Cardiac muscle, dog, l.s.	SB.2090	Hydrilla verticillata, hydrilla stem tip, l.s.
SH.1070	Squamous epithelium, human,	SB.2112	Cucurbita, pumpkin, stem, c.s.
	isolated cells from mouth, smear	SB.2135	Nerium oleander, leaf with sunken stomata, c.s.
SH.1315	Kidney rat, sec. cortex & medulla	SB.2210	Lilium, lily, anther with mature pollen, c.s.
SH.1420	Cerebellum section, dog	SB.2214	Lilium, lily, pollen, different stages of meiosis
SH.1450	Spinal cord, rabbit, c.s.	SB.2220	Capsella, shepherds' purse, ovary w. embryo in
SH.1470	Taste buds, rabbit, l.s.		pre-cotyledon stadium, l.s.
		SB.2222	Capsella, shepherds' purse, ovary w. embryo in
ZOOLOGY			cotyledon stadium, l.s.
SZ.1610	Planaria, flat worm, injected intestinal tube, w.m.	SB.2234	Pinus, pine tree, pollen, w.m.
SZ.1636	Ascaris megalocephala, horse roundworm, mitosis eggs	SB.2330	Marchantia, liverworts, thallus with gemma cup, c.s
SZ.1760	Ctenocephalus canis, dog flea, w.m.	SB.2360	Saccaromyces sp., yeast, budding, w.m.
SZ.1770	Tetranychus, red spider mite, w.m.	SB.2365	Penicillium sp., w.m.
SZ.1930	Bird, wing and down feather, section	SB.2410	Streptococus lactis, milk bacteria, smear
SZ.1940	Chicken, embryo 48 hours, sagittal section	SB.2415	Bacillus subtilis, hay bacteria, smear

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



# 23 Slides of human and mammal histology PB. 5221 set for education

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

<b>EPHITELIUM</b>	AND	CONNECT	111/E T	LCCLIEC
EPHILELIUM	AND	COMMECI	IVEI	1330E3

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 rabbit with developed eggs
SH.1376	Human chromosomes in blood, female

#### **NERVOUS SYSTEM AND SENSORY ORGANS**

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



# 23 Slides of human and mammal histology PB. 5222 set for education

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

#### **EPHITELIUM AND CONNECTIVE TISSUES**

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

#### RESPIRATORY, BLOOD CIRCULATION AND ENDOCRINE SYSTEM

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

#### **DIGESTIVE SYSTEM**

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

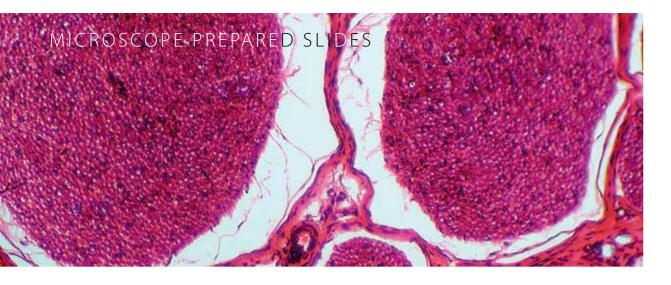
#### **URINARY AND GENITAL SYSTEM**

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

#### **NERVOUS SYSTEM AN 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



# 10 Prepared slides of zoology and botany slides

PB. 5204 set for hobby

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

#### ZOOLOGY

	rabbit, I.s.and c.s.	
SH.1110	Lung with injected blood vessels, rabbit, c.s.	
SZ.1708	<b>Z.1708</b> Apis mellifica, honey bee, mouth parts	
<b>5Z.1733</b> Pieres brassicae, cabbage-white butterfly,		
	part of wing	
SZ.1877	Rana sp, frog, blood smear	
SB.2015	Ranunculus, buttercup, root, c.s.	

**SH.1040** Smooth muscle, teased preparation,

#### **BOTANY**

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

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



# 25 Prepared slides of zoology and botany slides

PB. 5218 set for hobby

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

#### HISTOLOGY OF HUMAN AND MAMMALS

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

#### **BOTANY**

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

#### ZOOLOGY

SZ.1520	Paramecium, w.m.
SZ.1535	Euglena virides, a flagellate with eyespot
SZ.1580	Hydra with bud, w.m.
SZ.1630	Taenia, tapeworm pig, mature proglottid, w.m.
SZ.1635	Ascaris megalocephala, horse roundworm,
	female and male, c.s.
SZ.1640	Lumbricus, earthworm, c.s.
SZ.1655	Daphnia sp., water flea, w.m.
SZ.1705	Apis mellifica, honey bee, posterior leg, w.m.
SZ.1710	Apis mellifica, honey bee compound eye, c.s.
SZ.1719	Musca domestica, house fly, wing w.m.
SZ.1722	Culex pipiens, house mosquito, female, mouth parts
SZ1724	Fruitfly, drosophila, giant chromosomes of
	salivary gland, w.m.



**Individual EuroSlides** 

**Prepared slides** 

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

These high quality microscope slides are usually supplied directly from stock, at the very best prices. The following slides are available seperately



#### **HOW TO ORDER INDIVIDUAL EUROSLIDES**

- Minimum purchase quantity is 10 pieces of the same slide
- The individual slides always have to be ordered together with a box. Available is: plastic box PB.5181 (for 25 slides)

# Individual EuroSlides

# for Histology

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

#### **EPHITELIUM AND CONNECTIVE TISSUES**

SH.1001	Loose connective tissue, rabbit	SH.1220 Oesophagus dog, c.s.
SH.1005	Hyaline cartilage rabbit, section	<b>SH.1230</b> Small intestine, dog, c.s.
SH.1006	Elastic cartilage, rabbit	SH.1250 Liver pig, section
SH.1011	Hard bone grinding, human, section	
SH.1012	Hard bone grinding of rabbit, tooth, decalcium	URINARY AND GENITAL SYS
SH.1040	Smooth muscle, teased preparation, rabbit, l.s. and c.s.	<b>SH.1310</b> Injected kidney rabbit, section
SH.1045	Skeletal muscle, dog, l.s. and c.s.	SH.1330 Testis rabbit, c.s.

Muscle types, striated, smooth, heart muscle, dog, l.s.

SH.1060 Tendon dog, l.s. **SH.1072** Skin section through hair follicle, human Stratified flat epithelium, dog, section

#### RESPIRATORY, BLOOD CIRCULATION AND ENDOCRINE SYSTEM

Ciliated epithelium, trachea, rabbit

**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 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

#### NARY AND GENITAL SYSTEM

SH.1330	Testis rabbit, c.s.
SH.1340	Ovary rabbit with developed eggs
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 serie of zoology microscopy slides consists of samples with single-cell organisms (protozoa), coelenterate, worms (helminthes), Crustaceans (crustaceae), insects and amphibians

PROTOZO.	Α
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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.

SZ.1510 Amoeba proteus, w.m.

#### **HELMINTHES**

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

#### **CRUSTACEANS**

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

**SZ.1640** Lumbricus, earthworm, c.s.

#### INSECTS

**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

**SZ.1705** Apis mellifica, honey bee, posterior leg, w.m.

#### **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 serie 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.
CD 2020	and the state of the state of
SB.2020	Helianthus, sunflower, old root, c.s.
SB.2025	Monocot/dicot plant roots, zea mays/helantius, c.s.
	, , ,
SB.2025	Monocot/dicot plant roots, zea mays/helantius, c.s.

#### **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,
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 crok cambium and lenticels, c.s.

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

#### FLOWERS, FRUITS AND SEEDS

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

**SB.2240** Triticum aestivum, wheat, kernel, l.s.

#### **FERNS AND MOSSES**

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

#### **FUNGI**

SB.2365	Penicillium sp., w.m.
SB.2373	Coprinus, ink caps mushroom, section of pileus
SB.2374	Aspergillus, brown mold, w.m.

**SB.2360** Saccaromyces sp., yeast, budding, w.m.

#### ALGAE

B.2377	Diatoms, w.m.
B.2380	Spirogyra sp. in conjugation
B.2384	Volvox sp., w.m.

#### **BACTERIA**

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

#### DISPOSABLES



#### STAINS

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



#### MICROSCOPE SLIDES AND **COVER GLASSES**

PB.5150	Microscope slides $76x26mm$ , half white glass,
	cut edges. 50 pieces per pack
PB.5155	Microscope slides 76 x 26 mm white glass,
	grinded edges. 50 pieces per pack

Microscope slides 76 x 26 mm with concavity, PB.5160 grinded edges. 10 pieces per pack

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

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

**PB.5170** Cover glasses Ø18 mm, thickness 0.13-0.17 mm.

# MICROSCOPE SLIDE BOXES

PB.5180	Wooden slide box for 25 slides.
	White interior with index
PB.5185	Wooden slide box for 100 slides.
	White interior with index

Black plastic slide box for 25 slides

# PB.5150

100 pieces per pack



PB.5181



#### **MISCELLANEOUS ACCESSORIES**

PB.5200	Staining trough for 10 slides
PB.5210	Fine pointed brush
PB.5245	Lens paper. 100 sheets per pack
PB.5250	Solid paraffin.
	Melting point 60°C, 200 gram packed
PB.5255	Immersion oil,
	refractive index nD = 1.482. In bottle (25 ml)
PB.5256	Entellan, quick drying Canada balsam. In bottle (25 ml)
PB.5270	Xylol (bottle), lens cleaner, intermediate agent
	for section slide preparation. In bottle (100 ml)
PB.5274	Isopropyl alcohol 99%. In bottle (200 ml)
PB.5277	Formalin 40%, fixing agent. In bottle (200 ml)
PB.5275	Cleaning kit: lens cleaning fluid, lint free lens
	tissue, brush, air blower, cotton swabs



#### (DISSOLVED) STAINS

Supplied in 25 ml bottles

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

**PB.5295** Safranine. A general stain for showing nuclei and cellulose walls. To be used in combination with Astra Blue

**PB.5297** Methylene Blue. Biological and bacteriological stain

PB.5300 Analin Blue, to be used as third colour for Azo pigmentation

PB.5305 Fuchsine. For staining bacilli in tissue



PB.5210

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PB.5245

# OtherOptical

instruments



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

Our high-quality magnifiers, refractometers and other optical instruments all ensure an excellent optical quality and unmatched durability

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MICROSCOPES	
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@ euromex

#### MAGNIFIERS & MEASURING MICROSCOPES

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



#### HANDHELD MAGNIFIERS AND **MAGNIFIERS WITH HANDLES**

PB.5020 Magnifier with handle 4x.

lens Ø 50 mm and handle Ø 8 mm.

Fits PB.5022

PB.5021 Magnifier with handle 10x,

aplanatic lens Ø 25 mm and handle Ø 8 mm.

Fits PB.5022

Heavy stand with adjustable cross clamp, PB.5022

Base Ø 70 mm. Weight 450 grams.

For PB.5022 and PB.5021

Handheld magnifier 10x with illuminator, PB.5026

aplanatic lens Ø 28 mm. Field of view 30 mm.

Supplied without batteries



#### **FOLDING MAGNIFIERS**

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

**PB.5018** Aplanatic magnifier 15x, doublet.

Lens Ø 18 mm. Field of view 14 mm

**PB.5032** Achromatic magnifier 10x, triplet.

Lens Ø 21 mm. Field of view 15 mm

PB.5033 Achromatic magnifier 20x, triplet.

Lens Ø 21 mm. Field of view 8 mm



#### **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

Lens Ø 21 mm. White LED illumination

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

Lens Ø 21 mm. White LED illumination

PB.5035-LED Achromatic magnifier 30x triplet.

PB.5034 Achromatic magnifier 10x, triplet.

Lens Ø 18 mm. Field of view 15 mm

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

Achromatic diamond magnifier 10x PB.5037

with 4 lenses Ø 21 mm. Field of view 25 mm



#### **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





**a** euromex 305

OTHER OPTICAL INSTRUMENTS

MAGNIFIERS & MEASURING MICROSCOPES

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



Walley Vindender

PB.5030 Dual sliding magnifier with 3x and 6x magnification.

Lens aperture 23 x 23 mm.

Fields of view 50 x 50 mm and 25 x 25 mm.

Plastic housing

PB.5049 Linen tester folding magnifier with 6x lens.

A 25 x 25 mm base with millimeter scale.

Metal casing lacquered in black.

Supplied with plastic case

#### TABLE MAGNIFIERS

PB.5039 Table magnifier, 15x magnification.

Glass achromatic lens Ø 19 mm.

field of view 15 mm

PB.5041 Table magnifier, 10x magnification.

Glass lens Ø 26 mm, field of view 25 mm

PB.5043 Table magnifier, 4x magnification.

Plastic lens Ø 57 mm, field of view 55 mm

PB.5040 Table magnifier, 8x magnification.

Plastic lens Ø 23 mm, field of view 30 mm.

10mm/100 reticle



PB.5039 / PB.xxxx







PB.5030

#### MEASURING MAGNIFIERS WITH RETICLE

PB.5044 Measuring magnifier 7x.

Eyepiece Ø 18 mm. Field of view 24 mm.

Measuring scale 10-0-10 mm divided into

0.1 mm and cross hair

Measuring magnifier 7x. PB.5045

Eyepiece Ø 18 mm. Field of view 24 mm.

Measuring scale 10-0-10 mm divided into 0.1 mm and cross hair. With 5 interchangeable

scales for angle, thickness and linear

measurements

PB.5046 Measuring magnifier 10x.

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

0.5 mm graduations

PB.5048 Measuring magnifier 4x.

> Eyepiece Ø 30 mm. Field of view 65 mm. Measuring scale 25-0-25 mm with 0.1 mm

graduations

PB.5047 Measuring magnifier 10x.

Eyepiece Ø 25 mm. Field of view 32 mm.

Measuring scale 13-0-13 mm

#### **MEASURING MICROSCOPES**

PB.5044 Measuring magnifier 7x.

> Eyepiece Ø w18 mm. Field of view 24 mm. Measuring scale 10-0-10 mm divided into

0.1 mm and cross hair

PB.5008 Measuring microscope 20x

with LED illumination. Field of view 7.2 mm

PB.5010 Measuring microscope 40x

with LED illumination. Field of view 3.8 mm

PB.5012 Measuring microscope 60x

with LED illumination. Field of view 1.45 mm

PB.5014 Measuring microscope 100x

with LED illumination. Field of view 0.7 mm





PB.5044 / PB.5048







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# RefractoMeters





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

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



# Handheld refractometers

# Sugar concentration

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

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

Only a few drops of the liquid are necessary to read the refractive index straight from the built-in scale. All refractometers are equipped with an ATC (exept RF.5190) and are supplied with specific scales

#### **HIGHLIGHTS**

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



# Digital handheld refractometer Sugar concentration in juices

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

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

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

#### **MODELS**

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

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

#### **MODELS**

Concentrations of grapes and fruit

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

#### **MODELS**

Concentrations of sugar, nD indices (only for sugar)

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



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

scale to measure concentrations of sugar and refractive indices. Capable of measuring all kinds of concentrations and identifying several types of substances The Abbe refractometer can be connected to a water bath for measuring at a controlled temperature. During the use of this

Abbe refractometers are more accurate with an extended

type of refractometer the use of a cold light source like the

This Abbe table refractometer has scales for measurement of sugar concentrations and refractive indices. Delivered with carrying case, thermometer 0-50° Celsius, calibration plate

LE.5209 is recommended.

and adjusting tool

MODEL

Substance indentification of sugar concentration

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

#### HIGHLIGHTS

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



# **Gemmological** refractometer Gemstones

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

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

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

#### MODEL

Identification of precious stones

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



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REFRACTOMETERS

# **Battery acid and Coolant** Handheld refractometer

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



#### MODEL

For testing water-soluble coolants and battery acid solutions.

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

# **Alcohol and alcohol-sugar solutions** Handheld refractometer

The measure concertrations of alcohol, sugar and alcohol-sugar % solutions. Using refractometers permits the growers to choose the moment of the vintage by monitoring the "must". With ATC

#### MODEL

Sugar concentration, % alcohol and alcohol/sugar solutions

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

# **Clinical applications** Handheld refractometer

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



#### **MODELS**

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

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

# Sugar and salt Handheld refractometer

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



#### MODEL

Substance indentification of sugar concentration

Model	Scales	Accuracy	ATC	Analog
RF.5610	0-100°	1°	•	•
	0-10 Brix	0.1 Brix		

Substance indentification of sugar concentration
--

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

#### **ACCESSORIES AND SPARE PARTS**

RF.5295	Test slide 78.8 Brix for calibration of RF.5190	SL.5208	Spare 20 W 12 V halogen bulb
RF.5384	5 ml immersion nD 1.79 liquid for RF.5381	98.492	Thermometer 0-50° C
LE.5209	20 W 12 V cold light source with single fiber light		(for Abbe refractometer 98.490)
	conductor	98.496	Calibration slide nD 1.5163
			(for Abbe refractometer 98.490)

# Polarimeters & Spectroscopes



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

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

Spectroscopes are used to visualise the light spectrum of the light source of transparent substances



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

Polar scale, range  $\pm$  180° 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

Range 0-180° to left and right. Accuracy 0.1°. Polarizing device: Glam Thomson prism and Laurent Quartz plate

#### HIGHLIGHTS

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

#### **ACCESSORIES FOR 99.400**

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

#### MODEL

Model	Scales	Accuracy	Observation tubes 100 and 200 mm	230 V sodium lamp (with 589.3 nm filter)
99.400	± 180 °	± 0.1 ° polar scale	•	•



# Handheld spectroscope SP.5100

Handheld spectroscope with fixed slit

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



SP.5150

#### MODEL

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

# Handheld spectroscope SP.5150

Handheld spectroscope with adjustable slit from 0 tot 1 mm

Direct vision type

• Angle dispersion C - F 7°

· Adjustable eyelens

- · Linear dispersion 60 mm
- Adjustable slit 0 1 mm

#### MODEL

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

# **Euromex handheld spectroscope** SP.5155

Handheld spectroscope with adjustable slit and comparison prism, mirror and 5 glass cuvettes

- Direct vision type
- Adjustable eyelens
- · Adjustable slit 0 1 mm
- Angle dispersion C F 7°
- · Linear dispersion 60 mm
- · Comparison prism for comparison between products
- Mirror
- 5 Glass cuvettes



#### MODEL

		Weight	Adjustable	Comparison	Angle	Linear	Wavelenght	589 nm	With
Model	Dimensions	(gram)	slit	prism	dispersion	dispersion	scale	indication	5 glass cuvettes
SP.5155	h45x l105xp23	125	0-1 mm	•	C-F 7°	60 mm			•

# **Euromex handheld spectroscope** SP.5200

Handheld spectroscope with adjustable slit, comparison prism, mirror, 5 glass mini-cuvettes and wavelength scale 400 - 700 nm with 589 nm indication. Divisions 10 nm

- Direct vision type
- Adjustable eyelens
- · 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



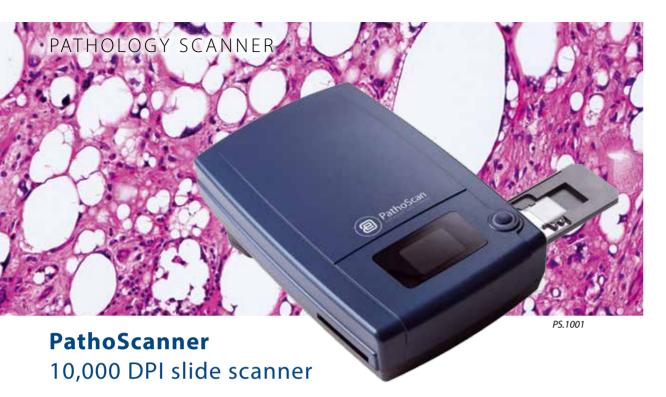
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Model	Dimensions	Weight (gram)	Adjustable slit	Comparison prism	Angle dispersion	Linear disper- sion	Wavelenght scale	With 5 glass cuvettes	
SP.5200	h50xl115xp23	250	0-1 mm	•	C-F 7°	60 mm	•	•	

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

The PathoScan digital microscope slide scanner produces quick, reliable and high-resolution digital images of cells. Once the slides are digitized there are numerous advantages agains classic microscopy

Weight

1.0 kg

The users now have the ability to upload the scanned images onto a network for sharing and collaboration among colleagues, resolving in better and faster diagnostics. The scanned slides can also be used for education purposes. Digitized slides also can be analyzed using the specialists own dedicated software. The software can be used to automate the manual counting of structures, or for classifying the condition of tissue such as is used in grading tumors

#### PATHOVIEW SCANNING SOFTWARE

- · Easy Preview and Scan Slide
- · Quick setting exposure time
- · Scan resolution from 1,000~10,000 dpi
- File format: TIF and JPEG
- · Images can also be used with ImageFocus Alpha basic microscopy analysis software, see chapter 9.

#### **HIGHLIGHTS**

• Supports standard microscopy slide 76 x 26 mm

· From basic histology research to life science education

- Scans full slide
- Simple user interface
- · Superior quality, 3-line CCD sensor
- 48-bit, 10,000 dpi, 5 μm resolution
- · Industry-leading scanning speeds
- · Holder for 2 slides included
- · Polarization attachment available



#### **SPECIFICATION**

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

#### MODEL

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

ENTE



(h) 70 x (w) 150 x (d) 260 mm

PS.1001

Dimensions

# Choose the right EuromexMicroscope

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

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

EDUCATION	FIELD OF APPLICATION	RECOMMENDED MODELS
• Botany	Study of plants as branch of biology. Plant anatomy and morphology. Plant genetics and ecology. Plant biochemistry	MicroBlue, EcoBlue, BioBlue, BioBlue.Lab, AP series, EduBlue, StereoBlue
Digital imaging	Observation and perform analysis on microscope images, storage and share captured and videos	CMEX cameras, CCD cameras, HD cameras, EduPad
• Electronics	Development, production, assembling and inspection of electronic components or circuitry	B+ series (material), EduBlue, StereoBlue, NexiusZoom
• Entomology	Study of insects as branch of zoology.  Identification and classification of beetles, flies, termites, moths and butterflies, bees, ants, wasps	MicroBlue, EcoBlue, BioBlue, BioBlue.Lab, AP series, EduBlue, StereoBlue
Geology, mineralogy	Earth Science; Study of solids, rocks and processes.  Identification and classification of rocks and minerals	EcoBlue (polarization), BioBlue (polarization), AP series, EduBlue, StereoBlue
Geology, petrology	Identification by means of petrographic microscope	EcoBlue (polarization), BioBlue (polarization), AP series, EduBlue, StereoBlue
• Mechanics	Manufacturing and quality inspection of mechanical parts	B+ series (material), EduBlue, StereoBlue, NexiusZoom
• Microbiology	Study of microscopic uni-, multi- or acellular small organisms such as protozoa, algae, bacteria and more. Identification and classification	EcoBlue, BioBlue, B and B+ series
• Mycology	Study of fungi as branch of biology. Identification and classification	EcoBlue, BioBlue, BioBlue.Lab, B and B+ series, AP series, EduBlue, StereoBlue
• Petrology	Study of the composition and structure of rocks as branch of geology.  Identification by means of polarization microscopes	EcoBlue (polarization), BioBlue (polarization), AP series, EduBlue, StereoBlue
• Zoology	Animal biology. Study of invertebrated and vertebrated animals and related branches	EcoBlue, BioBlue, BioBlue.Lab, B and B+ series, AP series, EduBlue, StereoBlue
UNIVERSITY LABS	FIELD OF APPLICATION	RECOMMENDED MODELS
Agronomy & forestry	Selective breeding of plants, fruit and production of food from plants, wood from trees, fuel.  Plant physiology and genetics research	BioBlue.Lab, B and B+ series, iScope, Oxion, StereoBlue, NexiusZoom, DZ series
Anatomopathology	Diagnosis of diseases of organs or tissues. Cytopathology and forensic pathology	BioBlue.Lab, B and B+ series, iScope, Oxion, NexiusZoom, DZ series
Asbestos control	Research of asbestos fibers, environmental protection during restauration of older buildings	iScope (asbestos and polarization), NexiusZoom, DZ series, Z series
Bacteriology	Study of bacteria as subdivision of microbiology. Identification, classification	BioBlue.Lab, B and B+ series, iScope, Oxion

UNIVERSITY LABS FIELD OF APPLICATION **RECOMMENDED MODELS**  Biochemistry Study of chemical processes within living organism. Identification and classification BioBlue.Lab, B and B+ series, iScope, Oxion of enzymes and structure of biomolecules Biomedical BioBlue.Lab, iScope, Oxion Study of medical microbiology, virology, epidemiology, biomedical engineering Biotechnology Study of living organism in order to make food products, for plant protection BioBlue.Lab, B and B+ series, iScope, Oxion, StereoBlue, NexiusZoom, DZ series (genetically modified organism) and other bioprocess engineering. Development of pharmaceutical drugs, genetic testing, enzymes production, biofuels, textile Botany Study of plants as branch of biology. Plant anatomy and morphology. BioBlue.Lab, B and B+ series, StereoBlue, NexiusZoom, DZ series Plant genetics and ecology. Plant biochemistry • Cell Culture Controlled grown of cells and tissues, fungal culture and microbiological culture Oxion Inverso, NexiusZoom, DZ series Chemistry Study of the composition and properties of chemicals iScope (material and polarization), Oxion (material), B+ series (material), NexiusZoom, DZ series Cosmetics Research, development and testing (safety) of substances for make-up or perfume iScope (material), Oxion (material), B+ series (material), NexiusZoom, DZ series Study of cell structure, function and chemistry. Detection of cellular diseases BioBlue.Lab, iScope, Oxion Cytology Dermatology Study and diagnosis, treatment of skin, nails and hair diseases iScope, Oxion, NexiusZoom, StereoBlue, DZ series Digital imaging Observation and perform analysis on microscope images, save and share captured images and videos CMEX cameras, CCD cameras, HD cameras, Cooled cameras, ProPad Electronics Development, production, assembling and inspection of electronic components or circuitry iScope (material), Oxion (material), B+ series (material), StereoBlue, NexiusZoom, DZ series, Z series Embryology Study of gametes, embryos and fetuses BioBlue.Lab, iScope, Oxion, StereoBlue, NexiusZoom, DZ series Study of insects as branch of zoology. Identification and classification of beetles, flies, BioBlue.Lab, B and B+ series, iScope, Oxion, StereoBlue, NexiusZoom, DZ series Entomology termites, moths and butterflies, bees, ants, wasps Environmental Monitoring of environmental conditions like water, atmosphere, ecosystems, soil and pollution control BioBlue.Lab, B and B+ series, iScope, Oxion, StereoBlue, NexiusZoom, DZ series Fluorescence Study of living and non living material with the help of fluorescence markers (fluorochromes) iScope (fluorescence), Oxion (fluorescence), Oxion Inverso (fluorescence), B+ series (fluorescence), DZ series Food and beverages Quality and safety controls, before, during and after the production of food and beverages BioBlue.Lab, B and B+ series, iScope, Oxion Forensics Analysis of scientific evidence. Toxicology, fingerprints, Forensic anthropology and archeology, BioBlue.Lab, iScope, iScope (material and polarization), Oxion, Oxion (material), Oxion Inverted, Oxion Inverted (material), NexiusZoom, DZ series, Z series forensic botany and entomology

iScope, Oxion, DZ series

Genetics

Study of genes, heredity in living organism including bacteria, plants, animals and humans

UNIVERSITY LABS FIELD OF APPLICATION **RECOMMENDED MODELS** • Geology, mineralogy Earth Science; Study of solids, rocks and processes. iScope (material), Oxion (material), B+ series (material), StereoBlue, NexiusZoom, DZ series Identification and classification of rocks and minerals iScope (polarization), StereoBlue, NexiusZoom, DZ series • Geology, petrology Identification by means of petrographic microscope Quality control, before, during and after the production of glass and coatings iScope (material), Oxion (material), Oxion Inverso (material), B+ series (material), StereoBlue, NexiusZoom, DZ series Glass industry

Hematology	Study and diagnosis, treatment and prevention of diseases of the blood	iScope, B and B+ series (dark field), iScope (dark field), Oxion, Oxion (dark field)
Histopathology	Microscopic examination of tissue , diagnosis of diseases	iScope, Oxion
Horticulture	Selective breeding of plants and fruit for production of food	BioBlue.Lab, B and B+ series, iScope, Oxion, StereoBlue, NexiusZoom, DZ series
• In vitro fertilization	In vitro fertilization IFV. Quality control of collected egg and sperm	StereoBlue, NexiusZoom, DZ series, Z series
Histopathology	Microscopic examination of tissue , diagnosis of diseases	iScope, Oxion
• Marine Biology	Study of organisms living in the ocean or sea's as branch of biology	B and B+ series, BioBlue.Lab, iScope, Oxion
• Mechanics	Manufacturing and quality inspection of mechanical parts	iScope (material), Oxion (material), Oxion Inverso (material), B+ series (material), StereoBlue, NexiusZoom, DZ series
• Metallurgy	Manufacturing and quality inspection of metallic elements, intermetallic compounds and alloys	iScope (material), Oxion (material), B+ series (material), StereoBlue, NexiusZoom, DZ series
• Microbiology	Study of microscopic uni-, multi- or acellular small organisms such as protozoa, algae, bacteria and more. Identification and classification	iScope, Oxion, StereoBlue, NexiusZoom, DZ series
• Mining	Extraction of minerals for identification, quantitative and qualitative evaluation of minerals	iScope (material and polarization), Oxion (material and polarization), Oxion Inverso (material), B+ series (material), StereoBLue, NexiusZoom, DZ series
• Mycology	Study of fungi as branch of biology. Identification and classification	BioBlue.Lab, B and B+ series, iScope, Oxion, StereoBlue, NexiusZoom, DZ series
Neuropathology	Study and diagnosis of diseases in nervous system tissue	iScope, Oxion, StereoBlue, NexiusZoom, DZ series
• Oncology	Study and diagnosis, treatment and prevention of cancers	iScope, Oxion
Ornithology	Study of birds as branch of zoology. Diagnosis of diseases in birds like competition pigeons	BioBlue.Lab, B and B+ series, iScope, Oxion, StereoBlue, NexiusZoom, DZ series
Paleontology	Study of fossils in order to determinate organisms evolution	iScope (material), Oxion (material), B+ series (material), StereoBlue, NexiusZoom, DZ series
• Paper industry	Production of paper related products. Quality inspection	iScope (material), Oxion (material), B+ series (material), StereoBlue, NexiusZoom, DZ series

UNIVERSITY LABS	FIELD OF APPLICATION	RECOMMENDED MODELS
• Parasitology	Study of parasites, medical and veterinary	BioBlue.Lab, B and B+ series, iScope, Oxion, StereoBlue, NexiusZoom, DZ series
Pathology	Study and diagnosis of diseases	iScope, Oxion
• Petrochemical	Research and transformation of crude oil and natural gas	iScope (material), Oxion (material), B+ series (material), StereoBlue, NexiusZoom, DZ series
• Petrology	Study of the composition and structure of rocks as branch of geology.  Identification by means of polarization microscopes	iScope (polarization), StereoBlue, NexiusZoom, DZ series
Pharmaceutics	Development and production of drugs for medication.  Quality assurance and inspection of produced products	iScope (polarization), StereoBlue, NexiusZoom, DZ series
Phytopathology	Study and diagnosis of plant diseases	BioBlue.Lab, B and B+ series, iScope, Oxion, StereoBlue, NexiusZoom, DZ series
• Plastics	Development and production of plastics and plastic based compounds.  Quality assurance and inspection	iScope (material), Oxion (material), Oxion Inverso (material), B+ series (material), StereoBlue, NexiusZoom, DZ series
• Textile	Development and production of all kind of textile based products.  Quality assurance and inspection	iScope (material), Oxion (material), B+ series (material), AP series, StereoBlue, NexiusZoom, DZ series
Veterinary medicine	Prevention, diagnosis and treatment of diseases, injuries in animals	BioBlue.Lab, B and B+ series, iScope, Oxion, Oxion Inverso, StereoBlue, NexiusZoom, DZ series
• Virology	Study and diagnosis of viruses and virus-like agents	BioBlue.Lab, B and B+ series, iScope, Oxion

BioBlue.Lab, B and B+ series, iScope, Oxion

BioBlue.Lab, B and B+ series, iScope, Oxion, StereoBlue, NexiusZoom, DZ series

NexiusZoom, DZ series, Z series

iScope (material), Oxion (material), Oxion Inverso (material), B+ series (material), AP series, StereoBlue, NexiusZoom, DZ series

LIFE SCIENCE LABORATORIES	FIELD OF APPLICATION	RECOMMENDED MODELS
Agronomy & forestry	Selective breeding of plants, fruit and production of food from plants, wood from trees, fuel.  Plant physiology and genetics research	BioBlue.Lab, B and B+ series, iScope, Oxion, StereoBlue, NexiusZoom, DZ series
Anatomopathology	Diagnosis of diseases of organs or tissues. Cytopathology and forensic pathology	BioBlue.Lab, B and B+ series, iScope, Oxion, StereoBlue, NexiusZoom, DZ series
Bacteriology	Study of bacteria as subdivision of microbiology. Identification, classification	BioBlue.Lab, B and B+ series, iScope, Oxion, Oxion Inverso

• Water treatment

Wood production

• Embryo collection

Zoology

Production of drinking water and wastewater treatment. Quality control and disease prevention

Animal biology. Study of invertebrated and vertebrated animals and related branches

Wood production for construction material, fuel. Quality control

Embryo collection and transfer in mares, pigs, cows. Quality control

FIELD OF APPLICATION

ABORATORIES		
Biochemistry	Study of chemical processes within living organism.  Identification and classification of enzymes and structure of biomolecules	BioBlue.Lab, B and B+ series, iScope, Oxion
• Biomedical	Study of medical microbiology, virology, epidemiology, biomedical engineering	BioBlue.Lab, iScope, Oxion
• Biotechnology	Study of living organism in order to make food products, for plant protection (genetically modified organism) and other bioprocess engineering. Development of pharmaceutical drugs, genetic testing, enzymes production, biofuels, textile	BioBlue.Lab, B and B+ series, iScope, Oxion, NexiusZoom, DZ series
• Botany	Study of plants as branch of biology. Plant anatomy and morphology.  Plant genetics and ecology. Plant biochemistry	BioBlue.Lab, iScope, Oxion, StereoBlue, NexiusZoom, DZ series
• Cell Culture	Controlled growth of cells and tissues, fungal culture and microbiological culture	Oxion Inverso, NexiusZoom, DZ series
• Chemistry	Study of the composition and properties of chemicals	iScope (material and polarization), Oxion (material), B+ series (material), NexiusZoom, DZ series
• Cosmetics	Research, development and testing (safety) of substances for make-up or perfume	B+ series (material), iScope (material), NexiusZoom, Oxion (material), DZ series
• Cytology	Study of cell structure, function an chemistry. Detection of cellular diseases	BioBlue.Lab, iScope, Oxion
Dermatology	Study and diagnosis, treatment of skin, nails and hair diseases	iScope, Oxion, NexiusZoom, StereoBlue, DZ series
Digital imaging	Observation and perform analysis on microscope images, save and captured the images and videos	CMEX cameras, CCD cameras, HD cameras, Cooled cameras, ProPad
• Embryology	Study of gametes, embryos and fetuses	BioBlue.Lab, B and B+ series, iScope, Oxion, NexiusZoom, DZ series, Z series
• Entomology	Study of insects as branch of zoology. Identification and classification of beetles, flies, termites, moths and butterflies, bees, ants, wasps	BioBlue.Lab, B and B+ series, iScope, Oxion, StereoBlue, NexiusZoom, DZ series
• Environmental	Monitoring of environmental conditions like water, atmosphere, ecosystems, soil and pollution control	BioBlue.Lab, B and B+ series, iScope, Oxion, StereoBlue, NexiusZoom, DZ series
• Fluorescence	Study of living and non living material with the help of fluorescence markers (fluorochromes)	iScope (fluorescence), Oxion (fluorescence), Oxion Inverso (fluorescence), B+ series (fluorescence), DZ series
• Food and beverages	Quality and safety controls, before, during and after the production of food and beverages	BioBlue.Lab, B and B+ series, iScope, Oxion
• Forensics	Analysis of scientific evidence. Toxicology, fingerprints, Forensic anthropology and archeology, forensic botany and entomology	BioBlue.Lab, B and B+ series, B+ series (material), iScope, iScope (material and polarization), Oxion, Oxion (material), Oxion Inverted, Oxion Inverted (material), NexiusZoom, DZ series, Z series
• Genetics	Study of genes, heredity in living organism including bacteria, plants, animals and humans	iScope, Oxion, DZ series
• Hematology	Study and diagnosis, treatment and prevention of diseases of the blood	iScope, B+ series (dark filed), iScope (dark field), Oxion, Oxion (dark field), iScope, Oxion

LABORATORIES		
Histopathology	Microscopic examination of tissue , diagnosis of diseases	iScope, Oxion
Horticulture	Selective breeding of plants and fruit for production of food	BioBlue.Lab, B and B+ series, iScope, Oxion, StereoBlue, NexiusZoom, DZ series
• In vitro fertilization	In vitro fertilization IVF. Quality control of collected egg and sperm	StereoBlue, NexiusZoom, DZ series, Z series
Histopathology	Microscopic examination of tissue , diagnosis of diseases	iScope, Oxion
Marine Biology	Study of organisms living in the ocean or sea's as branch of biology	iScope, Oxion, NexiusZoom, DZ series
• Microbiology	Study of microscopic uni-, multi- or acellular small organisms such as protozoa, algae, bacteria and more. Identification and classification	iScope, Oxion, NexiusZoom, DZ series
• Mycology	Study of fungi as branch of biology. Identification and classification	BioBlue.Lab, B and B+ series, iScope, Oxion, StereoBlue, NexiusZoom, DZ series
Neuropathology	Study and diagnosis of diseases in nervous system tissue	iScope, Oxion, NexiusZoom, DZ series
• Oncology	Study and diagnosis, treatment and prevention of cancers	iScope, Oxion
Parasitology	Study of parasites, medical and veterinary	BioBlue.Lab, B and B+ series, iScope, Oxion, StereoBlue, NexiusZoom, DZ series
Pathology	Study and diagnosis of diseases	iScope, Oxion
Pharmaceutics	Development and production of drugs for medication.  Quality assurance and inspection of produced products	iScope (polarization), StereoBlue, NexiusZoom, DZ series
• Phytopathology	Study and diagnosis of plant diseases	BioBlue.Lab, B and B+ series, iScope, Oxion, StereoBlue, NexiusZoom, DZ series
Veterinary medicine	Prevention, diagnosis and treatment of diseases, injuries on animals	BioBlue.Lab, B and B+ series, iScope, Oxion, Oxion Inverso, StereoBlue, NexiusZoom, DZ series
• Virology	Study and diagnosis of viruses and virus-like agents	BioBlue.Lab, B and B+ series, iScope, Oxion
Water treatment	Production of drinking water and wastewater treatment. Quality control and disease prevention	BioBlue.Lab, B and B+ series, iScope, Oxion
Embryo collection	Embryo collection and transfer in mares, pigs, cows. Quality control	NexiusZoom, DZ series, Z series
• Zoology	Animal biology. Study of invertebrated and vertebrated animals and related branches	BioBlue.Lab, B and B+ series, iScope, Oxion, StereoBlue, NexiusZoom, DZ series

INDUSTRY	FIELD OF APPLICATION	RECOMMENDED MODELS
Aerospace	Manufacturing and quality inspection of rockets and space vehicles related parts	iScope (material), Oxion (material), NexiusZoom, DZ series, Z series
Agronomy & forestry	Selective breeding of plants, fruit and production of food from plants, wood from trees, fuel.  Plant physiology and genetics research	BioBlue.Lab, B and B+ series, iScope, Oxion, StereoBlue, NexiusZoom, DZ series
Asbestos control	Research of asbestos fibers, environmental protection during restauration of older buildings	iScope (asbestos and polarization), NexiusZoom, DZ series, Z series
Automotive	Manufacturing and quality inspection of automotive related parts	iScope (material), Oxion Inverso (material), NexiusZoom, DZ series, Z series
• Avionics	Manufacturing and quality inspection of aircrafts related parts	iScope (material), NexiusZoom, DZ series
Biochemistry	Study of chemical processes within living organism. Identification and classification of enzymes and structure of biomolecules	BioBlue.Lab, iScope, Oxion, NexiusZoom, DZ series
Chemistry	Study of the composition and properties of chemicals	iScope (material), Oxion (material)
Cosmetics	Research, development and testing (safety) of substances for make-up or perfume	B+ series (material), iScope (material), Oxion (material), NexiusZoom, DZ series
Digital imaging	Observation and perform analysis on microscope images, save and captured the images and videos	CMEX cameras, CCD cameras, HD cameras, ProPad
• Electronics	Development, production, assembling and inspection of electronic components or circuitry	iScope (material), Oxion (material), NexiusZoom, DZ series, Z series, BE-50 LED
Environmental	Monitoring of environmental conditions like water, atmosphere, ecosystems, soil and pollution control	BioBlue.Lab, B and B+ series, iScope, Oxion, StereoBlue, NexiusZoom, DZ series
• Food and beverages	Quality and safety controls, before, during and after the production of food and beverages	BioBlue.Lab, B and B+ series, iScope, Oxion
• Forensics	Analysis of scientific evidence. Toxicology, fingerprints, Forensic anthropology and archeology, forensic botany and entomology	BioBlue.Lab, B and B+ series, B+ series (material), iScope, iScope (material and polarization), Oxion, Oxion (material), Oxion Inverted, Oxion Inverted (material), NexiusZoom, DZ series, Z series
• Geology, mineralogy	Earth science that study the solid, rocks and processes. Identification and classification of rocks and minerals	iScope (material), Oxion (material), Oxion Inverso (material), B+ (material), StereoBlue, NexiusZoom, DZ series
Geology, petrology	Identification by means of an petrographic microscope	iScope (polarization)
Glass industry	Quality control, before, during and after the production of glass and coatings	iScope (material), Oxion (material), Oxion Inverso (material), B+ series (material), StereoBlue, NexiusZoom, DZ series
• Horticulture	Selective breeding of plants and fruit for production of food	BioBlue.Lab, B and B+ series, iScope, Oxion, StereoBlue, NexiusZoom, DZ series
• Jewelry	Precise manufacturing of very small decorative items such as brooches, rings, bracelets and more	BE-50 LED series, StereoBlue, NexiusZoom, DZ series, Z series
• Mechanics	Manufacturing and quality inspection of mechanical parts	iScope (material), Oxion (material), Oxion Inverso (material), B+ series (material), StereoBlue, NexiusZoom, DZ series
• Metallurgy	Manufacturing and quality inspection of metallic elements, intermetallic compounds and alloys	iScope (material), Oxion (material), Oxion Inverso (material), B+ series (material), StereoBlue, NexiusZoom, DZ series
• Mining	Extraction of minerals such. Identification, quantitative and qualitative evaluation of minerals	iScope (material and polarization), Oxion (material and polarization), Oxion Inverso (material), B+ series (material), StereoBlue, NexiusZoom, DZ series
• Paper industry	Production of paper related products. Quality inspection	iScope (material), Oxion (material), B+ series (material), StereoBlue, NexiusZoom, DZ series
Petrochemical	Research and transformation of crude oil and natural gas	iScope (material), Oxion (material), B+ series (material), StereoBlue, NexiusZoom, DZ series
• Petrology	Study of the composition and structure of rocks as branch of geology.  Identification by means of polarization microscopes	iScope (polarization), StereoBlue, NexiusZoom, DZ series
• Pharmaceutics	Development and production of drugs for medication.  Quality assurance and inspection of produced products	iScope (polarization), StereoBlue, NexiusZoom, DZ series



#### **INDUSTRY** FIELD OF APPLICATION

• Plastics	Development and production of plastics and plastic based compounds.  Quality assurance and inspection	iScope (material), Oxion (material), Oxion Inverso (material), B+ series (material), StereoBlue, NexiusZoom, DZ series
Printing industry	Production of relief printing, lithography	iScope (material), Oxion (material), B+ series (material), AP series, StereoBlue, NexiusZoom, DZ series
• Textile	Development and production of all kind of textile based products. Quality assurance and inspection	iScope (material), Oxion (material), Oxion Inverso (material), B+ (material), AP series, StereoBlue, NexiusZoom, DZ series
Water treatment	Production of drinking water and wastewater treatment . Quality control and disease prevention	BioBlue.Lab, B and B+ series, iScope, Oxion,
• Wood production	Wood production for construction material, fuel. Quality control	iScope (material), Oxion (material), Oxion Inverso (material), B+ (material), AP series, StereoBlue, NexiusZoom, DZ series

#### MORE INFORMATION?

If you need further information or have any questions please feel free to contact our area sales managers or offices. Contact details can be found at the back of this catalogue

#### **ICONS EXPLANATION**

In this catalog icons are used to indicate the several functions of a microscope. Please find below more detail about the meaning of each icon

Monocular

• Binocular



00

BINO



• Phase contrast illumination









 Rechargeable battery

• LED illumination

Infinity

corrected

Halogen

HG-HBO

illumination





 Internal power supply

Trinocular



ZOOM

ABBE

Abbe

· Zoom stereo objective

condenser

 Digital product

connection

WiFi

 Rotating head 360

Incident

Transmitted

light

light

light

Polarized





360°







WIFI















 NeoLED™ illumination











5 illumination WARRANTY.

 Köhler illumination



# Mains adapter

 2 years warranty

• 5 years warranty

 10 years warranty

#### RECOMMENDED MODELS

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