

BlueLine
MADE IN HOLLAND

by euromex

ENGLISH



MICROSCOPES FOR
EDUCATION AND
LABORATORIES

MicroBlue
EcoBlue
BioBlue
EduBlue
BioBlue.Lab
StereoBlue

 **euromex**[®]



Microscopes for laboratory research and advanced education

Euromex BlueLine offers a high-quality range of microscope models, which are specifically meant for laboratory and higher education use. BioBlue.Lab is a state-of-the art instrument and is largely used for common contrasting methods like brightfield and phase contrast

The enhanced Infinity Optical Systems ensure a high performance microscopic image, perfectly suitable for Life Science research as well as advanced Life Science education

BIOLOGICAL SERIES



BIOBLUE.LAB

STEREOZOOM SERIES



STEREOBLUE

BIOLOGICAL SERIES

MICROBLUE



ECOBBLUE



BIOBLUE



Microscopes for education

Microscopes for education need to be easy-to-use and student-friendly, which means able to withstand extensive use and rough handling. High quality, yet affordably priced Euromex microscopes specifically match these demands due to the well-thought construction and usage of top-class materials

Extensive experience of Euromex optical engineers has contributed to the development and implementation of the finest optical components and guaranteed performance, which means clear bright images at every magnification

The outstanding optical performance of the ergonomic Euromex BlueLine microscopes enables long productive working sessions for students for beginner, intermediate, and advanced science teaching classes

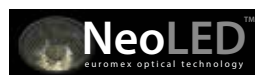
STEREO SERIES

EDUBBLUE



MicroBlue

MADE IN HOLLAND



- Entry-level microscopes
- Monocular and binocular models
- Reversed nosepiece
- LED and NeoLED™ illumination
- Cordless operation
- Ergonomic carrying grip
- 5 years warranty

MicroBlue is an entry-level microscope and is especially appreciated when budget is limited. The monocular model comes with a fixed lens condenser and a plain stage

The binocular versions are supplied with an Abbe condenser and a mechanical X-Y stage. All models are equipped with 35 mm achromatic objectives.

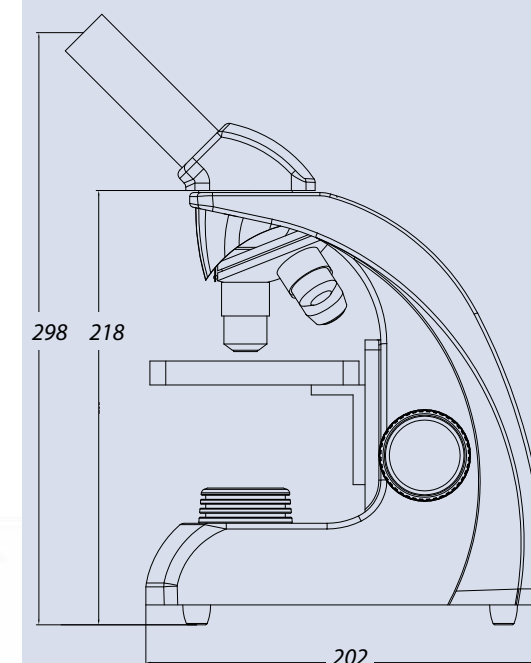
The built-in rechargeable batteries enable cordless operation

Binocular model MB.1152



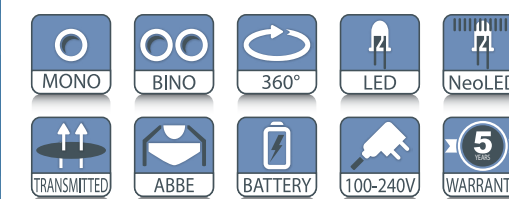
Monocular model MB.1001

DIMENSIONS



FEATURES

Body	Aluminium die-casting metal frame
Optical system	Finite optical system
Focusing	200 graduations, 15 µm per graduation, 3 mm per rotation total travel approximately 15 mm. With friction adjustment
Revolving nosepiece	Reversed quadruple nosepiece for binocular models. Reversed triple nosepiece for monocular models
Stage	Mechanical X-Y stage, 115 x 100 mm Travel range, 55 x 20 mm Plain stage with object clamps, 105 x 105 mm
Observation tube	Monocular and binocular 45° inclined tubes
Objectives	Achromatic (anti-fungus)
Eyepieces	WF 10x / 18 mm (anti-fungus)
Operating voltage	AC 100-240 V, 50/60 Hz
Batteries	Built-in, rechargeable
Height	350 mm
Weight	Approximately 2 kg (monocular), 2.8 kg (binocular)



MODELS

	Monocular	Binocular	Maximum objectives	4/10/S40x objectives	S60x objective	S100x objective	Mechanical X-Y stage	LED	NeoLED
MB.1001	•		3	•				•	
MB.1652		•	4	•	•		•		•
MB.1152		•	4	•		•	•		•

EcoBlue

MADE IN HOLLAND

- Economical microscopes for education
- Monocular, binocular and trinocular models
- Digital and polarisation models available
- LED and NeoLED™ illumination
- Ergonomic carrying grip
- 5 years warranty

The EcoBlue series offer quality biological microscopes at affordable prices. These modern microscopes were specifically developed for education with a special attention to ergonomics and an outstanding price/quality ratio

Monocular model EC.1001

Polarisation



Digital



FEATURES

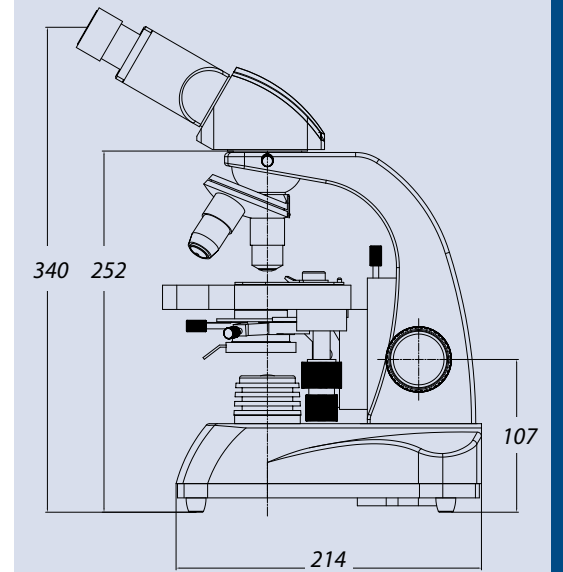
Body	Aluminium die-casting metal frame
Optical system	Finite optical system
Focusing	200 graduations, 12.5 µm per graduation, 2.5 mm per rotation total travel approximately 15 mm. With friction adjustment
Revolving nosepiece	Forwarded quadruple nosepiece
Stage	Mechanical X-Y stage, 130 x 125 mm Travel range, 70 x 27 mm Plain stage with object clamps, 123 x 119 mm Round stage 129 mm, 360° rotatable
Observation tube	(Digital) monocular 45° inclined tube (Digital) binocular and trinocular 30° inclined tubes
Objectives	Achromatic (anti-fungus)
Eyepieces	WF 10x / 18 mm (anti-fungus)
Operating voltage	AC 100-240 V, 50/60 Hz
Batteries	Built-in, rechargeable (for models EC.1x5x)
Height	372 mm
Weight	Approximately 3 kg

MODELS

	Monocular	Binocular	Trinocular	Digital	S60x objective	S100x objective	Mechanical X-Y stage ⁽¹⁾	LED	NeoLED	Batteries ⁽²⁾	Polarisation ⁽³⁾
EC.1001	•							•			
EC.1101	•					•		•			
EC.1601	•				•			•			
EC.1051	•						•	•		•	
EC.1151	•						•	•		•	
EC.1152		•					•		•	•	
EC.1652		•			•		•		•	•	
EC.1153			•				•		•	•	
EC.1653			•		•		•		•	•	
EC.1005	•			•				•			
EC.1105	•			•		•		•			
EC.1605	•			•	•			•			
EC.2001-P	•										•
EC.2101-P	•					•					•
EC.2601-P	•				•						•

(1) Integrated mechanical stage (2) With an external battery charger (3) Polarisation models supplied with halogen illumination

DIMENSIONS





BioBlue

MADE IN HOLLAND

- Monocular, binocular and trinocular models
- Reserved quadruple nosepiece with semi plan objectives
- Models with integrated digital camera
- Integrated mechanical stage
- Polarisation models available
- LED and NeoLED™ illumination
- Cordless operation
- 10 years warranty

The beautiful stylish design of the BioBlue series stands out among all other microscopes of this kind.

It has been especially designed for biology classes in educational institutes and small laboratories, and offer a full range of models



Binocular model BB.4260

Polarisation



Monocular model BB.4240

Monocular head



Binocular head



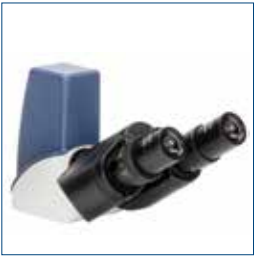
Trinocular head



Digital monocular head



Digital binocular head



Discussion head

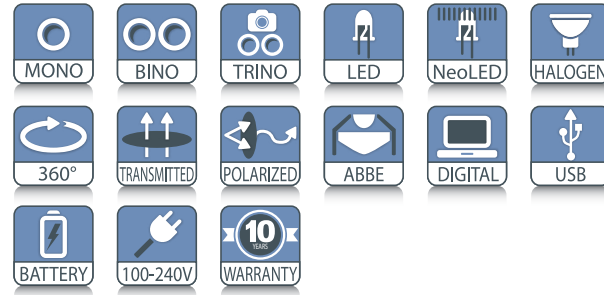
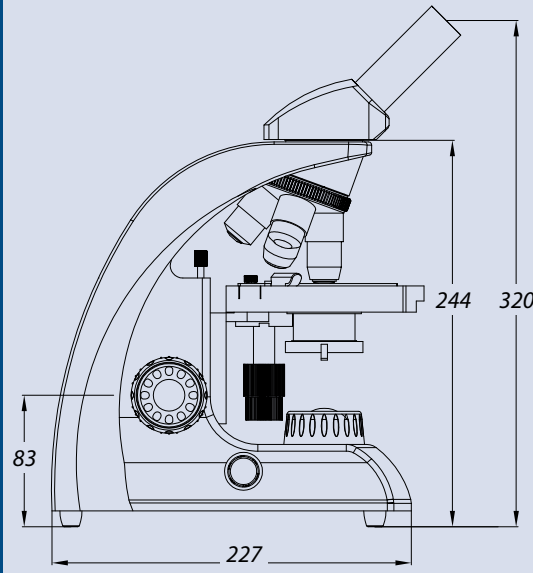


The ergonomic carrying grip enables easy transportation



The DIN WF 10x/18 eyepieces and the semi plan achromatic corrected 45 mm DIN objectives of the BioBlue models generate a crisp high-resolution image. When changing magnification the image remains perfectly in focus and centered

The 120 x 120 mm plain stage and 130 x 130 mm stage with double layered 70 x 28 mm mechanical X-Y stage enable precise and stable positioning of the specimen



FEATURES

Body	Aluminium die-casting metal frame
Optical system	Finite optical system
Focusing	200 graduations, 2 µm per graduation, 0.4 mm per rotation total travel approximately 23 mm With friction adjustment
Revolving nosepiece	Reversed quadruple nosepiece
Stage	Mechanical X-Y stage, 130 x 130 mm Travelling range 70 x 28 mm Plain stage with object clamps, 120 x 120 mm Round stage 129 mm, 360° rotatable
Observation tube	(Digital) monocular 45° inclined tube (Digital) binocular and trinocular 30° inclined tubes
Objectives	Semi plan (anti-fungus)
Eyepieces	WF 10x / 18 mm (anti-fungus)
Operating voltage	AC 100-240 V, 50/60 Hz
Batteries	Built-in, rechargeable
Height	360 mm
Weight	Approximately 4 kg

MODELS

	Monocular	Binocular	Trinocular	Digital	S60x objective	S100x objective	Mechanical X-Y stage	LED	NeoLED	Polarisation ⁽¹⁾
BB.4200	•							•		
BB.4220	•						•	•		
BB.4240	•				•		•	•		
BB.4250	•					•	•	•		
BB.4260		•				•	•		•	
BB.4263		•			•		•		•	
BB.4243			•		•		•		•	
BB.4253			•			•	•		•	
BB.4205	•			•				•		
BB.4225	•			•			•	•		
BB.4245	•			•	•		•	•		
BB.4255	•			•		•	•	•		
BB.4267		•		•		•	•		•	
BB.4269		•		•	•		•		•	
BB.4220-P	•									•
BB.4240-P	•				•					•
BB.4260-P		•				•				•

(1) Polarisation models supplied with halogen illumination

Technical Facts

Magnification

How to calculate the magnification of a microscope?

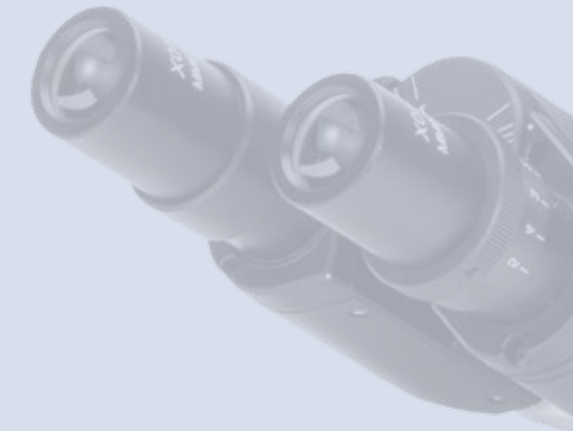
The optical system of a microscope has two main components that produce the total magnification of the instrument, the eyepiece(s) and objective(s). Eyepieces typically magnify 10x, objectives typically magnify 1 to 100x

The total system magnification can be calculated as follows:

System magnification = eyepiece magnification x objective magnification

e.g. when selecting a 40x objective and using 10x eyepiece the total system magnification will be 400x

*StereoZoom microscopes typically have a system magnification of 6x to 45x
Biological microscopes typically have a system magnification of 40x to 1,000x*

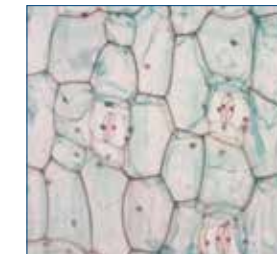


NeoLED™

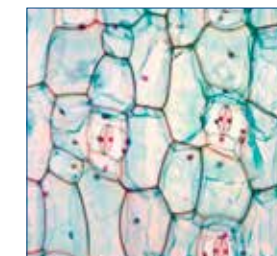
The innovative NeoLED™ design is a combination of a custom LED and a specially designed thin lens with a short focal length in order to obtain three main benefits:

- More oblique light from the LED light source can be captured, which increases the light output significantly
- Less energy is required to achieve this level of light intensity
- The larger aperture of NeoLED allows the optical systems of the microscope to produce images at higher resolutions, very close to the theoretical diffraction limit of the optics

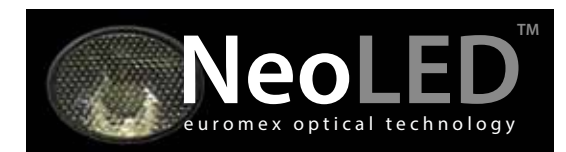
Normal LED



NeoLED



The innovative NeoLED illumination is integrated in all binocular and trinocular MicroBlue, EcoBlue, BioBlue and BioBlue.Lab models



EduBlue

MADE IN HOLLAND

- Economical binocular models
- Dual and triple magnification objectives
- Cordless operation
- Digital models available
- LED illuminators
- Ergonomic carrying grip
- 5 years warranty

The EduBlue stereo microscopes are specifically designed for educational purposes and come with both dual and triple magnifications

Rack & pinion stand model ED.1402-S



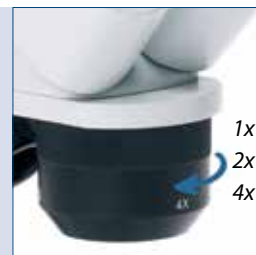
EduBlue digital



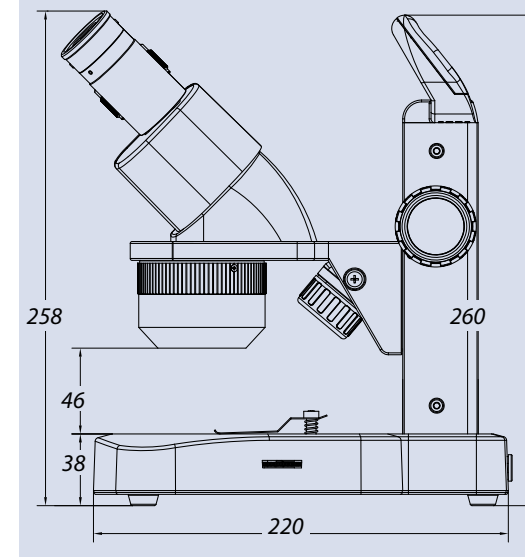
Pillar stand



Triple magnification



DIMENSIONS



FEATURES

Body	Aluminium die-casting metal frame
Optical system	Greenough stereo
Focusing	Coarse focus, stroke: 21 mm (rack & pinion stand) Coarse focus, stroke: 21 mm (pillar stand)
Revolving nosepiece	Revolving triple or dual magnification objectives
Stage	Plain stage with 2 object clamps and round 60 mm Black & white + transparent stage plates Max. object height: 36 mm (rack & pinion stand) Max. object height: 107 mm (pillar stand)
Observation tube	(Digital) binocular with 45° inclined tubes One tube ± 5 diopter adjustment
Objectives	Paired 1x/3x, field of view 20/6.7 mm, W.D. 60 mm Paired 2x/4x, field of view 10/5.0 mm, W.D. 60 mm Paired 1x/2x/3x, field of view 20/10/6.7 mm, W.D. 60 mm Paired 1x/2x/4x, field of view 20/10/5.0 mm, W.D. 60 mm
Eyepieces	WF 10x/20 mm secured (anti-fungus)
Operating voltage	AC 100-240 V, 50/60 Hz
Batteries	Built-in, rechargeable
Height	260 mm
Weight	Approximately 2.8 kg



MODELS

	Digital	1x/3x objective	2x/4x objective	1x/2x/3x objective	1x/2x/4x objective	Rack & pinion stand	Pillar stand
ED.1302-P		•					•
ED.1302-S		•				•	
ED.1305-S	•	•				•	
ED.1402-P			•				•
ED.1402-S			•			•	
ED.1405-S	•		•			•	
ED.1502-S				•		•	
ED.1505-S	•			•		•	
ED.1802-S					•	•	
ED.1805-S	•				•	•	

BioBlue.Lab

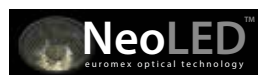
MADE IN HOLLAND

- Binocular and trinocular models
- Reversed quadruple nosepiece
- Plan and plan phase objectives
- Finity and infinity optical system
- Integrated mechanical stage
- NeoLED™ illumination
- Ergonomic carrying grip
- 10 years warranty

The BlueLine flagship BioBlue.Lab is an instrument that precisely matches highest expectations of microscopy users. All models are equipped with NeoLED™ illumination system and are available in binocular and trinocular versions.

These ergonomic easy-to-use microscopes have specifically been designed for laboratory and university applications. The 140 x 150 mm mechanical stage has an integrated rackless X-Y stage with 75 x 30 mm travel

Trinocular model BB.1153-PLi



An important feature of the BioBlue.Lab is the rackless stage, which provides a smooth translation of the specimen and highly precise positioning. This plays an integral part in most demanding cytology and histopathology applications

The BioBlue.Lab microscope models offer great functionality and are equipped with WF10x/20 mm eyepieces, plan and IOS plan 4x/ 10x/ S40x/ S100x infinity corrected objectives and create a superb image quality



Binocular model BB.1152-PLi



BioBlue.Lab microscopes can be supplied with IOS plan phase contrast objectives 10x / 20x / S40x / S100x, which are finity or infinity corrected.

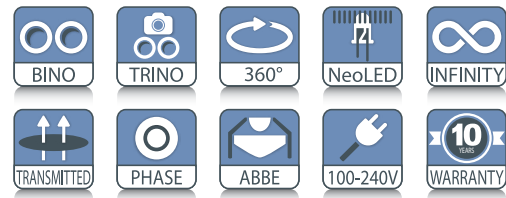
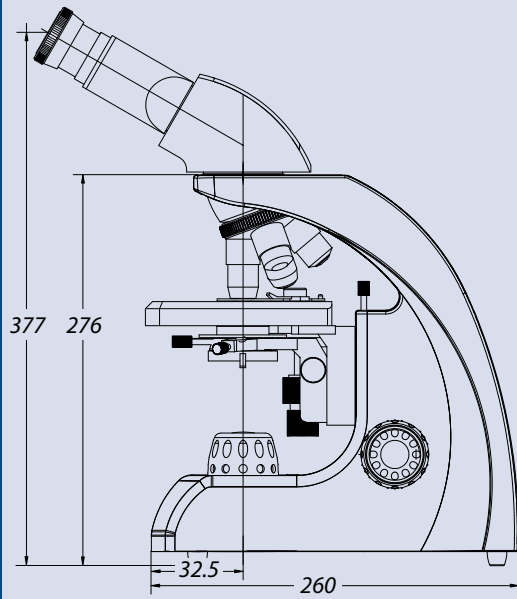
This enhancement is suitable for a wide variety of routine applications in laboratories and field microscopy



BioBlue

BioBlue.Lab

DIMENSIONS



FEATURES

Body	Aluminium die-casting metal frame
Optical system	Infinity optical system Finite optical system
Focusing	200 graduations, 1.5 µm per graduation, 0.3 mm per rotation total travel approximately 28 mm. With friction adjustment
Revolving nosepiece	Reversed quadruple nosepiece
Stage	Mechanical rackless X-Y stage, 140 x 150 mm, travelling range 75 x 30 mm
Observation tube	Binocular and trinocular 30° inclined tubes One tube with ± 5 diopter adjustment
Objectives	Plan (anti-fungus) Plan IOS Plan phase Plan phase IOS
Eyepieces	WF 10x/20 mm (anti-fungus)
Operating voltage	AC 100-240 V, 50/60 Hz
Height	377 mm
Weight	Approximately 6 kg

MODELS

	Bino	Trino	4x/10x/S40x/S100x plan objectives	4x/10x/S40x/S100x plan IOS objectives	10x/20x/S40x/S100x plan phase objective	10x/20x/S40x/S100x plan phase IOS objectives	Rackless mechanical stage	Neo LED
BB.1152-PL	•		•				•	•
BB.1153-PL		•	•				•	•
BB.1152-PLi	•			•			•	•
BB.1153-PLi		•		•			•	•
BB.1152-PLPH	•				•		•	•
BB.1153-PLPH		•			•		•	•
BB.1152-PLPHi	•					•	•	•
BB.1153-PLPHi		•				•	•	•

Objectives

Most common microscope objectives come in three different types: achromatic, semi plan and plan

Achromatic objectives

Usually contain a pair of lenses and correct for colour and have a flat field correction for about 65% of the image. If there are aberrations they occur in the outer 35% of the image

Semi plan objectives

Contain three or more (achromatic) lens elements and have an 80% flat field. Semi plan objectives have an improved resolution

Plan objectives

Correct even better for colour and spherical aberration than semi plan objectives. Plan objectives have a 95% flat field and produce the best image quality

Technical Facts



Rackless stage

The BioBlue.Lab rackless stage has no protruding parts, making it easier to reach the focusing knobs from any angle

The rackless stage enables convenient and smooth movement and guarantees durability

Rackless stage



Normal stage

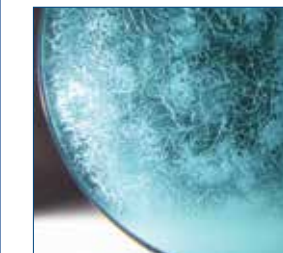


Anti-fungus treated

Fungus spores are parasitic, travel in the air and can settle inside lenses. High temperatures, humidity and environments that are dark and unventilated encourage fungus growth

The BlueLine optical components are anti-fungus treated. Nevertheless it is best to minimize the possibility of fungus by storing the microscopes in well-ventilated rooms with moderate temperatures and low humidity

Fungus



StereoBlue

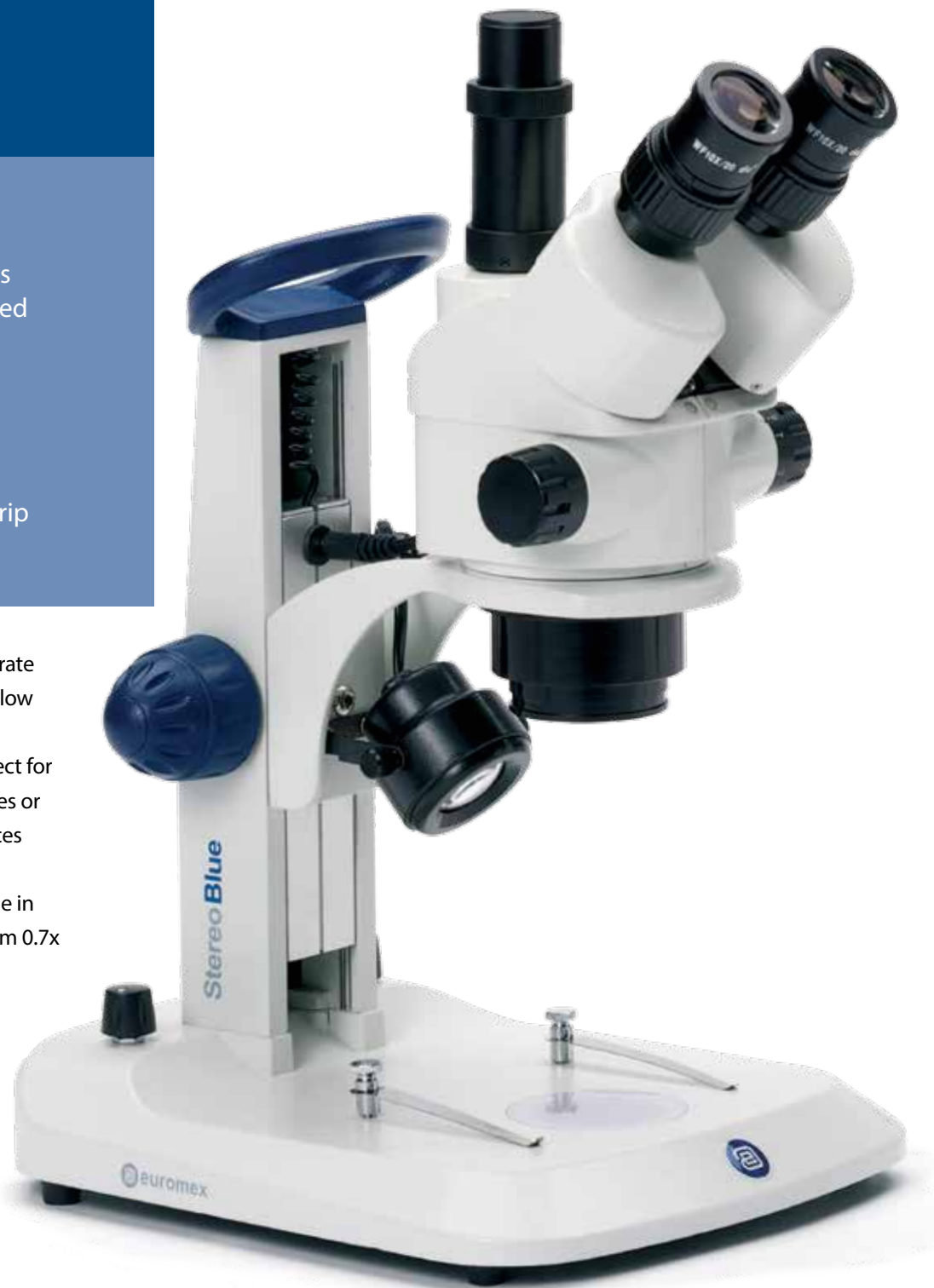
MADE IN HOLLAND

- Stereo Zoom versions
- Dual 1x/3x or 2x/4x magnification versions
- Ergonomically designed
- Available with
 - rack & pinion stands
 - pillar stands
 - universal stands
- 3 W LED illuminators
- Ergonomic carrying grip
- 5 years warranty

Stereo (zoom) microscopes generate three-dimensional images and allow extended working distances. StereoBlue microscopes are perfect for observing large biological samples or analysis of rough materials surfaces

The StereoBlue series are available in fixed dual magnification and zoom 0.7x to 4.5x magnification versions. They are most suitable for many routine applications for the industry and laboratories

Rack & pinion stand model SB.1903



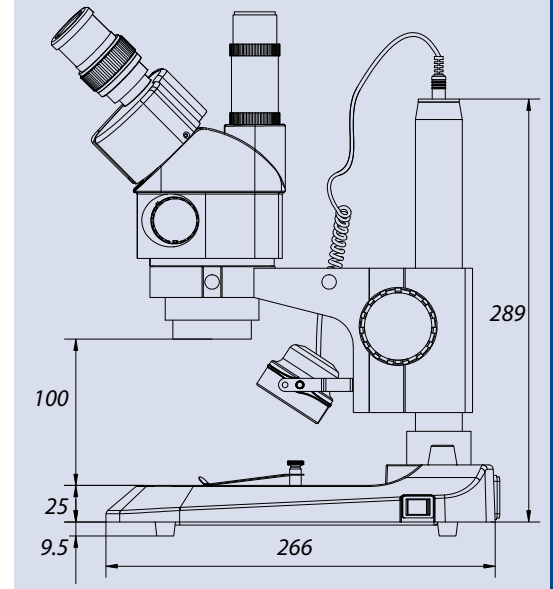
Pillar stand model SB.1402-P



Universal stand model SB.1902-U

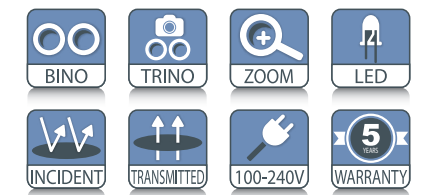


DIMENSIONS



FEATURES

Body	Aluminium die-casting metal frame
Optical system	Greenough stereo Zoom stereo
Focusing	Coarse focus, stroke: 21 mm (rack & pinion stand) Coarse focus, stroke: 21 mm (pillar stand)
Revolving nosepiece	Revolving dual magnification objectives or zoom objective
Stage	Plain stage with 2 object clamps and round 60 mm stage plates black & white + opaque Max. object height: 193 mm (rack & pinion stand) Max. object height: 175 mm (pillar stand)
Observation tube	Binocular and trinocular heads with 45° inclined tubes Two tubes with ± 5 diopter adjustment
Objectives	Paired 1x/3x, field of view 20/6.6 mm, W.D. 100 mm Paired 2x/4x, field of view 10/5.0 mm, W.D. 100 mm Paired Zoom 0.7 to 4.5x, field of view 28.5 to 4.4 mm, W.D. 100 mm
Eyepieces	WF 10x/20 mm secured (anti-fungus)
Operating voltage	AC 100-240 V, 50/60 Hz
Height	364 mm
Weight	Approximately 15 kg (with universal stand) Approximately 4 kg (with pillar stand) Approximately 4.7 kg (with rack & pinion stand)



MODELS

	Binocular	Trinocular	1x/3x objective	2x/4x objective	0.7-4.5x zoom	Rack & pinion stand	Pillar stand	Universal stand
SB.1302	•		•			•		
SB.1302-P	•		•				•	
SB.1402	•			•		•		
SB.1402-P	•			•			•	
SB.1902	•				•	•		
SB.1902-P	•				•		•	
SB.1902-U	•				•			•
SB.1903		•			•	•		
SB.1903-P		•			•		•	
SB.1903-U		•			•			•



by euromex



Euromex Microscopen bv

is a leading manufacturer of microscopes and other optical instruments. Founded in 1966, Euromex has become a world-class supplier of biological 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 80 countries through distributors, resellers and agents. A wide variety of customers such as schools and educational institutes, clinical and research laboratories and a broad range of industrial customers are using Euromex microscopes



Euromex microscopen bv

info@euromex.com
www.euromex.com

Papenkamp 20
6836 BD Arnhem
The Netherlands
Tel: +31 (0) 26 323 22 11

Carretera de Barcelona 88, Entresuelo
Edificio Technomar
08302 Mataró, Spain
Tel: +34 (0) 937 415 609

Euromex is a registered trademark of Euromex Microscopen bv. The information contained herein is subject to change without notice. All rights reserved.



Management System
ISO 9001:2008
www.tuv.com
ID 0000037140

The Euromex Quality System is certified according to ISO 9001:2008 and supports our pursuit of continuous improvement and our on-going commitment to provide our world-wide customers assurance of product quality