

# **BioBlue**

# HIGHLIGHTS

- WF10x/18mm eyepiece(s)
- · BioBlue EVO models with WF 10x/20 mm eyepieces and Köhler NeoLED<sup>™</sup> illumination
- Models with an integrated 5.0 MP CMOS camera
- Models with a 7" LCD screen
- · Models for polarization applications
- · Provided with APL (Antimicrobial Protection Layer)
- · Reversed nosepiece for 4 semi plan objectives
- Integrated X-Y mechanical stage
- · Coaxial coarse and fine adjustments with rack stop
- Height adjustable Abbe condenser with iris diaphragm and filter holder
- Monocular models with 1 W LED illumination
- Binocular and trinocular models supplied with 1 W NeoLED™ illumination for increased light output
- LED models with rechargeable AA batteries and integrated power supply
- Ergonomic stand
- Warranty 10 years

## TECHNICAL SPECIFICATIONS

### EYEPIECE(S)

- WF10x/18 mm Wide field
- Secured and with pointer for monocular models
- The BioBlue EVO models are supplied with WF 10x/20 mm eyepieces

#### HEAD

- All heads are 360° rotatable and secured
- Monocular models with 45° inclined tubes
- Binocular and trinocular models have 30° inclined tubes, interpupillary distance is adjustable between 48 and 75 mm and equipped with a  $\pm$  5 diopter adjustment on the left tube
- The trinocular head has a fixed light path beamsplitter (50:50) and • generates an erect image
- Models with digital head are supplied with a integrated 5.0 MP 1/2" CMOS • sensor with 2560 x 1920 pixel resolution USB 2.0 camera
- Models supplied with a 7" IPS LCD screen •
- Optional discussion head available

















Monocular head

- Binocular head
- Trinocular head

Discussion head

Digital mono head

Digital bino head

Digital LCD head





#### MONOCULAR MODEL BB.4200

320 (h) x 176 (w) x 227 mm (d) | 3.0 kg **BINOCULAR MODEL BB.4260** 360 (h) x 176 (w) x 227 mm (d) | 4.0 kg POLARIZATION MODEL BB.4200-P-HLED 360 (h) x 176 (w) x 227 mm (d) | 4.4 kg

#### NOSEPIECE

Reversed quadruple nosepiece on ball bearings. Models for polarization are supplied with a swing-out analyzer

DIGITAL SOLUTIONS

EDUCATION

LIFE SCIENCE

BIOBLUE



#### **OBJECTIVES - 45 MM PARFOCAL**

- Supplied with semi plan 4x/0.10, 10x/0.25, S40x/0.65, S60x/0.85, S100x/1.25 oil immersion objectives configuration is depending on model
- The S40x, S60x and S100x oil immersion objectives are spring loaded (to prevent damage to sample and objectives)

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

#### FOCUSSING

- Coaxial coarse and fine adjustments with 200 graduations. Precision 2  $\mu m$  per graduation, 0.4 mm per rotation
- Total travel approximately 23 mm
- Supplied with an adjustable rack stop to prevent damage to sample and objectives
- The coarse adjustment is equipped with friction control

#### STAGE

- 130 x 130 mm with mechanical 70 x 28 mm X-Y translation stage except for models BB.4200 and BB.4205
- These models have a 120 x 120 mm plain stage supplied with two non-removable object clamps
- The models for polarization are supplied with 129 mm round stage, 360° rotatable and two object clamps

#### POLARIZATION MODELS

- Equipped with analyzer, mounted in a slider under the head
- 360° Rotatable, graduated polarizer on the lamp house
- Standard supplied with H-LED illumination for correct color rendering (very similar to the halogen light spectrum) and an integrated 100-240 Vac power supply
- Polarisation attachments for standard microscopes are available optionally

#### CONDENSER

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

## 

- Binocular and trinocular models are supplied with an intensity adjustable 1 W NeoLED<sup>™</sup> illumination system for increased light output
- Monocular models are supplied with an adjustable 1W LED illumination
- The models for polarization are supplied with H-LED illumination for correct color rendering (very similar to the halogen light spectrum) and an integrated 100-240 V power supply. However 20 W halogen illumination is also available for polarization models on special request
- The EVO models are equipped with Köhler NeoLED<sup>™</sup> illumination
- All BioBlue microscopes are supplied with rechargeable AA batteries and integrated 100-240 V power supply for cordless operation. LCD versions do not run on batteries

#### **ANTI-THEFT SLOT**

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

#### PACKAGE CONTENT

- Supplied with power cord, three rechargeable AA batteries, dust cover, a spare fuse, white filter, user manual and 5 ml immersion oil for models with S100x objective
- · Polarisation models are supplied with a cross hair eyepiece for centering
- All packed in a polystyrene box



#### APL (ANTIMICROBIAL PROTECTION LAYER)

Using the same technology already used extensively throughout the healthcare environment in wall coatings, patient lighting, air pressure stabilization and suction liners, APL prevents the growth of unwanted microbes that can cause degradation, discoloration, staining or odors of the Euromex microscopes



DIGITAL SOLUTIONS



## DIGITAL MODELS

### CAMERA

- All the BioBlue digital microscopes are equipped with a 5.0 MP CMOS USB-2 camera
- Maximum resolution 2560 x 1920, 24 bits color depth, up to 30 frames per second
- Delivered with ImageFocus Plus software, USB-2 cable and a micrometer 1mm/100 slide
- Warranty for the camera is 2 years

## SOFTWARE

- The ImageFocus Plus software allows to save images in .jpg, .tif, .bmp or .dicom formats as well as .avi format videos
- Images can be annotated and measurements can be performed in live or captured images
- Compatible with Windows 10 and higher, both 32 and 64 bits configurations
- Mac OS version is also available
- Updates can be downloaded on our website www.euromex.com

### MODELS WITH LCD SCREEN

- 7" IPS LCD screen
- Screen resolution 1920 x 1080 @ 30 fps
- Save images and videos directly to micro SD card
- Image resolution upto 1844 x 1080 in JPEG format
- Video resolution 1280 x 720 AVI format
- Basic measurement function (line) with calibration. Calibration slide available as option
- Warranty for the screen is two years





~	
0	
F	
5	
N	
ш	

MODELS	Mono	Bino	Trino	4/10/40x SMP objectives	S60x SMP objective	S100x SMP objective	Mechanical X-Y stage	LED	NeoLED™	Köhler illumination(1)	Polarization <sup>(2)</sup>
BB.4200	•			•				•			
BB.4220	•			•			•	•			
BB.4240	•			•	•		•	•			
BB.4250	•			•		•	•	•			
BB.4260		•		•		•	•		•		
BB.4260-E		•		•		•	•		•	•	
BB.4263		•		•	•		•		•		
BB.4243			•	•	•		•		•		
BB.4253			•	•		•	•		•		
BB.4253-E			•	•		•	•		•	•	
BB.4220-P-HLED	•			•				•			•
BB.4240-P-HLED	•			•	•			•			•
BB.4250-P-HLED	•			•		•		•			•
BB.4261-P-HLED		•		•					•		•
BB.4263-P-HLED		•		•	•				•		•
BB.4260-P-HLED		•		•		•			•		•
BB.4241-P-HLED			•	•					•		•
BB.4243-P-HLED			•	•	•				•		•
BB.4253-P-HLED			•	•		•			•		•

<sup>(1)</sup> EVO models are supplied with WF 10x/20 mm eyepieces and Köhler NeoLED<sup>(tm)</sup> illumination

<sup>(2)</sup> Polarization models are supplied with H-LED illumination - very similar light spectrum to the halogen illumination - and an eyepiece

with crosshairs for centering. 20 W halogen illumination is also available for polarization models on special request

## DIGITAL MODELS

MODELS	Mono	Bino	LCD*	4/10/40x SMP objectives	S60x SMP objective	S100x SMP objective	Mechanical X-Y stage	1W LED	NeoLED™	Weight (Kg)
BB.4205	•			•				•		2.9
BB.4225	•			•			•	•		3.4
BB.4245	•			•	•		•	•		3.4
BB.4255	•			•		•	•	•		3.4
BB.4267		•		•		•	•		•	4.1
BB.4269		•		•	•		•		•	4.1
BB.4200-LCD			•	•				•		2.9
BB.4220-LCD			•	•			•	•		3.4

\* Models with a 7" LCD screen, 1920x1080 pixels, SD card for images and video. LCD versions do not run on batteries

## ACCESSORIES AND SPARE PARTS

## EYEPIECES

AE.5571	Wide field eyepiece WF 5x/18 mm	1
AE.5572	Wide field eyepiece WF10x/18 mm	
AE.5572-E	Wide field eyepiece WF 10x/20 mm for BB EVO	
AE.5573	Wide field eyepiece WF15x/12 mm	
AE.5573-E	Wide field eyepiece WF 15x/12 mm for BB EVO	
AE.5574	Wide field micrometer eyepiece 10mm/100	
AE.5581	Wide field eyepiece WF10x/18 mm with pointer	
AE.5581-E	Wide field eyepiece WF 10x/20 mm with pointer for BB EVO	I
AE.5582	Wide field eyepiece WF20x/11.5 mm	
AE.5582-E	Wide field eyepiece WF 20x/12.5 mm for BB EVO	
AE.5365	Eyecup for 28 mm eyepieces	
AE.5365-E	Pair of eyecups for eyepieces for BB EVO	

## OBJECTIVES

Semi Plan SMP, 45 mm parfocal				
AE.5591	4x/0.10 SMP objective. WD 37.5 mm			
AE.5593	10x/0.25 SMP objective. WD 6.54 mm			
AE.5594	20x/0.40 SMP objective. WD 1.2 mm			
AE.5597	S40x/0.65 SMP objective. WD 0.68 mm			
AE.5599	S60x/0.75 SMP objective. WD 0.2 mm			
AE.5601	S100x/1.25 SMP oil immersion objective. WD 0.22 mm			
WD = Work	ing distance			



#### MISCELLANEOUS

AE.1110	Stage micrometer 1 mm/ 100 parts
AE.5511	Discussion head without eyepieces. Delivered with two eyepieces
	when the head is ordered mounted on microscope
AE.5202	Blue filter, diameter 32 mm
AE.5203	Yellow filter, diameter 32 mm
AE.5204	Neutral grey filter, diameter 32 mm
AE.5205	Green filter, diameter 32 mm
AE.5207	Blue filter plexiglass, diameter 32 mm
BB.4300	Aluminium case for BioBlue microscopes
AE.9918	Nylon microscope bag (25 x 39 x 19 cm)
AE.9912	Euromex dust cover medium (35 x 39 cm)
BB.9602	Analyzer in slider
AE.9981	1 W LED replacement unit
AE.9981-H	1 W LED (halogen color type) replacement unit (only for monocular
	versions)
AE.9991	1 W NeoLED™ replacement unit
AE.9991-H	1 W NeoLED $^{\rm M}$ replacement unit (only for binocular and trinocular
	versions)
SL.1379	Spare halogen 20 W 12 V bulb for BioBlue
	polarization models
AE.5227	Glass fuses 1 A 250 V, 10 pieces



## CAMERA ACCESSORIES

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

#### DISPOSABLES

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





### POLARIZATION ATTACHMENTS

Not suitable for the BioBlue EVO models

AE.5150	Simple polarization attachment. Polarizer 18 mm diameter
	mounted in eyepiece, analyzer 32 mm diameter placed in
	filter holder
AE.5151	Simple polarization attachment. Polarizer mounted over eyepiece
	and analyzer 32 mm diameter in filter holder
AE.5152	Simple polarization attachment. Polarizer mounted over eyepiece
	and analyzer 32 mm diameter in filter holder
AE.5153	Simple polarization attachment. Analyzer mounted over eyepiece
	and 360° rotatable polarizer on table
AE.5154	Polarizer in mount, to place over eyepiece
AE.5155	Polarization attachment with analyzer and slider, rotatable stage for
	X-Y mechanical stage and polarizer on lamp house
AE.5155-P	Polarization attachment with analyzer and slider, rotatable stage for
	stage with clamps and polarizer on lamp house
AE.5156	Polarization attachment with analyzer and slider,
	and polarizer on lamp house
AE.5158	Polarization kit with analyzer in slider and small rotatable
	(75 x 50 mm) stage with two clamps to be mounted on X-Y stage.
	Rotatable 360° polarization filter to be mounted on lamphouse
AE.5158-P	Polarization kit with analyzer in slider and small rotatable (100 x 65
	mm) stage with two clamps to be mounted on plain stage. $360^\circ$

Rotatable polarization filter to be mounted on lamphouse



BioBlue with polarization kit





• AE.5158-P

