

# BioBlue



## HIGHLIGHTS

- WF10x/18mm eyepiece(s)
- BB EVO models with WF 10x/20 mm eyepieces and Köhler NeoLED™ illumination
- Models with integrated 3.2 MP CMOS camera
- Models for polarization applications
- 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 batteries and integrated power supply
- Ergonomic stand
- Warranty 10 years



● BB.4240

## 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 ± 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 3.2 MP 1/2" CMOS sensor with 2048 x 1635 pixel resolution USB 2.0 camera
- Optional discussion head available

#### 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



Monocular head



Binocular head



Trinocular head



Digital monocular head



Digital binocular head



Discussion head

### NOSEPIECE

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

### OBJECTIVES

- 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 µm 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 a 20 W halogen illumination for correct color rendering 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

### ILLUMINATION



- Binocular and trinocular models are supplied with an intensity adjustable 1 W NeoLED™ 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™ illumination
- All BioBlue microscopes – except halogen models – are supplied with rechargeable batteries and integrated power supply for cordless operation

### PACKAGE CONTENT

- Supplied with power cord, dust cover, a spare fuse, user manual and 5 ml immersion oil for models with S100x objective
- Models with halogen illumination are supplied with a blue filter and spare bulb, models with LED illumination are supplied with a white filter, all polarisation models are supplied with a cross hair eyepiece for centering
- All packed in a polystyrene box



● Polarization model BB.4260-P

## DIGITAL MODELS

### CAMERA

- All the BioBlue digital microscopes are equipped with a 3.2 MP CMOS USB-2 camera
- Maximum resolution 2048 x1635, 24 bits color depth, up to 10 frames per second
- Delivered with ImageFocus 4 software, USB-2 cable and a micrometer 1mm/100 slide.
- Warranty for the camera is 2 years

### SOFTWARE

- The ImageFocus 4 software allows to save images in .jpg, .tif or .bmp formats as well as .avi format videos.
- Images can be annotated and measurements can be performed in live or captured images
- Compatible with Windows 7, 8 and 10, both 32 and 64 bits configurations
- Mac OS version is also available
- Updates can be downloaded on our website [www.euromex.com](http://www.euromex.com)



● BB.4225

MODELS	Mono	Bino	Trino	Digital	4/10/40x SMP objectives	S60x SMP objective	S100x SMP objective	Mechanical X-Y stage	LED	NeoLED™	Köhler illumination <sup>(1)</sup>	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.4205	•			•	•				•			
BB.4225	•			•	•			•	•			
BB.4245	•			•	•	•		•	•			
BB.4255	•			•	•		•	•	•			
BB.4267		•		•	•		•	•		•		
BB.4269		•		•	•	•		•		•		
BB.4220-P-LED	•				•				•			•
BB.4240-P-LED	•				•	•			•			•
BB.4261-P-LED		•			•					•		•
BB.4263-P-LED		•			•	•				•		•
BB.4260-P-LED		•			•		•			•		•
BB.4241-P-LED			•		•					•		•
BB.4243-P-LED			•		•	•				•		•
BB.4253-P-LED			•		•		•			•		•

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

## ACCESSORIES AND SPARE PARTS

### EYEPIECES

- AE.5571** Wide field eyepiece WF 5x/18 mm
- AE.5572** Wide field eyepiece WF10x/18 mm
- AE.5572-E** Wide field eyepiece WF 10x/20 mm
- 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
- 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

- AE.5591** Semi plan objective 4x/0.10. Working distance 37.5 mm
- AE.5593** Semi plan objective 10x/0.25. Working distance 6.54 mm
- AE.5594** Semi plan objective 20x/0.40. Working distance 1.2 mm
- AE.5597** Semi plan objective S40x/0.65. Working distance 0.68 mm
- AE.5599** Semi plan objective S60x/0.75. Working distance 0.2 mm
- AE.5601** Semi plan objective S100x/1.25 oil immersion.  
Working distance 0.22 mm

### MISCELLANEOUS

- AE.1110** Stage micrometer 1 mm/ 100 parts
- AE.5511** Discussion head
- 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)

- BB.9602** Analyzer in slider
- AE.9981** 1 W LED replacement unit
- AE.9991** 1 W NeoLED™ replacement unit
- 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 = 1.482 (25 ml)
- PB.5274** Isopropyl alcohol 99% (200 ml)
- PB.5275** Cleaning kit: lens cleaning fluid, lint free lens tissue, brush, air blower, cotton swabs



● AE.9918

**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° Rotatable polarization filter to be mounted on lamphouse



● AE.5150



● AE.5151



● AE.5152



● AE.5154



● AE.5156



● AE.5155-P



● AE.5158-P

● BioBlue with polarization kit

