

# BioBlue

## HIGHLIGHTS

- WF10x/18mm eyepiece(s)
- BB EVO models with WF 10x/20 mm eyepieces and Köhler NeoLED™ illumination
- Models with integrated 5.0 MP CMOS camera
- Models with LCD screen
- Models for polarization applications
- Provided with APL (Anti-bacterial 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 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 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 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



Monocular head



Binocular head



Trinocular head



Discussion head

## 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  $\mu$ 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

## 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



## APL (ANTI-BACTERIAL PROTECTION LAYER)

APL is a revolutionary paint treatment applied to the most critical parts of our products. A microscope with APL will restrict the growth of micro-organisms, including bacteria and mold



● Polarization model BB.4260-P-HLED

## 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 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)

### 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



● BB.4225



● BB.4200-LCD



Digital monocular head



Digital binocular head



Digital LCD head

MODELS	Mono	Bino	Trino	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.4220-P-HLED	•			•				•			•
BB.4240-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™ 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

## ACCESSORIES AND SPARE PARTS

### EYEPIECES

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

### OBJECTIVES

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

### MISCELLANEOUS

<b>AE.1110</b>	Stage micrometer 1 mm/ 100 parts
<b>AE.5511</b>	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)
- AE.9912** Euromex dust cover medium (35 x 39 cm)

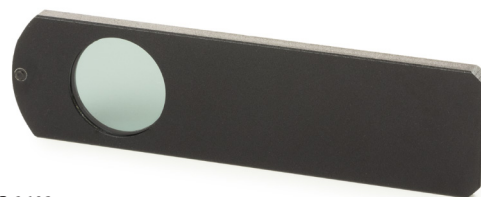
- BB.9602** Analyzer in slider
- AE.9981** 1 W LED replacement unit
- AE.9991** 1 W NeoLED™ replacement unit
- SL.1379** Spare halogen 20 W 12 V bulb for BioBlue polarization models
- AE.5227** Glass fuses 1 A 250 V, 10 pieces

### 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



● BB.9602



● PB.5155



● PB.5165



● PB.5255



● PB.5245



● PB.5275



● BB.4300



● AE.9918



● AE.9912



**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



● BioBlue with polarization kit

