

## BioBlue

### HIGHLIGHTS

- WF10x/18mm eyepiece(s)
- 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 designed stand
- Warranty 10 years



BB.4240

### TECHNICAL SPECIFICATIONS

#### EYEPIECE(S)

- Wide field WF10x/18 mm secured eyepiece with pointer for monocular models
- The eyepieces of the binocular and trinocular models are supplied without pointer

#### HEAD

- 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
- All heads are 360° rotatable and secured with a screw
- Models with an integrated USB-2 camera are supplied with a 3.2 MP 1/2" CMOS sensor with 2048 x 1536 pixel resolution
- The BioBlue microscope can also be supplied with a discussion head



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

- All models are supplied with semi plan 4x/0.10, 10x/0.25 and S40x/0.65 objectives
- Models with an S60x/0.85 or S100x/1.25 oil immersion objective are also available
- The S40x, S60x and S100x oil immersion objectives are spring loaded
- 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 adjustments are 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 EQUIPMENT

- The swing-out analyzer is mounted in a slider under the head.
- The rotatable 360° polarizer fits on the collector lamp

### POLARIZATION MODELS

- The models for polarization are standard supplied with a 20 W halogen illumination for correct color rendering and an integrated 100-240 Vac power supply

### CONDENSER

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

### ILLUMINATION

- Binocular and trinocular models are supplied with an adjustable 1 W NeoLED™ illumination system for increased light output
- Monocular models have a standard adjustable 1W LED illumination
- All BioBlue microscopes – except the polarization models – are supplied with rechargeable batteries and integrated power supply for cordless operation
- On special request LED illumination is also available



### CAMERA AND SOFTWARE

- Models with integrated 3.2 MP CMOS USB-2 camera are supplied with the ImageFocus 4 capture and measurement software
- Besides capturing of images and videos, this software allows measurements on still and live images and to perform annotations on captured images
- Compatible with Windows 7, 8 and 10, both 32 and 64 bits configurations

### PACKAGING

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



Polarization model BB.4260-P

### MODELS

	Monocular	Binocular	Trinocular	Digital	S60x objective	S100x objective	Mechanical X-Y stage	LED	NeoLED™	Polarization <sup>(1)</sup>
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) Polarization models are supplied with halogen illumination

## DIGITAL MODELS

### CAMERA

- All the BioBlue digital microscopes are equipped with a 3.2 MP CMOS USB-2 camera
- Maximum resolution 2048 x 1536, 24 bits color depth, up to 15 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 capture and analysis 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 XP, Vista, 7, 8 and 10, both 32 and 64 bits configurations.
- Mac OS Light version is also available for capturing images
- Updates can be downloaded on our website [www.euromex.com](http://www.euromex.com)

## ACCESSORIES AND SPARE PARTS

- |                  |   |                |   |
|------------------|---|----------------|---|
| <b>AE.5572</b>   | Wide field eyepieces WF10x/18 mm  | <b>AE.5202</b> | Blue filter, diameter 32 mm   |
| <b>AE.5573</b>   | Wide field eyepiece WF15x/12 mm   | <b>AE.5203</b> | Yellow filter, diameter 32 mm   |
| <b>AE.5574</b>   | Wide field micrometer eyepiece 10mm/100   | <b>AE.5204</b> | Neutral grey filter, diameter 32 mm   |
| <b>AE.5581</b>   | Wide field eyepiece WF10x/18 mm with pointer  | <b>AE.5205</b> | Green filter, diameter 32 mm  |
| <b>AE.5582</b>   | Wide field eyepiece WF20x/11.5 mm   | <b>AE.5207</b> | Blue filter plexiglass, diameter 32 mm  |
| <b>AE.5365</b>   | Eyecup for 28 mm eyepieces  | <b>AE.5130</b> | Universal SLR camera adapter with 2x projection lens for 23.2 mm tubes. Need T2 adapter   |
| <b>AE.1110</b>   | Stage micrometer 1 mm/ 100 parts  | <b>AE.5025</b> | T2 adapter for Nikon D digital SLR cameras  |
| <b>AE.5591</b>   | Semi plan objective 4x/0.10. Working distance 37.5 mm   | <b>AE.5040</b> | T2 adapter for Canon EOS digital SLR cameras  |
| <b>AE.5593</b>   | Semi plan objective 10x/0.25. Working distance 6.54 mm  | <b>BB.4300</b> | Aluminium case for BioBlue microscopes  |
| <b>AE.5594</b>   | Semi plan objective 20x/0.40. Working distance 1.2 mm   | <b>AE.9981</b> | 1 W LED replacement unit  |
| <b>AE.5597</b>   | Semi plan objective S40x/0.65. Working distance 0.68 mm   | <b>AE.9991</b> | 1 W NeoLED™ replacement unit  |
| <b>AE.5599</b>   | Semi plan objective S60x/0.75. Working distance 0.2 mm  | <b>SL.1379</b> | Spare halogen 20 W 12 V bulb for BioBlue polarization models                              |
| <b>AE.5601</b>   | Semi plan objective S100x/1.25 oil immersion. Working distance 0.22 mm  | <b>AE.5227</b> | Glass fuses 1 A 250 V, 10 pieces  |
| <b>AE.5511</b>   | Discussion head   | <b>PB.5155</b> | Microscope slides 76 x 26 mm, ground edges, 50 pieces                                     |
| <b>AE.5150</b>   | Simple polarization attachment. Polarizer 18 mm diameter mounted in eyepiece, analyzer 32 mm diameter placed in filter holder | <b>PB.5165</b> | Cover glasses 18 x 18 mm, thickness 0.13-0.17 mm, 100 pieces                              |
| <b>AE.5152</b>   | Simple polarization attachment. Polarizer mounted over eyepiece and analyzer 32 mm diameter in filter holder                  | <b>PB.5168</b> | Cover glasses 22 x 22 mm, thickness 0.13-0.17 mm, 100 pieces                              |
| <b>AE.5153</b>   | Simple polarization attachment. Analyzer mounted over eyepiece and 360° rotatable polarizer on table                          | <b>PB.5245</b> | Lens cleaning paper, 100 sheets per pack  |
| <b>AE.5155</b>   | Polarization attachment with analyzer and slider, rotatable stage for X-Y mechanical stage and polarizer on lamp house        | <b>PB.5255</b> | Immersion oil, n = 1.482 (25 ml)  |
| <b>AE.5155-P</b> | Polarization attachment with analyzer and slider, rotatable stage for stage with clamps and polarizer on lamp house           | <b>PB.5274</b> | Isopropyl alcohol 99% (200 ml)  |
| <b>AE.5156</b>   | Polarization attachment with analyzer and slider, and polarizer on lamp house   | <b>PB.5275</b> | Cleaning kit: lens cleaning fluid, lint free lens tissue, brush, air blower, cotton swabs |



BB.4225