

BIOLOGICAL MICROSCOPES

bscope

NeoLED™
euromex optical technology

bScope®

versatile and evolutive!

The well-equipped microscopes of the bScope® series are intensively used in universities, small and mid-sized laboratories and in veterinary applications

The design of the bScope® is both ergonomic and evolutive. Height adjustable eye tubes and low stage controls minimize fatigue during long working sessions and thus provide more comfort for microscopists. The robust, compact size of the

bScope® and the Cable Storage System allow more working space, safer operation and enable easy storage



product information



● BS.1153-EPLi

MONO: BS.1151-EPL

385 (h) x 235 (w) x 195 (d) | 6.3 kg

BINO: BS.1152-EPL / BS.1152-EPLi / BS.1152-PLi

409 (h) x 195 (w) x 235 mm (d) | 6.5 kg

TRINO: BS.1153-EPL / BS.1153-EPLi / BS.1153-PLi

459 (h) x 195 (w) x 235 mm (d) | 6.6 kg



● BS.1152-PLi

● BS.1151-EPL

SPECIFICATIONS

EYEPIECE(S)

High wide field **HWF 10x/20 mm** secured eyepiece(s) with 20 mm field of view (Ø 23.2 mm tube). The eyepiece of monocular models is supplied with pointer

HEAD

The bScope® is available with a monocular head (45° inclined Ø 23.2 mm tube) or with binocular or trinocular heads equipped with a Siedentopf type head, **360° rotatable** and equipped **with 30° inclined Ø 23.2 mm tubes**. Binocular and trinocular models have a diopter ± 5 adjustment on the left eyepiece. The interpupillary distance is adjustable between **48 to 76 mm**. The models equipped with plan infinity corrected PLi objectives have a unique swiveling system of the eyepiece tubes for ergonomic positioning of both tubes in a high (431 mm) and in a low position (377 mm). The trinocular head comes with a Ø 23.2 mm tube, ensuring a maximum of flexibility and has a fixed light path beam splitter (20:80) and generates an erect image. Models with an integrated USB-2.0 camera are supplied with a 5.0 MP 1/2.5" CMOS sensor with a resolution of 2592 x 1944 pixels (see chapter 7)

NOSEPIECE

Revolving and reversed ball-bearing quadruple or quintuple nosepiece

HIGHLIGHTS

- Versatile and evolutive microscopes
- Monocular, binocular and trinocular models
- Digital models available
- **HWF 10x/20 mm eyepieces**
- Reversed ball-bearing quadruple or quintuple nosepiece with slot for polarization filter
- E-plan, E-plan IOS and plan IOS objectives
- Plan phase IOS objectives
- Rackless integrated X-Y mechanical stage
- 3 W NeoLED™ adjustable illumination system
- Darkfield cardioid condenser with 5 W NeoLED™
- Integrated carrying grip
- Cable Storage System and anti-theft system
- 10 Years warranty

OBJECTIVES - 45 MM PARFOCAL

The state-of-the-art production techniques and multi layer coatings used for the manufacturing of the bScope® objectives enable the bScope® to be used for the most demanding applications. World class spherical aberration correction and modern CNC and assembly technology ensure the perfect centering of the objectives

- Brightfield models: E-plan, E-plan IOS infinity corrected, plan IOS infinity corrected 4x/**0.10**, **10x/0.25**, 20x/0.40, S40x/0.65, S60x/0.85 and S100x/1.25 oil immersion objectives
 - Phase contrast models: Plan phase IOS infinity corrected 10x/0.25, 20x/0.40, S40x/0.65 and S100x/1.25 oil immersion objectives
 - Darkfield model: E-plan 4x/0.10, 10x/0.25, 20x/0.40, S40x/0.65, S60x/0.85 objectives. The S100x/1.25 oil immersion objective has a built-in iris diaphragm
- All S40x, S60x and S100x oil immersion objectives are spring loaded. All optics are anti-fungus treated and anti-reflection coated for maximum light throughput*

FOCUSING

Double coaxial, low-positioned coarse and fine adjustments with 180 graduations. Precision 1.1 µm, 200 µm per rotation, total travel range is approximately 19 mm. Supplied with an adjustable rack stop to prevent damage to sample and objectives. The coarse adjustment is equipped with friction control

STAGE

The bScope® is equipped with a scratch resistant 152/197 x 131 mm stage with integrated 75 x 36 mm X-Y rackless mechanical stage, Vernier scale, soft-close removable specimen holder. The rackless stage has no protruding parts, enables more smooth movements and is safer in use. Low-positioned X-Y control knobs prevent fatigue during long working sessions. The bScope® can be equipped with a heating stage which can be set up to 50° Celsius by a PID temperature controller. Only available with newly purchased microscopes

CONDENSER FOR BRIGHTFIELD

The standard height adjustable Abbe N.A. 1.25 condenser for brightfield comes with an iris diaphragm and swing-out filter holder

CONDENSER FOR ZERNIKE PHASE CONTRAST

The height adjustable Zernike NA. 1.25 phase contrast disc condenser comes with phase annuli for 10/20/S40x and S100x phase contrast objectives, an iris diaphragm, a swing-out filter holder and also a BF position for brightfield contrast. Phase contrast objectives exist in PL-PHi phase contrast version. Supplied with alignment telescope and green filter

CONDENSER FOR SIMPLE PHASE CONTRAST

The height adjustable NA. 1.25 simple phase contrast condenser has a free slot for either a slider for 10/S40x phase contrast objectives or a slider for 20/S100x phase contrast objectives. The condenser has an iris diaphragm and filter holder. The condenser includes a BF position for brightfield contrast with an iris diaphragm and filter holder. Phase contrast objectives exist in PL-PHi version. Supplied with alignment telescope and green filter

POLARIZATION

The bScope® has an integrated slot above the nosepiece for an optional polarization filter

NEOLED™ ILLUMINATION

The 3 W adjustable Köhler NeoLED™ diascope illumination is powered by an internal 100-240 V power supply making it suitable for worldwide use. The innovative NeoLED™ design offers larger apertures, allowing the optical system of the bScope® microscope to produce images at higher resolutions, very close to the theoretical diffraction limit of the optics. Other benefits of the NeoLED™ is the low energy consumption, no heating and a long operating life span



Swing-out
Abbe condenser
0.9/1.25 NA



Zernike phase
contrast condenser
with filter holder



Ergonomic carrying
grip for easy
transportation

DARKFIELD EQUIPMENT

The BS.1153-EPL/DF is equipped with a darkfield oil immersion cardioïd mirror condenser with a integrated 5W LED illumination and a plan PL S100x oil immersion objective with built-in iris



Darkfield cardioïd
mirror condenser

KÖHLER ILLUMINATION

A Köhler illumination system ensures for all infinity corrected IOS models the highest possible contrast and the maximum achievable resolving power. It generates a uniform illumination of the sample and eliminates all interference from dust on lenses and side glare of the light source
The Köhler illumination is optional for non-IOS models

CORDLESS USE

The optional rechargeable AA batteries turn the bScope® into a cordless system

CSS – CABLE STORAGE SYSTEM

Allows users to easily stow away excess cable length into the back of the instrument during operation and to roll up the power cable for easy storage

CARRYING GRIP

The integrated carrying grip at the back of the microscope ensures safe transportation of the microscope

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

Smart polystyrene packaging ensures a low environmental footprint while maintaining maximum safety during transport. Supplied with power cord, dust cover, tools, a spare fuse, white filter, user manual and 5 ml immersion oil

Phase contrast models are supplied with green filter and alignment telescope. An optional aluminum case can be supplied



BS.1152-PLi

BSCOPE® FOR BRIGHTFIELD AND DARKFIELD *

MODELS	Bino	Trino	digital **	HWF 10x/20 mm eyepieces	Quadruple nosepiece E-plan 4/10/540/S100x	Quadruple nosepiece plan IOS 4/10/540/ S100x	Quintuple nosepiece E-plan IOS 4/10/ 540/S100x	Quintuple nosepiece plan IOS 4/10/540/ S100x	Köhler NeoLED™	Neo- LED™	2-position swiveling ergo head
BS.1152-EPL	•			•	•					•	
BS.1153-EPL		•		•	•					•	
BS.1153-EPL/DF*		•		•	•					•	
BS.1152-EPLi	•			•			•		•		•
BS.1153-EPLi		•		•			•		•		•
BS.1152-PLi	•			•				•	•		•
BS.1153-PLi		•		•				•	•		•
BS.1152-PLi/4N	•			•		•			•		•
BS.1153-PLi/4N		•		•		•			•		•
BS.1157-EPLi	•		•	•			•		•		•
BS.1157-PLi	•		•	•				•	•		•

* BS.1153-EPL/DF model is equipped with a dark field oil immersion cardioid mirror condenser and a S100x oil immersion objective with built-in iris diaphragm
** For more information, see chapter 7
Some models are also available as in vitro diagnostic medical devices class A - (EU) 2017/746. Contact your Euromex dealer

BSCOPE® FOR PHASE CONTRAST *

MODELS	Bino	Trino	HWF 10x/20 mm eyepieces	Quadruple nosepiece E-plan phase 10/20/ S40/S100x	Quintuple nosepiece E-plan phase IOS 10/20/S40/S100x	Quintuple nosepiece plan phase IOS 10/20/S40/S100x	Köhler NeoLED™	NeoLED™	2-position swiveling ergo head
BS.1152-PLPHi	•		•			•	•		•
BS.1153-PLPHi		•	•			•	•		•

*All models can be supplied with three rechargeable AA batteries
All models are equipped with a 152/197 x 131 mm stage with integrated 75 x 36 mm X-Y rackless mechanical stage
These models are also available as in vitro diagnostic medical devices class A - (EU) 2017/746. Contact your Euromex dealer

ACCESSORIES AND SPARE PARTS

EYEPIECES

BS.6010	HWF 10x/20 mm eyepiece, Ø 23.2 mm tube	BS.6020	WF 20x/11 mm eyepiece, Ø 23.2 mm tube
BS.6010-P	HWF 10x/20 mm with pointer, Ø 23.2 mm tube	BS.6099	Pair of eyecups
BS.6010-C	HWF 10x/20 mm eyepiece with crosshairs, Ø 23.2 mm tube		
BS.6010-CM	HWF 10x/20 mm eyepiece, Ø 23.2 mm tube with 10/100 micrometer and crosshairs		
BS.6012	WF 12.5x/14 mm eyepiece, Ø 23.2 mm tube		
BS.6015	WF 15x/11 mm eyepiece, Ø 23.2 mm tube		

OBJECTIVES - 45 MM PARFOCAL

BS.7104	E-plan EPL 4x/0.10 objective. WD 37.0 mm
BS.7110	E-plan EPL 10x/0.25 objective. WD 6.61 mm
BS.7120	E-plan EPL 20x/0.40 objective. WD 1.85 mm
BS.7140	E-plan EPL S40x/0.65 objective. WD 0.64 mm

BS.7160	E-plan EPL S60x/0.85 objective. WD 0.20 mm
BS.7100	E-plan EPL S100x/1.25 objective. WD 0.19 mm
86.521	Plan PL S100x/1.25 oil immersion objective with built-in iris diaphragm. Working distance 0.33 mm
BS.8204	E-plan EPLi 4x/0.10 IOS infinity corrected objective. WD 18.9 mm
BS.8210	E-plan EPLi 10x/0.25 IOS infinity corrected objective. WD 5.95 mm
BS.8220	E-plan EPLi 20x/0.40 IOS infinity corrected objective. WD 2.61 mm
BS.8240	E-plan EPLi S40x/0.65 IOS infinity corrected objective. WD 0.78 mm
BS.8200	E-plan EPLi S100x/1.25 IOS infinity corrected objective. WD 0.36 mm
BS.8404	Plan PLi 4x/0.10 IOS infinity corrected objective. WD 21.0 mm
BS.8410	Plan PLi 10x/0.25 IOS infinity corrected objective. WD 5.0 mm
BS.8420	Plan PLi 20x/0.40 IOS infinity corrected objective. WD 8.8 mm
BS.8440	Plan PLi S40x/0.65 IOS infinity corrected objective. WD 0.66 mm
BS.8400	Plan PLi S100x/1.25 IOS infinity corrected objective. WD 0.36 mm
BS.8710	Plan phase PLPHi 10x/0.25 IOS infinity corrected objective. WD 5.00 mm
BS.8720	Plan phase PLPHi 20x/0.40 IOS infinity corrected objective. WD 8.80 mm
BS.8740	Plan phase PLPHi S40x/0.65 IOS infinity corrected objective. WD 0.66 mm
BS.8700	Plan phase PLPHi S100x/1.25 IOS infinity corrected objective. WD 0.36 mm

WD = working distance

CONDENSERS

BS.9102	Abbe condenser 1,25 NA with slot for darkfield and phase contrast sliders
BS.9170	Darkfield stop for BS.9102 condenser
BS.9105	Swing-out Abbe condenser 0.9/1.25 NA



BS.1153-PLPHi

PHASE CONTRAST ATTACHMENTS

- BS.9123** Zernike phase contrast kit with plan PLPH 10/20/ S40 and S100x oil phase contrast objectives, Zernike rotating condenser, telescope and green filter
- BS.9126** Zernike phase contrast kit with plan PLPHi 10/20/ S40 and S100x oil phase contrast IOS infinity corrected objectives, Zernike rotating condenser, telescope and green filter
- BS.9164** Phase contrast kit with Abbe condenser with slot for slider. Plan PLPHi phase S40x contrast objectives, slider with 40x annuli only, telescope and green filter
- BS.9194** Slider with phase contrast annuli 40x. Needs BS.9102 condenser with slot
- BS.9148** Alignment telescope for bScope® IOS version with Ø 30 mm tubes
- BS.9149** Alignment telescope for bScope® non IOS version with Ø 23.2 mm tubes
- BS.9162** Phase contrast kit with Abbe condenser with slot for slider. Plan PLPH i 10/S40x phase contrast infinity corrected objectives, slider with 10 and 40x annuli, telescope and green filter
- BS.9163** Phase contrast kit with Abbe condenser with slot for slider. Plan PLPHi 20/S100x phase contrast infinity corrected objectives, slider with 20 and 100x annuli, telescope and green filter

POLARIZATION ATTACHMENTS

- BS.9660** Polarization kit: analyzer under head and polarizer on lamphouse
- AE.5152-N** Small rotatable stage to be used with BS.9660
- BS.9647** Polarization polarizer Ø 16 mm for slider under bScope® head
- BS.9651** Polarization attachment for lamphouse of bScope® with 360° scale



● AE.5152-N,
small rotatable stage

MISCELLANEOUS

- BS.9880** Köhler attachment
- BS.9577-L** Add-on for left handed mechanical stage (only with new purchased microscope)
- BS.9870** Mirror attachment for bScope
- BS.9900** Aluminum transport case
- AE.9919** Nylon bag for bScope. 58(h) x 32(w) x 24(d)
- BS.9993** NeoLED™ replacement unit
- AE.1370** Set of rechargeable AA batteries, three pieces
- AE.5226** Glass fuses 3A 250V, 10pcs

CAMERA ACCESSORIES

- AE.5130** Universal Ø 23.2 mm tube adapter with built-in 2x lens for SLR photo camera with APS-C sensor. Needs T2 adapter
- AE.5025** T2 adapter for Nikon D SLR digital camera
- AE.5040** T2 adapter for Canon EOS SLR digital camera

DISPOSABLES

- PB.5155** Microscope slides 76 x 26 mm, ground edges, 50 pieces per pack
- PB.5157-W** Microscope slides 76 x 26 mm, ground edges and frosted side white color, 50 pieces per pack
- PB.5157-B** Microscope slides 76 x 26 mm, ground edges and frosted side blue color, 50 pieces per pack
- PB.5160** Microscope slides 76 x 26 mm with cavity, grinded edges. 10 pieces per pack
- 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 (25 ml). n = 1.515
- PB.5274** Isopropyl alcohol 99% (200 ml)
- PB.5275** Cleaning kit: lens cleaning fluid, lint free lens tissue/paper, brush, air blower, cotton swabs
- PB.5276** Microscope maintenance and servicing kit, 16pcs: cleaning brush, 6 pcs screwdriver set, air blower, 3 pcs Allen key, 1.5, 2, 2.5 mm, lens cleaning fluid 20 ml, cleaning cloth 140 x 140 mm, 100 pcs lens tissue sheets, tube of maintenance grease, 10 ml bottle of oil, packed in a nice toolbox

DIMENSIONS

