

bScope

HIGHLIGHTS

- Microscopes for research field at school and laboratories
- Binocular and trinocular models
- HWF 10x/20 mm eyepieces
- Revolving and reversed ball-bearing quadruple or quintuple rotating nosepiece with slot for polarization filter
- E-plan, E-plan IOS and Plan IOS objectives
- E-plan Phase, E-plan Phase IOS, Plan Phase IOS objectives
- Rackless integrated X-Y mechanical stage
- 1.5 W NeoLED™ adjustable illumination system
- Integrated carrying grip
- Cable Storage System
- 10 years warranty

The well-equipped bScope microscopes are used intensively in the research field at secondary schools, universities, small laboratories and veterinary applications. These robust and attractively priced microscopes are available in several configurations with HWF 10x/20 mm eyepieces and objectives for bright field and phase contrast



BS.1152-EPL

TECHNICAL SPECIFICATIONS

EYEPIECES

- High wide field HWF plan 10x eyepieces with 20 mm field of view (Ø 23.2 mm tube)

HEAD

- The bScope is equipped with a Siedentopf type head, 360° rotatable and equipped with 30° inclined Ø 23.2 mm tubes
- Binocular and trinocular models are equipped with a diopter ± 5 adjustment on left eyepiece
- The interpupillary distance is adjustable between 48 to 76 mm for a optimal and comfortable observation
- The infinity PLI models are equipped with a unique swivelling rotating system allowing the ergonomic positioning of both tubes in a high and in a low position
- The trinocular head comes with a Ø 23.2 mm tube, ensuring maximum flexibility. The prisms inside the heads are designed to minimize the light absorption for perfect digital imaging
- All heads are 360° rotatable and fixed by a screw

NOSEPIECE

- Revolving and reversed ball-bearing quadruple or quintuple rotating nosepiece

OBJECTIVES

- The state-of-the-art production techniques and multi layer coatings used for the manufacturing of the bScope objectives enables the bScope to be used in small laboratories and for higher education applications.
- Experience based optical designs offer world class spherical aberration correction and provides crisp true color images at high resolution.
- Combining the latest CNC and assembly techniques ensure the perfect centration of the objectives
- **Bright field 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:**
E-plan Phase, E-plan Phase IOS infinity corrected, Plan Phase IOS infinity corrected 10x/0.25, 20x/0.40, S40x/0.65 and S100x/1.25 oil immersion objectives
- 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 1.11 μm , 200 μm per rotation, total travel 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 equipped 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 X-Y control knobs prevent fatigue during low working sessions
- The bScope can be supplied with a heating stage which can be set up to 50° Celsius by a PID temperature controller
- Only available with new purchased microscopes



Scratch resistant stage

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 objectives, an iris diaphragm and filter holder
- The condenser includes a BF position for Bright Field microscopy
- Phase contrast objectives in either EPL Phase, EPLi Phase or PLI Phase versions
- Supplied with centering telescope and green filter



Zernike phase contrast

POLARISATION

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

ILLUMINATION

- The microscopes of the bScope are equipped with a 1.5 W NeoLED™ adjustable illumination system for increased light output and can optionally be supplied with 3 rechargeable batteries for cordless operations

KÖHLER ILLUMINATION

- A Köhler illumination ensures for all IOS infinity corrected models the highest possible contrast and the maximum achievable resolving power
- 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

NEOLED™ ILLUMINATION

- The 1.5 W adjustable Köhler NeoLED™ diascope illumination is powered by an internal 100-240 V power supply making it suitable for world wide 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 lifetime



BS.1152-PLi

CORD LESS USE

- The optional rechargeable batteries turn the bScope into a cordless system

CSS – CABLE STORAGE SYSTEM

- bScope allows users to easily insert the power cable into the backside of the instrument, prevents excess cable length for a safer working environment
- Roll up the cable completely 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; an anti-theft slot prevent the unauthorized appropriation of the microscope

PACKAGING

- Smart Styrofoam 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 centering telescope

COMING SOON

- The bScope darkfield, fluorescence and material science models



Carrying grip



BS.3153-PLFi



BS.1053-PLMi

BSCOPE FOR BRIGHT FIELD

MODELS	Binocular	Trinocular	HWF 10x/20 mm eyepieces	Rackless integrated X-Y mechanical stage	Quadruple nosepiece E-plan 4/10/ S40/S100x	Quintuple nose- piece E-plan IOS 4/10/ S40/S100x	Quintuple nosepiece Plan IOS 4/10/ S40/S100x	Köhler NeoLED™	NeoLED™	2-position swivelling ergo head	Rechargeable batteries
BS.1152-EPL	•		•	•	•				•		0
BS.1153-EPL		•	•	•	•				•		0
BS.1152-EPLi	•		•	•		•		•		•	0
BS.1153-EPLi		•	•	•		•		•		•	0
BS.1152-PLi	•		•	•			•	•		•	0
BS.1153-PLi		•	•	•			•	•		•	0

BSCOPE FOR PHASE CONTRAST

MODELS	Binocular	Trinocular	HWF 10x/20 mm eyepieces	Rackless integrated X-Y mechanical stage	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 swivelling ergo head	Rechargeable batteries
BS.1152-EPLPH	•		•	•	•				•		0
BS.1153-EPLPH		•	•	•	•				•		0
BS.1152-EPLPHi	•		•	•		•		•		•	0
BS.1153-EPLPHi		•	•	•		•		•		•	0
BS.1152-PLPHi	•		•	•			•	•		•	0
BS.1153-PLPHi		•	•	•			•	•		•	0

0 = optional

ACCESSORIES AND SPARE PARTS

- BS.6010** HWF10x/20 mm eyepiece, Ø 23.2 mm tube
- BS.6010-P** HWF10x/20 mm with pointer, Ø 23.2 mm tube
- BS.6010-C** HWF 10x/20 mm eyepiece with cross hair, Ø 23.2 mm tube
- BS.6010-CM** HWF 10x/20 mm eyepiece, Ø 23.2 mm tube with 10/100 micrometer and cross hair
- 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
- BS.6020** WF 20x/11 mm eyepiece, Ø 23.2 mm tube
- BS.6099** Pair of eyecups (finit models)
- BS.7004** E-plan EPL 4x/0.10 objective. Working distance 37.0 mm
- BS.7010** E-plan EPL 10x/0.25 objective. Working distance 6.61 mm
- BS.7020** E-plan EPL 20x/0.40 objective. Working distance 1.85 mm
- BS.7040** E-plan EPL S40x/0.65 objective. Working distance 0.64 mm
- BS.7060** E-plan EPL S60x/0.85 objective. Working distance 0.20 mm
- BS.7000** E-plan EPL S100x/1.25 objective. Working distance 0.19 mm
- BS.7510** E-Plan Phase EPLPH 10x/0.25 objective.
Working distance 6.61 mm
- BS.7520** E-Plan Phase EPLPH 20x/0.40 objective.
Working distance 1.85 mm
- BS.7540** E-Plan Phase EPLPH S40x/0.65 objective.
Working distance 0.64 mm
- BS.7500** E-Plan Phase EPLPH S100x/1.25 objective.
Working distance 0.19 mm
- BS.8204** E-plan EPLi 4x/0.10 IOS objective. Working distance 18.9 mm
- BS.8210** E-plan EPLi 10x/0.25 IOS objective. Working distance 5.95 mm
- BS.8220** E-plan EPLi 20x/0.40 IOS objective. Working distance 2.61 mm
- BS.8240** E-plan EPLi S40x/0.65 IOS objective. Working distance 0.78 mm
- BS.8200** E-plan EPLi S100x/1.25 IOS objective. Working distance 0.36 mm
- BS.8404** Plan PLi 4x/0.10 IOS objective. Working distance 21.0 mm
- BS.8410** Plan PLi 10x/0.25 IOS objective. Working distance 5.0 mm
- BS.8420** Plan PLi 20x/0.40 IOS objective. Working distance 8.8 mm
- BS.8440** Plan PLi S40x/0.65 IOS objective. Working distance 0.66 mm
- BS.8400** Plan PLi S100x/1.25 IOS objective. Working distance 0.36 mm
- BS.8510** E-Plan Phase EPLPHi 10x/0.25 IOS objective.
Working distance 5.95 mm
- BS.8520** E-Plan Phase EPLPHi 20x/0.40 IOS objective.
Working distance 2.61 mm
- BS.8540** E-Plan Phase EPLPHi S40x/0.65 IOS objective.
Working distance 0.78 mm
- BS.8500** E-Plan Phase EPLPHi S100x/1.25 IOS objective.
Working distance 0.36 mm
- BS.8710** Plan Phase PLPHi 10x/0.25 IOS objective.
Working distance 5.00 mm
- BS.8720** Plan Phase PLPHi 20x/0.40 IOS objective.
Working distance 8.80 mm
- BS.8740** Plan Phase PLPHi S40x/0.65 IOS objective.
Working distance 0.66 mm
- BS.8700** Plan Phase PLPHi S100x/1.25 IOS objective.
Working distance 0.36 mm
- BS.9102** Optional Abbe condenser 1,25 NA with slot for darkfield and phase contrast sliders
- BS.9880** Köhler attachment
- BS.9993** NeoLED™ replacement unit
- AE.1370** Set rechargeable batteries, 3 pieces
- 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 ring for Nikon D SLR digital camera
- AE.5040** T2 ring for Canon EOS SLR digital camera
- 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 (25 ml). n = 1.482
- PB.5274** Isopropyl alcohol 99% (200 ml)
- PB.5275** Cleaning kit: lens cleaning fluid, lint free lens tissue/paper, brush, air blower, cotton swabs