

# **bScope**

# **HIGHLIGHTS**

- · Provided with APL (Antimicrobial Protection Layer)
- Microscopes for research and laboratories
- · Monocular, binocular and trinocular models
- · Digital models available
- HWF 10x/20 mm eyepieces
- Reversed ball-beared 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
- · Color coded condenser
- S10 3 W NeoLED™ adjustable illumination system
  - · Integrated carrying grip
  - · Cable Storage System
  - · 10 Years warranty

# TECHNICAL SPECIFICATIONS

# EYEPIECE(S)

High wide field HWF 10x/20 mm secured eyepiece(s) with 20 mm field of view.

The eyepiece of monocular models is supplied with pointer

#### HEAD

- The bScope is available with a monocular head (45° inclined Ø 23.2 mm
- \$2 tube) or with a Siedentopf type head, 360° rotatable, with 30° inclined \$\tilde{Q}\$
  23.2 mm tubes
  - Binocular and trinocular models are equipped with a diopter  $\pm\,5$  adjustment on 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 page 4)

# NOSEPIECE

Revolving and reversed ball-bearing quadruple or quintuple nosepiece

# **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



MONOCULAR MODEL BS.1151-XXX BINOCULAR MODEL BS.1152-XXX TRINOCULAR MODEL BS.1153-XXX 385 (h) x 195 (w) x 235 (d) | 6.3 kg 409 (h) x 195 (w) x 235 (d) | 6.5 kg 459 (h) x 195 (w) x 235 (d) | 6.6 kg

- 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**

**S7** 

Double coaxial, low-positioned coarse and fine adjustments with 180 graduations. Precision 1.11  $\mu$ m, 200  $\mu$ m per rotation, total travel range approximately 19 mm. Supplied with an adjustable rack stop to prevent damage to sample and objectives. The coarse adjustment is equipped with friction control

**BSCOPE** 



#### STAGE

- The bScope is equipped with a scratch resistant 152/197 x 131 mm stage S5, S6 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 fatique 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 in height adjustable Abbe N.A. 1.25 condenser for brightfield **S8** comes with an iris diaphragm and swing-out filter holder. The condenser is color coded. Optionally available swing-out Abbe condenser (BS.9105)

### ZERNIKE CONDENSER FOR PHASE CONTRAST

The in 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 bright field contrast. Phase contrast objectives in PL-PHi phase contrast version. Supplied with alignment telescope and green filter

#### CONDENSER WITH SLIDER(S) FOR PHASE CONTRAST

The in 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 also includes a BF position for bright field contrast. Phase contrast objectives in PL-PHi version. Supplied with alignment telescope and green filter

## **CONDENSER FOR DARKFIELD**

A state-of-the-art condenser equipped with reflective cardioid mirrors, with an integrated high powered 3 W LED light source. Together with a S100x objective with built-in iris diaphragm this forms a 1000x magnification darkfield solution. The power supply of the 3 W LED light source is built in the microscope. The darkfield condenser can easily be exchanged for a brightfield condenser which is also included

## **DARKFIELD EQUIPMENT**

The BS.1153-EPL/DF is equipped with a darkfield oil immersion cardioïd mirror condenser with a integrated 3 W LED illumination and a plan PL S100x oil immersion objective with built-in iris

# **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 3 W NeoLED adjustable illumination system for increased light output and a 100-240 Vac integrated power supply. On request, rechargeable batteries are also available

# **S10** NEOLED™ ILLUMINATION

The 3 W adjustable Köhler NeoLED diascopic illumination is powered by an with integrated 75 x 36 mm X-Y rackless mechanical stage, Vernier scale, SQ 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 lifetime

#### KÖHLER ILLUMINATION

A Köhler illumination 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 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 alignment telescope. An optional aluminum case can be supplied

Darkfield cardioïd mirror condenser



C10



# APL (ANTIMICROBIAL PROTECTION LAYER)

Using the same technology already used extensively throughout the healthcare environment in wall coatings, patient lighting, air pressure stabilization and suction liners, APL prevents the growth of unwanted microbes that can cause degradation, discoloration, staining or odors of the Euromex microscopes



# BSCOPE® FOR BRIGHTFIELD AND DARKFELD \*

	S2	S3	S1, S4					510
MODELS	Mono Bino Trino	HWF 10x/20 mm eyepieces	Quadruple nosepiece E-plan 4/10/S40/S100x	Quadruple nosepiece plan IOS 4/10/S40/S100x	Quintuple nosepiece E-plan IOS 4/10/S40/ S100x	Quintuple nosepiece plan IOS 4/10/S40/S100x	Köhler NeoLED™	Neo- 2-position LED™ swiveling ergo head
BS.1151-EPL	•	•	•					•
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	•	•		•			•	•

<sup>\*</sup>BS.1153-EPL/DF model is equipped with a dark field oil immersion cardioïd mirror condenser and a S100x oil immersion objective with built-in iris diaphragm

AA Batteries are optional

Some models are also available as medical device, EU MDR 2017-745, 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 swivel- ling ergo head
BS.1152-PLPHi	•		•			•	•		•
BS.1153-PLPHi		•	•			•	•		•

Rechargeable batteries is optional

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 medical device, EU MDR 2017-745, contact your Euromex dealer







● BS.1153-PLPHi

● BS.1152-PLi