

OPTIKA

M I C R O S C O P E S
I T A L Y



B-1000

Upright Research Microscope





B-1000

OPTIKA Microscopes, thanks to the long experience achieved in microscopy development, has conceived the new B-1000: a major leap in our technological offer.

As a flagship instrument, B-1000 originates from customer most demanding feedbacks and needs. Its modularity and versatility will allow to find the perfect place in any clinical or basic research laboratory. All controls are easily accessible and comfortable also for extended periods of observation. Highest category of optical equipment among our product range guarantees a sharp and clear view in any situation, while top level mechanical design offers sturdiness and long lifetime.

B-1000 is built on IOS Infinity Corrected optical system, which gives both top-notch optical performances, and the possibility to extend your instrument with the broad range of accessories and modules. X-LED illumination is the best solution to have pure white light, very intense even at higher magnification, and optimum power efficiency given by solid state source.

If you search for our best solution to your present and future professional needs, B-1000 is the answer.



Upright Research OPTIKA Microscopes



B-1000 Research Microscope



Solid Stand – Extra Stability

Completely new design and a die-cast aluminium stand offer solidity and durability, even for the most demanding laboratory use.

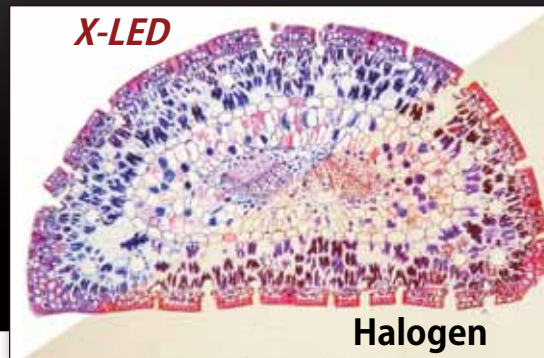
This new microscope can seamlessly be upgraded with many attachments that extend its field of use.



X-LED White Illumination

X-LED illumination system is based on a pure white high-efficiency LED and a special optics. It guarantees constant color temperature, no heat, and an extreme electrical consumption efficiency.

The whole system is pre-aligned and boasts a lifetime of 50.000 hours.



Light under control

Intelligent control of the microscope illumination: the "AUTO-OFF" function automatically switches the light off after a user-selectable time period. "BOOST" gives an extra high level of illumination for light-demanding applications. "AUTO" allows to store an illumination level, and to maintain it throughout the inspection.



Ergonomy

Low position focus and stage controls allow a fast and comfortable operation. Frequently used controls as light intensity adjustment and diaphragm are also placed in the lower part of the stand and enable operation without having to take the eyes off the specimen.

All optical heads are equipped with high-point eyepieces and dioptic adjustment, for the best viewing experience.





Comfortable Stage

Refined ceramic stage, with a wide working surface and a highly precise XY movement.



Modularity – Build your own solution

Many worlds in one instrument. Modularity allows to build the desired solution (brightfield, darkfield, phase contrast, material science, fluorescence, motorized automation and so on).

B-1000 has the flexibility to help your work the best way.



High Quality IOS Optical System

Infinity corrected optical system, based on planachromatic, fluorite, and semi-apochromatic objectives, designed to give sharp and clear images, both for the user and the digital camera. Quintuple and sextuple nosepiece give the flexibility to build the optics set that best suits your needs. The system is complete with wide field, high-point eyepieces, with a field number of 24mm.



Ready for Digital Imaging

Range of adapters can accommodate for C-mount digital cameras, as well as reflex cameras. Focus adjustment gives a perfectly clear digital images.

Our cameras include specific software for capturing, measuring, marking and storing your pictures. Optika Vision Pro software allows to perform image acquisition, post-processing, measurements and storage of your images. User can save a preset for later work, or even create a multi-focus composition.

Remote Stage Control

The stage can be remote-controlled through a dedicated software: X, Y and Z axes can be moved with a single click.

Communication protocol is available for interfacing with custom software, such as automated analysis or autofocus.

X-Y MOTORIZED STAGE Z-AXIS WITH AUTOFOCUS SYSTEM



X-LED benefits

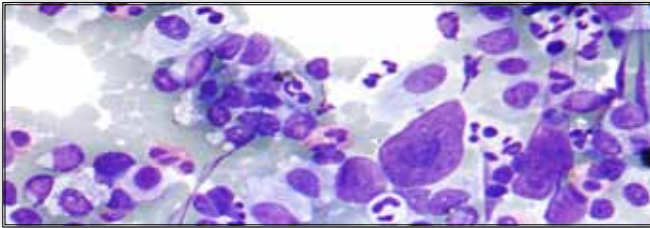
Powerful pure white LED illumination, ideal for brightfield, darkfield and phase contrast applications.

Color temperature constant through all the intensity levels. No heat generation, that could damage the specimen.

Factory pre-centering assures uniform illumination over the field of view, yet providing perfect Koehler alignment.

Very long lifetime and high power efficiency.

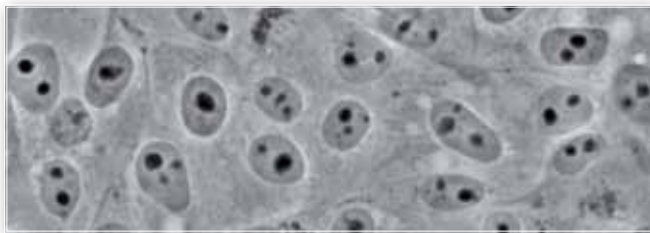




Pathology / Cytology

Since B-800 / B-1000 uses white LED illumination, it can maintain the same color temperature even if the brightness is changed. "AUTO" function automatically adjusts the light intensity when the objective is changed or the aperture diaphragm is set to a different value.

These features, along with motorized stage and ergonomic controls, make your workflow easier.



Phase Contrast Microscopy

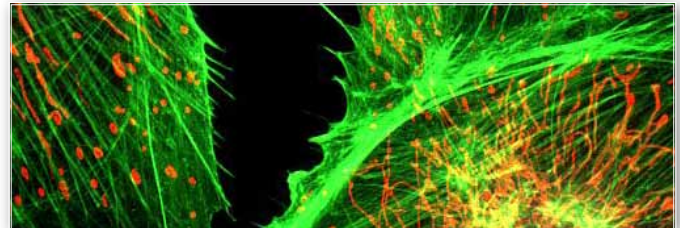
The bright LED illuminator brings a comfortable view in phase contrast with all magnifications. Universal wheel condenser allows to quickly switch between brightfield, darkfield and phase contrast.

Ideal for clinical laboratories or fibers (e.g. asbestos) analysis.



Material Science

A new attachment designed specifically for metallographic inspection, with dedicated objectives set, for the most complete epi-illumination analysis: brightfield, darkfield and polarizing view.



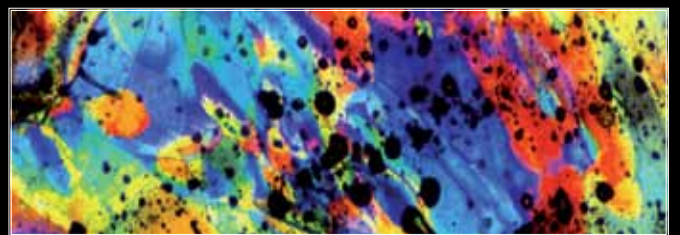
Fluorescence Microscopy

A new attachment for epi-fluorescence provides the ultimate solution in the field of fluorescence diagnostic. Vibration-free six positions filter wheel with shutter, field and aperture diaphragms, it offers all you need for a complete analysis. Custom filtersets are available and mounted on request. For application where efficiency, rapidity and ease of use are crucial, this model offers also a LED epi-fluorescence attachment, with very high power blue and green standard illuminators.



Darkfield Microscopy

Ideal for observing blood cells, diatoms, small insects, bone, fibers, unstained bacteria, yeast, protozoa, mineral and chemical crystals, colloidal particles, dust-count specimens, and thin sections of polymers and ceramics.



Polarizing Microscopy

Polarized light microscopy is used in geological applications or also for both natural and industrial minerals, composites such as concretes, ceramics, mineral fibers and polymers, and crystalline or biological molecules such as DNA, starch, wood and urea.

Attachments for a full polarization analysis are available (both for transmitted and incident light), so it's possible to look at color fringes right away.

Discussion Microscopy – Multi-head

Share your view with up to 10 persons. With built-in movable pointer, it helps any teaching or discussion experience.



EYEPIECES



M-1001

WF10x/22mm Eyepieces, high-point type



M-1002

WF10x/24mm Eyepieces, high-point type

HEADS



M-1010

Trinocular Head 100/0 - 50/50 type



M-1011

Trinocular Head 100/0 - 50/50 - 0/100 type



M-1012

Binocular Ergonomic Head



M-1013

Binocular Ergonomic Head with side Video/Photo Tube

NOSEPIECES



M-1040

Quintuple revolving Nosepiece, for RMS objectives



M-1041

Sextuple revolving Nosepiece, for RMS objectives



M-1042

Sextuple revolving Nosepiece, for RMS objectives; with DIC slot



M-1043

Sextuple motorized revolving Nosepiece, for RMS objectives; with DIC slot



M-1044

Quintuple revolving Nosepiece, with centrable positions for polarizing objectives



M-1045

Quintuple revolving Nosepiece for dark-field metallurgical objectives; with 3 ring adapters for brightfield objectives



M-1046

Quintuple motorized revolving Nosepiece for dark-field metallurgical objectives; with 3 ring adapters for brightfield objectives motorized

OBJECTIVES



IOS (infinity corrected) Plan Objectives



IOS (infinity corrected) Semi-APO FLUO E-Plan objectives



IOS (infinity corrected) Semi-APO FLUO High-Grade Plan objectives



IOS (infinity corrected) POL Plan objectives, for transmitted polarized light



IOS (infinity corrected) LWD POL Plan objectives, for transmitted and incident polarized light



IOS (infinity corrected) MET Plan objectives, for brightfield



IOS (infinity corrected) MET Plan objectives, for darkfield



IOS (infinity corrected) Phase Contrast Plan Objectives



Motorized stage

STAGES



Standard Mechanical Stage



Belt drive Mechanical Stage; movement knobs with friction adjustment control



Ceramic coated Mechanical Stage; movement knobs with friction adjustment control



MPC (mineral solid surface) Belt drive Mechanical Stage; movement knobs with friction adjustment control



Heating Stage



Rotating Stage

CONDENSERS



M-1150

0.90 N.A. swing-out Condenser



M-1151

1.20 N.A. swing-out Condenser



M-1153

0.90 N.A. swing-out Polarizing Condenser



M-1154

0.70 N.A. swing-out Condenser



M-1152

Phase contrast Condenser with darkfield stop (dry)



M-618

Darkfield Condenser (dry)

FLUORESCENCE ATTACHMENTS



M-1031

4-position LED Fluorescence Attachment



M-1032

6-position HBO Fluorescence attachment

POLARIZING ATTACHMENTS



M-1033

Bertrand Lens with analyzer and Lambda slides slot



M-1034

Incident Polarizing Light attachment, with field and aperture diaphragms

METALLURGICAL ATTACHMENT



M-1035

Metallurgical Brightfield/Darkfield attachment, with field and aperture diaphragms and neutral density filter

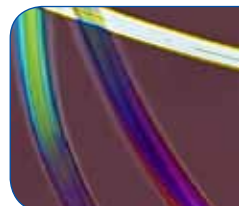
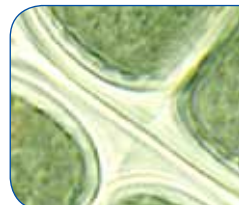


B-800 BF

page 14

B-800 PH

page 16



B-1000 BF

page 18

B-1000 PH

page 20

B-1000 FL LED

page 22

B-1000 FL HBO

page 24

B-1000 POL

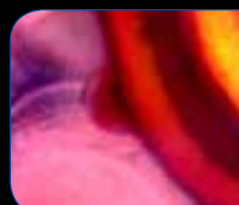
page 26

B-1000 POL-I

page 28

B-1000 MET

page 30



Model: **B-800 BF**



Model:

B-800 BF

Typology:

RESEARCH MICROSCOPE

Description:

Laboratory microscope for routine and research applications.

Dye-cast frame, with high stability and ergonomics, for transmitted light observation.



B-800 BF

Version for standard brightfield view.

Illumination: X-LED (3,5W power).



Attachment chart

B-800 BF

WF10x/22mm
Eyepieces



Trinocular head
(2 position)



Binocular ERGO
head



Trinocular ERGO
head



Body with
manual focus



Quintuple nosepiece



Sextuple nosepiece



IOS Plan
Objectives



IOS (infinity corrected)
Semi-APO FLUO E-Plan objective



Standard stage



0.90 N.A. swing-out
condenser



1.20 N.A. swing-out
condenser



Model: **B-800 BF**

Model: **B-800 PH**



Model:

B-800 PH

Typology:

RESEARCH MICROSCOPE

Description:

Laboratory microscope for routine and research applications.

Dye-cast frame, with high stability and ergonomics, for transmitted light observation.



B-800 BH

Version for phase contrast analysis.

Illumination: X-LED (3,5W power)

Attachment chart

B-800 PH

WF10x/22mm
Eyepieces



Trinocular head
(2 position)



Binocular ERGO
head



Trinocular ERGO
head



Body with
manual focus



Quintuple nosepiece



Sextuple nosepiece



IOS Phase Contrast
Plan Objectives



Standard stage



Phase contrast condenser with
darkfield spot (dry)



Model: **B-800 BH**

Model: **B-1000 BF**



Model:
B-1000 BF

Typology:
RESEARCH MICROSCOPE

Description:
Laboratory microscope for routine and research applications.
Dye-cast frame, with high stability and ergonomy, for transmitted light observation.

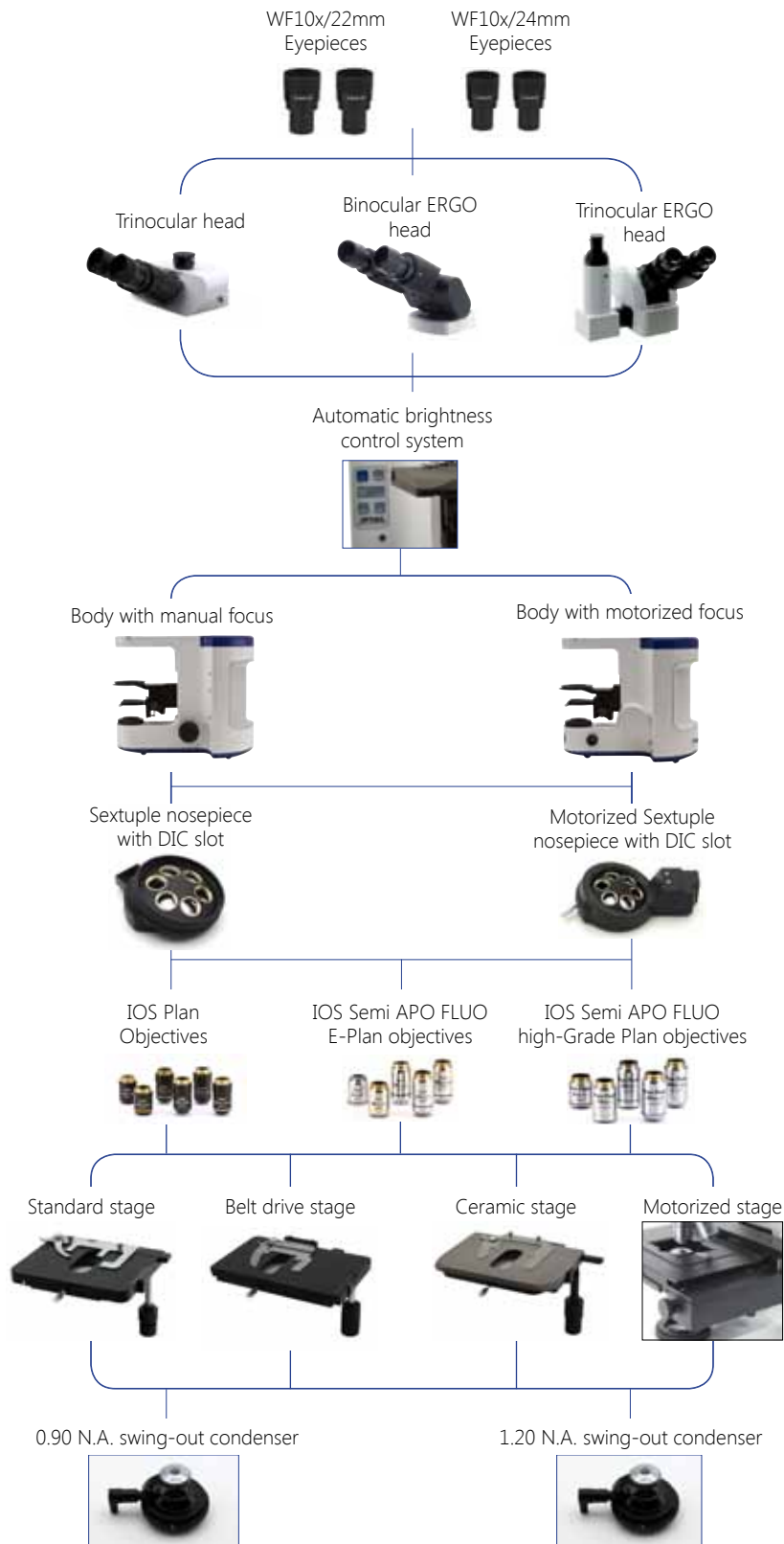


B-1000 BF

Version for standard brightfield view.
Illumination: X-LED (8W power)

Attachment chart

B-1000 BF



Model: B-1000 BF

Model: **B-1000 PH**



Model:
B-1000 PH

Typology:
RESEARCH MICROSCOPE

Description:
Laboratory microscope for routine and research applications.
Dye-cast frame, with high stability and ergonomy, for transmitted light observation.



B-1000 PH

Version for phase contrast analysis.
Illumination: X-LED (8W power).

Attachment chart

B-1000 PH

WF10x/22mm
Eyepieces

WF10x/24mm
Eyepieces



Trinocular head

Binocular ERGO
head

Trinocular ERGO
head



Automatic brightness
control system



Body with manual focus

Body with motorized focus



Sextuple nosepiece
with DIC slot

Motorized Sextuple
nosepiece with DIC slot



IOS Phase Contrast
Plan Objectives



Standard stage

Belt drive stage

Ceramic stage

Motorized stage



Phase contrast condenser with darkfield spot (dry)



Model: **B-1000 PH**

Model: **B-1000 FL LED**



Model:
B-1000 FL LED

Typology:
RESEARCH MICROSCOPE

Description:
Laboratory microscope for routine and research applications.
Dye-cast frame, with high stability and ergonomo-
logy, for transmitted light observation.

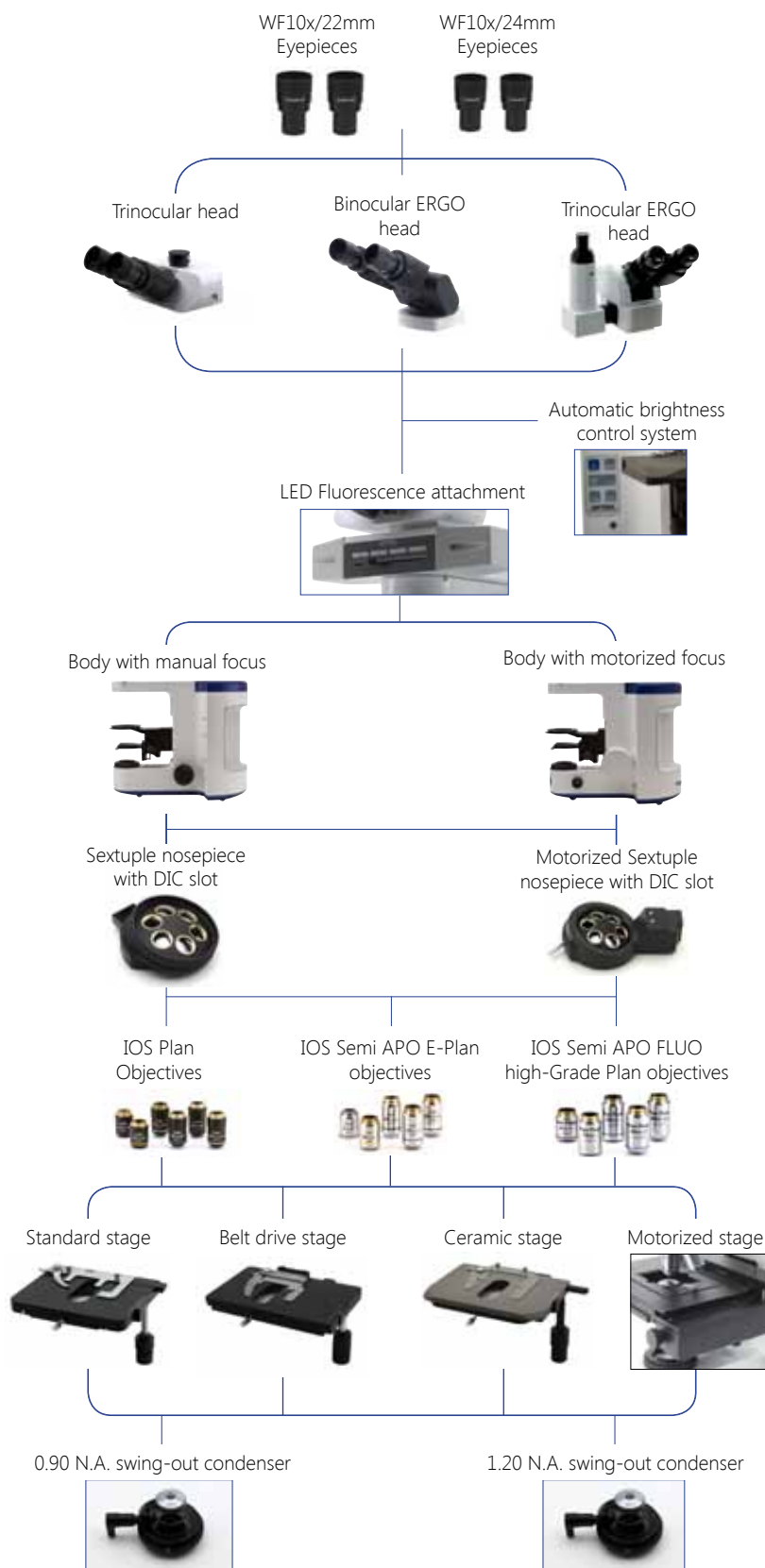


B-1000 FL LED

Version for LED epifluorescence analysis.
Transmitted illumination: X-LED (8W power).
Epi-illumination: special attachment with built-in high-power colored LEDs.

Attachment chart

B-1000 FL LED



Model: **B-1000 FL LED**

Model: **B-1000 FL HBO**



Model:
B-1000 FL HBO

Typology:
RESEARCH MICROSCOPE

Description:
Laboratory microscope for routine and research applications.
Dye-cast frame, with high stability and ergonomy, for transmitted light observation.



B-1000 FL HBO

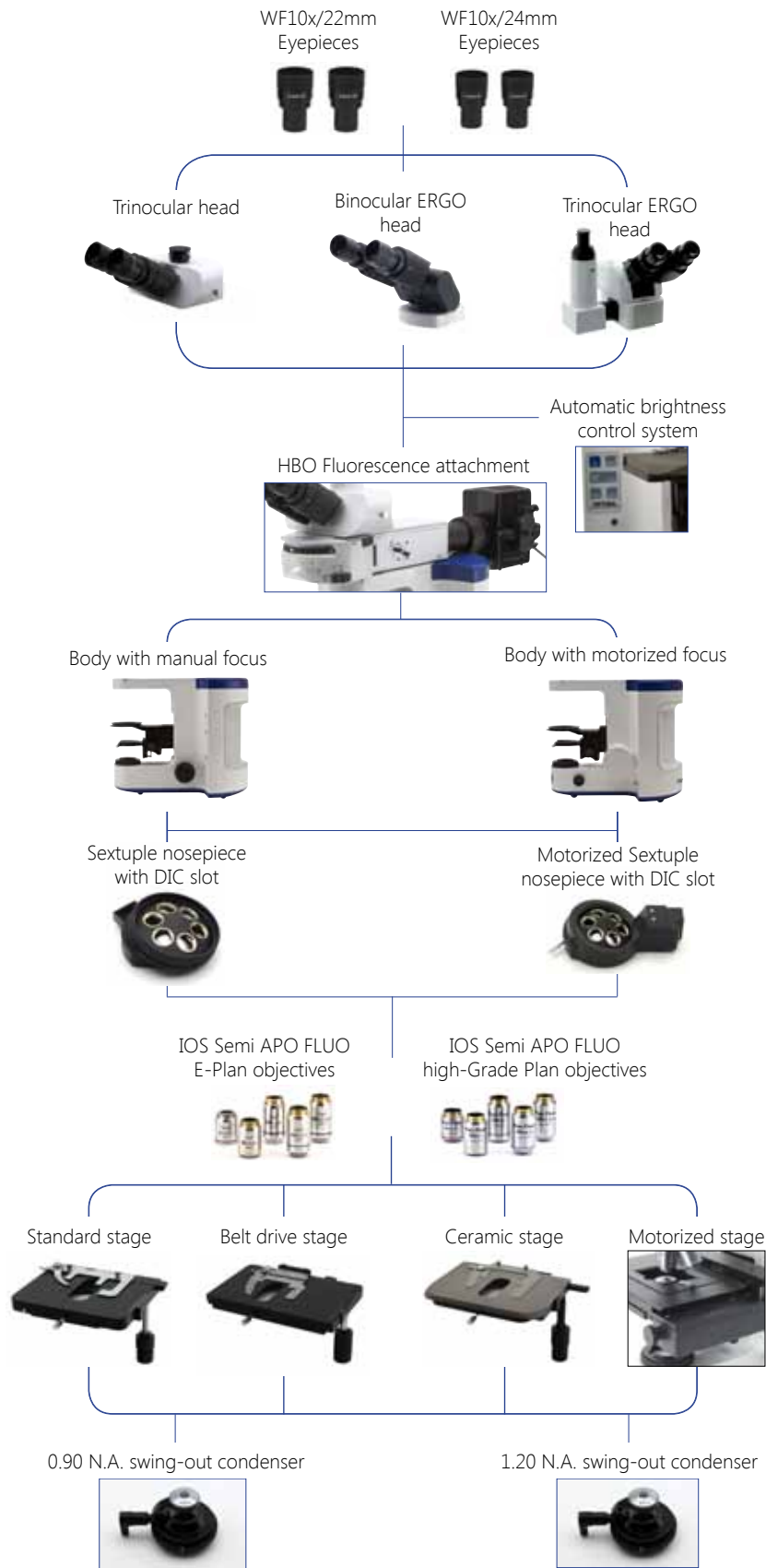
Version for epifluorescence analysis.

Transmitted illumination: X-LED (8W power).

Epi-illumination: special attachment with 100W mercury lamp and 6-position filter wheel.

Attachment chart

B-1000 FL HBO



Model: B-1000 FL HBO

Model: **B-1000 POL**



Model:
B-1000 POL

Typology:
RESEARCH MICROSCOPE

Description:
Laboratory microscope for routine and research applications.
Dye-cast frame, with high stability and ergonomy, for transmitted light observation.

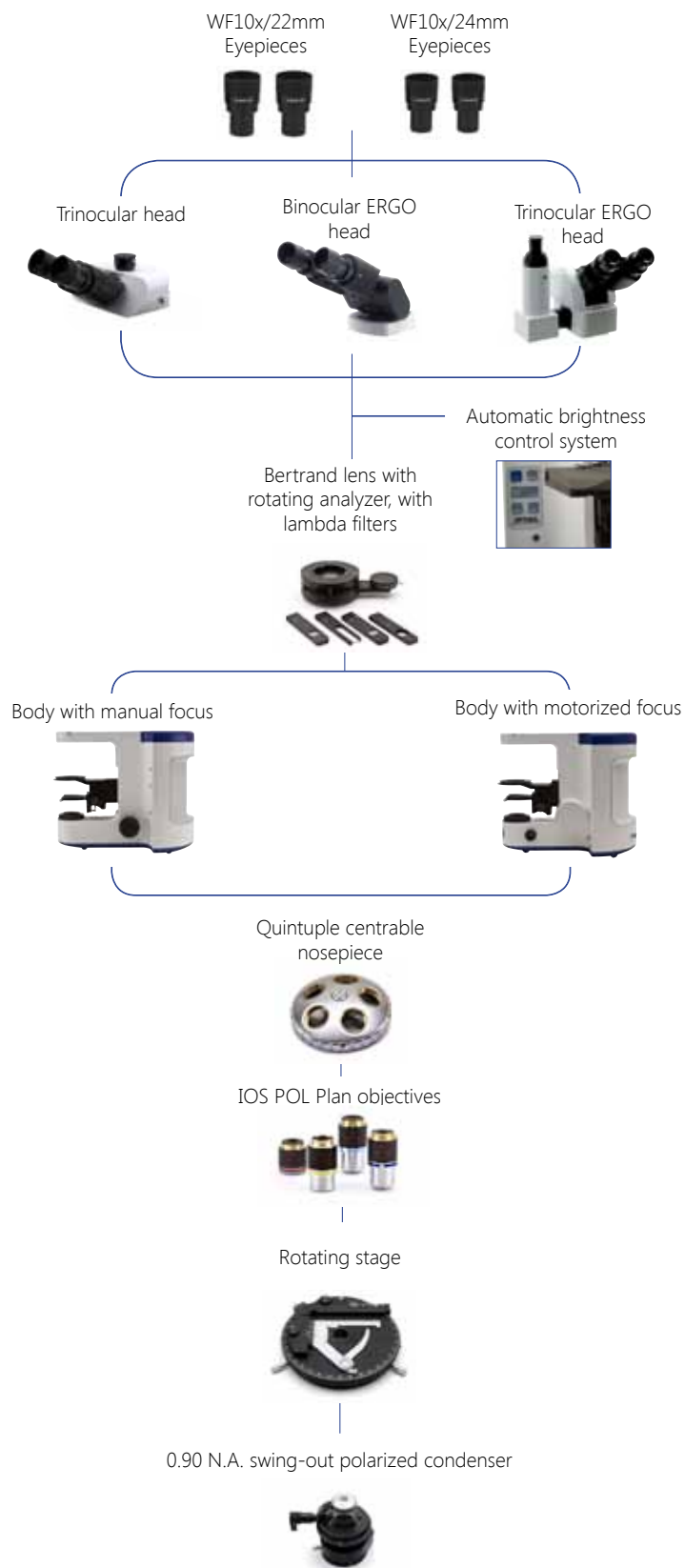


B-1000 POL

Version for transmitted polarization analysis.
Illumination: X-LED (8W power).

Attachment chart

B-1000 POL



Model: **B-1000 POL**

Model: **B-1000 POL-I**



Model:

B-1000 POL-I

Typology:

RESEARCH MICROSCOPE

Description:

Laboratory microscope for routine and research applications.

Dye-cast frame, with high stability and ergonomy, for transmitted light observation.



B-1000 POL-I

Version for transmitted and incident polarization analysis.

Transmitted illumination: X-LED (8W power).

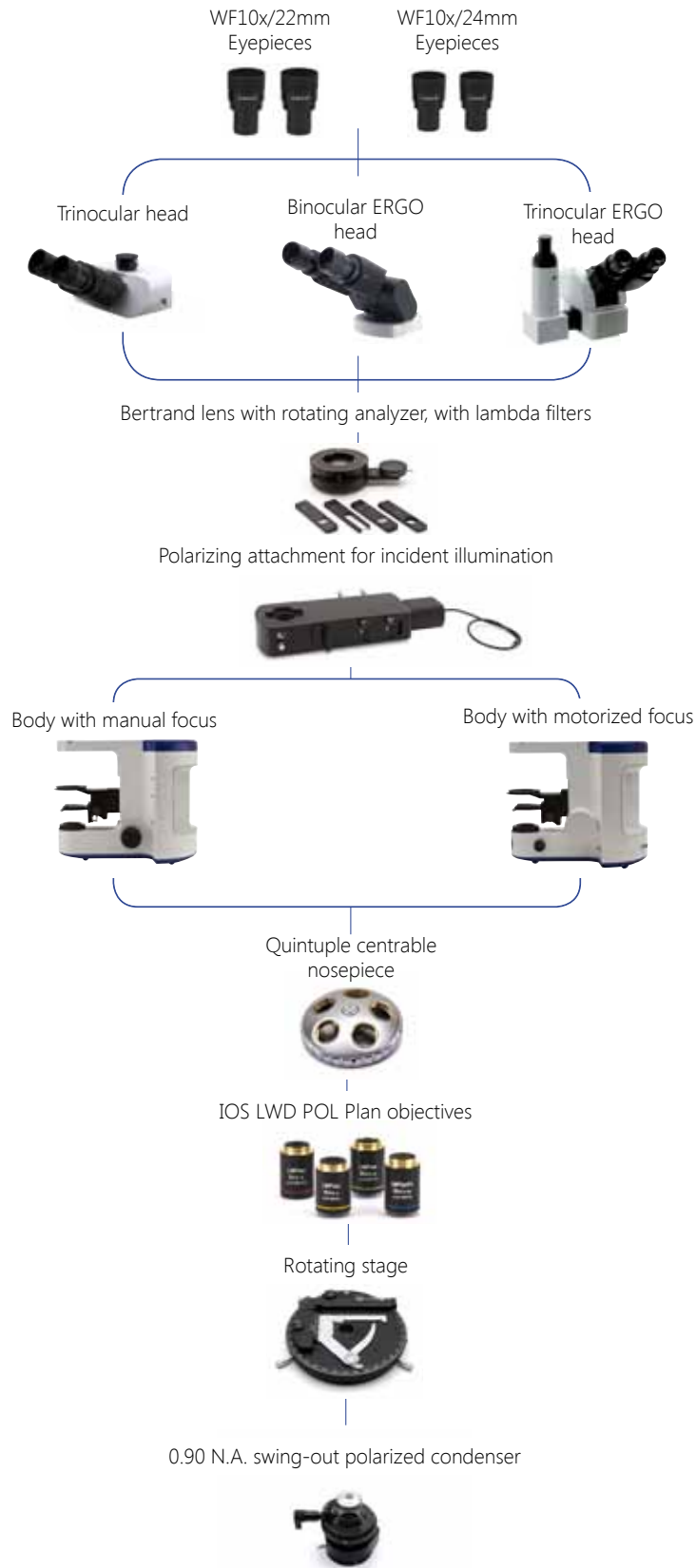
Epi-illumination: special attachment with built-in high-power white LED.





Attachment chart

B-1000 POL-I



Model: **B-1000 POL-I**



Model: **B-1000 MET**



Model:
B-1000 MET

Typology:
RESEARCH MICROSCOPE

Description:
Laboratory microscope for routine and research applications.
Dye-cast frame, with high stability and ergonomy, for transmitted light observation.



B-1000 MET

Version for material analysis
(transmitted and incident light).
Transmitted illumination: X-LED (8W power).
Epi-illumination: special attachment with built-in 100W halogen lamp.



Attachment chart

B-1000 MET

WF10x/22mm
Eyepieces



WF10x/24mm
Eyepieces



Trinocular head



Binocular ERGO
head



Trinocular ERGO
head



Metallurgical attachment for brightfield and darkfield



Body with manual focus



Body with motorized focus



Quintuple revolving Nosepiece for darkfield
metallurgical objectives



Quintuple motorized revolving Nosepiece
for darkfield metallurgical objective



IOS MET Plan
Objectives for brightfield



IOS MET Plan objectives
for darkfield



Standard stage



Motorized stage



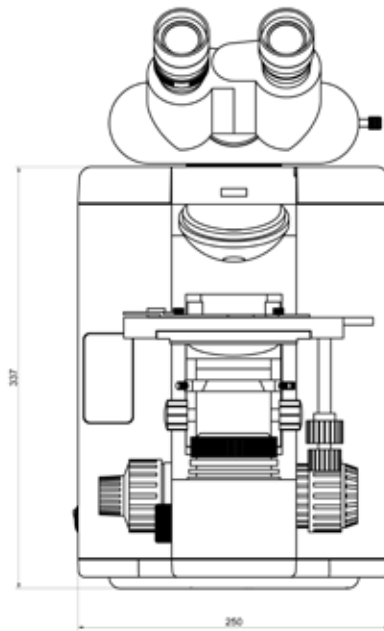
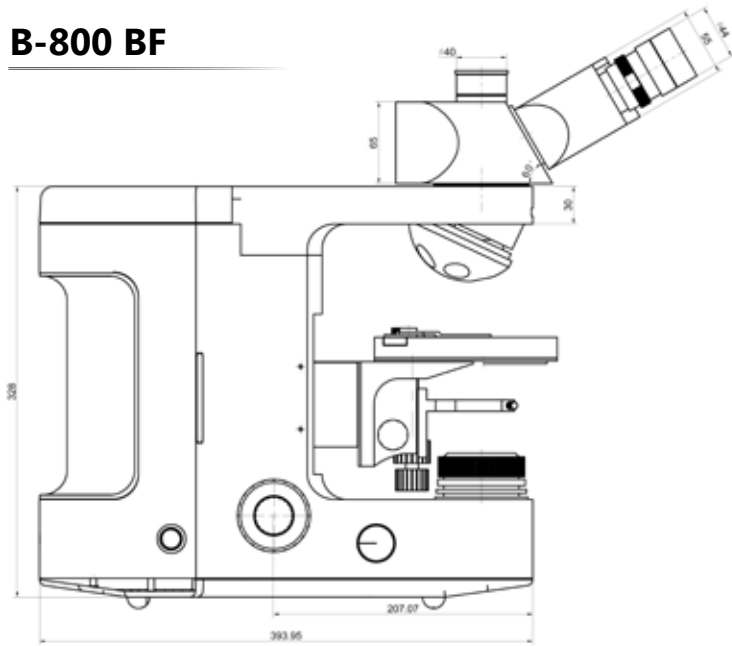
0,7 N.A. swing-out condenser



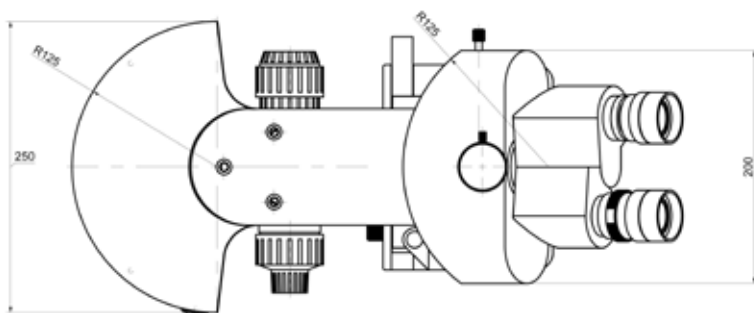
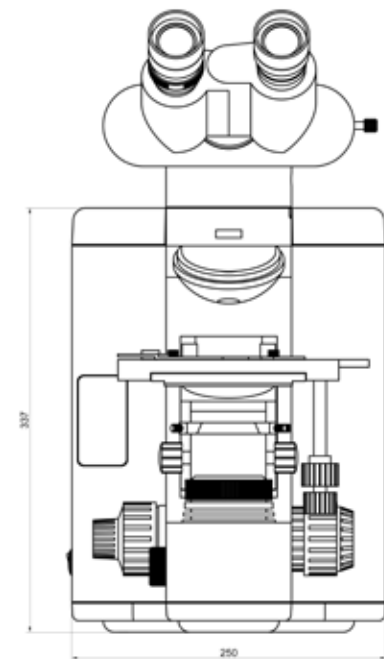
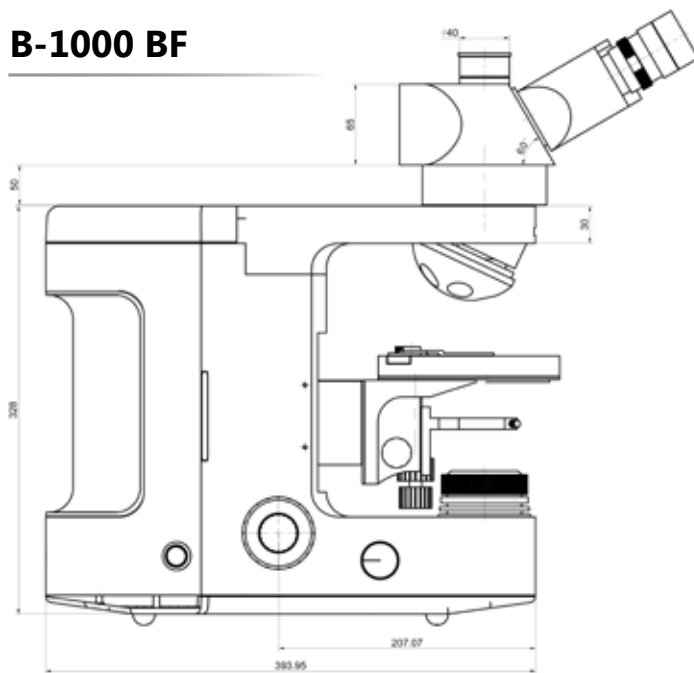
Model: B-1000 MET

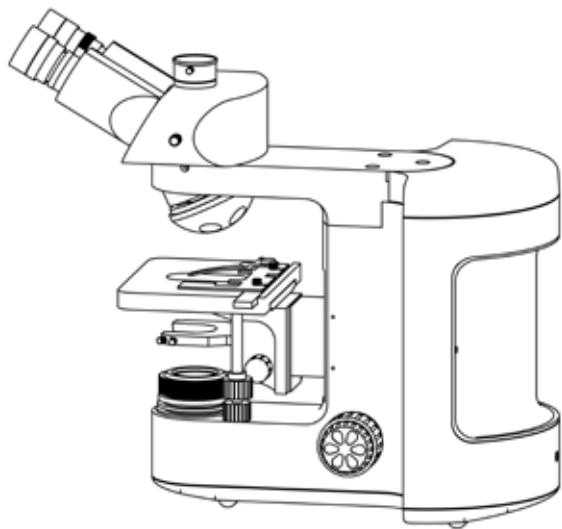
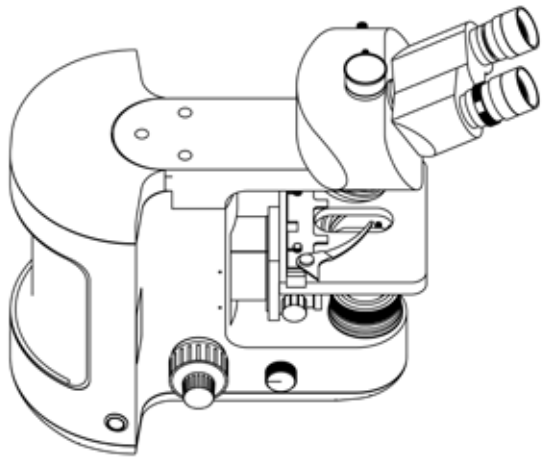
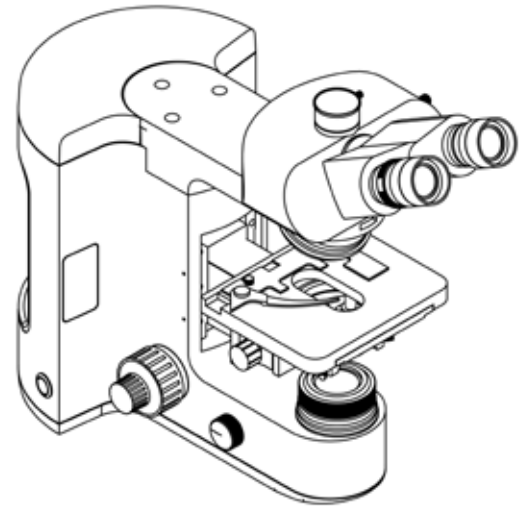
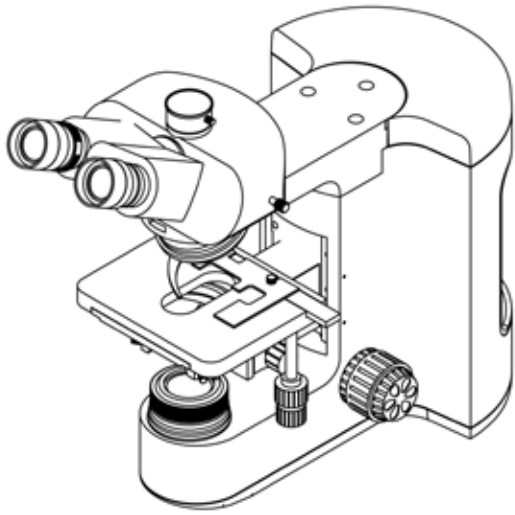


B-800 BF



B-1000 BF







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