









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 flag 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 reasearch 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



Solid Stand – Extra Stability

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

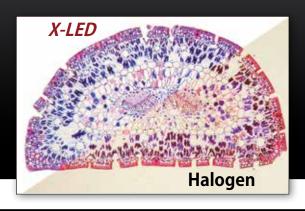
This new microscope can seamlessly be upgraded with many attachments that extend its field of use.



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.



AUTO OPTIKA

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 dioptric adjustment, for the best viewing experience.





Comfortable Stage

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



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 semiapochromatic objectives, designed to give sharp and clear images, both for the user and the digital camera. Quintuple and sextuple nosepieces 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.



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

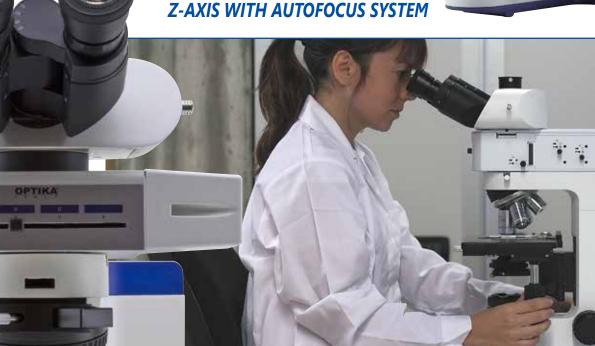
Our cameras include specific software for capturing, measuring, marking and storing your pictures. Optika Vision Pro software allows to perform image acquisition, post-processing, measurements and storage of your images. User can save a preset for later work, or even create a multi-focus composition.

Remote Stage Control

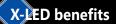
The stage can be remote-controlled through a dedicated software: X, Y and Z axes can be moved with a single click.

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





X-Y MOTORIZED STAGE



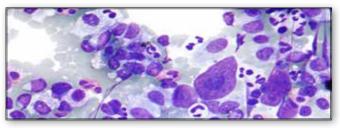
Powerful pure white LED illumination, ideal for brightfield, darkfield and phase contrast applications.

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.

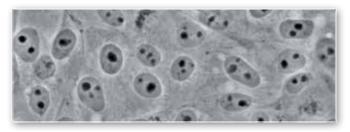




Pathology / Cytology

Since B-800 / B-1000 use white LED illumination, they 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.

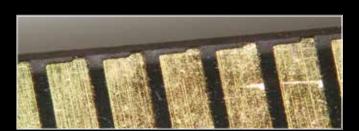
These feautures, along with motorized stage and ergonomic controls, make your workflow easier.



Phase Contrast Microscopy

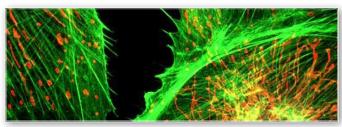
The bright LED illuminator brings a comfortable view in phase contrast with all magnifications. Universal wheel condenser allows to quickly switch between brightfield, darkfield and phase contrast.

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 epiillumination analysis: brightfield, darkfield and polarizing view.



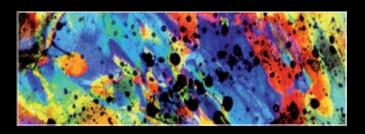
Fluorescence Microscopy

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 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.

B-1000 Series - **Discussion microscope**



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

B-1000Ti-2

B-1000Ti-3

B-1000Ti-5

B-1000Ti-10

B-1000Ti-5





B-1000Ti-10





EYEPIECES



WF10x/22mm Eyepieces, high-point type



WF10x/24mm Eyepieces, high-point type

HEADS



Trinocular Head 100/0 - 50/50 type



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





Binocular Ergonomic Head with side Video/Photo Tube

NOSEPIECES



Quintuple revolving Nosepiece, for RMS objectives



Sextuple revolving Nosepiece, for RMS objectives



Sextuple revolving Nosepiece, for RMS objectives; with DIC slot



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



Quintuple revolving Nosepiece, with centrable positions for polarizing objectives



Quintuple revolving Nosepiece for darkfield metallurgical objectives; with 3 ring adapters Pag 10 for brightfield objectives Pag 10



Quintuple motorized revolving Nosepiece for darkfield metallurgical objectives; with 3 ring adapters for brightfield objectives motorized



Metallographic stage for B-1000 MET

OBJECTIVES



IOS (infinity corrected) Plan Objectives



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



IOS (infinity corrected) MET Plan objectives, for darkfield



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



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



IOS (infinity corrected) Phase Contrast Plan Objectives



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



IOS (infinity corrected) MET Plan objectives, for brightfield



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

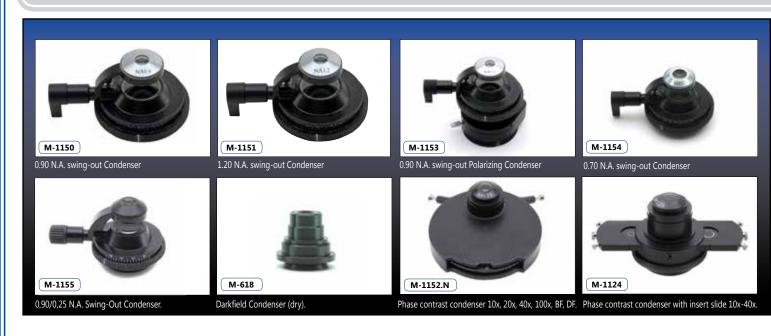


Heating Stage



Rotating Stage + attachable XY stage

CONDENSERS



FLUORESCENCE ATTACHMENTS



4-position LED Fluorescence Attachment



6-position HBO Fluorescence attachment

POLARIZING ATTACHMENTS



Bertrand Lens with analyzer and Lambda slides slot



Incident Polarizing Light attachment, with field and aperture diaphragms

DISCUSSION HEADS



M-1160 - 2-Head attachment M-1161 - 3-Head Attachment M-1162 - 5-Head Attachment M-1163 - 10-Head attachment

METALLURGICAL ATTACHMENT



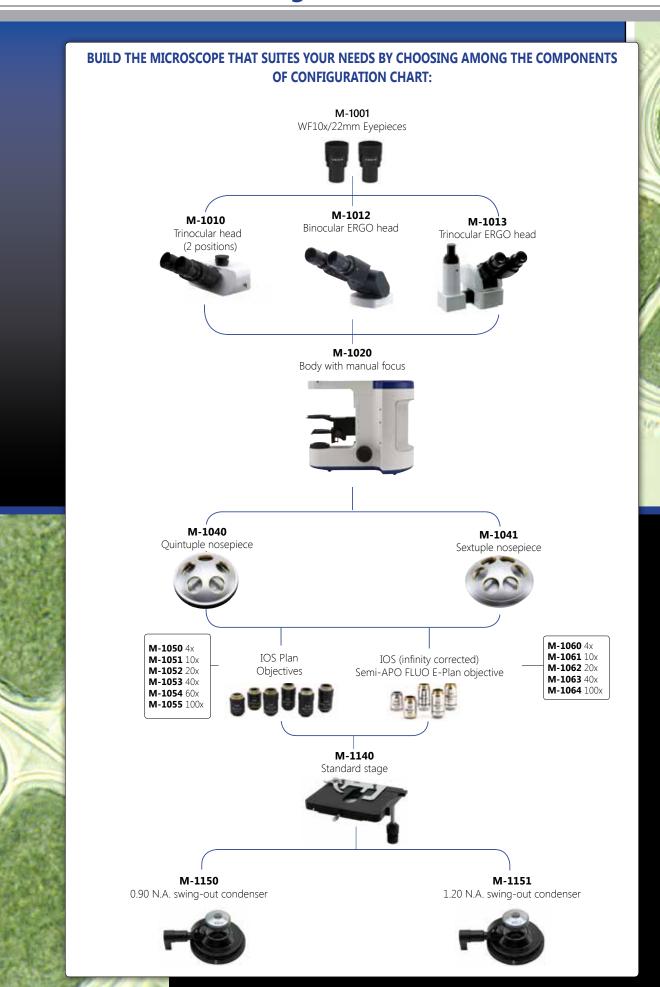
Metallurgical Brightfield/Darkfield attachment, with field and aperture diaphragms, neutral density filter, and polarizer/analyzer filters.



B-800BF Model - **Brightfield version**



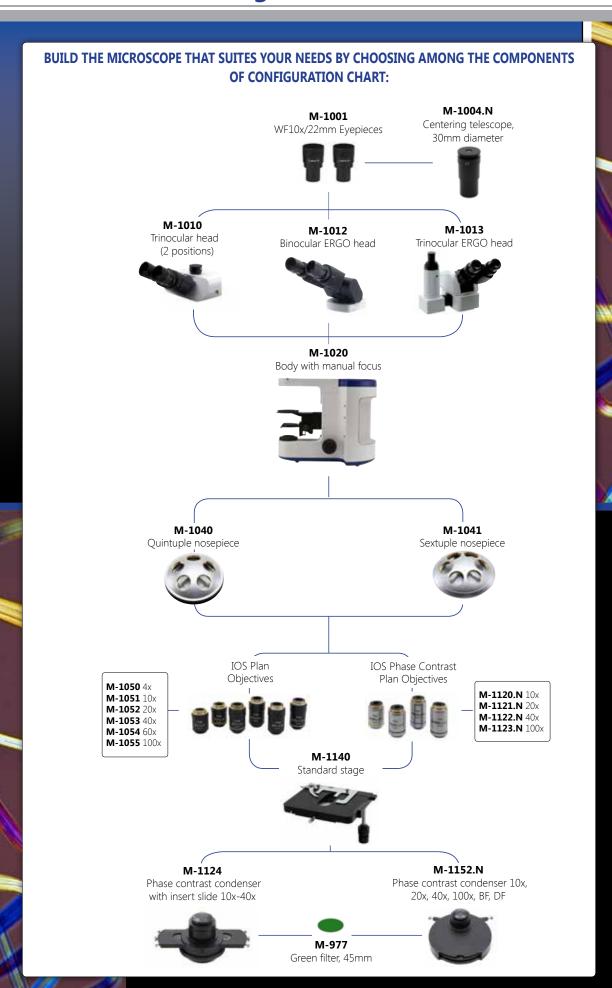
B-800BF Model - Configuration chart



B-800PH Model - **Phase contrast version**



B-800PH Model - Configuration chart



B-1000BF Model - **Brightfield version**



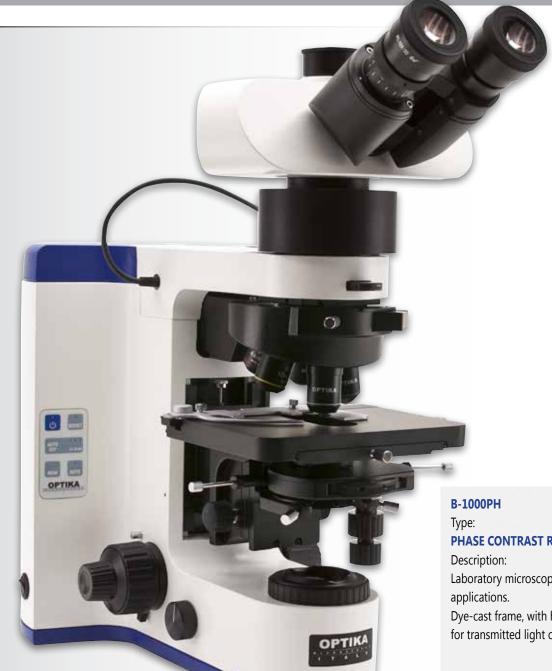


Version for standard brightfield view. Illumination: X-LED⁸ (8W power)

B-1000BF Model - Configuration chart



B-1000PH Model - **Phase contrast version**



B-1000PH















PHASE CONTRAST RESEARCH MICROSCOPE

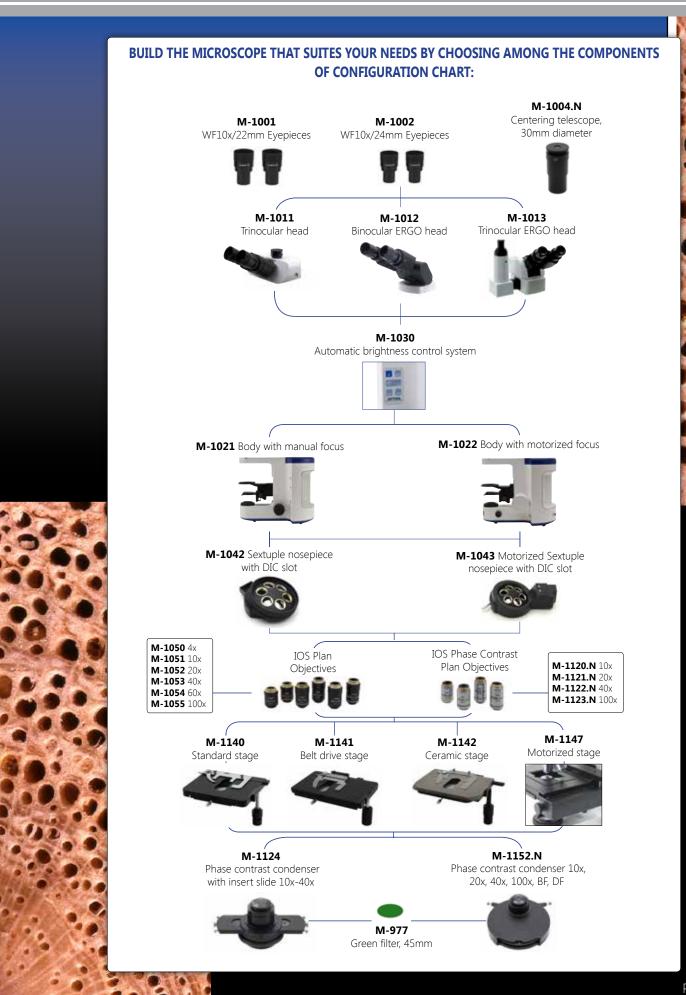
Laboratory microscope for routine and research

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



Version for phase contrast analysis. Illumination: X-LED⁸ (8W power).

B-1000PH Model - Configuration chart



B-1000FL-LED Model



B-1000FL-LED



















LED FLUORESCENCE RESEARCH MICROSCOPE

Laboratory microscope for routine and research applications.

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

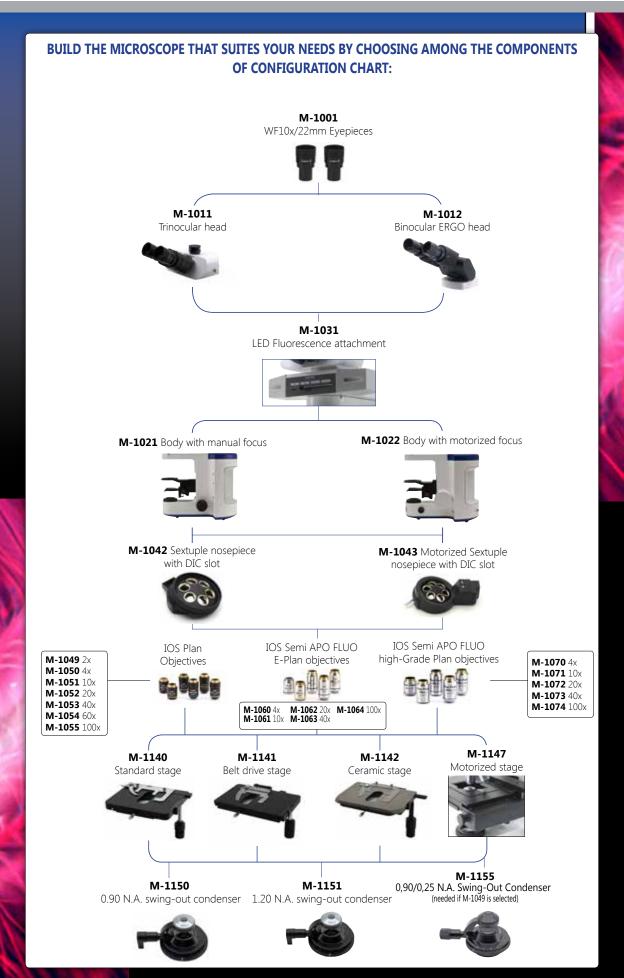


Version for LED epifluorescence analysis. Transmitted illumination: X-LED⁸ (8W power). Epi-illumination: special attachment with built-in high-power colored LEDs.

Standard filtersets (included)

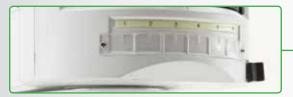
Name	Excitation wavelength (nm)	Dichroic mirror cut-off (nm)	Barrier filter wavelength (nm)
B (Blue)	450-490	495	520LP
G (Green)	500-540	565	575LP

B-1000FL-LED Model - Configuration chart



B-1000FL-HBO Model





Version for epifluorescence analysis.

Transmitted illumination: X-LED8 (8W power).

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

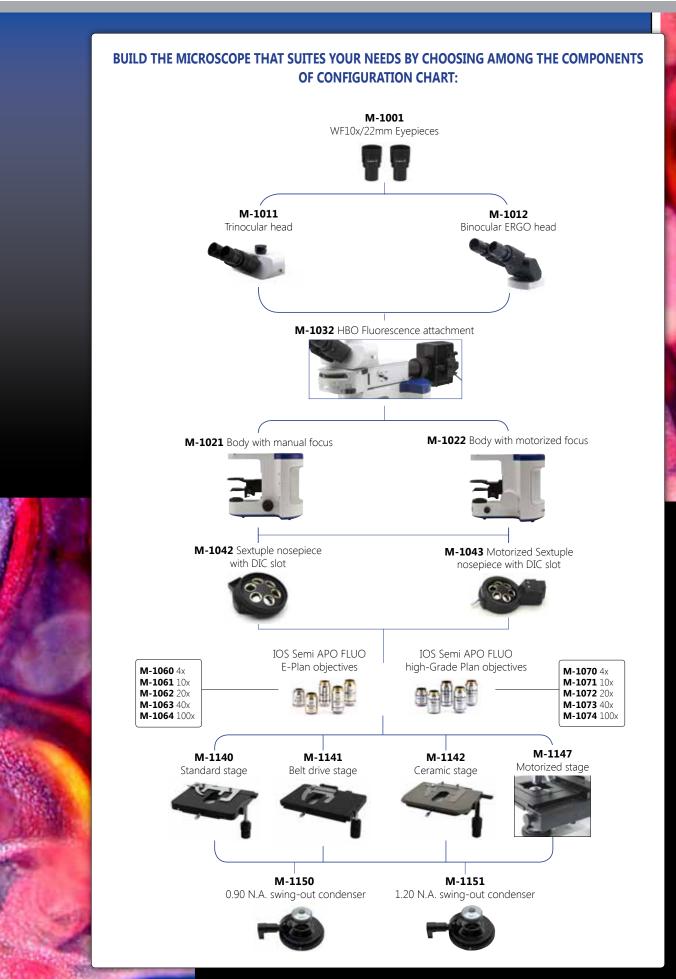
Standard filtersets (included)

Name	Excitation wavelength (nm)	Dichroic mirror cut-off (nm)	Barrier filter wavelength (nm)
B (Blue)	460-490	500	520LP
G (Green)	510-550	570	590LP

Additional filters (as option)

Name	Excitation wavelength (nm)	Dichroic mirror cut-off (nm)	Barrier filter wavelength (nm)
V (Violet)	400-410	455	455LP
UV	330-385	400	420LP

B-1000FL-HBO Model - Configuration chart



B-1000POL Model - Transmitted polarization



B-1000POL



B-1000POL

TRANSMITTED POLARIZING RESEARCH MICROSCOPE

Description:

Laboratory microscope for routine and research applications.

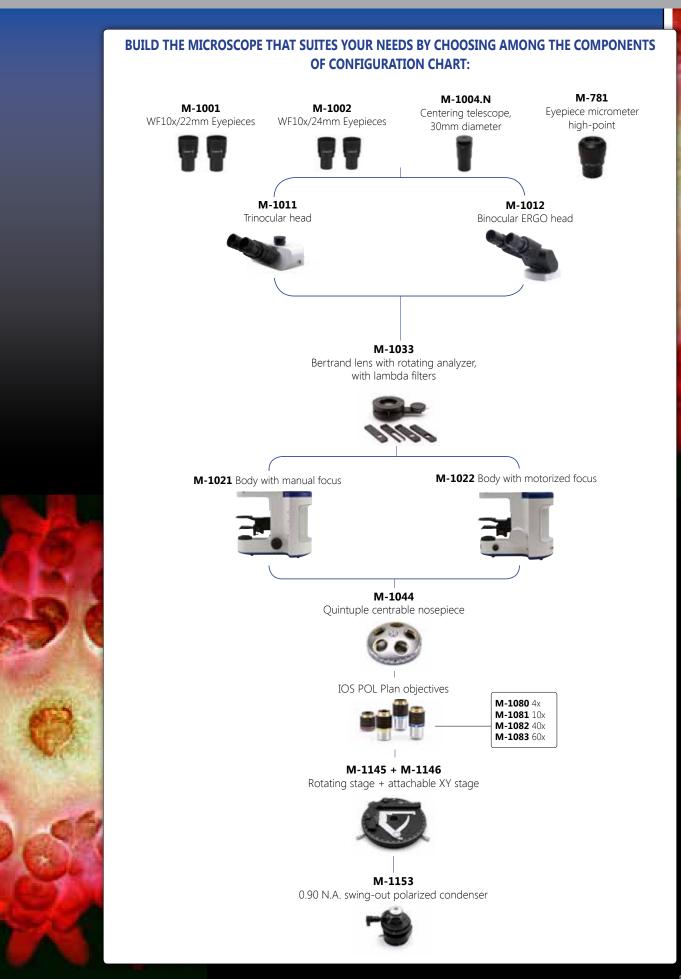
Dye-cast frame, with high stability and ergonomy, for transmitted light observation.



Version for transmitted polarization analysis.

Illumination: X-LED⁸ (8W power).

B-1000POL Model - Configuration chart



B-1000POL-I Model - Transmitted and incident polarizing



B-1000POL-I















TRANSMITTED AND INCIDENT POLARIZING **RESEARCH MICROSCOPE**

Description:

Laboratory microscope for routine and research applications.

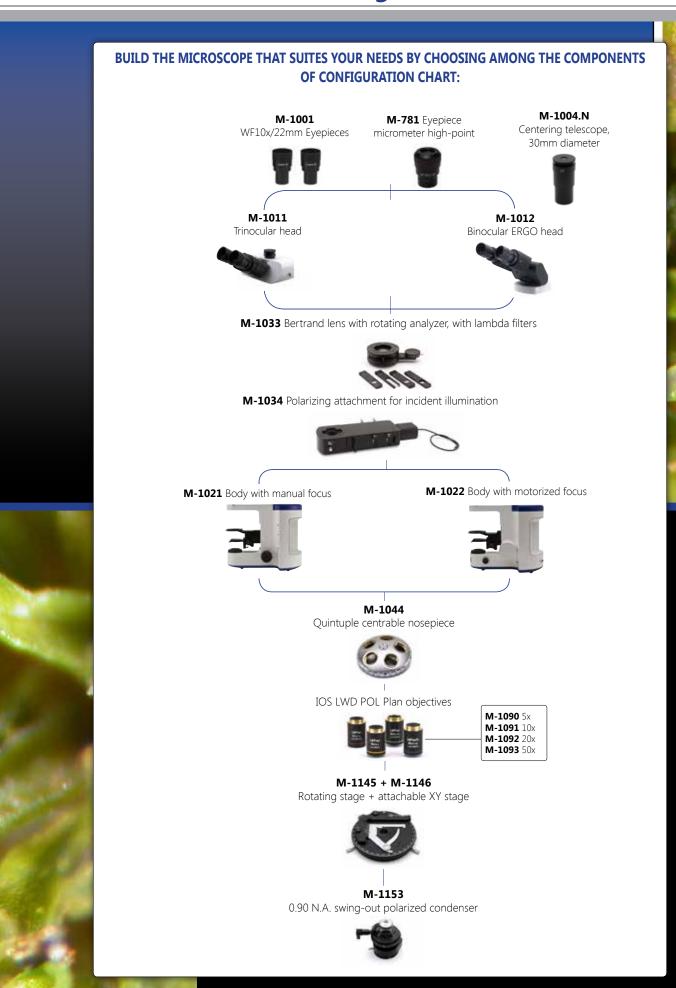
Dye-cast frame, with high stability and ergonomy, for transmitted and incident light observation.



Version for transmitted and incident polarization analysis.

Transmitted illumination: X-LED⁸ (8W power). Epi-illumination: special attachment with built-in high-power white LED.

B-1000POL-I Model - Configuration chart



B-1000MET Model



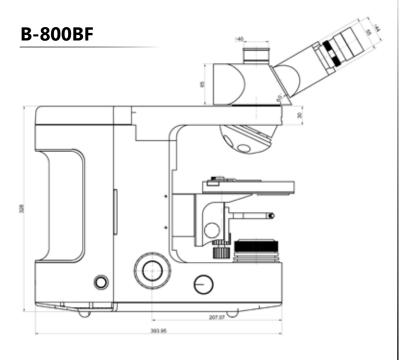


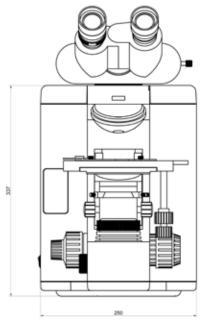
Version for material analysis (transmitted and incident light).

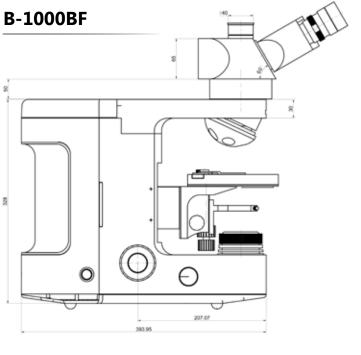
Transmitted illumination X-LED⁸ (8W power). Special attachment with built-in 100W halogen lamp.

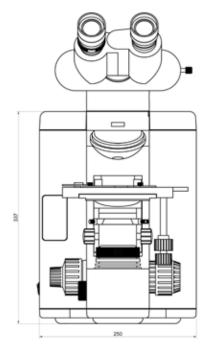
B-1000MET Model - Configuration chart

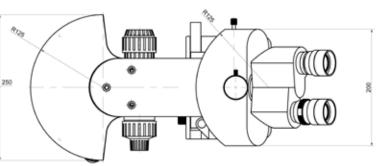






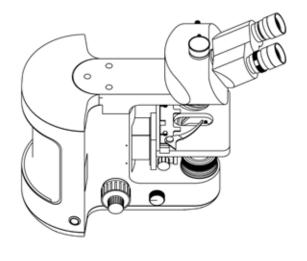


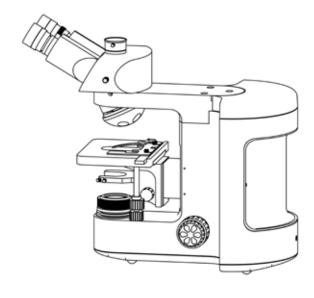


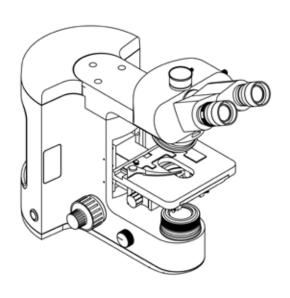


CONCEPT ART

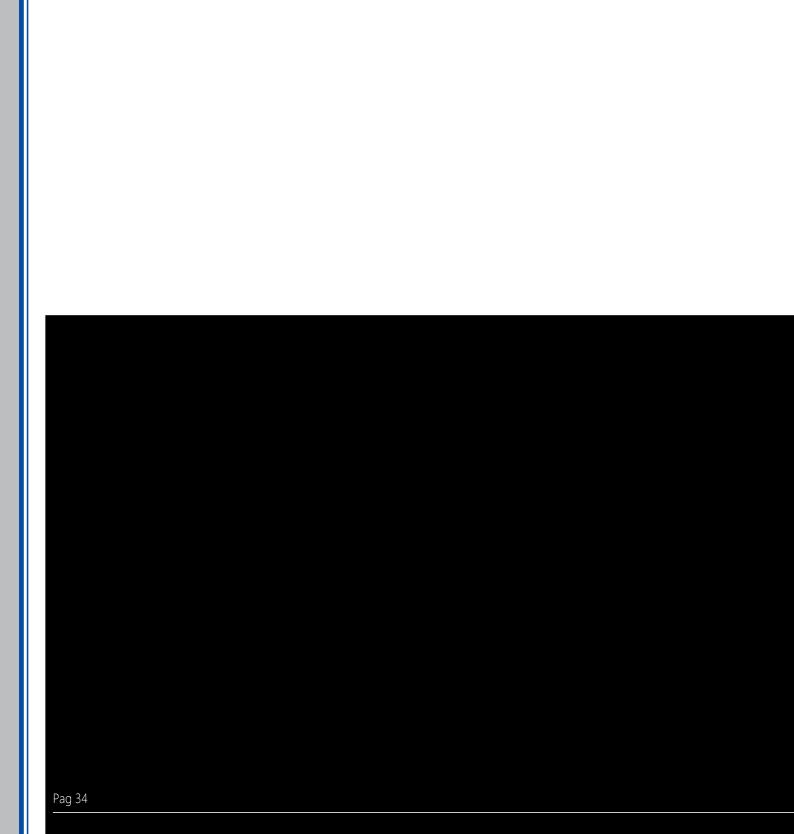












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01/2015 Specifications and appearances are subject to change without any notice or obligation on the part of the manufacturer.

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