

Optech microscopes

Research Lab Applications



Optech microscopes

Biostar BM 80



Biological microscope for research and accurate laboratory analysis.

- Metal frame stand.
- Trinocular heads: 30° inclined or Ergonomic (variable inclination).
- Eyepieces, for different configurations: EW 10x (20) - EW 10x (22) - WF 10x (24).
- Focusable eyepieces with housing for measurement or counting graticules.
- 6-places revolver nosepiece, for parfocal infinity objectives, having Plan-achromatic or Plan-achromatic F* correction.
- Interchangeable translating stage, 185 x 140 mm with scanning area 77 (X) - 52 (Y).
- Condenser with AN 0,9 / 0,25 "removable front lens", with aperture diaphragm.
- Universal disc-revolver condenser NA 1,25, for phase contrast configurations.
- Kohler lighting system.
- External lamp housing with halogen lamp 24V / 100W; electronic adjustment of the light intensity.

*Note: the Plan-achromatic F series identifies objectives having high optical brightness & resolution.

Standard equipment:

- Oil immersion bottle ND. 1,515.
- Telescopic centering eyepiece, for phase contrast configurations.
- Dust cover.
- User & instruction manual.

Optional accessories:

- Additional optics.
- Phase contrast device.
- LED epifluorescence device.
- HBO epifluorescence device.
- Discussion bridges.
- Motorization systems.
- Dark field device.
- Polarization device.
- Ergonomic head.
- TV C-mount adapters.
- SLR photomicrography adapters.
- Digital cameras.



BM 80 Trinocular



BM 80 Trinocular Ergo



MODELS	PLAN ACHROMATIC OBJECTIVES FOR BRIGHT FIELD
BM 80 Trinocular 30°	PA 4x / 0,10 - PA 10x / 0,25 - PA 20x / 0,40 - PA 40x / 0,65 - PA 100x / 1,25

MODELS	PLAN ACHROMATIC OBJECTIVES F FOR BRIGHT FIELD
BM 80 Trinocular Ergo	PA 4x / 0,13 - PA 10x / 0,30 - PA 20x / 0,50 - PA 40x / 0,75 - PA 100x / 1,30

Optech microscopes

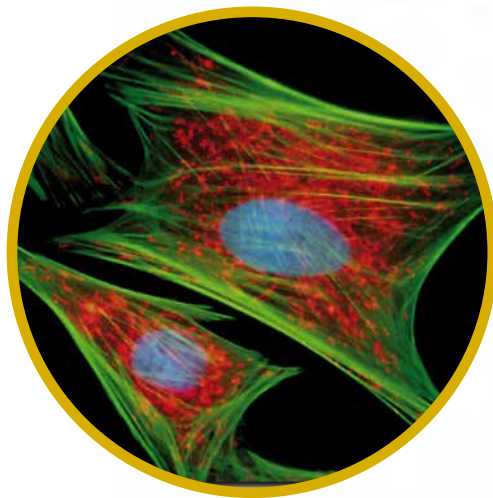
Biostar BM 80



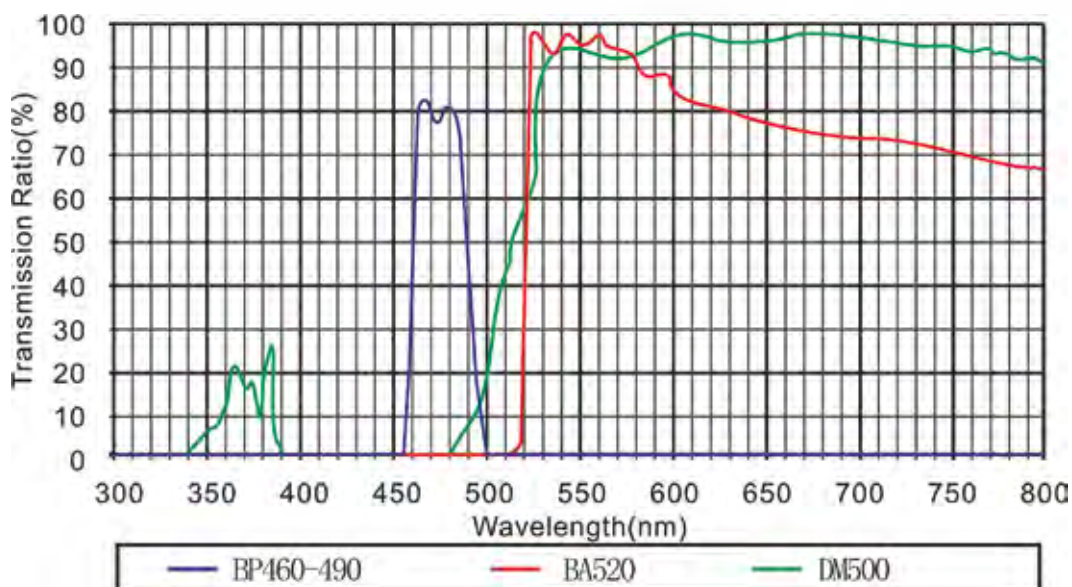
Epifluorescence device with HBO 100 W lamp.

- External housing with lamp adjustment system.
- Intermediate module with 6-places filter-housing revolver (5 + 1 place for transmitted light).
- Aperture & image view field diaphragms.
- Electronic power supply with starter and digital indicators.

Note:
Plan achromatic F objectives
are the most suggested ones.



BM 80 Trinocular with Epifluorescence device



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Biostar BM 80



Multivision device Viewing stations.

- Stations for opposed vision.
- Stations for 2 - 3 - 5 users, side-by-side.
- Main unit equipped with adjustable lighting system and adjustable indication arrow in the image field.

BM 80 with viewing station for 2 users

BM 80 with viewing station for 3 users



BM 80 with viewing station for 2 users

BM 80 with viewing station for 5 users

Optech microscopes

Biostar BM 80



Motorized systems.

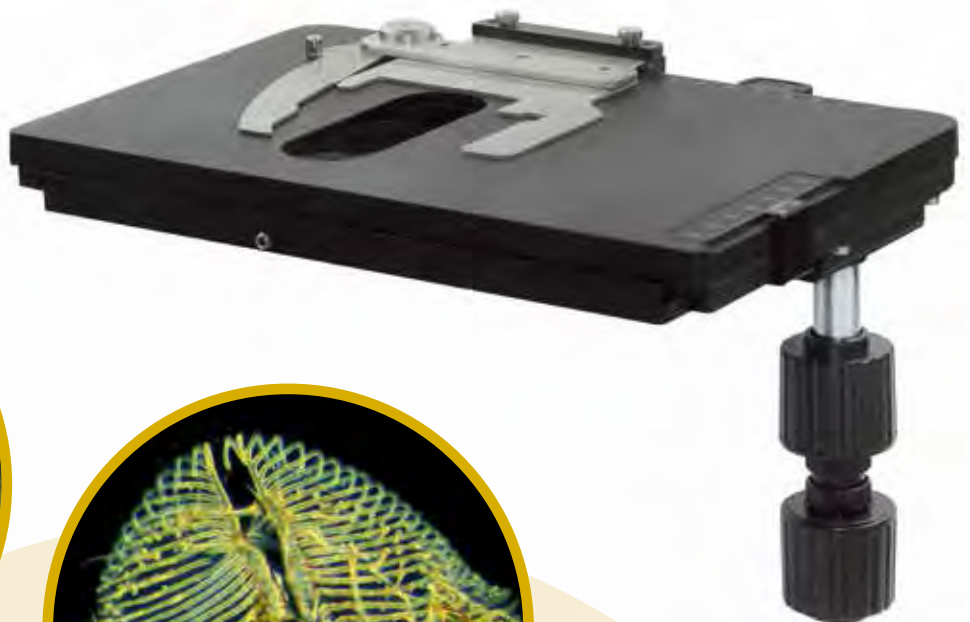
- Example of motorization on Z-axis.
- Mechanical module for connection to the focussing system, motorization included.
- Electronic control unit; micrometric focussing possible (additionally) even when the PC is off.
- Digital videocamera Delta Pix with software for measures & focal planes, and interface to the system.

Note:

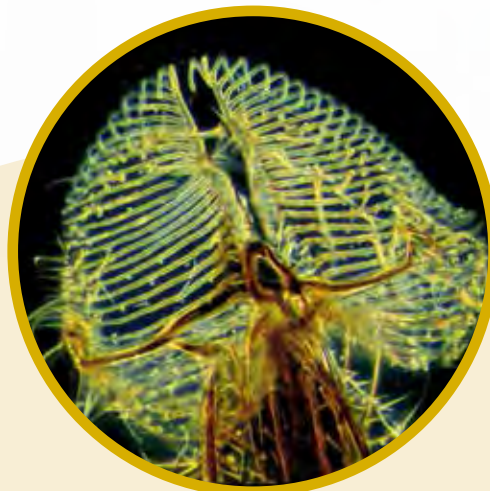
Universal accessory, can be installed on any Trinocular microscope.



- Translating stage, to replace the standard one.
- Wide support base: 243 x 158 mm.
- Scan area 78 (X) - 52 (Y).
- Clutch for movements fluidity adjustment.



*First captured image



*Final image, after the focal planes recomposition

Optech inverted microscopes

Biostar IB 5



Inverted biological microscope for research and routine laboratory.

- Metal frame stand.
- Binocular head, 45° inclined.
- Side photo port for a comfortable and stable photo/TV connection.
- Wide field eyepieces WF 10x (22).
- 6-places revolver nosepiece; equipped with parfocal objectives with infinity optics and Planachromatic correction.
- Specimen stage 208 x 227 mm.
- Specimen guide with scan area 130 (X) - 74 (Y).
- Condenser system, long working distance (55 mm), can be completed with:
 - universal revolver disc, for bright field and phase contrast;
 - universal revolver disc, for bright field and modulation contrast.
- Rapid exclusion of the condenser group to work in bright field with high samples.
- Lighting system with 6V - 30W halogen lamp.
- Electronic adjustment for light intensity.

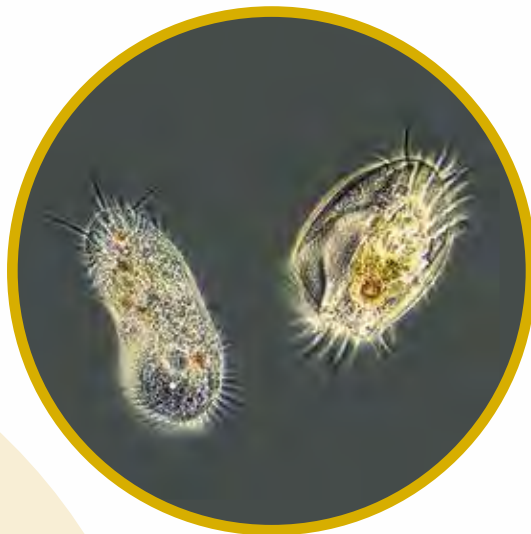


Standard equipment:

- Telescopic centering eyepiece (for phase contrast configurations)
- Inserts for:
 - Petri dishes, 26 x 76 mm specimen glass, wells plates.
- Contrast and conversion filters.
- Dust cover.
- User and instruction manual.

Optional accessories:

- Additional optics.
- Phase contrast device.
- Modulation contrast device.
- TV C-mount adapters.
- Photomicrography adapters.
- Digital videocameras.



CODE	MODELS	OBJECTIVES FOR BRIGHT FIELD AND PHASE CONTRAST DEVICE (PH)
K71145	IB 5	PA 10x / 0,25 - PA 20x / 0,40 - PA 40x / 0,60 PA 10x / 0,25 Ph - PA 20x / 0,40 Ph - PA 40x / 0,60 Ph
CODE	MODELS	OBJECTIVE FOR MODULATION CONTRAST (MC) AND BRIGHT FIELD
K71656	IB 5 MC	PA 10x / 0,25 MC - PA 20x / 0,40 MC - PA 40x / 0,60 MC - PA 10x / 0,25

Optech inverted microscopes

Biostar IB 5 F



Inverted biological microscope for research and routine laboratory.

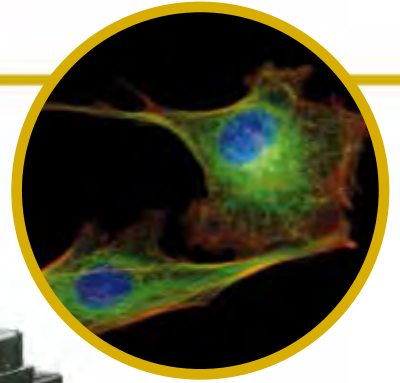
- Metal frame stand.
- Binocular head, 45° inclined.
- Side photo port for a comfortable and stable photo/TV connection.
- Wide field eyepieces WF 10x (22).
- 6-places revolver nosepiece; equipped with parfocal objectives with infinity optics and Planachromatic correction.
- Epifluorescence device with HBO 100W lamp.
- External housing with centering adjustments for the lamp.
- 3-places filters slide (2 + 1 place for transmitted light).
- Image field diaphragm.
- Electronic power supply with starter and digital indicators.
- Specimen stage 208 x 227 mm.
- Specimen guide with scan area 130 (X) - 74 (Y).
- Condenser system, long working distance (55 mm), can be completed with:
 - universal revolver disc, for bright field and phase contrast;
 - universal revolver disc, for bright field and modulation contrast.
 Rapid exclusion of the condenser group to work in bright field with high samples.
- Lighting system with 6V - 30W halogen lamp.
- Electronic adjustment for light intensity.

Standard equipment:

- Epifluorescence device HBO 100W Complete with filters slides (without filters).
- Telescopic centering eyepiece.
- Inserts for:
 - Petri dishes, 26 x 76 mm specimen glass, wells plates.
- Contrast and conversion filters.
- Dust cover.
- User and instruction manual.

Optional accessories:

- Additional optics.
- Modulation contrast device.
- Standard epifluorescence slides, wide range.
- Wide range of epifluorescence filters, single or multirange.
- TV C-mount adapters.
- Photomicrography adapters.
- Digital videocameras.



MODELS	OBJECTIVES FOR BRIGHT FIELD AND PHASE CONTRAST (PH)
IB 5 F	PA 10x / 0,25 - PA 20x / 0,40 - PA 40x / 0,60 PA 10x / 0,25 Ph - PA 20x / 0,40 Ph - PA 40x / 0,60 Ph

Optech Stereomicroscopes

Serie GZ 808



Modular stereomicroscope with Galilean optic system, for research and laboratory analysis.

- Metal frame stand & high column.
- Binocular head, 20° inclined.
- Interpupillary distance adjustment: 55...75 mm.
- Wide Field eyepieces EW 10x (22) with +/- 5 mm dioptic compensation.
- Zoom optical system F = 8:1.
- Reference click stops for dimensional measurements.
- Connection of Plan-achromatic and Plan-apochromatic objectives.
- Min-Max possible magnifications: 2,4x...384x.
- Intermediate module AX for more incisive images for both photomicrography & TV.
- Standard magnifications: 8x...64x.
- Working distance: 80 mm.
- Focussing systems: macrometric or macro-micrometric.
- Stands for transmitted light, with progressive adjustment of the image contrast.
- Stands with LED light in both incident and transmitted light.



GZ 808

Standard equipment:

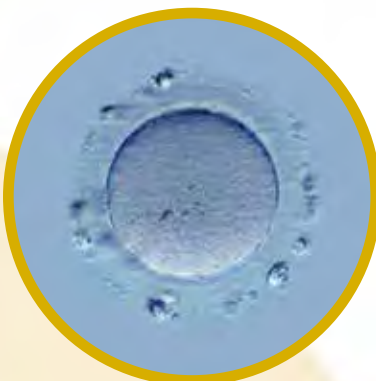
- Dust cover.
- User and instruction manual.

Optional accessories:

- Binocular head with variable inclination.
- Additional optics.
- Intermediate photo/TV modules.
- HBO epifluorescence device.
- Episcopic lighting system.
- Drawing tube.
- Stands for high-dimensions samples.
- Racking light and ring lighting systems.
- TV C-mount adapters.
- Adapters for photomicrography.
- Dimensional measures.
- Digital videocameras.



GZ 808 (embryology stand)



CODE	MODEL	DIMENSIONS mm (L x P x H)
K71589	Binocular GZ 808 Standard configuration with stand and LED incident/transmitted lighting system	330 x 285 x 400

Optech Stereomicroscopes

Serie GZ 808



Epifluorescence device with HBO 100W lamp.

- External housing with lamp centering adjustment.
- Intermediate module with 4-places filter housing (3 + 1 place for transmitted light).
- Electronic power supply with starter and digital indicators.
- Kit of Epifluorescence filters GFP-B (EX 460-500 / DM 505 / BA 510-560).
- Kit of Epifluorescence filters GFP-L (EX 460-500 / DM 505 / BA 510).
- Lateral photo/TV exit with optical diverter 100/100.

Standard equipment:

- Dust cover.
- User & instruction manual.

Optional accessories:

- Kit of Epifluorescence filters (G) - (RFP-B).
- TV C-mount adapters.
- Photomicrography adapters.
- Dimensional measures.
- Digital videocameras.



CODE	DESCRIPTION
K71657	Complete device for HBO Epifluorescence for Stereomicroscope GZ 808

Optech Stereomicroscopes

Independent lighting systems

Ring lighting device with fluorescent lamp.



CODE	FEATURES
K71631	Inner diameter: 62 mm - 220V - 7W

LED ring device, adjustable intensity.



CODE	FEATURES
K71632	Inner diameter: 61 mm - n. 48 Leds

Sector ring LED device, adjustable intensity.



CODE	FEATURES
F719959	Inner diameter: 61 mm - n. 144 Leds

Cold light source model PL2000, complete with 2-arms goose neck.



CODE	FEATURES
B7865	Real diameter of the light beam: 3 mm

LED device for transmitted light.



CODE	FEATURES
K71633	Round plate diameter: 95 mm Thickness: 4,5 mm - Adjustable intensity

LED lighting spot, with 2 semi-rigid arms.



CODE	FEATURES
K71630	Arms length: 48 cm Independent and adjustable intensity

Microscope Digital videocameras

Visiocam AS - ISHD series

Delta Pix series



Digital videocameras for different applications.

- Resolutions: 1,4...32 Mpixels.
- Sensors: C MOS - CCD.
- Details definition and reliable colours reproduction.
- Pc connection through USB cable.
- Software for view, acquisition and basic image analysis.
- Professional modular software.
- C-mount TV adapters (on request).

Digital videocameras Visiocam AS series



CODE	VISIOCAM AS	MPIXELS	RESOLUTION	SENSOR	FRAME/SEC.	DINAMIC RANGE	SOFTWARE
K71655	AS C 560	5.6	2720 x 2048	CCD 1/2"	10	75 db	F Scope
K71643	AS M 510	5.0	2592 x 1944	CMOS 1/2.2"	7	67 db	F Scope

Digital videocameras Visiocam ISHD series



- No "wake effect", thanks to an high Fps value.
- Micro SD card included, for direct image storage.

CODE	VISIOCAM ISHD	MPIXELS	RESOLUTION	PORTS	FRAME/SEC.	SOFTWARE
K71638	IS DV 6000 HD	6.0	3264 x 1836	HDMI - USB 2 - micro SD	60	IS Capture

Digital videocameras Delta Pix Invenio II series



MODEL	MPIXELS	RESOLUTION	SENSOR	FRAME/SEC.	DINAMIC RANGE	SOFTWARE
Invenio 5S II	5.0	2592 x 1944	CMOS 1/2.5"	7	48 db	INSIGHT
Invenio 5D II	5.1	2608 x 1956	CCD 1/1.8"	3	61 db	INSIGHT

Delta Pix (DK) modular professional software INSIGHT

MODULE SOFTWARE	ADVANCED FUNCTIONS	ACTIVATION
INSIGHT BASIC	Reports - Dimensional measures	USB hardware key
INSIGHT EE EF	Focal extension (focal plans recomposition)	USB hardware key

Optional accessories for all models:

- C-mount TV adapters.
- Glass specimens for software calibration.
- INSIGHT software additional modules.

