



BIOLOGICAL MICROSCOPE

BIOLOGICAL MICROSCOPE BEM2Z1 TO BEM2Z4

ECONOMICAL BIOLOGICAL MICROSCOPE

The Economical Biological Microscope is an affordable and reliable solution for educational, laboratory, and clinical applications. Designed to meet the needs of students, researchers, and professionals, this microscope provides clear and detailed imaging of biological specimens at an exceptional value.



SPECIFICATIONS

Model	BEM2Z1	BEM2Z2	BEM2Z3	BEM2Z4
Old Model	BMIC-701	BMIC-702	BMIC-703	BMIC-704
Viewing Head	Monocular head inclined at 30°, 360° rotatable	Compensation free binocular head inclined at 30°, 360° rotatable	Compensation free trinocular head, 360° rotatable	Dual viewing head, one tube 30° inclined and another tube vertical, 360° rotatable
Achromatic Objectives	4X, 10X, 40X(Spring), 100X(Spring, Oil)			
Eyepiece	Wide field eyepiece: WF10X(WF16X optional)			
Stage	Double layer mechanical stage size 115*125mm			
Focusing	Coaxial coarse and fine adjustment, focusing range 30mm, focusing interval 0.002mm			
Condenser	Abbe NA=1.25 with Iris diaphragm&filter			
Illumination	LED(1W) lamp 220V or 110V(LED 3W lamp optional)			
Power Supply	AC110/220V±10%, 50/60Hz			
Package Size	450*360*240mm			
Gross Weight	5kg			
Alt Name	Economical Biological Microscope			



BEM2Z1



BEM2Z2



BEM2Z3



BEM2Z4

BIOLOGICAL MICROSCOPE BEM2BL1 BEM2BL2

MULTI-FUNCTION DIGITAL BIOLOGICAL MICROSCOPE

The Biological Microscope is a powerful scientific instrument for studying the microscopic world of biology. It offers high-resolution imaging, versatile observation modes, and precision controls, making it an indispensable tool for researchers, educators, and enthusiasts.



SPECIFICATIONS

Model	BEM2BL1	BEM2BL2
Old Model	BMIC-601	BMIC-602
Optical System	/	Infinite optical system
Viewing Head	Siedentopf binocular viewing head, inclined at 30°	
Eyepiece	WF10X/18	WF10X/20
Objective	Achromatic objective 4X,10X, 40X,100X	Infinite plan achromatic objective 4X,10X, 40X,100X
Nosepiece	Quadruple nosepiece	Backward quadruple nosepiece
Focusing	Coaxial coarse&fine adjustment, fine division 0.002mm, coarse stroke 37.7mm per rotation, fine stroke 0.2mm per rotation, moving range 20mm	
Stage	Double layers mechanical stage: 132*142mm, moving range: 75*40mm	Rectangular 230*150mm stage, moving range: 78*54mm,
Condenser	Abbe condenser NA1.25 with aperture diaphragm	
Illumination	S-LED Illumination, brightness adjustable	
Power Supply	110~220V, 50/60Hz	
Accessories	Photo attachment, video attachment	Photo attachment, video attachment Polarization set, phase contrast kit
Package Size	323*264*440mm	380*260*510mm
Gross Weight	6.5kg	10kg
Alt Name	Multi-function Digital Biological Microscope	



BIOLOGICAL MICROSCOPE BEM2BC1 BEM2BC2

DIGITAL BIOLOGICAL MICROSCOPE

The Biological Microscope is a powerful scientific instrument for studying the microscopic world of biology. It offers high-resolution imaging, versatile observation modes, and precision controls, making it an indispensable tool for researchers, educators, and enthusiasts.



SPECIFICATIONS

Model	BEM2BC1	BEM2BC2
Optical System	Finite Optical System	Infinite Optical System
Viewing Head	Seidentopf Binocular Viewing Head Inclined at 30°, Interpupillary 47~78mm	Seidentopf Trinocular Viewing Head Inclined at 30°, Interpupillary 47~78mm
Eyepiece	Wide Field Eyepiece WF 10X/18	
Objective	Achromatic Objective 4X, 10X, 40X, 100X	Infinite Semi-plan Achromatic Objectives 4X, 10X, 40X, 100X
Nosepiece	Backward Quadruple Nosepiece	Quadruple Nosepiece
Stage	Double Layers Mechanical Stage 140mmx140mm/75mmx50mm	
Condenser	NA1.25 Abbe Condenser	Sliding-in Centerable condenser NA1.25, Dark Field Condenser(Dry, Oil)
Focusing System	Coaxial Coarse and Fine Adjustment, Fine Division 0.002mm, Moving Range 25mm	Coaxial Coarse and Fine Adjustment, Fine Division 0.002mm, Coarse Stroke 37.7mm per Rotation, Fine Stroke 0.2mm per Rotation, Moving Range 20mm
Illumination	S-LED Illumination, Brightness Adjustable	
Accessories	Phase Contrast Kit, Fluorescent Attachment, Polarization Set	
Power Supply	AC110~220V, 50/60Hz	
Packing Size (mm)	380x270x470mm	350x350x640mm
Gross Weight (kg)	8.5	12
Alt Name	Digital Biological Microscope	



BEM2BC1



BEM2BC2

BIOLOGICAL MICROSCOPE BEM2BD1 TO BEM2BD4

DIGITAL MICROSCOPE

The Digital Microscope is an advanced imaging solution designed to offer high-resolution observation and precise analysis in scientific research, industrial inspection, and educational applications.



SPECIFICATIONS

Model	BEM2BD1	BEM2BD2	BEM2BD3	BEM2BD4
Old Model	BMIC-201	BMIC-202	BMIC-203	BMIC-204
Viewing Head	Sliding Trinocular Head Inclined at 45°		Compensation Free Trinocular Head inclined at 30°	10° LCD
Nosepiece	Ball Beating Quadruple Nosepiece			
Eyepiece	WF10X/18mm			
Objective	Achromatic 4X, 10X, 40X(S), 100X(S, O)		Plan Achromatic 4X, 10X, 40X(S), 100X(S, O)	
Stage	Double Layer Mechanical Stage 135*140mm			
Condenser	ABBE NA1.25 condenser with Iris Diaphragm&filter, rack&pinion adjustable			
Illumination	Build-in Illumination			
Power Supply	AC100~240V, 50/60Hz			
Package	Cartoon with foam			
Package Size	250*360*460mm			
Gross Weight	8kg			
Image Sensor	1/3 SONY CCD			
Signal System	PAL/NTSC			
Scanning Frequency	Horizontal: 15.62KHz; Vertical: 50Hz			
Horizontal Resolution	480TV/520TV			
Min Illumination	F1.20.5LUX; 0.01LUX			
Gain Control	Auto			
48S/N Ratio	50dB AGC			
Video Output	BNC 1.0VP-P.75			
Backlight Compensation	OFF/ON			
Electronic Shuttle	AUTO IRIS EE			
Camera Interface	CS			
Balance	Auto			
Power	DC 12V			

Optional cameras: 5M, 6M, 8M, 10M, 12M, 16M, 18M, 20M(DC2000B)(only for Trinocular microscope).	
Alt Name	Digital Microscope



BEM2BD1



BEM2BD2



BEM2BD3



BEM2BD4

BIOLOGICAL MICROSCOPE BEM2K1 BEM2K2

BUILD-IN CAMERA BIOLOGICAL MICROSCOPE

A biological microscope is a kind of precision optical instrument used to observe biological sections, biological cells, bacteria and living tissue culture, fluid precipitation, etc. It can also observe other transparent or translucent objects as well as powder, fine particles and other objects.



SPECIFICATIONS

Model	BEM2K1	BEM2K2
Old Model	BMIC-207	BMIC-208
Viewing Head		
--Compensation Free Binocular Head, Inclined at 30°, Interpupillary Distance 48~75mm	yes	
--Valid Pixel	1280*1024(1.3M Pixel)	2048*1036(3.0M Pixel)
--Valid Pixel 1600*1200(2.0M Pixel)	•	/
--Valid Pixel 2052*1944(5.0M Pixel)	/	•
--Camera System Output Mode	USB2.0	
--Camera System Operation System	WINDOWS7/8 2000/XP/VISTA	
--Camera System Software	Scope image 9.0	
--Range of Viewing Field	>90%	18mm
Eyepiece: WF10X/18	yes	
Eyepiece: P16X/11	•	/
Eyepiece: Extra Wide Field Eyepiece EW10X/20 with Diopter Adjustment	/	•

Objective	/	•
--Achromatic Objective	4X, 10X, 40X, 100X	/
--Infinite Plan Achromatic Objective	/	4X, 10X, 40X, 100X
-- Infinite Plan Achromatic Phase Objective	/	•
--Oil Darkfield Objective with Iris Diaphragm	/	•
Nosepiece: Backward Quadruple Nosepiece	yes	/
Nosepiece: Quadruple Nosepiece	/	yes
Stage	Double Layers Mechanical Stage 140*140mm, Moving Range 75*50mm	
Focusing	Coaxial Coarse&Fine Adjustment System, Range 24mm, Fine Division 0.004mm	Coaxial Coarse&Fine Adjustment System, Range 20mm
Condenser	Abbe NA1.20 with Iris Diaphragm&Filter	Swing Condenser N.A.0.9/0.25
Illumination	LED 3W, Brightness Adjustable	S-LED Powerful Illumination
Power Supply	AC110~220V, 50/60Hz	
Accessories: Phase Contrast Kit		•
Accessories: Dark-Field Attachment		•
Accessories: Polarization Attachment		•
Package Size	396*262*492mm	334*334*533mm
Gross Weight	7.5kg	12.5kg
Note: •Optional, \ Without this feature		
Alt Name	Build-in Camera Biological Microscope	



BEM2K1



BEM2K2

BIOLOGICAL MICROSCOPE BEM2BF1 BEM2BF2

FLUORESCENCE BIOLOGICAL MICROSCOPE

The Fluorescence Biological Microscope is an advanced imaging instrument designed for high-precision analysis of biological samples under fluorescence illumination.



SPECIFICATIONS

Model	BEM2BF1	BEM2BF2
Old Model	BMIC-401	BMIC-402
View Head	Binocular head	Trinocular head
Fluorescent Straight Illumination	B(Blue), G(Green) exciting light filter system O ordinary light system 100W HBO Super high-pressured spherical mercury lamp	
Protection Screen	Screen to resist the UV	
Nosepiece	Quadruple nosepiece	
Connecting Wire	With 2 connectors	
Fluorescent Free Objective	4X,10X, 40X, 100X(Oil)	
Immersion Oil	Fluorescent free oil	
Power Supply	AC100~240V, 50/60Hz	
Package Size	320*270*425mm	150*300*250mm
Gross Weight	7kg	3kg
Alt Name	Fluorescence Biological Microscope	



BEM2BF1



BEM2BF2

BIOLOGICAL MICROSCOPE BEM2BM1 BEM2BM2

POLARIZING BIOLOGICAL MICROSCOPE

Polarizing biological microscope is a kind of microscope which uses the polarization property of light to study and identify birefringent substances. By converting ordinary light into polarized light for observation, it is able to clearly distinguish between monorefractive(isotropic) and birefringent(anisotropic) substances. Polarizing microscopes are widely used in geology, minerals, metallurgy, chemical industry, semiconductor industry and many other fields .



SPECIFICATIONS

Model	BEM2BM1	BEM2BM2
Old Model	BMIC-301	BMIC-302
Viewing Head	Sliding Binocular Head at 45°, 360° rotatable	Sliding Trinocular Head at 45°, 360° rotatable
Eyepiece	Eyepiece WF10X/18 with Scale of Crosshair Eyepiece WF10X/18	
Objective	Strain free Achromatic Objective 4X, 10X, 40X	
Nosepiece	Toward Quadruple Nosepiece, Center Adjustable	
Analyzer	Rotatable Analyzer with Gradation 0°~90°	
Bertrand Lens	Bertrand Lens, Sliding in/out of Optical Path	
Optical Compensator	λ Slip(first class red)1/4 λ Slip Quartz wedge	
Revolving Round Stage	Diameter Φ 160mm, Graduated in 1° Increments, Minimum Resolution 6 when using Vernier Scale	
Condenser	Abbe Condenser with Iris Diaphragm & Filter	
Focusing	Coaxial Coarse&Fine Adjustment, Range 28mm, Fine Division 0.002mm	
Polarizer	Sliding in/out of Optical Path, Located on the Top of Collector	
Illumination	6V/20W Halogen Lamp, Brightness Adjustable	
Power Supply	AC110~220V, 50/60Hz	
Package Size	327*273*425mm	
Gross Weight	7.5kg	
Alt Name	Polarizing Biological Microscope	

BIOLOGICAL MICROSCOPE BEM2BE1 BEM2BE2

INVERTED MICROSCOPE



SPECIFICATIONS

Model	BEM2BE1	BEM2BE2
Old Model	BMIC-503	BMIC-504
Viewing Head	Trinocular viewing head, inclined at 45°	Trinocular viewing head, inclined at 30°
Eyepiece	WF10X/20mm	EW10X/22mm
Objective	LWD Plan objective 4X,10X,20X, 40X	LWD Infinite plan objective 4X,10X,20X, 40X Infinite plan objective 10X,20X, 40X
Stage	Double layers mechanical stage, stage size:224*172mm, central stage:φ110mm, moving range: 75*50mm	Plain stage: 160*250mm, glass insert, attachable mechanical stage, X-Y coaxial control, moving range: 120*78mm Auxiliary stage 70*180mm, Terasaki holder, Petri dish holderφ35mm/φ54mm/φ90mm, slide glass holderφ54mm
Condenser	NA 0.3 Abbe condenser W.D. 75mm	ELWD Condenser NA 0.3, LWD 72mm (without condenser 150mm)
Interpupillary Distance	50-75mm/48-75mm	
Focusing	Coaxial coarse& fine adjustment, fine division 0.002mm	
Phase Contrast Sliding Plate	Center of phase contrast ring plate adjustable	Center of phase contrast ring plate adjustable 10X, 20X, 40X phase annulus plate (fixed) 10X, 20X, 40X phase annulus plate (adjustable)
Center Telescope	Center telescope	Center telescope(φ30mm)
Illumination	Halogen lamp 12V30W, adjustable brightness	LED lamp 3W/Halogen lamp 6V/30W
Filter	Blue, green, yellow and frosted glass	Blue, green and frosted glass
Optional Accessories	B, G wave band, 220V(110V)/100W Fluorescent Mercury lamp; photograph connecting tube, adapter with MD or PK mount, 4X photography eyepiece	Inverted fluorescent attachment, photo attachment, video adapter with C mount
Power Supply	AC 110/220V±10%,50/60Hz	
Package Size	350*250*580mm	468*397*665mm
Gross Weight	15kg	
Alt Name	Inverted Microscope	



BEM2BE1



BEM2BE2

BIOLOGICAL MICROSCOPE BEM2BB1

INVERTED BIOLOGICAL MICROSCOPE

The inverted biological microscope is a microscope specifically designed for viewing living cells and other biological samples in culture. Its main feature is that the position of the objective lens and the lighting system is reversed, the objective lens is under the stage, and the transmitted light source is above the stage. This design makes the inverted biological microscope particularly suitable for applications in cell culture, tissue culture, plankton, environmental protection, and food inspection.



SPECIFICATIONS

Model	BEM2BB1
Old Model	BMIC-501
Optical System	Infinite Optical System
Viewing Head	Trinocular Head Inclined at 30°, Interpupillary Distance 48~75mm
Eyepiece	High-point, Extra Wide Field Eyepiece EW10X/22
Objective - LWD Infinite Plan Objective 4X/0.1, WD 17.3mm	yes
Objective - LWD Infinite Plan Objective 10X/0.25, WD 10mm	optional
Objective - LWD Infinite Plan Objective 20X/0.4, WD 5.1mm	optional
Objective - LWD Infinite Plan Objective 40X/0.6, WD 2.1mm	yes
Objective - Infinite Plan Phase Objective PH10X/0.25, WD 10mm	yes
Objective - Infinite Plan Phase Objective PH20X/0.4, WD 5.1mm	yes
Objective - Infinite Plan Phase Objective PH40X/0.65, WD 2.1mm	optional
Nosepiece	Quintuple Nosepiece
Condenser	ELWD Condenser NA 0.3, LWD 72mm (Without Condenser 150mm)
Centering	Centering Telescope(Φ30MM) •
Phase Annulus - 10X~20X, Phase Annulus Plate(Fixed)	yes

Phase Annulus - 10X~20X, 40X Phase Annulus Plate(Adjustable)	optional
Stage - Plain Stage	160X250mm
Stage - Glass Insert	yes
Stage - Attachable Mechanical Stage	X-Y Coaxial Control, Moving Rang 120X78mm •
Stage - Auxiliary Stages	70X180mm
Stage - Terasaki Holder	yes
Stage - Φ 35mm Petri Dish Holder	optional
Stage - Φ 54mm Slide Glass Holder	optional
Stage - Φ 90mm Petri Dish Holder	optional
Focusing	Coaxial Coarse and Fine Adjustment, Fine Division 0.002mm, Coarse Stroke 37.7mm per Rotation, Fine Stroke 0.2mm per Rotation, Moving Range up 8mm, down 3mm
Illumination - Halogen Lamp	6V/30W
Illumination - LED	optional
Filter	Blue, Green and Ground Glass, Diameter 45mm
Power Supply	AC110~220V, 50/60Hz
Accessories	Inverted fluorescent attachment FL-100, Photo Attachment, Video Adapter with C Mount •
Package Size	468*397*665mm
Gross Weight	15.5kg
Alt Name	Inverted Biological Microscope

BIOLOGICAL MICROSCOPE BEM2BA1

INVERTED BIOLOGICAL MICROSCOPE

The inverted biological microscope is a microscope specifically designed for viewing living cells and other biological samples in culture. Its main feature is that the position of the objective lens and the lighting system is reversed, the objective lens is under the stage, and the transmitted light source is above the stage. This design makes the inverted biological microscope particularly suitable for applications in cell culture, tissue culture, plankton, environmental protection, and food inspection.



SPECIFICATIONS

Model	BEM2BA1
Old Model	BMIC-502
Optical System	Infinite optical system
Viewing Head	Seidentopf trinocular viewing head, inclined at 45°, 360° rotatable, Interpupillary 48~75mm
Eyepiece - Wide field eyepiece WF10X/22	yes

Eyepiece - Wide field eyepiece WF15X/16	optional
Eyepiece - Wide field eyepiece WF20X/12	optional
Objective - LWD infinite plan achromatic objective 4X/0.10 WD=22	yes
Objective - LWD infinite plan achromatic phase objective 10X/0.25 WD=6	yes
Objective - LWD infinite plan achromatic phase objective 20X/0.4 WD=3.1	yes
Objective - LWD infinite plan achromatic phase objective 40X/0.55 WD=2.2	yes
Objective - High-level phase contrast objective 10X/0.25 WD=6	optional
Objective - High-level phase contrast objective 20X/0.4 WD=3.1	optional
Objective - High-level phase contrast objective 40X/0.55 WD=2.2	optional
Objective - Lamp house adjustment objective	yes
Nosepiece	Backward quintuple nosepiece
Condenser	ELWD condenser NA0.3, LWD72mm(without condenser 150mm)
Centering Telescope	Centering telescope(Φ 30mm)
Phase Annulus	10X, 20X, 40X phase annulus plate(adjustable)
Stage - Plain stage	230X170
Stage - Glasse insert	yes
Stage - Attachable mechanical stage	X, Y coaxial control, moving rang 80X120mm
Stage - Auxiliary stage	yes
Stage - Terasaki holder	yes
Stage - Petri dish holder Φ 38	yes
Stage - Petri dish holder Φ 54	yes
Focusing System	Coaxial coarse and fine adjustment, fine division 0.002mm, moving range up 4.5mm down 4.5mm
Illumination	6V, 30W halogen lamp, brightness adjustable
Filter	Blue, green and ground glass, diameter 45mm
Power Supply	110~220V, 50/60Hz
Accessories - Photo attachment	optional
Accessories - C Mount 0.4X	optional
Package Size	630*350*620mm
Gross Weight	15kg
A Trinocular microscope can be installed on the camera and screen.	
Alt Name	Inverted Biological Microscope



Biolab Scientific Ltd.

Trillium Executive Center, East Tower, 675 Cochrane Dr, Markham, Ontario L3R 0B8, Canada

Email: info@biolabscientific.com | Website: www.biolabscientific.com