

Compound microscope KERN OBT-1



Note

Please request special conditions for a classroom set



Monocular version



Objectives OBT

EDUCATIONAL LINE

The modern compound microscope for teaching in your class room

Features

- The KERN OBT range is a high-quality school microscope, which will impress you with its intuitive control elements, sturdy construction and modern design
- The infinitely dimmable 1W LED guarantees optimum illumination of the samples and also ensures long service life. Mobile use is also no problem through optional battery operation
- The simple 0.65 condenser lens with adjustable aperture diaphragm on the OBT 101 ensures the very best concentration of light and illumination of the sample. The OBT 102, 103, 104, 105, 106 models have a 1.25 Abbe condenser which is height-adjustable and can therefore be focussed and has an aperture diaphragm, which ensures the very best concentration of light
- To focus the object accurately, all models have a coarse and fine focusing knob on both sides. The mechanical angle table enables you to work with the samples and move them rapidly (for OBT 103, 104, 105, 106 models)
- A large selection of different eyepieces and objectives is also available
- A dust cover as well as user instructions are included with the delivery
- Please find detailed information in the following model outfit list

Scope of application

- Primary school, secondary school, training, hobby use

Applications/Samples

- Translucent, thin, high-contrast, less complex samples (e.g. plant tissue, coloured cells/parasites)

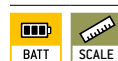
Technical data

- Finite optical system (DIN)
- Triple (OBT 101) or quadplex (OBT 102, 103, 104, 105, 106) nosepiece
- Tube 45° inclined/360° rotatable
- Diopter adjustment: Both-sided (for binocular models)
- Overall dimensions W×D×H 195×147×325 mm
- Net weight approx. 2,5 kg

STANDARD



OPTION



not OBT 101

Model	Standard configuration					
	Tube	Eyepiece	Objective quality	Objectives	Illumination	Stage
KERN						
OBT 101	Monocular	HWF 10×/∅ 18 mm	Achromatic	4x/10x/40x	1W LED (transmitted)	fix
OBT 102	Monocular	HWF 10×/∅ 18 mm	Achromatic		1W LED (transmitted)	fix
OBT 103	Monocular	HWF 10×/∅ 18 mm	Achromatic		1W LED (transmitted)	mechanical
OBT 104	Binocular	HWF 10×/∅ 18 mm	Achromatic		1W LED (transmitted)	mechanical
OBT 105	Monocular	HWF 10×/∅ 18 mm	Achromatic	4x/10x/40x/100x	1W LED (transmitted)	mechanical
OBT 106	Binocular	HWF 10×/∅ 18 mm	Achromatic		1W LED (transmitted)	mechanical

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Model outfit		Model KERN						Order number
		OBT 101	OBT 102	OBT 103	OBT 104	OBT 105	OBT 106	
Eyepieces (23,2 mm)	WF 10×/ø 18 mm	✓	✓	✓	✓✓	✓	✓✓	OBB-A3200
	WF 10×/ø 18 mm (with Pointer)	○	○	○	○	○	○	OBB-A3201
	WF 10×/ø 18 mm (reticule 0,1 mm)	○	○	○	○	○	○	OBB-A3202
Achromatic objectives	4×/0,10 W.D. 27 mm	✓	✓	✓	✓	✓	✓	OBB-A3203
	10×/0,25 W.D. 7 mm	✓	✓	✓	✓	✓	✓	OBB-A3204
	40×/0,65 (spring-loaded) W.D. 0,6 mm	✓	✓	✓	✓	✓	✓	OBB-A3205
	100×/1,25 (oil) (spring-loaded) W.D. 0,2 mm	○	○	○	○	✓	✓	OBB-A3207
	60×/0,85 (spring-loaded) W.D. 0,4 mm	○	○	○	○	○	○	OBB-A3206
Monocular tube	45° inclined/360° rotatable	✓	✓	✓	○	✓	○	OBB-A3221
Binocular tube	<ul style="list-style-type: none"> • Siedentopf 45° inclined/360° rotatable • Interpupillary distance 48-75 mm • Diopter adjustment: One-sided 	○	○	○	✓	○	✓	OBB-A3222
Fixed stage	<ul style="list-style-type: none"> • Stage size W×D 115×110 mm • Coaxial coarse and fine focusing knobs, scale: 2 µm 	✓	✓					
Mechanical stage	<ul style="list-style-type: none"> • Stage size W×D 115×110 mm • Travel 52×20 mm • Coaxial coarse and fine focusing knobs, scale: 2 µm • One slide holder 			✓	✓	✓	✓	
Condenser	Simple condenser N.A. 0,65	✓						
	Abbe N.A. 1,25 (aperture diaphragm)		✓	✓	✓	✓	✓	
Illumination	1 W LED spare bulb (transmitted)	✓	✓	✓	✓	✓	✓	OBB-A3208
Colour filters for transmitted illumination	Blue	○	○	○	○	○	○	OBB-A3212
	Green	○	○	○	○	○	○	OBB-A3210
	Yellow	○	○	○	○	○	○	OBB-A3211
	Grey	○	○	○	○	○	○	OBB-A3209

✓ = Included with delivery

○ = Option

Pictograms

360° rotatable microscope head	Fluorescence illumination for compound microscopes With 3 W LED illumination and filter	USB 3.0 digital camera For direct transmitting of the picture to a PC
Monocular Microscope For the inspection with one eye	Phase contrast unit For a higher contrast	WLAN data interface For transmitting of the picture to a mobile display device
Binocular Microscope For the inspection with both eyes	Darkfield condenser/unit For a higher contrast due to indirect illumination	HDMI digital camera For direct transmitting of the picture to a display device
Trinocular Microscope For the inspection with both eyes and the additional option for the connection of a camera	Polarising unit To polarise the light	PC software To transfer the measurements from the device to a PC
Abbe Condenser With high numerical aperture for the concentration and the focusing of light	Infinity system Infinity corrected optical system	Automatic temperature compensation For measurements between 10 °C and 30 °C
Halogen illumination For pictures bright and rich in contrast	Zoom magnification For stereomicroscopes	Protection against dust and water splashes IPxx: The type of protection is shown in the pictogram cf. DIN EN 60529:2000-09, IEC 60529:1989+A1:1999+A2:2013
LED illumination Cold, energy-saving and especially long-life illumination	Auto-focus For automatic control of the focus level	Battery operation Ready for battery operation. The battery type is specified for each device.
Incident illumination For non-transparent objects	Parallel optical system For stereomicroscopes, enables fatigue-proof working	Battery operation rechargeable Prepared for a rechargeable battery operation
Transmitting illumination For transparent objects	Integrated scale In the eyepiece	Plug-in power supply 230V/50Hz in standard version for EU. On request GB, AUS or USA version.
Fluorescence illumination for stereomicroscopes	SD card For data storage	Integrated power supply unit Integrated in microscope. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
Fluorescence illumination for compound microscopes With 100 W mercury lamp and filter	USB 2.0 digital camera For direct transmitting of the picture to a PC	Package shipment The time required to manufacture the product internally is shown in days in the pictogram.

Abbreviations

C-Mount Adapter for the connection of a camera to a trinocular microscope	LWD Long Working Distance	SWF Super Wide Field (Field number at least \varnothing 23 mm for 10 \times eyepiece)
FPS Frames per second	N.A. Numerical Aperture	W.D. Working Distance
H(S)WF High (Super) Wide Field (Eyepiece with high eye point for wearers of glasses)	SLR camera Single-Lens Reflex camera	WF Wide Field (Field number up to \varnothing 22 mm for 10 \times eyepiece)

Your KERN specialist dealer: