



**Note**  
Please request special conditions for a classroom set



**EDUCATIONAL LINE**

The fully equipped all-round compound microscope for school, training and laboratories

**Features**

- The KERN OBE series is a range of high-quality, fully-equipped compound microscopes, which can't be beaten in terms of ease of use and ergonomic design
- The strong and continuously dimmable 3 W LED guarantees optimum illumination of the samples and also ensures long service life. Mobile use of several models is also no problem through the use of rechargeable batteries
- The height-adjustable and thereby focusable 1,25 Abbe condenser with aperture diaphragm is a further quality feature of the OBE series and ensures the very best concentration of light
- Height adjustment of the fully-equipped mechanical stage is carried out using a coarse and fine focusing knob on both sides. The ergonomically designed coaxial drive enables you to work with the samples and move them rapidly
- A large selection of different eyepieces and objectives, a simple polarising unit and a darkfield kit are available to you as accessories
- A protective dust cover, eye cups, as well as multi-lingual user instructions are included in the scope of the delivery
- A C-mount adapter is required to connect a camera to the trinocular version. You can select this adapter from the following model outfit list
- Please find detailed information in the following model outfit list

**Scope of application**

- Training, haematology, sediment investigation, doctor's practise

**Applications/Samples**

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

**Technical data**

- Finite optical system
- Quadplex nosepiece
- Siedentopf 30° inclined/360° rotatable
- Diopter adjustment: One-sided (for binocular and trinocular models)
- Overall dimensions W×D×H 320×180×365 mm
- Net weight approx. 5,5 kg

STANDARD



OPTION



OBE 103,  
OBE 113

Model	Standard configuration				
	Tube	Eyepiece	Objective quality	Objectives	Illumination
<b>OBE 101</b>	Monocular	HWF 10×/ø 18 mm	Achromatic	4×/10×/40×	3 W LED (transmitted)
<b>OBE 102</b>	Binocular	HWF 10×/ø 18 mm	Achromatic		3 W LED (transmitted)
<b>OBE 103*</b>	Binocular	HWF 10×/ø 18 mm	Achromatic		3 W LED (transmitted) (battery incl., rechargeable)
<b>OBE 104</b>	Trinocular	HWF 10×/ø 18 mm	Achromatic		3 W LED (transmitted)
<b>OBE 111</b>	Monocular	HWF 10×/ø 18 mm	Achromatic	4×/10×/40×/100×	3 W LED (transmitted)
<b>OBE 112</b>	Binocular	HWF 10×/ø 18 mm	Achromatic		3 W LED (transmitted)
<b>OBE 113</b>	Binocular	HWF 10×/ø 18 mm	Achromatic		3 W LED (transmitted) (battery incl., rechargeable)
<b>OBE 114</b>	Trinocular	HWF 10×/ø 18 mm	Achromatic		3 W LED (transmitted)

\* ONLY WHILE STOCKS LAST

Compound microscopes KERN OBE-10 · 11

Model outfit		Model KERN				Order number	
		OBE 101	OBE 102	OBE 103	OBE 104		
<b>Eyepieces</b> (23,2 mm)	HWF 10×/∅ 18 mm	✓	✓✓	✓✓	✓✓	OBB-A1403	
	WF 16×/∅ 13 mm	○	○○	○○	○○	OBB-A1354	
	HWF 10×/∅ 18 mm (with Pointer)	○	○	○	○	OBB-A1348	
	HWF 10×/∅ 18 mm (reticule 0,1 mm) (non-adjustable)	○	○	○	○	OBB-A1349	
<b>Achromatic objectives</b>	4×/0,10 W.D. 18,6 mm	✓	✓	✓	✓	OBB-A1111	
	10×/0,25 W.D. 6,5 mm	✓	✓	✓	✓	OBB-A1108	
	40×/0,65 (spring-loaded) W.D. 0,47 mm	✓	✓	✓	✓	OBB-A1112	
	100×/1,25 (oil) (spring-loaded) W.D. 0,07 mm	○	○	○	○	OBB-A1109	
	20×/0,40 (spring-loaded) W.D. 1,75 mm	○	○	○	○	OBB-A1110	
	60×/0,85 (spring-loaded) W.D. 0,1 mm	○	○	○	○	OBB-A1113	
	E-Plan 100×/0,80 (dry) (spring-loaded) W.D. 0,15 mm	○	○	○	○	OBB-A1442	
	Plan 100×/1,0 (water) (spring-loaded) W.D. 0,18 mm	○	○	○	○	OBB-A1441	
<b>Monocular tube</b>	30° inclined/360° rotatable	✓				OBB-A1227	
<b>Binocular tube</b>	<ul style="list-style-type: none"> <li>· Siedentopf 30° inclined/360° rotatable</li> <li>· Interpupillary distance 50 – 75 mm</li> <li>· Diopter adjustment: One-sided</li> </ul>		✓	✓		OBB-A1123	
<b>Trinocular tube</b>	<ul style="list-style-type: none"> <li>· see binocular tube</li> <li>· Light distribution 20:80</li> </ul>				✓	OBB-A1341	
<b>Mechanical stage</b>	<ul style="list-style-type: none"> <li>· Stage size W×D 125×115 mm</li> <li>· Travel 50×70 mm</li> <li>· Coaxial coarse and fine focusing knobs, scale: 2 µm</li> </ul>	✓	✓	✓	✓		
<b>Condenser</b>	Abbe N.A. 1,25 (aperture diaphragm)	✓	✓	✓	✓	OBB-A1101	
<b>Darkfield unit</b>	Usable for 4× – 40× objectives	○	○	○	○	OBB-A1148	
<b>Polarising unit</b>	Analyser/Polariser	○	○	○	○	OBB-A1276	
<b>Illumination</b>	3 W LED illumination system (transmitted) (non-rechargeable)	✓	✓		✓		
	3 W LED illumination system (transmitted) (rechargeable)			✓			
<b>Colour filters for transmitted illumination</b>	Blue	○	○	○	○	OBB-A1466	
	Green	○	○	○	○	OBB-A1467	
	Yellow	○	○	○	○	OBB-A1468	
	Grey	○	○	○	○	OBB-A1184	
<b>C-Mount</b>	0,5× (focus adjustable)				○	OBB-A1137	
	1×				○	OBB-A1139	

✓ = Included with delivery

○ = Option

Compound microscopes KERN OBE-10 · 11

Model outfit		Model KERN				Order number	
		OBE 111	OBE 112	OBE 113	OBE 114		
<b>Eyepieces</b> (23,2 mm)	HWF 10×/∅ 18 mm	✓	✓✓	✓✓	✓✓	OBB-A1403	
	WF 16×/∅ 13 mm	○	○○	○○	○○	OBB-A1354	
	HWF 10×/∅ 18 mm (with Pointer)	○	○	○	○	OBB-A1348	
	HWF 10×/∅ 18 mm (reticule 0,1 mm) (non-adjustable)	○	○	○	○	OBB-A1349	
<b>Achromatic objectives</b>	4×/0,10 W.D. 18,6 mm	✓	✓	✓	✓	OBB-A1111	
	10×/0,25 W.D. 6,5 mm	✓	✓	✓	✓	OBB-A1108	
	40×/0,65 (spring-loaded) W.D. 0,47 mm	✓	✓	✓	✓	OBB-A1112	
	100×/1,25 (oil) (spring-loaded) W.D. 0,07 mm	✓	✓	✓	✓	OBB-A1109	
	20×/0,40 (spring-loaded) W.D. 1,75 mm	○	○	○	○	OBB-A1110	
	60×/0,85 (spring-loaded) W.D. 0,1 mm	○	○	○	○	OBB-A1113	
	E-Plan 100×/0,80 (dry) (spring-loaded) W.D. 0,15 mm	○	○	○	○	OBB-A1442	
	Plan 100×/1,0 (water) (spring-loaded) W.D. 0,18 mm	○	○	○	○	OBB-A1441	
<b>Monocular tube</b>	30° inclined/360° rotatable	✓				OBB-A1227	
<b>Binocular tube</b>	<ul style="list-style-type: none"> <li>· Siedentopf 30° inclined/360° rotatable</li> <li>· Interpupillary distance 50 – 75 mm</li> <li>· Diopter adjustment: One-sided</li> </ul>		✓	✓		OBB-A1123	
<b>Trinocular tube</b>	<ul style="list-style-type: none"> <li>· see binocular tube</li> <li>· Light distribution 20:80</li> </ul>				✓	OBB-A1341	
<b>Mechanical stage</b>	<ul style="list-style-type: none"> <li>· Stage size W×D 125×115 mm</li> <li>· Travel 50×70 mm</li> <li>· Coaxial coarse and fine focusing knobs, scale: 2 µm</li> </ul>	✓	✓	✓	✓		
<b>Condenser</b>	Abbe N.A. 1,25 (aperture diaphragm)	✓	✓	✓	✓	OBB-A1101	
<b>Darkfield unit</b>	Usable for 4× – 40× objectives	○	○	○	○	OBB-A1148	
<b>Polarising unit</b>	Analyser/Polariser	○	○	○	○	OBB-A1276	
<b>Illumination</b>	3 W LED illumination system (transmitted) (non-rechargeable)	✓	✓		✓		
	3 W LED illumination system (transmitted) (rechargeable)			✓			
<b>Colour filters for transmitted illumination</b>	Blue	○	○	○	○	OBB-A1466	
	Green	○	○	○	○	OBB-A1467	
	Yellow	○	○	○	○	OBB-A1468	
	Grey	○	○	○	○	OBB-A1184	
<b>C-Mount</b>	0,5× (focus adjustable)				○	OBB-A1137	
	1×				○	OBB-A1139	

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## Pictograms

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

## Abbreviations

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

Your KERN specialist dealer:



# WolfLabs

**Pricing on any accessories shown can be found by keying the part number into the search box on our website.**

The specifications listed in this brochure are subject to change by the manufacturer and therefore cannot be guaranteed to be correct. If there are aspects of the specification that must be guaranteed, please provide these to our sales team so that details can be confirmed.

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Please contact us if this literature doesn't answer all your questions.