Compound microscopes KERN OBE-10 · 11

Trinocular version

Monocular version

Note

Please request special conditions for a classroom set

Objectives OBE

Simple polarising unit

Darkfield unit

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 mechnical 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

360° | MONO | BINO | TRINO | ABBE | LED | RECHARGE (OBE 103, OBE 113) | 230 V | 1 DAY

OPTION

DF | POLAR | SCALE

Model KERN	Standard configuration					
	Tube	Eyepiece	Objective quality	Objectives	Illumination	
OBE 101	Monocular	HWF 10×/Ø 18 mm	Achromatic	4×/10×/40×	3 W LED (transmitted)	
OBE 102	Binocular	HWF 10×/Ø 18 mm	Achromatic		3 W LED (transmitted)	
OBE 103*	Binocular	HWF 10×/Ø 18 mm	Achromatic		3 W LED (transmitted) (battery incl., rechargeable)	
OBE 104	Trinocular	HWF 10×/Ø 18 mm	Achromatic		3 W LED (transmitted)	
OBE 111	Monocular	HWF 10×/Ø 18 mm	Achromatic	4×/10×/40×/100×	3 W LED (transmitted)	
OBE 112	Binocular	HWF 10×/Ø 18 mm	Achromatic		3 W LED (transmitted)	
OBE 113	Binocular	HWF 10×/Ø 18 mm	Achromatic		3 W LED (transmitted) (battery incl., rechargeable)	
OBE 114	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		
Eyepieces (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	
Achromatic objectives	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	
Monocular tube	30° inclined/360° rotatable	✓				OBB-A1227	
Binocular tube	· Siedentopf 30° inclined/360° rotatable · Interpupillary distance 50 – 75 mm · Diopter adjustment: One-sided		✓	✓		OBB-A1123	
Trinocular tube	· see binocular tube · Light distribution 20:80				✓	OBB-A1341	
Mechanical stage	· Stage size W×D 125×115 mm · Travel 50×70 mm · Coaxial coarse and fine focusing knobs, scale: 2 µm	✓	✓	✓	✓		
Condenser	Abbe N.A. 1,25 (aperture diaphragm)	✓	✓	✓	✓	OBB-A1101	
Darkfield unit	Usable for 4× – 40× objectives	○	○	○	○	OBB-A1148	
Polarising unit	Analyser/Polariser	○	○	○	○	OBB-A1276	
Illumination	3 W LED illumination system (transmitted) (non-rechargeable)	✓	✓		✓		
	3 W LED illumination system (transmitted) (rechargeable)			✓			
Colour filters for transmitted illumination	Blue	○	○	○	○	OBB-A1466	
	Green	○	○	○	○	OBB-A1467	
	Yellow	○	○	○	○	OBB-A1468	
	Grey	○	○	○	○	OBB-A1184	
C-Mount	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		
Eyepieces (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	
Achromatic objectives	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	
Monocular tube	30° inclined/360° rotatable	✓				OBB-A1227	
Binocular tube	· Siedentopf 30° inclined/360° rotatable · Interpupillary distance 50 – 75 mm · Diopter adjustment: One-sided		✓	✓		OBB-A1123	
Trinocular tube	· see binocular tube · Light distribution 20:80				✓	OBB-A1341	
Mechanical stage	· Stage size W×D 125×115 mm · Travel 50×70 mm · Coaxial coarse and fine focusing knobs, scale: 2 µm	✓	✓	✓	✓		
Condenser	Abbe N.A. 1,25 (aperture diaphragm)	✓	✓	✓	✓	OBB-A1101	
Darkfield unit	Usable for 4× – 40× objectives	○	○	○	○	OBB-A1148	
Polarising unit	Analyser/Polariser	○	○	○	○	OBB-A1276	
Illumination	3 W LED illumination system (transmitted) (non-rechargeable)	✓	✓		✓		
	3 W LED illumination system (transmitted) (rechargeable)			✓			
Colour filters for transmitted illumination	Blue	○	○	○	○	OBB-A1466	
	Green	○	○	○	○	OBB-A1467	
	Yellow	○	○	○	○	OBB-A1468	
	Grey	○	○	○	○	OBB-A1184	
C-Mount	0,5× (focus adjustable)				○	OBB-A1137	
	1×				○	OBB-A1139	

✓ = Included with delivery ○ = Option

Pictograms

360° rotatable microscope head

Monocular Microscope
For the inspection with one eye

Binocular Microscope
For the inspection with both eyes

Trinocular Microscope
For the inspection with both eyes and the additional option for the connection of a camera

Abbe Condenser
With high numerical aperture for the concentration and the focusing of light

Halogen illumination
For pictures bright and rich in contrast

LED illumination
Cold, energy-saving and especially long-life illumination

Incident illumination
For non-transparent objects

Transmitting illumination
For transparent objects

Fluorescence illumination
For stereomicroscopes

Fluorescence illumination for compound microscopes
With 100 W mercury lamp and filter

Fluorescence illumination for compound microscopes
With 3 W LED illumination and filter

Phase contrast unit
For a higher contrast

Darkfield condenser/unit
For a higher contrast due to indirect illumination

Polarising unit
To polarise the light

Infinity system
Infinity corrected optical system

Zoom magnification
For stereomicroscopes

Auto-focus
For automatic control of the focus level

Parallel optical system
For stereomicroscopes, enables fatigue-proof working

Integrated scale
In the eyepiece

SD card
For data storage

USB 2.0 digital camera
For direct transmitting of the picture to a PC

USB 3.0 digital camera
For direct transmitting of the picture to a PC

WLAN data interface
For transmitting of the picture to a mobile display device

HDMI digital camera
For direct transmitting of the picture to a display device

PC software
To transfer the measurements from the device to a PC

Automatic temperature compesation
For measurements between 10 °C and 30 °C

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

Battery operation
Ready for battery operation. The battery type is specified for each device.

Battery operation rechargeable
Prepared for a rechargeable battery operation

Plug-in power supply
230V/50Hz in standard version for EU. On request GB, AUS or USA version.

Integrated power supply unit
Integrated in microscope. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.

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 ⌀ 23 mm for 10× 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 ⌀ 22 mm for 10× 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.

www.wolflabs.co.uk

Tel : 01759 301142

Fax : 01759 301143

sales@wolflabs.co.uk

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