

Compound microscopes KERN OBL-12 · 13



Trinocular version



Simple polarising attachment

### LAB LINE

The flexible laboratory assistant with infinity optical system and fixed, pre-centred Koehler illumination

#### Features

- The OBL series stands out through its infinity optical unit and is therefore ideally suited for all demanding transmitted illumination applications. The robust and ergonomic stand base guarantees safe and comfortable working
- Depending on the application, there is a choice of models with strong, continuously dimmable 3 W LED or 20 W halogen illumination (Philips)
- The fixed, pre-centred and focusable 1,25 Abbe condenser with aperture diaphragm and field diaphragm gives you a simplified Koehler illumination, without having to move the centre
- The large mechanical stage and its specimen holder holds up to two samples at the same time and is quick and easy to focus using a coaxial coarse and fine focusing knob on both sides

- A large selection of eyepieces, objectives and colour filters as well as a darkfield condenser, a simple polarising unit, different phase contrast kits through to HBO and LED fluorescence units 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 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

- Haematology, urology, gynaecology, dermatology, pathology, microbiology and parasitology, immunology, oncology, entomology, vets, water analysis and breweries

#### Applications/Samples

- Translucent, thin, low-contrast, challenging samples (e.g. living mammal cells, bacteria, tissue)

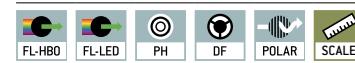
#### Technical data

- Infinity optical system
- Quadplex nosepiece
- Siedentopf 30° inclined/360° rotatable
- Diopter adjustment: One-sided
- Overall dimensions W×D×H 395×200×380 mm
- Net weight approx. 6,7 kg

#### STANDARD



#### OPTION



#### Model

#### Standard configuration

KERN	Tube	Eyepiece	Objective quality	Objectives	Illumination
OBL 125*	Binocular	HWF 10×/Ø 20 mm	Infinity E-Plan		20 W Halogen (transmitted)
OBL 127	Binocular	HWF 10×/Ø 20 mm	Infinity E-Plan	4×/10×/40×/100×	3 W LED (transmitted)
OBL 137	Trinocular	HWF 10×/Ø 20 mm	Infinity E-Plan		3 W LED (transmitted)

\* ONLY WHILE STOCKS LAST

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Model outfit	Model KERN	Order number		
	OBL 125	OBL 127	OBL 137	
<b>Eyepieces</b> (23,2 mm)	HWF 10×/Ø 20 mm	✓✓	✓✓	✓✓ OBB-A1404
	WF 16×/Ø 13 mm	○○	○○	○○ OBB-A1354
	HWF 10×/Ø 20 mm (with Pointer)	○	○	○ OBB-A1448
<b>Infinity E-Plan objectives</b>	4×/0,10 W.D. 12,1 mm	✓	✓	✓ OBB-A1161
	10×/0,25 W.D. 2,1 mm	✓	✓	✓ OBB-A1159
	40×/0,65 (spring-loaded) W.D. 0,58 mm	✓	✓	✓ OBB-A1160
	100×/1,25 (oil) (spring-loaded) W.D. 0,19 mm	✓	✓	✓ OBB-A1158
	Plan 20×/0,40 (spring-loaded) W.D. 2,41 mm	○	○	○ OBB-A1250
	Plan 60×/0,80 (spring-loaded) W.D. 0,33 mm	○	○	○ OBB-A1270
	Plan 100×/1,15 (water) (spring-loaded) W.D. 0,18 mm	○	○	○ OBB-A1437
<b>Binocular tube</b>	• Butterfly 30° inclined/360° rotatable • Interpupillary distance 50 – 75 mm (for infinity system) • Diopter adjustment: One-sided	✓	✓	○ OBB-A1578
<b>Trinocular tube</b>	• Butterfly 30° inclined/360° rotatable • Interpupillary distance 50 – 75 mm • Light distribution 20:80 (for infinity system) • Diopter adjustment: One-sided	○	○	✓ OBB-A1580
<b>Mechanical stage</b>	• Stage size W×D 145×130 mm • Travel 76×52 mm • Coaxial coarse and fine focusing knobs, scale: 2 µm • Two slide holder	✓	✓	✓
<b>Condenser</b>	Abbe N.A. 1,25 precentered (aperture diaphragm)	✓	✓	✓ OBB-A1103
<b>Darkfield condenser</b>	N.A. 0,85 – 0,91 (dry, paraboloid)	○	○	○ OBB-A1422
<b>Illumination</b>	20 W Halogen spare bulb (transmitted)	✓		OBB-A1643
	3 W LED illumination system (transmitted) (non-rechargeable)	✓	✓	
<b>Polarising unit</b>	Analyser/Polariser	○	○	○ OBB-A1277
<b>Phase contrast units (including PH-condenser and PH-slides)</b>	Single unit with ∞ PH-Plan objective 10×	○	○	○ OBB-A1215
	Single unit with ∞ PH-Plan objective 20×	○	○	○ OBB-A1217
	Single unit with ∞ PH-Plan objective 40×	○	○	○ OBB-A1219
	Single unit with ∞ PH-Plan objective 100×	○	○	○ OBB-A1213
	When several magnification levels are required, please contact us			
<b>Fluorescence unit</b>	100 W HBO Epi Fluorescence unit, three-hole slide (B/G) including centering objective	○	○	○ OBB-A1153
	3 W LED Epi Fluorescence unit, three-hole slide (B/G) including centering objective	○	○	○ OBB-A1157
<b>Colour filters for transmitted illumination</b>	Blue (built-in)	✓	✓	✓
	Green	○	○	○ OBB-A1188
	Yellow	○	○	○ OBB-A1165
	Grey	○	○	○ OBB-A1183
<b>C-Mount</b>	0,5× (focus adjustable)		○	OBB-A1515
	1×		○	OBB-A1514

✓ = Included with delivery

○ = Option

 <b>360° rotatable microscope head</b> For the inspection with one eye	 <b>Infinity system</b> Infinity corrected optical system	 <b>Battery operation</b> Ready for battery operation. The battery type is specified for each device.
 <b>Monocular Microscope</b> For the inspection with one eye	 <b>Zoom magnification</b> For stereomicroscopes	 <b>Battery operation rechargeable</b> Prepared for a rechargeable battery operation
 <b>Binocular Microscope</b> For the inspection with both eyes	 <b>Auto-focus</b> For automatic control of the focus level	 <b>Plug-in power supply</b> 230V/50Hz in standard version for EU. On request GB, AUS or USA version.
 <b>Trinocular Microscope</b> For the inspection with both eyes and the additional option for the connection of a camera	 <b>Parallel optical system</b> For stereomicroscopes, enables fatigue-proof working	 <b>Integrated power supply unit</b> Integrated in microscope. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
 <b>Abbe Condenser</b> With high numerical aperture for the concentration and the focusing of light	 <b>Integrated scale</b> In the eyepiece	 <b>Package shipment</b> The time required to manufacture the product internally is shown in days in the pictogram.
 <b>Halogen illumination</b> For pictures bright and rich in contrast	 <b>SD card</b> For data storage	 <b>1 DAY</b>
 <b>LED illumination</b> Cold, energy-saving and especially long-life illumination	 <b>USB 2.0 digital camera</b> For direct transmitting of the picture to a PC	
 <b>Incident illumination</b> For non-transparent objects	 <b>USB 3.0 digital camera</b> For direct transmitting of the picture to a PC	
 <b>Transmitting illumination</b> For transparent objects	 <b>WIFI data interface:</b> For transmitting of the picture to a mobile display device	
 <b>Fluorescence illumination</b> For stereomicroscopes	 <b>HDMI digital camera</b> For direct transmitting of the picture to a display device	
 <b>Fluorescence illumination for compound microscopes</b> With 100 W mercury lamp and filter	 <b>PC software</b> To transfer the measurements from the device to a PC.	
 <b>Fluorescence illumination for compound microscopes</b> With 3 W LED illumination and filter	 <b>Automatic temperature compensation</b> For measurements between 10 °C and 30 °C	
 <b>Phase contrast unit</b> For a higher contrast	 <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>Darkfield condenser/unit</b> For a higher contrast due to indirect illumination		
 <b>Polarising unit</b> To polarise the light		

## ABBREVIATIONS

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