



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)

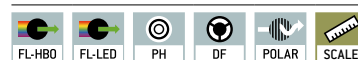
### Technical data

- 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				
	Tube	Eyepiece	Objective quality	Objectives	Illumination
<b>KERN OBL 125</b>	Binocular	HWF 10×/ø 20 mm	Infinity E-Plan	4×/10×/40×/100×	20 W Halogen (transmitted)
<b>OBL 127</b>	Binocular	HWF 10×/ø 20 mm	Infinity E-Plan		3 W LED (transmitted)
<b>OBL 135</b>	Trinocular	HWF 10×/ø 20 mm	Infinity E-Plan		20 W Halogen (transmitted)
<b>OBL 137</b>	Trinocular	HWF 10×/ø 20 mm	Infinity E-Plan		3 W LED (transmitted)

Compound microscopes KERN OBL-12 · 13

Model outfit		Model KERN				Order number	
		OBL 125	OBL 135	OBL 127	OBL 137		
Eyepieces (23,2 mm)	HWF 10×/∅ 20 mm	✓✓	✓✓	✓✓	✓✓	OBB-A1404	
	WF 16×/∅ 13 mm	○○	○○	○○	○○	OBB-A1354	
	HWF 10×/∅ 20 mm (with Pointer)	○	○	○	○	OBB-A1448	
Infinity E-Plan objectives	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	
Binocular tube	<ul style="list-style-type: none"> <li>Siedentopf 30° inclined/360° rotatable</li> <li>Interpupillary distance 50 – 75 mm (for infinity system)</li> <li>Diopter adjustment: One-sided</li> </ul>	✓	○	✓	○	OBB-A1130	
Trinocular tube	<ul style="list-style-type: none"> <li>Siedentopf 30° inclined/360° rotatable</li> <li>Interpupillary distance 50 – 75 mm</li> <li>Light distribution 20:80 (for infinity system)</li> <li>Diopter adjustment: One-sided</li> </ul>	○	✓	○		OBB-A1346	
					✓	OBB-A1549	
Mechanical stage	<ul style="list-style-type: none"> <li>Stage size W×D 145×130 mm</li> <li>Travel 76×52 mm</li> <li>Coaxial coarse and fine focusing knobs, scale: 2 µm</li> <li>Two slide holder</li> </ul>	✓	✓	✓	✓		
Condenser	Abbe N.A. 1,25 precentered (aperture diaphragm)	✓	✓	✓	✓	OBB-A1103	
Darkfield condenser	N.A. 0,85 – 0,91 (dry, paraboloid)	○	○	○	○	OBB-A1422	
Illumination	20 W Halogen spare bulb (transmitted)	✓	✓			OBB-A1370	
	3 W LED illumination system (transmitted) (non-rechargeable)			✓	✓		
Polarising unit	Analyser/Polariser	○	○	○	○	OBB-A1277	
Phase contrast units (including PH-condenser and PH-slides)	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						
Fluorescence unit	100 W HBO Epi Fluorescence unit, three-hole slide (B/G) including centering objective	○	○	○	○	OBB-A1154	
	3 W LED Epi Fluorescence unit, three-hole slide (B/G) including centering objective	○	○	○	○	OBB-A1157	
Colour filters for transmitted illumination	Blue (built-in)	✓	✓	✓	✓		
	Green	○	○	○	○	OBB-A1188	
	Yellow	○	○	○	○	OBB-A1165	
	Grey	○	○	○	○	OBB-A1183	
C-Mount	0,47× (focus adjustable)	○	○	○		OBB-A1135	
	0,5× (focus adjustable)				○	OBB-A1515	
	1×	○	○	○		OBB-A1142	
					○	OBB-A1514	

✓ = Included with delivery

○ = Option

## Pictograms

<b>360° rotatable microscope head</b>	<b>Fluorescence illumination for compound microscopes</b> With 3 W LED illumination and filter	<b>WLAN data interface</b> For transmitting of the picture to a mobile display device
<b>Monocular Microscope</b> For the inspection with one eye	<b>Phase contrast unit</b> For a higher contrast	<b>HDMI digital camera</b> For direct transmitting of the picture to a 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>PC software</b> To transfer the measurements from the device to a PC.
<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>Automatic temperature compensation</b> For measurements between 10 °C and 30 °C
<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>Protection against dust and water splashes IPxx</b> The type of protection is shown by the pictogram.
<b>Halogen illumination</b> For pictures bright and rich in contrast	<b>Zoom magnification</b> For stereomicroscopes	<b>Battery operation</b> Ready for battery operation. The battery type is specified for each device.
<b>LED illumination</b> Cold, energy saving and especially long-life illumination	<b>Parallel optical system</b> For stereomicroscopes, enables fatigue-proof working	<b>Battery operation rechargeable</b> Prepared for a rechargeable battery operation
<b>Incident illumination</b> For non-transparent objects	<b>Integrated scale</b> In the eyepiece	<b>Mains adapter</b> 230V/50Hz in standard version for EU. On request GB, AUS or USA version.
<b>Transmitting illumination</b> For transparent objects	<b>SD card</b> For data storage	<b>Power supply</b> Integrated in microscope. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
<b>Fluorescence illumination for stereomicroscopes</b>	<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.
<b>Fluorescence illumination for compound microscopes</b> With 100 W mercury lamp and filter	<b>USB 3.0 digital camera</b> For direct transmitting of the picture to a PC	

## 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)

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