



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
- 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, sewage treatment plants and breweries

#### Applications/Samples

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

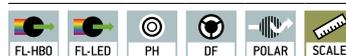
#### Technical data

- 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</b>					
<b>OBL 127</b>	Binocular	HWF 10×/ø 20 mm	Infinity E-Plan	4×/10×/40×/100×	3 W LED (transmitted)
<b>OBL 137</b>	Trinocular	HWF 10×/ø 20 mm	Infinity E-Plan	4×/10×/40×/100×	3 W LED (transmitted)

Model outfit		Model KERN		Order number
		OBL 127	OBL 137	
<b>Eyepieces</b> (23,2 mm)	HWF 10×/∅ 20 mm	✓✓	✓✓	OBB-A1404
	WF 16×/∅ 13 mm	○○	○○	OBB-A1354
	HWF 10×/∅ 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>	<ul style="list-style-type: none"> <li>• Butterfly 30° inclined/360° rotatable</li> <li>• Interpupillary distance 50 – 75 mm (for infinity system)</li> <li>• Diopter adjustment: One-sided</li> </ul>	✓	○	OBB-A1578
<b>Trinocular tube</b>	<ul style="list-style-type: none"> <li>• Butterfly 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-A1580
<b>Mechanical stage</b>	<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>	✓	✓	
<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</b> (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			
<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</b> for transmitted illumination	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>	<b>Fluorescence illumination for compound microscopes</b> With 100 W mercury lamp and filter	<b>Integrated scale</b> In the eyepiece	<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>Fluorescence illumination for compound microscopes</b> With 3 W LED illumination and filter	<b>SD card</b> For data storage	<b>Battery operation rechargeable</b> Prepared for a rechargeable battery operation
<b>Binocular Microscope</b> For the inspection with both eyes	<b>Phase contrast unit</b> For a higher contrast	<b>USB 2.0 interface</b> For data transmission	<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>Darkfield condenser/unit</b> For a higher contrast due to indirect illumination	<b>USB 3.0 interface</b> For data transmission	<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>Polarising unit</b> To polarise the light	<b>WIFI data interface:</b> For transmitting of the picture to a mobile display device	<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>Infinity system</b> Infinity corrected optical system	<b>HDMI digital camera</b> For direct transmitting of the picture to a display device	<b>Pallet shipment</b> The time required to manufacture the product internally is shown in days in the pictogram.
<b>LED illumination</b> Cold, energy-saving and especially long-life illumination	<b>Zoom magnification</b> For stereomicroscopes	<b>PC software</b> To transfer the measurements from the device to a PC.	
<b>Incident illumination</b> For non-transparent objects	<b>Auto-focus</b> For automatic control of the focus level	<b>Automatic temperature compensation</b> For measurements between 10 °C and 30 °C	
<b>Transmitting illumination</b> For transparent objects	<b>Parallel optical system</b> For stereomicroscopes, enables fatigue-proof working	<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>Fluorescence illumination</b> For stereomicroscopes			

## Abbreviations

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