



Specimen stage and illumination unit



Analyser/Polariser

**LAB LINE**

The inverted metallurgical microscope for professional applications

**Features**

- The KERN OLM range is part of the range of inverted microscopes and stands out through its design which is ergonomic, robust and extremely stable. This range, with its large working distance is, for example, particularly suitable for surface quality testing of raw materials and finished products in industry
- Strong and continuously adjustable 50W halogen illumination unit ensures the optimum illumination of the materials to be tested
- As standard, the OLM range is fitted with a trinocular eyepiece tube
- A simple polarising unit (analyser and polariser) is included with delivery
- A large mechanical stage is included with delivery as standard. The coarse and fine focusing knob on both sides guarantees optimal adjustment and focusing
- Further options such as, for example, a large selection of objectives can be integrated as accessories
- A dust cover as well as user instructions are included with the delivery
- Please find detailed information in the following model outfit list

**Scope of application**

- Metallurgy, material testing, quality assurance

**Applications/Samples**

- Opaque and thick samples, workpieces (surfaces, fold lines, coatings)

**Technical data**

- Infinity optical system
- Quintuple nosepiece
- Siedentopf 30° inclined
- Diopter adjustment: Both-sided
- Overall dimensions WxDxH 271x379x747 mm
- Net weight approx. 12,5 kg

STANDARD



Model	Standard configuration					
	Tube	Eyepiece	Objective quality	Objectives	Illumination	
<b>KERN</b>						
<b>OLM 171</b>	Trinocular	HWF 10x/ø 22 mm	Infinity Plan	LWD5x/LWD10x/ LWD20x/LWD50x	12 V/50 W Halogen (incident)	↓

↓ Price reduction

Model outfit		Model KERN	Order number	
		OLM 171		
Eyepieces (30 mm)	HWF 10×/∅ 22 mm (adjustable)	✓	OBB-A1491	
	HWF 10×/∅ 22 mm (reticule 0,1 mm) (adjustable)	✓	OBB-A1523	
Infinity Plan achromatic objectives for long working distance	5×/0,13 W.D. 24,23 mm	✓	OBB-A1525	
	10×/0,25 W.D. 18,48 mm	✓	OBB-A1526	
	20×/0,40 W.D. 8,35 mm	✓	OBB-A1527	
	50×/0,70 (spring) W.D. 1,95 mm	✓	OBB-A1528	
	80×/0,80 (spring) W.D. 0,85 mm	○	OBB-A1530	
	100×/0,90 (dry) W.D. 1,0 mm	○	OBB-A1531	
Trinocular tube	<ul style="list-style-type: none"> <li>• 30° inclined</li> <li>• Interpupillary distance 48-76 mm</li> <li>• Light distribution 100:0</li> <li>• Diopter adjustment: Both-sided</li> </ul>	✓		
Mechanical stage	<ul style="list-style-type: none"> <li>• Stage size W×D 210×180 mm</li> <li>• Travel 50×50 mm</li> <li>• Coaxial coarse and fine focusing knobs</li> </ul>	✓		
Illumination	12 V/50 W Halogen spare bulb (incident)	✓	OBB-A1207	
Reflected illumination unit	Polarising unit (Incl. analyser, polariser and colour filter slide)	✓		
Colour filters for transmitted illumination	Blue	✓	OBB-A1510	
	Green	○	OBB-A1511	
	Yellow	○	OBB-A1512	
	Gray	○	OBB-A1513	
C-Mount	0,5×	○	OBB-A1515	
	1×	○	OBB-A1514	

✓ = Included with delivery

○ = Option

 360°	<b>360° rotatable microscope head</b>	 FL-LED	<b>Fluorescence illumination for compound microscopes</b> With 3 W LED illumination and filter	 WLAN	<b>WLAN data interface:</b> For transmitting of the picture to a mobile display device
 MONO	<b>Monocular Microscope</b> For the inspection with one eye	 PH	<b>Phase contrast unit</b> For a higher contrast	 HDMI	<b>HDMI digital camera</b> For direct transmitting of the picture to a display device
 BINO	<b>Binocular Microscope</b> For the inspection with both eyes	 DF	<b>Darkfield condenser/unit</b> For a higher contrast due to indirect illumination	 SOFTWARE	<b>PC software</b> To transfer the measurements from the device to a PC.
 TRINO	<b>Trinocular Microscope</b> For the inspection with both eyes and the additional option for the connection of a camera	 POLAR	<b>Polarising unit</b> To polarise the light	 AUTO ATC	<b>Automatic temperature compensation</b> For measurements between 10 °C and 30 °C
 ABBE	<b>Abbe Condenser</b> With high numerical aperture for the concentration and the focusing of light	 INFINITY	<b>Infinity system</b> Infinity corrected optical system	 IP	<b>Protection against dust and water splashes IPxx</b> The type of protection is shown by the pictogram.
 HAL	<b>Halogen illumination</b> For pictures bright and rich in contrast	 ZOOM	<b>Zoom magnification</b> For stereomicroscopes	 BATT	<b>Battery operation</b> Ready for battery operation. The battery type is specified for each device.
 LED	<b>LED illumination</b> Cold, energy saving and especially long-life illumination	 PARALLEL	<b>Parallel optical system</b> For stereomicroscopes, enables fatigue-proof working	 RECHARGE	<b>Battery operation rechargeable</b> Prepared for a rechargeable battery operation
 IL	<b>Incident illumination</b> For non-transparent objects	 SCALE	<b>Integrated scale</b> In the eyepiece	 230 V	<b>Mains adapter</b> 230V/50Hz in standard version for EU. On request GB, AUS or USA version.
 TL	<b>Transmitting illumination</b> For transparent objects	 SD	<b>SD card</b> For data storage	 230 V	<b>Power supply</b> Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
 FL	<b>Fluorescence illumination</b> For stereomicroscopes	 USB 2.0	<b>USB 2.0 digital camera</b> For direct transmitting of the picture to a PC	 1 DAY	<b>Package shipment</b> The time required to manufacture the product internally is shown in days in the pictogram.
 FL-HBO	<b>Fluorescence illumination for compound microscopes</b> With 100 W mercury lamp and filter	 USB 3.0	<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 Kamera</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: