



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 charts.

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 W×D×H 271×379×747 mm
- Net weight approx. 12,5 kg

STANDARD

TRINO | ABBE | HAL | POLAR | INFINITY | SCALE | 230 V | 1 DAY | 3 YEARS WARRANTY

Model	Standard configuration					
KERN	Tube	Eyepiece	Objective quality	Objectives	Illumination	
OLM 171	Trinocular	WF 10×/⌀ 22 mm	Infinity Plan	LWD5×/LWD10×/ LWD20×/LWD50×	12 V/50 W Halogen (incident)	

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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	
	40×/0,65 W.D. 3,90 mm	○	OBB-A1529	
	80×/0,80 (spring) W.D. 0,85 mm	○	OBB-A1530	
Trinocular tube	· 30° inclined · Interpupillary distance 48-76 mm · Light distribution 100:0 · Diopter adjustment: Both-sided	✓		
Mechanical stage	· Stage size W×D 210×180 mm · Travel 50x50 mm · Coaxial coarse and fine focusing knobs	✓		
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

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KERN 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

Parallel optical system
For stereomicroscopes, enables fatigue-proof working

Integrated scale
In the eyepiece

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

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

SD card
For data storage

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 by the pictogram.

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

Battery operation rechargable
Prepared for a rechargable battery operation

Mains adapter
230V/50Hz in standard version for EU. On request GB, AUS or USA version.

Power supply
Integrated in balance. 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.

Warranty
The warranty period is shown in the pictogram.

Abbreviations

C-Mount Adapter for the connection of a camera to a trinocular microscope

FPS Frames per second

H(S)WF High (Super) Wide Field (Eyepiece with high eye point for wearers of glasses)

LWD Long Working Distance

N.A. Numerical Aperture

SLR Kamera Single-Lens Reflex camera

SWF Super Wide Field (Field number at least ⌀ 23 mm for 10× eyepiece)

W.D. Working Distance

WF Wide Field (Field number up to ⌀ 22 mm for 10× eyepiece)

Your KERN specialist dealer: