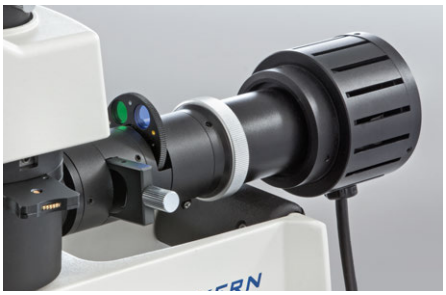
Metallurgical microscope KERN OKM-1



Illumination unit with filter disc

Stage and objectives

LAB LINE MET

The metallurgical reflected light microscope for material testing and surface testing, as well as quality assurance in industry

Features

- The KERN OKM is an excellent metallurgical reflected light microscope, e.g. for surface quality testing of raw materials and finished products in industry
- The strong, continuously dimmable 30 W halogen reflected illumination unit (Philips) ensures excellent, high-contrast images
- The illumination unit with an integrated 5-slot filter wheel for blue, green, yellow, grey and blank means that you can quickly change the colour filter for different contrast views
- A large mechanical stage for reflected illumination applications is configured as standard. The coarse and fine focusing knob on both sides guarantees optimal adjustment and focusing of your sample
- A simple polarising unit (analyser and polariser) is included with delivery
- A large selection of different eyepieces, objectives and a polarising unit are also available
- 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

- Metallurgy, material testing, quality assurance

Applications/Samples

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

Technical data

- Infinity optical system
- Quadplex nosepiece
- Siedentopf 30° inclined/360° rotatable
- Diopter adjustment: One-sided
- Overall dimensions W×D×H 440×200×460 mm
- Net weight basic configuration approx. 8 kg

STANDARD

360° | BINO | TRINO | HAL | POLAR | INFINITY | SCALE | 230 V | 1 DAY

Model	Standard configuration					
KERN	Tube	Eyepiece	Objective quality	Objectives	Illumination	
OKM 172*	Binocular	HWF 10×/Ø 18 mm	Infinity Plan	5×/10×/ LWD 20×/ LWD40×	30 W Halogen (incident)	
OKM 173	Trinocular	HWF 10×/Ø 18 mm	Infinity Plan		30 W Halogen (incident)	

! *ONLY WHILE STOCKS LAST

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Model outfit		Model KERN		Order number	
		OKM 172	OKM 173		
Eyepieces (23,2 mm)	HWF 10×/Ø 18 mm	✓	✓	OBB-A1403	
	HWF 10×/Ø 18 mm (reticule 0,1 mm) (non-adjustable)	✓	✓	OBB-A1349	
	WF 5×/Ø 20 mm	○	○	OBB-A1355	
	WF 12,5×/Ø 14 mm	○	○	OBB-A1353	
	WF 16×/Ø 13 mm	○	○	OBB-A1354	
Infinity Plan achromatic objectives (no cover glass)	5×/0,11 W.D. 12,10 mm	✓	✓	OBB-A1268	
	10×/0,25 W.D. 4,75 mm	✓	✓	OBB-A1244	
	20×/0,40 (spring-loaded) W.D. 2,14 mm	○	○	OBB-A1251	
	40×/0,65 (spring-loaded) W.D. 0,45 mm	○	○	OBB-A1258	
Infinity Plan achromatic objectives (no cover glass) for long working distance	20×/0,40 W.D. 8,35 mm	✓	✓	OBB-A1252	
	40×/0,65 W.D. 3,90 mm	✓	✓	OBB-A1259	
	50×/0,70 (spring-loaded) W.D. 1,95 mm	○	○	OBB-A1266	
	80×/0,80 (spring-loaded) W.D. 0,85 mm	○	○	OBB-A1271	
Binocular tube	· Siedentopf 30° inclined/360° rotatable · Interpupillary distance 50 – 75 mm · Diopter adjustment: One-sided	✓	○	OBB-A1130	
Trinocular tube	· Siedentopf 30° inclined/360° rotatable · Interpupillary distance 50 – 75 mm · Light distribution 80:20 · Diopter adjustment: One-sided	○	✓	OBB-A1346	
Mechanical stage	· Stage size W×D 200×140 mm · Travel 76×52 mm · Coaxial coarse and fine focusing knobs	✓	✓		
Illumination	30 W Halogen spare bulb (incident)	✓	✓	OBB-A1372	
Reflected illumination unit	5-filter unit (Blue, Green, Yellow, Grey, Empty)	✓	✓		
	Polarising unit (Incl. analyser and polariser slide)	✓	✓		
C-Mount	1×		○	OBB-A1514	
	0,5× (focus adjustable)		○	OBB-A1515	

✓ = Included with delivery ○ = Option

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

SD card
For data storage

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

WLAN data interface
For transmitting of the picture to a mobile display device

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

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 microscope. 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.

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 camera	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: