





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

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

Model	Standard configuration					
KERN	Tube	Eyepiece	Objective quality	Objectives	Illumination	
OKM 172*	Binocular	HFW 10×/Ø 18 mm	Infinity Plan	5×/10×/LWD 20×/	6 V/30 W Halogen (incident)	U
OKM 173	Trinocular	HFW 10×/Ø 18 mm	Infinity Plan	LWD40×	6 V/30 W Halogen (incident)	J
*ONLY WH	ILE STOCKS LAST	U Pri	ce reduction			

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Metallurgical microscope KERN OKM-1



Model outfit		Model KERN		Order number	
		OKM 172	OKM 173		
Eyepieces (23,2 mm)	HWF 10×/Ø 18 mm	✓	1	OBB-A1403	
	HWF 10×/Ø 18 mm (reticule 0,1 mm) (non-adjustable)	*	✓	OBB-A1349	
	WF 5×/Ø 20 mm	0	0	OBB-A1355	
(,,	WF 12,5×/Ø 14 mm	0	0	OBB-A1353	
	WF 16×/Ø 13 mm	0	0	OBB-A1354	
	5×/0,11 W.D. 12,10 mm	*	✓	OBB-A1268	
Infinity Plan achromatic	10×/0,25 W.D. 4,75 mm	✓	1	OBB-A1244	
objectives (no cover glass)	20×/0,40 (spring) W.D. 2,14 mm	0	0	OBB-A1251	
	40×/0,65 (spring) W.D. 0,45 mm	0	0	OBB-A1258	
Infinity	20×/0,40 W.D. 8,35 mm	✓	1	OBB-A1252	
Plan achromatic objectives	40×/0,65 W.D. 3,90 mm	✓	✓	OBB-A1259	
(no cover glass) for long working distance	50×/0,70 (spring) W.D. 1,95 mm	0	0	OBB-A1266	
	80×/0,80 (spring) W.D. 0,85 mm	0	0	OBB-A1271	
Binocular tube	 Siedentopf 30° inclined/360° rotatable Interpupillary distance 50 – 75 mm Diopter adjustment: One-sided 	~	0	OBB-A1130	
Trinocular tube	 Siedentopf 30° inclined/360° rotatable Interpupillary distance 50 – 75 mm Light distribution 80:20 Diopter adjustment: One-sided 	0	~	OBB-A1346	
Mechanical stage	 Stage size W×D 200×140 mm Travel 76×52 mm Coaxial coarse and fine focusing knobs 	~	~		
Illumination	6 V/30 W Halogen spare bulb (incident)	✓	✓	OBB-A1372	
Reflected illumination unit	5-filter unit (Blue, Green, Yellow, Gray, Empty)	✓	1		
	Polarising unit (Incl. analyser and polariser slide)	~	~		
0.14	1×	0	0	OBB-A1142	
C-Mount	0,47× (focus adjustable)	0	0	OBB-A1135	
	1	1	✓ = Included wi	th delivery	O = Optio

 \checkmark = Included with delivery

O = Option

KERN Pictograms:



360° rotatable microscope head



Monocular Microscope For the inspection with one eye



Binocular Microscope For the inspection with both eyes

Trinocular Microscope



the additional option for the connection of a camera Abbe Condenser With high numerical aperture for the

concentration and the focusing of light

For the inspection with both eyes and



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ABBE

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 100W mercury lamp and filter

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)

C



Fluorescence illumination for compound microscopes With 3W LED illumination and filter



Phase contrast unit For a higher contrast

Darkfield condenser/unit

For a higher contrast due to indirect





Polarising unit To polarise the light

Infinity system

illumination







For stereomicroscopes Parallel optical system

For stereomicroscopes, enables

Zoom magnification

fatigue-proof working

Infinity corrected optical system



Integrated scale human In the eyepiece SCALE



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USB 2.0

⊶

USB 3.0

SD card For data storage



USB 2.0 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.



SOFTWARE

Automatic temperature compesation For measurements between 10 °C and 30 °C



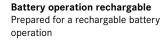
Protection against dust and water splashes IPxx The type of protection is shown by the

pictogram.



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





Mains adapter

230 V	



Power supply Integrated in balance. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.

230V/50Hz in standard version for EU.

On request GB, AUS or USA version.



Package shipment The time required to manufacture the product internally is shown in days in the pictogram.

USB 3.0 digital camera For direct transmitting of the picture to a PC

Long Working Distance	SWF	Super Wig
Numerical Aperture		(Field nun for 10× ey
Single-Lens Reflex camera	W.D.	Working [
	6 6	Numerical Aperture

SWF	Super Wide Field (Field number at least \emptyset 23 mm for 10× eyepiece)
W.D.	Working Distance
WF	Wide Field (Field number up to Ø 22 mm for 10× eyepiece)

Your KERN specialist dealer:

