

PROFESSIONAL MEASURING



POLARISING MICROSCOPES

23

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



Auto-focus
For automatic control of the focus level



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 compensation
For measurements between 10 °C and 30 °C



Protection against dust and water splashes IPxx:
The type of protection is shown in the pictogram cf. DIN EN 60529:2000-09, IEC 60529:1989+A1:1999+A2:2013



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



Battery operation rechargeable
Prepared for a rechargeable battery operation



Plug-in power supply
230V/50Hz in standard version for EU. On request GB, AUS or USA version.



Integrated power supply unit
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 \varnothing 23 mm for 10× eyepiece)
W.D.	Working Distance
WF	Wide Field (Field number up to \varnothing 22 mm for 10× eyepiece)

Why you should choose a KERN microscope now!

For 175 years, KERN & SOHN has been synonymous with high precision weighing and measuring technology. This claim is the driving force for the development of our microscope and refractometer ranges.

Thanks to consistent customer focus paired with smart ideas and the latest available technology we are proud to be suppliers of high-quality, durable top microscopes and refractometers, which help you to be as efficient as possible in your daily work.

When developing our microscopes we have concentrated on the very best optical quality and have used only high-quality glass and the latest technologies to achieve this. The high-quality Philips halogen and modern LED illumination produce razor-sharp images with high contrast and which will impress you with their brilliant true-colour display – you must have noticed this yourself.

Your advantages:

- all mechanical parts have been designed for a long service life
- special attention has been given to the ergonomics of our microscopes, as this allows the user to work for several hours in a comfortable position which does not cause fatigue
- our microscopes are fully-equipped and can be used immediately
- Highlight for 2022: die KERN camera software – you will be amazed at how user-friendly and intuitive it is, a high-quality tablet camera as well as a comprehensive range of calibration services for refractometers
- and much more...

Use our practical “Check list for microscopes and refractometers”, which may help you to quickly determine specifications for the future instrument. Together with our KERN product specialist you can choose the right product for you.

If there is no suitable product in the standard range, for example, then we will of course configure an individual microscope for you.

Our aim is to develop a market-driven product solution, so with our microscope and refractometer range, the saying holds true: good quality at a competitive price! This is what we stand for and work towards, every day!

With our current 2022 product range you can benefit from improved quality and a clear reduction in price, which we have been able to achieve through more efficient production methods and increased global sales of our microscopes and refractometers and of course we pass this straight on to you

Do you have any questions about our range of microscopes and refractometers?

Your KERN customer consultants are available at any time to help you further.

I hope that you enjoy working efficiently with our KERN Optics products.



Albert Sauter, Managing Director

Your advantages

fast

- 24 hour dispatch service for products in stock – order today, on its way tomorrow
- Sales & service hotline from 8:00 am to 5:00 pm

reliable

- Up to 3 years warranty
- Certified QM system
DIN EN ISO 9001

versatile

- One-stop shopping: from microscope through to refractometer – everything from one supplier
- Quick as a flash, find the product you want with the “Quick-Finder” at www.kern-sohn.com



Order hotline
+49 7433 9933-0



E-mail order
info@kern-sohn.com



www.kern-sohn.com
Information on current product availability, product data sheets, user instructions, useful knowledge, technical glossary and much for you to download, practical topic areas, which will guide you to the right product in your industry as well as a microscopes and refractometers search engine.



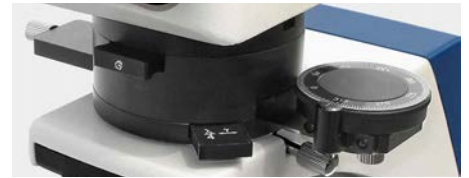
Service hotline
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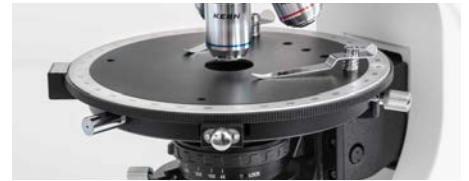
Our team of consultants will assist you
from Monday to Friday
from 8:00 am to 5:00 pm



Online shop
www.kern-sohn.com



Bertrand lens, λ Slip, 360° rotatable analyser (removable)



Center-adjustable and turnable polarisation stage



"Swing-Out" condenser

03

PROFESSIONAL LINE POL

The flexible and powerful polarising microscope for all professional applications with reflected and transmitted light

Features

- This device is a professional, fully-equipped polarising microscope, which uses the polarisation of light to analyse minerals, crystals and isotropic materials
- The KERN OKO 185 is a combi variant of LED incident illumination and LED transmitted illumination. A height-adjustable 0.9/0.13 Swing-out Abbe condenser which can be centred for complete Köhler illumination are part of the standard version.
- A 360° revolving stage with 1° division, 6' fine division and locking function is integrated into all series as standard
- As standard all series are fitted with a complete polarising unit with scale, a Bertrand lens, a $\lambda + \frac{1}{4} \lambda$ Slip as well as a quartz wedge
- A large selection of accessories such as, for example, a mechanical stage attachment as well as further objectives for a long working distance and filter units 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. You can select this adapter from the following model outfit list
- Please find detailed information in the following model outfit list

Scope of application

- Mineralogy, texture observations, material testing, observation of crystals

Applications/Samples

- More complex samples with polarising properties

Technical data

- Infinity optical system
- Quintuple nosepiece
- Siedentopf 30° inclined
- Diopter adjustment: Both-sided
- Overall dimensions WxDxH 500x200x500 mm
- Net weight approx. 14,5 kg

STANDARD



Model	Standard configuration					Price excl. of VAT ex works €
	Tube	Eyepiece	Objective quality	Objectives	Illumination	
KERN						
OPO 185	Trinocular	HWF 10x/ø 20 mm	Infinity Plan	Non-stress 4x/10x/20x/40x/50x	5W LED (incident + transmitted)	5740,-

Polarising microscopes KERN OPO-1

Model outfit		Model KERN	Order number	Price/piece excl. of VAT ex works €
		OPO 185		
Eyepieces (23,2 mm)	HWF 10×/20 mm	✓	OBB-A1591	95,-
	HWF 10×/20 mm (reticule 0,1 mm) (adjustable)	✓	OBB-A1592	130,-
Non-stress Infinity Plan objectives (transmitted)	4×/0,10 W.D. 12,1 mm	✓	OBB-A1294	115,-
	10×/0,25 W.D. 4,64 mm	✓	OBB-A1289	220,-
	20×/0,40 (spring-loaded) W.D. 2,41 mm	✓	OBB-A1290	290,-
	40×/0,66 (spring-loaded) W.D. 0,65 mm	✓	OBB-A1292	335,-
Non-stress Infinity Plan objectives (incident) for long working distance	5×/0,13 W.D. 16,04 mm	○	OBB-A1593	110,-
	10×/0,25 W.D. 18,48 mm	○	OBB-A1594	220,-
	20×/0,40 W.D. 8,35 mm	○	OBB-A1291	375,-
	Semi apochromatic 50×/0,75 W.D. 4,25 mm	✓	OBB-A1642	480,-
	100×/0,85 (dry) (spring-loaded) W.D. 3,00 mm	○	OBB-A1595	1260,-
Trinocular tube	<ul style="list-style-type: none"> • Siedentopf 30° inclined • Interpupillary distance 48 - 76 mm • Light distribution 100:0 	✓		
Analyser unit with scale	360° rotatable, lockable	✓		
Bertrand lens	Insertable, center-adjustable	✓	OBB-A1121	330,-
λ + ¼ λ Slip	λ Slip and ¼ λ Slip (combination)	✓	OBB-A1316	155,-
Quartz wedge	I - IV Class	✓	OBB-A1321	260,-
Revolving round stage	360° rotatable, center-adjustable, division 1°, Vernier division 6'	✓		
Polarising attached mechanical stage	Polarising attached mechanical stage	○	OBB-A1337	295,-
Swing-out condenser	N.A. 0,9/0,13 swing-out achromatic condenser (aperture diaphragm)	✓	OBB-A1107	255,-
Polarising unit with scale (transmitted)	360° rotatable, lockable	✓		
Koehler illumination	5 W LED spare bulb (transmitted)	✓		
Illumination polarising unit	5 W LED spare bulb (incident)	✓	OBB-A1589	90,-
Colour filters for transmitted illumination	Blue	✓	OBB-A1170	25,-
	Green	○	OBB-A1188	25,-
	Yellow	○	OBB-A1165	25,-
	Grey	○	OBB-A1183	25,-
C-Mount	1×	○	OBB-A1514	130,-
	0,75×	○	OBB-A1590	200,-
	0,5× (focus adjustable)	○	OBB-A1515	200,-

✓ = Included with delivery

○ = Option



03

Cleaning sets for microscopes

Features

- This economical and fully equipped 7-piece cleaning set contains everything you need for the very best care of your microscope
- A silicon hand blower, dust brush, 60 ml of cleaning liquid, lint-free duster, optical cleaning cloths and cleaning swabs. You get all that in a high-quality KERN storage bag which you can also easily fix onto your belt
- You can use this set not only to gently clean your microscope, but also for example your camera, binoculars or all other optical surfaces

Model	Description	Price excl. of VAT ex works €
KERN OCS 901	7-piece cleaning sets for microscopes und other optical instruments	35,-

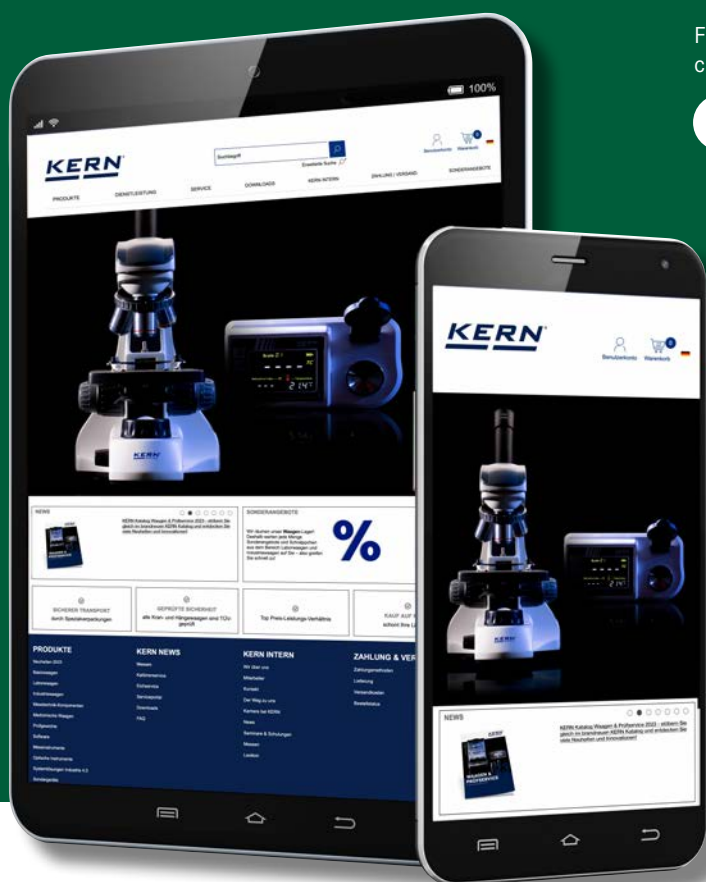
KERN & SOHN – The wide range of product champion that is situated in the Swabian Alb

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