

POLARISING MICROSCOPES

PROFESSIONAL MEASURING



KERN Pictograms

 360° rotatable microscope head	 Fluorescence illumination for compound microscopes With 100 W mercury lamp and filter	 Integrated scale In the eyepiece	 Battery operation Ready for battery operation. The battery type is specified for each device.
 Monocular Microscope For the inspection with one eye	 Fluorescence illumination for compound microscopes With 3 W LED illumination and filter	 SD card For data storage	 Battery operation rechargeable Prepared for a rechargeable battery operation
 Binocular Microscope For the inspection with both eyes	 Phase contrast unit For a higher contrast	 USB 2.0 interface For data transmission	 Plug-in power supply 230V/50Hz in standard version for EU. On request GB, AUS or USA version.
 Trinocular Microscope For the inspection with both eyes and the additional option for the connection of a camera	 Darkfield condenser/unit For a higher contrast due to indirect illumination	 USB 3.0 interface For data transmission	 Integrated power supply unit Integrated in microscope. 230V/50Hz standard EU. More standards e.g. GB, AUS or USA on request.
 Abbe Condenser With high numerical aperture for the concentration and the focusing of light	 Polarising unit To polarise the light	 WIFI data interface: For transmitting of the picture to a mobile display device	
 Halogen illumination For pictures bright and rich in contrast	 Infinity system Infinity corrected optical system	 HDMI digital camera For direct transmitting of the picture to a display device	
 LED illumination Cold, energy-saving and especially long-life illumination	 Zoom magnification For stereomicroscopes	 PC software To transfer the measurements from the device to a PC.	 Package shipment The time required to manufacture the product internally is shown in days in the pictogram.
 Incident illumination For non-transparent objects	 Auto-focus For automatic control of the focus level	 Automatic temperature compensation For measurements between 10 °C and 30 °C	 Pallet shipment The time required to manufacture the product internally is shown in days in the pictogram.
 Transmitting illumination For transparent objects	 Parallel optical system For stereomicroscopes, enables fatigue-proof working	 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	
 Fluorescence illumination For stereomicroscopes			

Abbreviations

C-Mount	Adapter for the connection of a camera to a trinocular microscope	SLR camera	Single-Lens Reflex camera
FPS	Frames per second	SWF	Super Wide Field (Field number at least \varnothing 23 mm for 10 \times eyepiece)
H(S)WF	High (Super) Wide Field (Eyepiece with high eye point for wearers of glasses)	W.D.	Working Distance
LWD	Long Working Distance	WF	Wide Field (Field number up to \varnothing 22 mm for 10 \times eyepiece)
N.A.	Numerical Aperture		

KERN Models A – Z

OAB-L _____	110-111
OBE-12 · OBE-13 _____	16
OBE-S _____	67
OBL-12 · OBL-13 _____	16
OBL-14 · OBL-15 _____	18
OBL-S · OBN-S _____	68
OBN-13 · OBN-15 _____	20
OBN-14 _____	22
OBS-1 _____	10
OBT-1 _____	12
OCM-1 _____	24
ODC-2 _____	89
ODC-82 · ODC-83 · ODC-84 _____	86
ODC-85 · ODC-86 _____	87
ODC-87 · ODC-88 · ODC-89 _____	88
OIV-2 _____	64
OIV-3 _____	63
OIV-6 _____	65
OKM-1 _____	27
OKO-1 _____	29
OLM-1 _____	31
OPO-1 _____	34
ORA _____	94-100
ORL-B _____	107
ORM _____	101-106
OSE-4 · OZL-9 · OZM-9 _____	73
OSE-42 _____	38
OSF-4G _____	40
OXM-9 _____	90
OZB-H _____	82
OZB-IR _____	84
OZB-M _____	75-79
OZB-UE _____	81
OZB-UP _____	80
OZG-4 _____	58
OZL-44 _____	42
OZL-45 _____	48
OZL-45R _____	50
OZL-46 _____	44
OZL-47 _____	46
OZL-S _____	69
OZM-5 _____	52
OZM-9 _____	72
OZM-S · OZP-S _____	70
OZP-5 _____	54
OZS-5 _____	56
OXM-9 (Software OXM 901 · OXM 902) _____	90

KERN Customer Consultants

With questions about our products and services, we will be happy to advise you:

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KERN Hotlines

Technical questions about our products?
You will find assistance here quickly: **+49 7433 9933- ...**



Service Hotline

→ 199

for general technical questions about your KERN product

Optical Devices

→ 777

for all technical questions concerning our microscopes, microscope cameras, refractometers, etc.

Laboratory and Analytical Balances

→ 444

for all technical questions concerning our high quality precision balances, analytical balances (especially with electromagnetic force-compensated measuring systems, tuning fork and high application density)

SAUTER Measuring Instruments

→ 555

for all technical questions concerning our SAUTER measuring instruments, test benches, force measuring accessories (clamps etc.), SAUTER software

System Solutions Industry 4.0

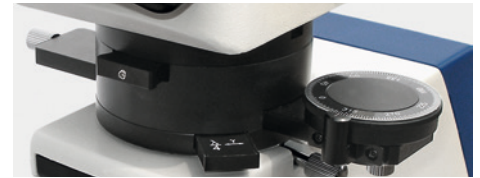
→ 200

for all technical questions concerning the interlocking of the latest information and communication technology with our scales, load cells and measuring devices as well as questions about KERN software

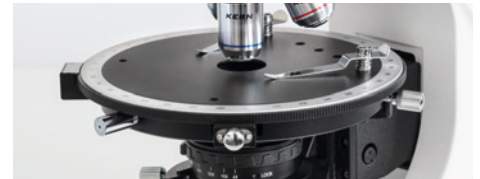
Calibration and Verification Service

→ 196

for any questions concerning our calibration and verification service



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



Center-adjustable and turnable polarisation stage



"Swing-Out" condenser

3



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,-

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



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,-

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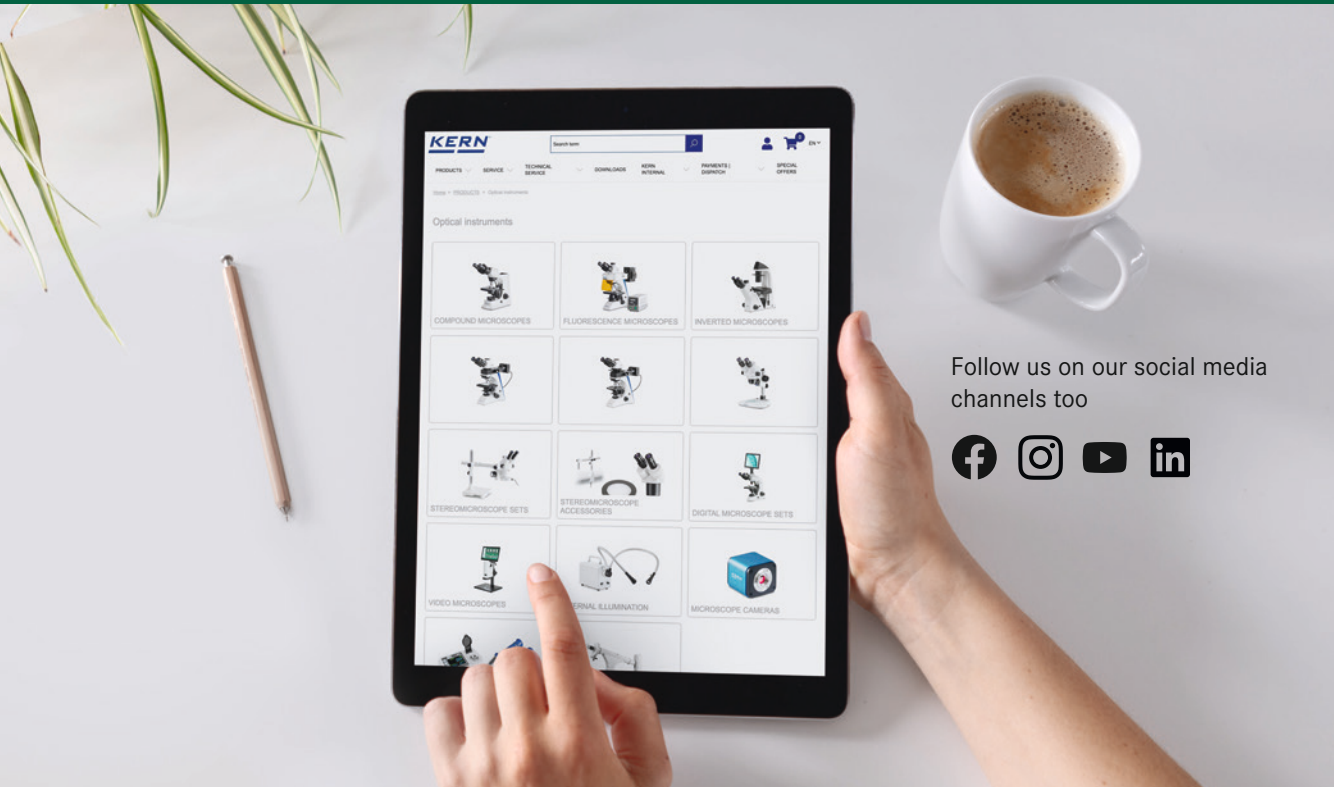
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