



MANUAL POLARIMETERS

Laboratory | Industry | Food Industry



KERN Pictograms



360° rotatable microscope head



Monocular Microscope
For the inspection with
one eve



Binocular MicroscopeFor the inspection with both eyes



Trinocular MicroscopeFor 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 illuminationFor non-transparent objects



Transmitting illumination For transparent objects



Fluorescence illumination For stereomicroscopes



Fluorescence illumination for compound microscopes With 100W 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 unitTo 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 interface
For data transmission



USB 3.0 interface For data transmission



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



HDMI digital cameraFor direct transmitting of the picture to a display device



PC software
To transfer the measurements from the device to



Automatic temperature compesation
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.



Rechargeable battery pack Rechargeable set



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.



Pallet 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 Ø 23 mm

for 10× eyepiece)

W.D. Working Distance

WF Wide Field (Field number up to Ø 22 mm

for 10× eyepiece)

KERN Models A-Z

| OAB-L | 108 |
|---|--|
| OBE-12 · OBE-13 | 12 |
| OBE-S | |
| OBL-12 · OBL-13 | |
| OBL-14 · OBL-15 | |
| OBL-S · OBN-S | |
| OBN-13 · OBN-15 | |
| OBN-14 ™ | |
| | |
| OBS-1 | |
| OBT-1 · OBT-2 🚾 | |
| OCM-1 | |
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| ODC-24 | 88 |
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| ODC-85 · ODC-86 | 86 |
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| OIV-3 · OIV-9 ™ | |
| OIV-6 | |
| OKM-1 | |
| OKO-1 | |
| OLM-1 | |
| OPO-1 | |
| | |
| OPA | |
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| ORL-B | 105 99-104 |
| ORL-B ORM OSE-4 · OZL-9 · OZM-9 | 105 99-104 71 |
| ORL-B ORM OSE-4 · OZL-9 · OZM-9 OSE-42 | 105 99-104 71 36 |
| ORL-B ORM OSE-4 · OZL-9 · OZM-9 OSE-42 OSF-43 | 105 99-104 71 36 38 |
| ORL-B ORM OSE-4 · OZL-9 · OZM-9 OSE-42 OSF-43 | 105 99-104 71 36 38 90 |
| ORL-B ORM OSE-4 · OZL-9 · OZM-9 OSE-42 OSF-43 OXM-9 OZB-H | 105 99-104 71 36 38 90 81 |
| ORL-B ORM OSE-4 · OZL-9 · OZM-9 OSF-42 OSF-43 OXM-9 OZB-H | 105 99-104 71 36 38 90 81 83 |
| ORL-B | 105 99-104 71 36 38 90 81 83 74 |
| ORL-B | 105 99-104 71 36 38 90 81 83 74 80 |
| ORL-B | 105 99-104 71 36 38 90 81 83 74 80 79 |
| ORL-B | 105 99-104 71 36 38 90 81 74 80 79 56 |
| ORL-B | 105 99-104 71 36 38 90 81 74 80 79 56 |
| ORL-B | 105 99-104 71 36 38 90 81 74 80 79 56 |
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| ORL-B | 105 99-104 71 36 38 90 81 83 74 80 79 56 40 46 |
| ORL-B | 105 99-104 71 36 38 90 81 83 74 80 79 56 40 46 48 |
| ORL-B | 105 99-104 71 36 38 90 81 83 74 80 79 56 40 46 48 42 |
| ORL-B | 105 99-104 71 36 38 90 81 83 74 80 79 56 40 46 48 42 44 67 |
| ORL-B | 105 99-104 71 36 38 90 81 83 74 80 79 56 40 46 48 42 44 67 50 |
| ORL-B | 105 99-104 71 36 38 90 81 83 74 80 79 56 40 46 48 42 44 67 50 70 |
| ORL-B | 105 99-104 71 36 38 90 81 83 74 80 79 56 40 46 48 42 44 67 50 |

New model

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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 | |
| Ontical Davisos | → 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



The ideal helper for getting started with the analysis of your optically active solutions in the laboratory

Features

- The KERN OAB 10LN is a manual polarimeter which is characterised by its ergonomic design and easy handling
- The powerful 589 nm sodium vapour lamp is the optimum light source to produce a linear, polarised beam of light
- The 1° scale division including Nonius (0.05°) enables precise definition of the angle of rotation of the substance to be observed
- To hold liquid samples, two glass cuvettes (100 mm/200 mm) are included with the delivery
- · Included with delivery: Sodium vapour lamp, 100 mm glass cuvette, 200 mm glass cuvette, replacement lenses and sealing rings for cuvettes

Technical data

- Light source: Sodium vapour lamp (589 nm)
- Stabilisation time: 10 mins after switching on
- Total dimensions W×D×H 430×140×310 mm
- Net weight approx. 3,5 kg

STANDARD











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Scope of application: Laboratory/Education

The reliable polarimeters in the OAB-L range have been designed for simple laboratory applications as well as practical training. You can evaluate liquid, optically-active samples with chiral characteristics with this device. Typical applications are determining kinetics in cane sugar inversion, determining mutarotation of glucose and investigation of starch hydrolysis. The optical rotation is measured in degrees.

The main scope of applications is:

- Pharmacy
- · Sugar industry: for example cane sugar
- Beverage industry
- · Food industry
- · Chemical industry
- Laboratories
- Training



Cuvette in measuring chamber

| Model KERN | Scales | Measuring range | Division | Vernier | Wave lenght | Price excl. of VAT ex works € |
|---------------|------------------|--------------------|----------|---------|-------------|--|
| OAB 10LN | Optical rotation | ± 180° | 1° | 0,05° | 589 nm | 920,- |

■ ONLY WHILE STOCKS LAST

Accessory parts: OAB

| Model KERN | Description | Price excl. of VAT ex works € |
|---------------|--|--|
| OAB-A2501 | Glass cuvette, Length: 100 mm (Spare part) | 110,- |
| OAB-A2502 | Glass cuvette, Length: 200 mm (Spare part) | 110,- |
| OAB-A2581 | Sodium vapour lamp, Wave length: 589 mm (Spare part) | 120,- |



Cuvette 100mm and 200mm

The oldest Precision Balance Factory in Germany

KERN & SOHN GmbH

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