

MANUAL POLARIMETERS





24

KERN Pictograms



360° rotatable microscope head



Monocular Microscope
For the inspection with
one eye



Binocular MicroscopeFor the inspection with both



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 illuminationCold, 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



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 evepiece



SD card For data storage



USB 2.0 interface
For data transmission



USB 3.0 interfaceFor 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 measurementsfrom 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.



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.



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

Abbreviations

C-Mount

LWD

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)

Long Working Distance

Adapter for the connection of a

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

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KERN Hotlines

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



Service Hotline ightarrow 199 for general technical questions about your KERN product

Optical Devices

for all technical questions concerning our microscopes, microscope cameras, \rightarrow 777 refractometers, etc.

Laboratory and Analytical Balances

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)

→444

SAUTER Measuring Instruments

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

→ 555

System Solutions Industry 4.0

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

for any questions concerning our calibration and verification service

→200





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

Features

- The models of the serie KERN OAB-L are manual polarimeters which are 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

110











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	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,-

*For model OAB 10LN only Cuvette 10 and 20 cm



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