MICROSCOPES & REFRACTOMETERS 2023

REFRACTOMETERS

Digital refractometer KERN ORL-B





Transport and storage case



Rear view, screw-on battery compartment cover

Digital refractive index measurement for laboratories and the industry for multi-application ► Laboratory refractometer

Features

- The models in the KERN ORL range are accurate, universal and maintenance-free digital desktop refractometers
- Other key features are the extra-large measuring range and a high degree of accuracy.
- With their handy design, they are ideal for convenient and rapid everyday use
- The large, easy-to-read multi-function display with integrated temperature display supports the user to reliably determine the measurement.
- The integrated automatic temperature compensation (ATC), avoids the manual conversion of the measurement. This allows a quick and efficient usage of the instrument

- Rapid, user-friendly calibration of the refractometer is possible at any time using standard commercial distilled water.
- Mean value measurement (15 measurements)
- The follwoing accessory-parts are included:
 - Pipette
 - Storage box
 - USB cable
 - Power adapter
- Screwdriver

Technical data

- Measurement temperature: 0 °C 40 °C
- Overall dimensions W×D×H 180×100×55 mm
- Net weight approx. 365 g (without battery)
- Power supply: USB connection, as an alternative 1 × battery 3.7 V 3000 mA (not included with delivery)
- ATC (Automatic Temperature Compensation)
- Minimum sample volume: 0,3-0,4 ml
- Automatic energy management (AUTO-OFF after 3 Minutes)
- · Mean value measurement (15 measurements)

Accessories

 Rechargeable Battery 3,7 V 3000 mA, KERN ORL-A2007

Also available with calibration certificate.

STANDARD	1 DAY			
Model	Scales	Measuring range	Accuracy	Division
KERN				
ORL 94BS	Brix Refractive index	0 – 94 % 1,3330 – 1,5290 nD	± 0,1 % ± 0,0002 nD	0,1 % 0,0001 nD

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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

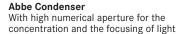


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HAL

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LED





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 3W LED illumination and filter



Phase contrast unit For a higher contrast



Darkfield condenser/unit For a higher contrast due to indirect illumination



To polarise the light



ABBREVIATIONS

C-Mount

H(S)WF LWD

SLR camera

FPS

N.A.

SWF

W.D.

WF







Frames per second

Numerical Aperture

Working Distance

Long Working Distance

Single-Lens Reflex camera





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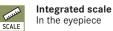
INFINITY

Q

ZOOM

Parallel optical system For stereomicroscopes, enables fatigue-proof working

Infinity corrected optical system



SD card

Infinity system

Auto-focus

Zoom magnification

For stereomicroscopes



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



WIFI 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 compesation For measurements between 10 $^\circ\mathrm{C}$ and 30 $^\circ\mathrm{C}$



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



Adapter for the connection of a camera to a trinocular microscope

Super Wide Field (Field number at least Ø 23 mm for 10× eyepiece)

Wide Field (Field number up to Ø 22 mm for 10× eyepiece)

High (Super) Wide Field (Eyepiece with high eye point for wearers of glasses)



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



Battery operation rechargeable Prepared for a rechargeable battery

operation

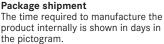


Plug-in power supply 230V/50Hz in standard version for EU. On request GB, AUS or USA version.



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





Battery operation

