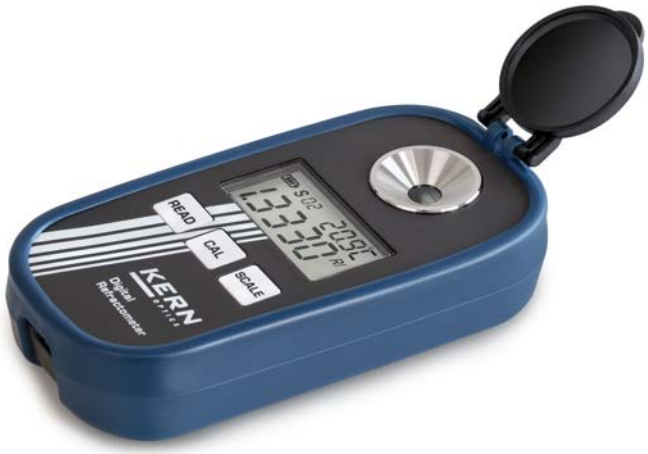
Digital refractometers KERN ORM-B · ORM-R



Transport and storage case

Rear view, battery compartment cover with click-lock

Digital measurement of refraction index for universal application

Features

- The KERN ORM refractometers are accurate and universal maintenance free digital handheld refractometers
- The typical and practical design is suitable for a quick and convenient everyday use and is characterized by its easy-using and robustness
- The large, easy-to-read 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
- A quick and user-friendly calibration of the refractometer is possible at any time using commercially available distilled water
- The refractometers of the KERN ORM range are protected to international IP65 protection class, against dust and water splashes. After use, you can rinse the refractometer under running water
- The follwoing accessory-parts are included:
  - Prism cover lid
  - Pipette
  - Storage box
  - 1 × AAA batteries
  - User manual

Technical data

- Measurement temperature: 0 °C – 40 °C
- Overall dimensions W×D×H 121×5×25 mm
- Net weight approx. 90 g
- Power supply: 1 × AAA (1,5 V)
- Lifetime of the battery: approx. 10.000 measurements
- ATC (Automatic Temperature Compensation), does not apply to the refraction index scale
- Minimum sample volume: 2–3 drops
- Automatic energy management (AUTO-OFF after 60 seconds)

! Now also available with calibration certificate, see page 116!

STANDARD

AUTO ATC | IP 65 | BATT | 1 DAY

Model KERN	Scales	Measuring range	Accuracy	Division	
ORM 50BM	Brix Refractive index	0 – 50 % 1,3330 – 1,4200 nD	± 0,2 % ± 0,0003 nD	0,1 % 0,0001 nD	
ORM 1RS	Brix Refractive index	0 – 90 % 1,3330 – 1,5177 nD	± 0,2 % ± 0,0003 nD	0,1 % 0,0001 nD	

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

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 devic

PC software
To transfer the measurements from the device to a PC

Automatic temperature compesation
For measurements between 10 °C and 30 °C

Protection against dust and water splashes IPxx
The type of protection is shown by the pictogram

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

Battery operation rechargeable
Prepared for a rechargeable battery operation

Mains adapter
230V/50Hz in standard version for EU. On request GB, AUS or USA version

Power supply
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	**LWD**	Long Working Distance	**SWF**	Super Wide Field (Field number at least ⌀ 23 mm for 10× eyepiece)
FPS	Frames per second	**N.A.**	Numerical Aperture	**W.D.**	Working Distance
H(S)WF	High (Super) Wide Field (Eyepiece with high eye point for wearers of glasses)	**SLR camera**	Single-Lens Reflex camera	**WF**	Wide Field (Field number up to ⌀ 22 mm for 10× eyepiece)

Your KERN specialist dealer: