

### Digital refractometer KERN ORF



Transport and storage case



Rear view, screw-on battery compartment cover



IP65: Protected against dust and water splashes

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

#### Features

- The KERN ORF refractometers are accurate and universal maintenance free digital handheld refractometers
- The large display is easy to read. Mistakes in reading are avoided
- The typical and practical design is suitable for a quick and convenient everyday use and is characterized by its easy-using and robustness
- The PREMIUM refractometers from the KERN ORF range are protected to international IP65 protection class, against dust and water splashes. After use, you can rinse the refractometer under running water
- The large, easy-to-read TFT colour display with integrated temperature display supports the user to reliably determine the measurement
- A large selection of models is available with single or multiple scales. This allows the use in various applications
- The instrument comes with an optimized software that can show a result in different scales
- The integrated automatic temperature compensation (ATC), avoids the manual conversion of the measurement. This allows a quick and efficient usage of the instrument
- Due to the fact that the refractometer has been calibrated at the factory, this guarantees that it can be used immediately for accurately measuring your sample.
- The following accessory-parts are included:
  - Calibration liquid
  - Pipette
  - Storage box
  - 2 × AAA batteries
  - Leather bag
  - Screwdriver
  - Cleaning tissue

#### Technical data

- Measurement temperature: 5 °C – 40 °C
- Overall dimensions W×D×H 145×67×40 mm
- Net weight approx. 200 g
- Power supply: 2 × AAA (1,5 V)
- Lifetime of the battery: approx. 3.750 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 90 seconds)

! Also available with calibration certificate.

#### STANDARD



**Only while stocks last**

Remaining stocks of this series

**Successor series ORM**



**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



**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 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 compensation**  
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.

## ABBREVIATIONS

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