## 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 follwoing 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







# MICROSCOPES & REFRACTOMETERS 2023

KERN PICTOGRAMS



Ready for battery operation. The battery

type is specified for each device.

Battery operation rechargeable

Prepared for a rechargeable battery

**Plug-in power supply** 230V/50Hz in standard version for EU.

On request GB, AUS or USA version.

Integrated in microscope. 230V/50Hz standard EU. More standards e.g.

The time required to manufacture the product internally is shown in days in

Integrated power supply unit

GB, AUS or USA on request.

Package shipment

the pictogram.

**Battery operation** 

operation

BATT

**■**→)

RECHARGE

230 V



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

00

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 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

**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 \$\phi\$ 23 mm for 10× eveniece)

W.D. Working Distance

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

