





Refractive index measurement for pharmacy, laboratories and industry

Features

- The KERN ORT refractometers are universal analog Abbe refractometers
- The handy and robust design allows the easy, efficient and sustainable use in everyday life
- The integrated scale allows the use in different applications and provides the best possible security to read the measurement results accurately
- The scope of delivery includes:
- Calibration solution
- Calibration block
- Pipette
- Small screwdriver
- Cleaning tissue
- Digital thermometer
- · Accessories are available as options

Technical data

- Measurement temperature: 20 °C
- Overall dimensions W×D×H 180×90×240 mm
- Net weight approx. 1950 g









Scope of application: Industry/Pharmacy/Laboratory

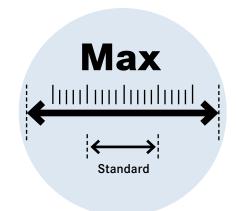
The following model is a simple yet highly reliable Abbe refractometer with a digital thermometer. Liquid, solid and pasty samples can be evaluated. This refractometer is robust, accurate and easy to use. Optionally a solide aluminium case for transport and storage is available. It measures the refractive index (nD).

The main scope of applications is:

- Sugar industry: for example cane sugar
- Pharmacy
- Beverage industry
- Food industry
- · Chemical industry
- · Oil industry/Refinery
- Laboratories
- Training

Model KERN	Scales	Measuring range	Accuracy	Division	
ORT 1RS	Brix Refractive index	0 - 95 % 1,3000 - 1,7000 nD	± 0,1 % ± 0,0002 nD	0,25 % 0,0005 nD	•







Accessory parts: Abbe refractometer - ORT

Model	Description	
KERN		
ORA-A1102	Aluminium suitcase Dimension: 310×120×240 mm, weight: 1300 g	•
ORA-A2266	Digital thermometer (0 °C/50 °C) (Spare part)	
ORA-A2267	Calibration block for ORT 1RS	
ORA-A1107	Contact liquid – Alpha-Bromonaphthalene (Refractive index: 1,65 nD) Volume: 2,5 ml	
ORA-A3001	Contact liquid – Diiodomethane "Pro" (Refractive index: 1,79 nD) Volume: 2 ml	•

Price reduction



Transport and storage case ORA-A1102



Calibration block ORA-A2267

Relationship overview – refractometer calibration (Abbe)								
Model refractometer	Calibration value	Calibration liquid	Article number liquid	Calibration block	Article number calibration block			
ORT 1RS	engraved on the block (nD value)	Alpha-Bromnaphthalene CAS 90-11-9	ORA-A1107	yes	ORA-A2267			

KERN Pictograms:





360° rotatable microscope head



Fluorescence illumination for compound microscopes With 3W LED illumination and filter



WLAN data interface:

For transmitting of the picture to a mobile display device



Monocular Microscope

For the inspection with one eye



Phase contrast unit For a higher contrast



HDMI digital camera

For direct transmitting of the picture to a display device



Binocular Microscope

Trinocular Microscope

For the inspection with both eyes



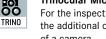
Darkfield condenser/unit

For a higher contrast due to indirect illumination



PC software

To transfer the measurements from the device to a PC.



For the inspection with both eyes and the additional option for the connection of a camera



Polarising unit

To polarise the light



Automatic temperature compesation

For measurements between 10 °C and 30 °C



Abbe Condenser

With high numerical aperture for the concentration and the focusing of light



Infinity system

Infinity corrected optical system



Protection against dust and water splashes IPxx

The type of protection is shown by the pictogram.



Halogen illumination

For pictures bright and rich in contrast



Zoom magnification

For stereomicroscopes



Battery operation

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



LED illumination

Cold, energy saving and especially long-life illumination



Parallel optical system

For stereomicroscopes, enables fatigue-proof working



Battery operation rechargable

Prepared for a rechargable battery operation



Incident illumination

For non-transparent objects



Integrated scale In the eyepiece



Mains adapter

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



Transmitting illumination

For transparent objects



-230 V Power supply

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

Fluorescence illumination

For stereomicroscopes



USB 2.0 digital camera

For direct transmitting of the picture to a PC



WF

Package shipment

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

FL-HB0

H(S)WF

Fluorescence illumination for compound microscopes

With 100W mercury lamp and filter

USB 3.0

USB 3.0 digital camera

For direct transmitting of the picture to a PC

Abbreviations

C-Mount Adapter for the connection of a

camera to a trinocular microscope

FPS Frames per second

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

LWD Long Working Distance

N.A. **Numerical Aperture**

SLR Kamera Single-Lens Reflex camera

SWF Super Wide Field

(Field number at least Ø 23 mm

for 10× eyepiece)

Working Distance W.D.

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

Your KERN specialist dealer:

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