



Transport and storage case



Rear view, screw-on battery compartment cover

Digital measurement of refraction index for universal application

Features

- NEW: Up to eight additional, individually selectable scales available, for more details see internet
- NEW: Free OXR-BASIC software for performing measurements and for saving and exporting measurement results, for more details see internet
- The KERN ORL 94BS is a accurate, universal and maintenance-free digital desktop refractometer
- 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 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
- Mean value measurements possible
- Scope of delivery:
  - Pipette
  - Storage case
  - USB cable
  - Power adapter
  - Screwdriver
  - Operating instructions

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)

Note: Also available with calibration certificate

STANDARD OPTION

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

Digital refractometer application set with predefined scales

NEW

ORL 94BS digital refractometer set with Brix and refractive index scales as well as other predefined scales for your specific application area

Area of application: Alcohol

Model	Scales	Measuring range	Accuracy	Division
KERN				
ORL 94AL	Brix	0–94 %	±0,1 %	0,1%
	Refraktive index	1,3330–1,5290 nD	±0,0002 nD	0,0001 nD
	Percent by mass	0–72 %	±1 %	1%
	Volume percentage	0–80 %	±1 %	1%
	Plato	0–31 °P	±0,3 °P	0,1 °P
	Original gravity (specific weight)	1,000–1,130	±0,002	0,001
	Oechsle	0–150 °Oe	±2 °Oe	1 °Oe
	Oechsle France	0–230 °Oe	±2 °Oe	1 °Oe
	Volume percentage (Wine)	0–22 %	±0,2 %	0,1%
	KWM (Babo)	0–25 °KWM	±0,2 °KWM	0,1 °KWM



Area of application: Industry/Motor vehicles

Modell	Scales	Measuring range	Accuracy	Division
KERN				
ORL 94IN	Brix	0–94 %	±0,1%	0,1%
	Refraktive index	1,3330–1,5290 nD	±0,0002 nD	0,0001 nD
	Windshield washer fluid	(-60)–0 °C	±0,5 °C	0,1 °C
	Battery fluid	1,000–1,500 kg/l	±0,005 kg/l	0,001 kg/l
	Ethylene glycol (%)	0–100 %	±0,5 %	0,1%
	Ethylene glycol (°C)*	(-50)–0 °C	±0,5 °C	0,1 °C
	Propylene glycol (%)	0–100 %	±0,5 %	0,1%
	Propylene glycol (°C)*	(-60)–0 °C	±0,5 °C	0,1 °C

*according to ASHRAE standard



Area of application: Food

Modell	Scales	Measuring range	Accuracy	Division
KERN				
ORL 94LM	Brix	0–94 %	±0,1%	0,1%
	Refraktive index	1,3330–1,5290 nD	±0,0002 nD	0,0001 nD
	Fructose (fruit-sugar)	0–69 %	±0,2%	0,1%
	Glucose (Grape sugar)	0–60 %	±0,2%	0,1%
	Lactose (milk sugar)	0–17 %	±0,2%	0,1%
	Maltose (Malt sugar)	0–16 %	±0,2%	0,1%
	Dextran	0–11 %	±0,2%	0,1%
	Salt content (NaCl) %	0–28 %	±0,2%	0,1%
	Salt content (NaCl) ‰	0–280 ‰	±2 ‰	1 ‰
	Salt content (specific gravity)	1,000–1,220	±0,002	0,001

