KERN **ORL 94BS**

Digital measurement of refraction index for universal application



Date of creation: 24.10.2026

Category

Brand	Optics
Product category	Refractometer
Product group	Digital refractometer
Product family	ORL-B

Measuring System

Scales	Refractive index Brix
Measurement temperature [Max] (°C)	40 °C
Measurement temperature [Min] (°C)	0 °C
Readabilites [d]	0,0001 nD 0,1 %
Precision	0,0002 nD 0,1 %
Appropriate calibration liquid	0 % (distilled water)
Measuring method	Total reflection
Automatic temperature compensation (ATC)	✓
Measuring range refractive index [Min]	1,3330 nD
Measuring range refractive index [Max]	1,5290 nD
Readout refractive index	0,0001 nD
Accuracy refractive index	±0,0002 nD
Scale for Refractive index	✓
Measuring ranges	1,3330 nD - 1,5290 nD 0 % - 94 %
Area of application	Basic measurements for Brix and refractive index
Accuracy Brix	±0,1 %
Readout Brix	0,1 %
Measuring range Brix [Min]	0 %
Measuring range Brix [Max]	94 %
Brix scale	✓

Construction

Dimension (W×D×H)	180×100×55 mm
Refractometer type	Desktop refractometer
Scale - Display type	Digital
Prism lid	✓
Material prism	Sapphire

Functions

IP protection - complete device	IP43
Auto-off interval(s) in battery mode/rechargeable battery mode	3 min
Automatic temperature compensation	✓
Supported operating systems	Win 10 Win 11
Color display	✓
Averaging measurement	✓
Averaging measurement amount	15
System requirements CPU	Intel Core i3 or higher AMD Ryzen 5 or higher
System requirements clock speeds	2.8 GHz

Interface

Interfaces	USB 2.0

Power Supply

Supplied power supply	Power supply unit
Power supply type	USB including power supply
Plug-in power supply / adapter for countries - included with the delivery	EURO
Plug-in power supply / adapter for countries - optional	EURO UK
Input voltage power supply / power [Max]	100 - 240 V AC 50/60 Hz 0,35 A
Power supply cable removable	removable
Input voltage device / power [Max]	5 V DC 2,0 A

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Power socket for mains adapter	USB B
Battery connection	Pad + Spring
Rechargeable battery optional	Rchrg. battery optional

Environmental conditions

Storage temperature [Min]	-5 °C
Storage temperature [Max]	40 °C

Services (optional)

Article number for factory calibration	961-290

Packing & Shipping

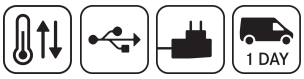
Dimensions transport container (W×D×H)	300×150×100 mm
Delivery time	1 d
Dimensions packaging (W×D×H)	300×150×100 mm
Shipping method	Parcel service
Net weight approx.	0,40 kg
Gross weight approx.	1,00 kg
Shipping weight	1 kg
Shipping volume weight	0,9 kg

Product information

GTIN/EAN number	4045761263420
Trade number	90275000
Warranty Time	36 mon
REACH classification	no prohibited substances

Pictograms

STANDARD



OPTION

