KERN **ORL 94IN**

Digital refractometer with pre-installed scales for refractive index measurements and industrial/ automotive applications



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 EG EG (%) PG PG (%) CW BF
Measurement temperature [Max] (°C)	40 °C
Measurement temperature [Min] (°C)	0 °C
Readabilites [d]	0,0001 nD 0,1 % 0,1 °C 0,1 % 0,1 °C 0,1 % 0,1 °C 0,001 kg/l
Precision	0,0002 nD 0,1 % 0,5 °C 0,5 % 0,5 °C
	0,5 % 0,5 °C 0,005 kg/l
Appropriate calibration liquid	0 % (distilled water)
Measuring method	Total reflection
Automatic temperature compensation (ATC)	✓
Scale windshield washer fluid	✓
Measuring range batterie fluid [Min]	1,000 kg/l
Meausring range batterie fluid [Max]	1,500 kg/l
Readout batterie fluid	0,001 kg/l
Accuracy batterie fluid	±0,005 kg/l
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 batterie fluid	✓
Measuring range ethylene glycol (%) [Min]	0 %
Measuring range ethylene glycol (%) [Max]	100 %
Readout ethylene glycol (%)	0,1 %
Accuracy ethylene glycol (%)	±0,5 %
Measuring range ethylene glycol (°C) [Min]	-50 °C
Measuring range ethylene glycol (°C) [Max]	0 °C
Scale for Refractive index	✓
Readout ethylene glycol (°C)	0,1 °C
Accuracy ethylene glycol (°C)	±0,5 °C
Scale for ethylene glycol (%)	✓
Scale for ethylene glycol (°C)	✓
Measuring range propylene glycol (%) [Min]	0 %
Measuring range propylene glycol (%) [Max]	100 %
Readout propylene glycol (%)	0,1 %
Accuracy propylene glycol (%)	±0,5 %
Measuring range propylene glycol (°C) [Min]	-60 °C
Measuring range propylene glycol (°C) [Max]	0 °C
Readout propylene glycol (°C)	0,1 °C
Accuracy propylene glycol (°C)	±0,5 °C

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Scale propylene glycol (%)	✓
Scale propylene glycol (°C)	✓
Measuring range windshield washer fluid [Min]	-60 °C
Measuring range windshield washer fluid [Max]	0 °C
Readout windshield washer fluid	0,1 °C
Accuracy windshield washer fluid	±0,5 °C
Measuring ranges	1,3330 nD - 1,5290 nD 0 % - 94 % -50,0 °C - 0,0 °C 0,0 % - 100,0 % -60,0 °C - 0,0 °C 0,0 % - 100,0 % -60,0 °C - 0,0 °C 1,000 kg/l - 1,500 kg/l
Area of application	Automotive / Industry
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
Power socket for mains adapter	USB B
Battery connection	Pad + Spring

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	2 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

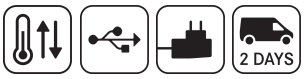
GTIN/EAN number	4045761489448
Trade number	90275000
Warranty Time	36 mon
REACH classification	no prohibited substances

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Pictograms

STANDARD



OPTION

