

# KERN ORL 94LM



Digital refractometer with pre-installed scales for refractive index measurements and the food application area



0,0 % - 68,9 %
0,0 % - 59,9 %
0,0 % - 16,5 %
0,0 % - 15,6 %
0,0 % - 10,6 %
0,0 % - 28,0 %
0 ‰ - 280 ‰
1,000 sg - 1,220 sg

0,0001 nD
0,1 %
0,1 %
0,1 %
0,1 %
0,1 %
0,1 %
0,1 %
1 ‰
0,001 sg

Readout Brix	0,1 %
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Automatic temperature compensation (ATC)	✓
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Accuracy Brix	±0,1 %
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Measuring range refractive index [Min]	1,3330 nD
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Measuring range refractive index [Max]	1,5290 nD
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Readout refractive index	0,0001 nD
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Accuracy refractive index	±0,0002 nD
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Measuring range dextran [Min]	0 %
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Scale for Refractive index	✓
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Measuring range dextran [Max]	11 %
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Readout dextran	0,1 %
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Accuracy dextran	±0,2 %
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Scale for dextran	✓
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Measuring range fructose (fruit sugar) [Min]	0 %
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Measuring range fructose (fruit sugar) [Max]	69 %
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Readout fructose (fruit sugar)	0,1 %
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Accuracy fructose (fruit sugar)	±0,2 %
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Measuring range glucose (fruit sugar) [Min]	0 %
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Measuring range glucose (fruit sugar) [Max]	60 %
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Readout glucose (fruit sugar)	0,1 %
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Accuracy glucose (fruit sugar)	±0,2 %
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Scale for fructose (fruit sugar)	✓
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Scale for glucose (fruit sugar)	✓
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Measuring range lactose (milk sugar) [Min]	0 %
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## Category

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

## Measuring System

Measurement temperature [Min] (°C)	0 °C
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Measurement temperature [Max] (°C)	40 °C
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Precision	0,0002 nD
	0,1 %
	0,2 %
	0,2 %
	0,2 %
	0,2 %
	0,2 %
	0,2 %
	2 ‰
	0,002 sg

Measuring method	Total reflection
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Measuring range Brix [Min]	0 %
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Scales	Refractive index
	Brix
	Fruktose (Fruchtzucker)
	Glukose (Traubenzucker)
	Laktose (Milchzucker)
	Maltose (Malzzucker)
	Dextran
	Salt (NaCl)
	Salz (NaCl) ‰
spec. gravity	

Measuring ranges	1,3330 nD - 1,5290 nD
	0 % - 94 %

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Measuring range lactose (milk sugar) [Max]	17 %
Readout lactose (milk sugar)	0,1 %
Accuracy lactose (milk sugar)	±0,2 %
Measuring range maltose (malt sugar) [Min]	0 %
Measuring range maltose (malt sugar) [Max]	16 %
Readout maltose (malt sugar)	0,1 %
Accuracy maltose (malt sugar)	±0,2 %
Scale lactose (milk sugar)	✓
Scale maltose (malt sugar)	✓
Measuring range salinity (NaCl) % [Min]	0 %
Measuring range salinity (NaCl) % [Max]	28 %
Readout salinity (NaCl) %	0,1 %
Accuracy salinity (NaCl) %	±0,2 %
Measuring range salinity (NaCl) ‰ [Min]	0 ‰
Measuring range salinity (NaCl) ‰ [Max]	280 ‰
Readout salinity (NaCl) ‰	1 ‰
Accuracy salinity (NaCl) ‰	±2 ‰
Scale salinity (NaCl) %	✓
Scale salinity (NaCl) ‰	✓
Measuring range salinity (spec. weight) [Min]	1,000
Measuring range salinity (spec. weight) [Max]	1,220
Readout salinity (spec. weight)	0,001
Accuracy salinity (spec. weight)	±0,002
Scale salinity (spec. weight)	✓
Appropriate calibration liquid	0 % (distilled water)
Measuring range Brix [Max]	94 %
Brix scale	✓
Area of application	Food

## Construction

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

## Functions

Color display	✓
Averaging measurement	✓
Averaging measurement amount	15

Automatic temperature compensation	✓
Supported operating systems	Win 10 Win 11
IP protection - complete device	IP43
Auto-off interval(s) in battery mode/rechargeable battery mode	3 min
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
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## 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

## Approval

CE mark	✓
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## Services (optional)

Article number for factory calibration	961-290
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## 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

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Gross weight approx. 1,00 kg

Shipping weight 1 kg

## Product information

GTIN/EAN number 4045761489455

Trade number 90275000

REACH classification no prohibited substances

## Pictograms

### STANDARD

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### OPTION

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