

Рефрактометры, батарейки CARL ROTH

Технические характеристики

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Россия (495)268-04-70

Казахстан (772)734-952-31

Киргизия (996)312-96-26-47

Refractometers

Handheld refractometer analogue

Kern.

For measuring the refractive index of transparent substances in a liquid state.

- Eyepiece with dioptré compensation
- Scale is precisely calculated and checked, with very thin and clear lines
- Without or with automatic temperature compensation (ATC)
Measuring temperature with ATC: 10 to 30 °C
Measuring temperature without ATC: 20 °C



Delivery incl. calibration solution and storage box.

Application area: laboratory

Type	Scale/measuring range	Resolution	Temp. compensation	Art. No.	Pack Qty.	
ORA 4RR	Refractive index/1.440–1.520 nD	0.001 nD	No	CEX9.1	1 unit(s)	
ORA 1RE	Refractive index/1.333–1.517 nD	0.005 nD	No	CEY0.1	1 unit(s)	

Usage: food industry/quality control

Type	Scale/measuring range	Resolution	Art. No.	Pack Qty.	
ORA 10BA	Brix/0–10%	0.1%	CEY1.1	1 unit(s)	
ORA 20BA	Brix/0–20%	0.1%	CEY2.1	1 unit(s)	
ORA 32BA	Brix/0–32%	0.2%	CEY3.1	1 unit(s)	
ORA 80BB	Brix/0–80%	0.5%	CEY4.1	1 unit(s)	

Usage: food industry/wine making

Type	Scale/measuring range	Resolution	Art. No.	Pack Qty.	
ORA 3WA	Brix/0–32%, Oechsle/30–140 °Oe	0.2%, 1 °Oe	CEY5.1	1 unit(s)	
ORA 1WA	Brix/0–32%, Oechsle/0–140 °Oe, KMW (Babo)/0–25 °KMW	0.2%, 1 °Oe, 0.25 °KMW	CEY6.1	1 unit(s)	
ORA 2AB	Volume (weight)/0–80% Vol	1% Vol (0–50% Vol), 2.5% Vol (50–80% Vol)	CEY7.1	1 unit(s)	

Usage: food industry/fishkeeping

Type	Scale/measuring range	Resolution	Temp. compensation	Art. No.	Pack Qty.	
ORA 1SA	Salinity/0–100 ‰, spec. weight/1.000–1.070 sg	1 ‰, 0.001 sg	Yes	CEY8.1	1 unit(s)	
ORA 3SA	Salt (NaCl)/0–28%, Brix/0–32%	0.2% (Salt), 0.2% (Brix)	Yes	CEY9.1	1 unit(s)	

Usage: industry/automotive

For analysing glycol concentrations (ethylene: EG and propylene: PG) of battery fluid (BF), and for measuring the freezing point of windscreen washer fluid (CW).

Type	Scale/measuring range	Resolution	Temp. compensation	Art. No.	Pack Qty.	
ORA 4FA	EG (G13)/-50–0 °C, PG (G11/12)/-50–0 °C, CW/-40–0 °C, BF/1.10–1.40 kg/l	1 °C (EG), 1 °C (PG), 5 °C (CW), 0.01 kg/l (BF)	Yes	CYN3.1	1 unit(s)	



Refractometers

Handheld refractometer digital DR series

Krüss.

Digital refractometer for determining the concentration and refractive index of the liquids. Fully automatic measuring, temperature compensation and calibration.



Technical specifications:

Art. No.	HH60.1	EP62.1
Short designation	DR 201-95	DR 301-95
W x D x H	80 x 130 x 40 mm	100 x 180 x 60 mm
Weight	150 g	900 g
Power supply	1.5 V AA battery	E-Block 9 V battery

DR-201-95

Delivery incl. batteries.

Pic.	Type	Scale/measuring range	Resolution	Accuracy	Temp. compensation	Art. No.	Pack Qty.	
(1)	DR 201-95	Brix/0–95%, Refractive index/1.3330–1.5320	0.1%, 0.0001 nD	± 0.2%, ±0.0003 nD	Yes	HH60.1	1 unit(s)	

DR-301-95

The DR301-95 model also includes a tolerance alarm, serial port, data transfer cable and evaluation software.

Delivery incl. batteries and cable for data transfer.

Pic.	Type	Scale/measuring range	Resolution	Accuracy	Temp. compensation	Art. No.	Pack Qty.	
(2)	DR 301-95	Brix/0–95%, Salt (NaCl)/0–30%, Refractive index/1.3330–1.5318 nD	0.1% (Brix), 0.1% (Salt), 0.0001 nD	± 0.1% (Brix), ±0.1% (Salt), ±0.00015 nD	Yes	EP62.1	1 unit(s)	

Refractometers

Handheld refractometer digital ORF series

Kern.

Digital refractive index measuring instrument for laboratories and industry.

- Compact, rugged design
- Dust and splash-proof according to protection class IP 65
- With automatic temperature compensation (ATC)
- Measuring temperature with ATC: +5 to +40 °C (Accuracy ± 0.5 °C)
- Depending on model, measured value is output on different measurement scales
- Auto-off function after 90 seconds



Technical specifications:

Art. No.	ECL0.1	ECL1.1	ECL2.1	ECL3.1
Minimum sample volume	approx. 2–3 droplets			
Service life	battery: approx. 3750 measurements			
W x D x H	145 x 67 x 40 mm			
Weight	560 g			
Power supply	2 x 1.5 V AAA batteries			

Delivery incl. calibration solution, leather case, storage box and batteries.

Usage: laboratory

For refractive index measurement, with extra-large measuring range.

Type	Scale/measuring range	Resolution	Accuracy	Temp. compensation	Art. No.	Pack Qty.	
ORF 1RS	Refractive index/1.3330–1.5400 nD	0.0001 nD	± 0.0005 nD	Yes	ECL0.1	1 unit(s)	

Usage: food industry/quality control

For calculating the Brix value (refractive index) for the quantification of sugar content in foodstuffs (e.g. fruit, vegetables, juices and beverages containing sugar). Also suitable for monitoring industrial processes (monitoring of cooling lubricants, oils and greases). Refractive index display is optional.

Type	Scale/measuring range	Resolution	Accuracy	Temp. compensation	Art. No.	Pack Qty.	
ORF 45BM	Brix/0–45%, Refractive index/1.3330–1.4098 nD	0.1%, 0.0001 nD	$\pm 0.2\%$, ± 0.0003 nD	Yes	ECL1.1	1 unit(s)	
ORF 85BM	Brix/0–85%, Refractive index/1.3330–1.5100 nD	0.1%, 0.0001 nD	$\pm 0.2\%$, ± 0.0003 nD	Yes	ECL2.1	1 unit(s)	

Usage: food industry/fishkeeping

For determining the Brix value and the sodium chloride content in water. Refractive index display is optional.

Type	Scale/measuring range	Resolution	Accuracy	Temp. compensation	Art. No.	Pack Qty.	
ORF 3SM	Brix/0–45%, Salt (NaCl)/0–28%, Refractive index/1.3330–1.4100 nD	0.1% (Brix), 0.1% (Salt), 0.0001 nD	$\pm 0.2\%$ (Brix), $\pm 0.2\%$ (Salt), ± 0.0003 nD	Yes	ECL3.1	1 unit(s)	



Refractometers

Abbe refractometer ORT 1RS

Kern.

For determining the refraction index of transparent liquids, solids and paste-like samples. Usage: Laboratory/industry/pharmaceuticals.

- Easy-to-use, rugged design
- Eyepiece with dioptr adjustment
- Scale refers to +20 °C
- Includes thermometer for reading the measuring temperature
- Calibrated with distilled water or calibration block and special contact fluid
- Can be connected to a water circulation system for temperature control of measurement prism and illumination prism (outer diameter of connecting piece: 9.5 mm)



Optional accessories (please order separately):

- Transport and storage box made from aluminium

Technical specifications:

Art. No.	ECK5.1
W x D x H	90 x 180 x 240 mm
Weight	1950 g

Delivery incl. thermometer (incl. battery), calibration block and contact fluid.

Type	Scale/measuring range	Resolution	Accuracy	Temp. compensation	Art. No.	Pack Qty.	
ORT 1RS	Brix/0–95%, Refractive index/1.3000– 1.7000 nD	0.25%, 0.0005 nD	±0.1% Brix, ±0.0002 nD	No	ECK5.1	1 unit(s)	

Accessories for Abbe refractometer ORT 1RS

Kern.

Aluminium case

Version	Art. No.	Pack Qty.	
Dimensions: L 310 x H 120 x T 240 mm Weight: 1300 g	ECK6.1	1 unit(s)	

Batteries



Dry cell battery High Energy

Varta.

Technical specifications:

Art. No.	CH38.1	1021.2	1022.2	1023.2	1024.2	1025.1
Rechargeable	No					

Pic.	Type	System	Voltage (V)	Capacity (mAh)	Art. No.	Pack Qty.
(1)	Lady/LR 1	Alkaline manganese	1,5	800	CH38.1	1 unit(s)
(2)	Micro/AAA	Alkaline manganese	1,5	1,200	1021.2	4 unit(s)
(3)	AA	Alkaline manganese	1,5	2,600	1022.2	4 unit(s)
(4)	Baby/C	Alkaline manganese	1,5	7,800	1023.2	2 unit(s)
(5)	Mono/D	Alkaline manganese	1,5	16,500	1024.2	2 unit(s)
(6)	E-Block	Alkaline manganese	9,0	550	1025.1	1 unit(s)



Button cell

Varta

Type	System	Voltage (V)	Capacity (mAh)	Art. No.	Pack Qty.
CR 1220	Lithium	3,0	35	CH41.1	1 unit(s)
CR 1225	Lithium	3,0	48	AEC3.1	1 unit(s)
CR 1616	Lithium	3,0	55	KE59.1	1 unit(s)
CR 1620	Lithium	3,0	60	CH42.1	1 unit(s)
CR 2016	Lithium	3,0	90	CH43.1	1 unit(s)
CR 2025	Lithium	3,0	170	CH14.1	1 unit(s)
CR 2032	Lithium	3,0	230	P858.1	1 unit(s)
CR 2430	Lithium	3,0	280	EY56.1	1 unit(s)
CR 2450	Lithium	3,0	570	CXC6.1	1 unit(s)
V 10 GA	Alkaline manganese	1,5	50	CH39.1	1 unit(s)
V 13 GA	Alkaline manganese	1,5	125	1938.1	1 unit(s)
V301	Silver	1,55	115	CH40.1	1 unit(s)
V357	Silver	1,55	143	1AN1.1	1 unit(s)

Rayovac

Type	System	Voltage (V)	Capacity (mAh)	Art. No.	Pack Qty.
V 675 AT	Zinc-air	1,4	630	9800.2	6 unit(s)



Battery rechargeable

Varta.

Environmentally friendly Ni-MH batteries. No memory effect. Constant, consistently recurring capacity level.

Technical specifications:

Art. No.	T409.2	1301.2	HT32.1	1302.2	X228.2	1304.1
Rechargeable	Yes					

Pic.	Type	Voltage (V)	Capacity (mAh)	Art. No.	Pack Qty.
(1)	Micro/AAA	1,2	800	T409.2	4 unit(s)
(2)	Mignon/AA	1,2	2,100	1301.2	4 unit(s)
(3)	Mignon/AA	1,2	2,400	HT32.1	4 unit(s)
(4)	Baby/C	1,2	3,000	1302.2	2 unit(s)
(5)	Mono/D	1,2	3,000	X228.2	2 unit(s)
(6)	E-Block	8,4	200	1304.1	1 unit(s)



Battery charger LCD Universal charger

Varta.

Suitable for two or four Ni-MH batteries of sizes AA, AAA, C, D (charging in pairs), 1 x 9 V.

- LCD indicator (blue) for charge status
- Safety features: Minus Delta U-shut-off, timer, alkaline detection
- Charging times: Rechargeable batteries 4 hours, external devices 1.5–5 hours
- Four charging bays for charging batteries

Delivery incl. external mains adapter (100–240 V). Supplied without rechargeable batteries, please order separately.

W x D x H (mm)	Art. No.	Pack Qty.
111 x 70 x 187	EXP0.1	1 unit(s)

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