

# OPTECH



## REFRACTOMETERS

Digital, benchtop and portable.



# DIGITAL REFRACTOMETERS



Portable digital refractometers provide convenient, rapid and precise measurement of different parameters in aqueous solutions, avoiding the subjectivity when reading analogue scales.



#### Technical specifications:

Reading time: 3 seconds.

Working temperature: 0 to 40 °C.

Battery power: 9V.

Low battery indicator.

Automatic temperature compensation.

Auto-OFF after 2 minutes without use.

Dimensions: 185x105x50 mm.

Weight: 250 g.

MODEL	MEASUREMENT	COMMON APPLICATIONS	RANGE	PRECISION	CODE
RM 45	Brix Refr. Index	General purpose	0-45% 1.3330-1.4098	0.1% 0.00015	K71601
RM 65	Brix Refr. Index	General purpose	28-65% 1.3800-1.4535	0.1% 0.00015 nD	K71602
RM 92	Brix Refr. Index	General purpose	60-92% 1.4400-1.5230	0.1% 0.00015 nD	K71603
RMS 28	Percentage Refr. Index	Salinity concentration	0-28% 1.3330-1.3903	0.1% 0.00015 nD	K71604
RMC	Sp. Gravity, g/dl Refr. Index	Biological fluids: urine, serum	1.000 - 1.050 0-12 1.3330-1.3903	0.001 0.1 0.00015	K71605
RMW	Brix Percentage Oechsle Babo	Sugar content in wine/grape musts Probable alcohol in wine	0-35% 0-22 Vol 0-150° 0-25°	0.1% 0.1 Vol 1° 0.1°	K71606



# BENCHTOP REFRACTOMETERS



Benchtop refractometers are high precision instruments capable of reading almost the whole Brix range (0 to 95%) and the corresponding refractive index, simultaneously. It is possible to perform measurements on liquids, semi-liquids, solids and powders. Both models feature inlet/outlet ferrules for thermostatic control of the sample.

## MODEL RMT

Code K7121

### Ranges:

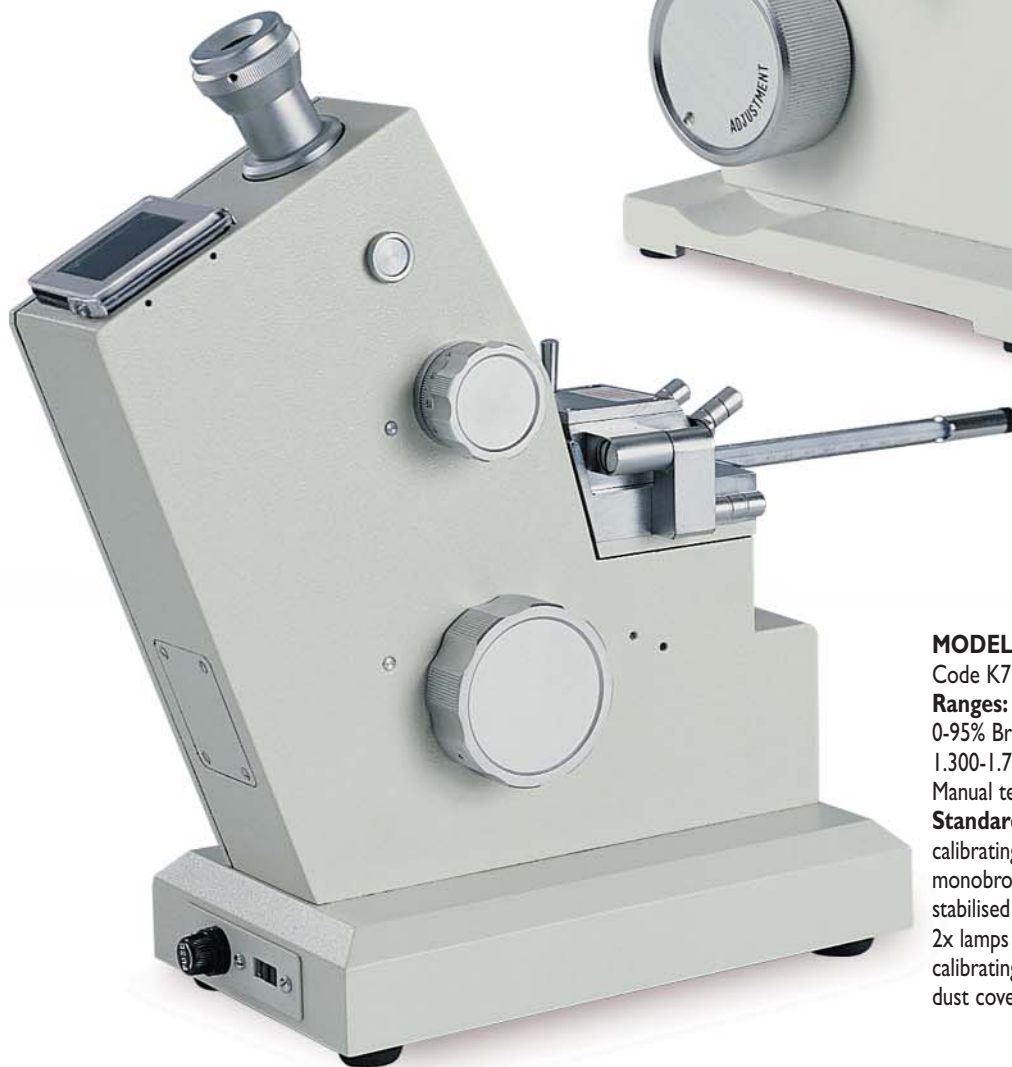
0 to 95%Brix, precision 0.2%

1.300 to 1.700 nD, precision 0.001 nD.

Manual temperature compensation from 0 °C to 70 °C.

### Standard accessories:

calibrating glass prism;  
monobromonaphthalene standard;  
bottle; calibrating screwdriver;  
thermometer;  
dust cover;  
wooden box.



## MODEL RMI

Code K7135

### Ranges:

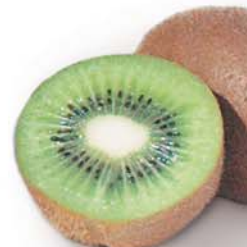
0-95% Brix, precision 0.2% Brix

1.300-1.700 nD, precision 0.001 nD.

Manual temperature compensation from 0 °C to 100 °C.

### Standard accessories:

calibrating glass prism;  
monobromonaphthalene standard, bottle;  
stabilised mains adapter;  
2x lamps 6V/5W;  
calibrating screwdriver;  
dust cover.



# PORTABLE REFRACTOMETERS



Simple, precise instruments for determining the concentration of different substances in aqueous solution, using the refraction principle. ATC (Automatic Compensation Temperature) system allows measurements to be taken at alternative temperatures to the standard 20 °C without re-calibration.



MODEL	MEASUREMENT	COMMON APPLICATIONS	RANGE	PRECISION	ATC	CODE
RBC	Brix	Tomato, oily emulsions, etc	0-10%	0.1%	Yes	K71900
RLC	Brix	Fruit, fruit juices, milk	0-18%	0.1%	Yes	K71901
RZT	Brix	General purpose	0-32%	0.2%	Yes	K71319
RFC	Brix	Jam, tomato juice or paste	28-62%	0.2%	Yes	K71320
RPD	Brix	Jam, tomato juice or paste	45-82%	0.5%	Yes	K71314
RPU	Brix	General purpose	0-80% (2 ranges)	1%	No	K7117
RTS	Brix	General purpose	0-90% (3 ranges)	0.2%	No	K71316
RMM	Brix Baumé Water	Honey, jam	58-90%	0.5%	Yes	K71902
			38-43°	0.5°		
			17-27%	1%		
RPI	g/dl Sp. gravity Refr. Index	Biological fluids: urine, serum	0-12	0,2	Yes	K71903
			1.000-1.050	0.002		
			1.3330-1.3600	0.00025		
RSM	Percentage	Salinity concentration	0-100‰	1‰	Yes	K71904
RCS	Percentage	Salinity concentration	0-28%	0.2%	Yes	K71905
RPC	Percentage	Freezing point, electrolytes in batteries	-50/0 °C	5 °C	Yes	K71906
			1.10-1.40	0.1		
RGA	Percentage	Alcoholic solutions	0-80% Vol	1% Vol	Yes	K71909
RMA	Percentage Brix	Probable alcohol in wine Sugar content in grapes	0-25% Vol	0.2% Vol	Yes	K71907
			0-40%	0.2%		
RBB	Percentage Brix Baumé	Probable alcohol in wine Sugar content in grapes Density	0-25% Vol	0.2%	Yes	K71321
			0-40%	0.2%		
			0-22°	0.2°		
RMB	Percentage Baumé	Probable alcohol in wine Density	0-25% Vol	0.2% Vol	Yes	K71908
			0-20°	0.2°		
RBO	Oechsle Babo Brix	Sugar content in grapes	0-140°	1°	Yes	K71196
			0-25°	0.2°		
			0-32%	0.2%		



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