



Transport and storage case



Rear view, screw-on battery compartment cover

## Digital measurement of refraction index for universal application

### Features

- The KERN ORM refractometers are accurate and universal maintenance free digital handheld refractometers
- They are characterized by their easy-using and robustness
- The typical and practical design is suitable for a quick and convenient everyday use
- The large, easy-to-read display with integrated temperature display supports the user to reliably determine the measurement
- The integrated automatic temperature compensation (ATC), avoids the manual conversion of the measurement. This allows a quick and efficient usage of the instrument
- Rapid, user-friendly calibration of the refractometer is possible at any time using standard commercial distilled water
- The refractometers from the KERN ORM range are protected to international IP65 protection class, against dust and water splashes. After use, you can rinse the refractometer under running water
- Mean value measurements possible
- The following accessory-parts are included:
  - Prism cover lid
  - Pipette
  - Storage box
  - 1 × AAA battery
  - Screwdriver

### Technical data

- Measurement temperature: 0 °C – 40 °C
- Overall dimensions W×D×H 121×58×25 mm
- Net weight approx. 289 g
- Power supply: 1 × AAA (1,5 V)
- Lifetime of the battery: approx. 10.000 measurements
- ATC (Automatic Temperature Compensation 0 °C – 40 °C)
- Minimum sample volume: 4 drops
- Automatic energy management (AUTO-OFF after 60 seconds)
- Mean value measurement (15 measurements)

### Accessories

- Calibration liquid

**Note:** Also available with calibration certificate, see page 106

STANDARD



## Scope of application: Beer/alcohol

The following models are particularly suitable for determining the sugar content of the original wort of beer in its unfermented state. The value can be read straightaway, without having to be converted, using the Original gravity (specific weight) and Degrees Plato scales. In addition, the percent by volume and percent by mass scales can be used to determine the alcohol content of clear spirits.

The main scope of applications is:

- Beer brewers
- Alcohol production



Model	Scales	Measuring range	Accuracy	Division
<b>KERN</b>				
<b>ORM 1AL</b>	Percentage by mass	0 – 72 %	± 1 %	1 %
	Percentage by volume	0 – 80 %	± 1 %	1 %
	Brix	0 – 50 %	± 0,2 %	0,1 %
	Refractive index	1,3330 – 1,4200 nD	± 0,0003 nD	0,0001 nD
<b>ORM 1BR</b>	Plato	0 – 31 °P	± 0,3 °P	0,1 °P
	Original gravity (specific weight)	1,000 – 1,130	± 0,002	0,001
	Brix	0 – 50 %	± 0,2 %	0,1 %
	Refractive index	1,3330 – 1,4200 nD	± 0,0003 nD	0,0001 nD

## Scope of application: Wine

The following models are particularly suitable for the measurement of the sugar content in fruit. It indicates the expected °Alcohol of the fruit. The degree of ripeness of fruit (fruit-sugar) can also be determined, such as e.g. grapes. Alternatively the display can be switched to show Brix.

The main scope of applications is:

- Agriculture: Wine-growing (viticulture) and fruit-growing
- Wine-production
- Must and alcohol production



°Oe = Degree Oechsle, °KMW = Klosterneuburger Most Waage

Model	Scales	Measuring range	Accuracy	Division
<b>KERN</b>				
<b>ORM 1WN</b>	Oechsle	0 – 150 °Oe	± 2 °Oe	1 °Oe
	Percentage by volume	0 – 22 %	± 0,2 %	0,1 %
	KMW (Babo)	0 – 25 °KMW	± 0,2 °KMW	0,1 °KMW
	Brix	0 – 50 %	± 0,2 %	0,1 %
<b>ORM 2WN</b>	Oechsle France	0 – 230 °Oe	± 2 °Oe	1 °Oe
	Percentage by volume	0 – 22 %	± 0,2 %	0,1 %
	KMW (Babo)	0 – 25 °KMW	± 0,2 °KMW	0,1 °KMW
	Brix	0 – 50 %	± 0,2 %	0,1 %