

PRODUCT BROCHURE

OPTICS ORM 50BM

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ENGLISH



Digital measurement of refraction index for universal application

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PRODUCT SHOWCASE



DESCRIPTION

- The KERN ORM refractometers are accurate and universal maintenance free digital handheld refractometers
- The typical and practical design is suitable for a quick and convenient everyday use and is characterized by its easy-using and robustness
- With their handy design, they are ideal for convenient and rapid 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
- A quick and user-friendly calibration of the refractometer is possible at any time using commercially available distilled water
- The refractometers of the KERN ORM series are protected against dust and splash water according to the international protection class IP65. You can rinse the refractometer under running water after use
- Mean value measurements possible
- Included with the delivery:
 - prism cover

- pipette
- storage box
- 1 × AAA battery
- user instruction
- This model is particularly suitable for basic measurement where the result is required in Brix or refractive index. They are used to determine the sugar content in food or for monitoring processes in the industry (coolant monitoring, water-based mixtures). Alternatively the display can be switched to show Brix or the refractive index.
- Main scope of applications:
 - Industry: Monitoring of lubricants for process and quality control
 - Food industry: Beverages, fruits and sweets
 - Determination of the degree of ripeness of fruit for quality control in harvesting
 - Restaurants and large-scale catering establishment

SPECIFICATIONS

Article codes, product groups & Status information

Model article-code	ORM 50BM
Model-Serie	ORM-B
Assortment	Optics
Product Type	Refractometers
Product group	Digital refractometers
Product usage type	Main article
EAN code (Model)	404576 1249875
Predecessor Model	ORF 45BE; ORF 45BM; ORF 45RE
Customs tariff number	90275000
CE Label	yes

Technical data - Primary

Scales	Refractive index Brix
Scale Range	1,3330 nD - 1,4200 nD 0,0 % - 50,0 %

Technical data - Construction

IP Protection	IP65
Type	Handheld refractometer
Display scale	Digital
Auto-Off	60 s
Prism material	optical glass
Prism cover lid	yes
Dimensions (W×D×H)	121×58×25 mm

Technical data - Power supply

Protection Class	Class III - Low voltage
Cable attachment	removable
Battery type	Alkali(-Manganese)
Battery compartment	internal - in the housing

Technical data - Measuring system

Measuring method	Total reflection
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Measuring Temp min	0 °C
Measuring Temp max	40 °C
Readout	0.0001 nD 0.1 %
Accuracy	0.0003 nD 0.2 %
Averaging measurment	yes
Averaging measurement quantity	15

Standard



Technical data - Environmental conditions

Storage Temp Min	-5 °C
Stotage Temp Max	40 °C

Technical data - Packing & Shipping

Dimensions packaging (W×D×H)	170×110×50 mm
Gross weight	0.35 kg
Net weight	0.15 kg
Shipping method	Parcel service
Packaging component - by weight - cardboard	20 g
Packaging component - by weight - plastics	1 g
Delivery time	1 d

Technical data - Verification

WEEE	yes
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Optional Services

ISO Calobration	961-290
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FUNCTIONS

ACCESSORIES

Model	Description
ORA-A1010	Liquid KERN ORA-A1010

SERVICES

Model	Description
961-290	Factory calibration KERN 961-290
961-290R	Factory calibration KERN 961-290R
970-015	Warranty extension KERN (+3 years) 970-015

SPARE PARTS

Model	Description
ORA-A2010	Pipette ORA-A2010
ORM-A2001	Refractometer box KERN ORM-A2001
ORM-A2002	Housing protection KERN ORM-A2002
ORM-A2003	Battery compartment cover KERN ORM-A2003
ORM-A2004	Prismatic flap KERN ORM-A2004
ORM-A2005	Outer packaging box KERN ORM-A2005

RELATED ARTICLES DATA

Model name	Scales	Scale Range
ORM 50BM	Refractive index Brix	1,3330 nD - 1,4200 nD 0,0 % - 50,0 %