

# KERN ORM 1NA



Digital measurement of refraction index for universal application



## Category

|                  |                       |
|------------------|-----------------------|
| Brand            | Optics                |
| Product category | Refractometer         |
| Product group    | Digital refractometer |
| Product family   | ORM-NA                |

## Measuring System

|                                          |                                                                                                 |
|------------------------------------------|-------------------------------------------------------------------------------------------------|
| Measurement temperature [Min] (°C)       | 0 °C                                                                                            |
| Measurement temperature [Max] (°C)       | 40 °C                                                                                           |
| Precision                                | 0,0003 nD<br>0,2 %<br>0,2 %<br>2 ‰<br>0,002 sg                                                  |
| Measuring method                         | Total reflection                                                                                |
| Measuring range Brix [Min]               | 0 %                                                                                             |
| Scales                                   | Refractive index<br>Brix<br>Salt (NaCl)<br>Salz (NaCl) ‰<br>spec. gravity                       |
| Measuring ranges                         | 1,3330 nD - 1,4200 nD<br>0,0 % - 50,0 %<br>0,0 % - 28,0 %<br>0 ‰ - 280 ‰<br>1,000 sg - 1,220 sg |
| Readabilities [d]                        | 0,0001 nD<br>0,1 %<br>0,1 %<br>1 ‰<br>0,001 sg                                                  |
| Readout Brix                             | 0,1 %                                                                                           |
| Automatic temperature compensation (ATC) | ✓                                                                                               |
| Accuracy Brix                            | ±0,2 %                                                                                          |

|                                               |                       |
|-----------------------------------------------|-----------------------|
| Measuring range refractive index [Min]        | 1,3330 nD             |
| Measuring range refractive index [Max]        | 1,4200 nD             |
| Readout refractive index                      | 0,0001 nD             |
| Accuracy refractive index                     | ±0,0003 nD            |
| Scale for Refractive index                    | ✓                     |
| 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]                    | 50 %                  |
| Brix scale                                    | ✓                     |
| Area of application                           | Salt                  |

## Construction

|                      |                                        |
|----------------------|----------------------------------------|
| Dimension (W×D×H)    | 121×58×25 mm                           |
| Refractometer type   | Handheld refractometer                 |
| Scale - Display type | Digital                                |
| Prism lid            | ✓                                      |
| Material prism       | ZLaF3 lanthanum flint glass nd=1.85544 |

## Functions

|                                                                |        |
|----------------------------------------------------------------|--------|
| Averaging measurement                                          | ✓      |
| Averaging measurement amount                                   | 15     |
| IP protection - complete device                                | IP65   |
| Auto-off interval(s) in battery mode/rechargeable battery mode | 60 sec |

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## Power Supply

|                              |                         |
|------------------------------|-------------------------|
| Supplied power supply        | Battery                 |
| Power supply cable removable | removable               |
| Battery / accumulator type   | Alkali(-Manganese)      |
| Battery connection           | Pad + Spring            |
| Battery capacity             | 1.300 mAh               |
| Battery voltage              | 1,5 V                   |
| Battery – Number of cells    | 1                       |
| Battery – Individual weight  | 11,5 g                  |
| Battery – Total weight       | 11,5 g                  |
| Battery – Construction       | Individual cells        |
| Battery capacity (Wh)        | 1,95 Wh                 |
| Battery – Lithium content    | 0 g                     |
| Battery/Accu connected       | not connected, enclosed |

## Environmental conditions

|                           |       |
|---------------------------|-------|
| Storage temperature [Min] | -5 °C |
| Storage temperature [Max] | 40 °C |

## Approval

|         |   |
|---------|---|
| CE mark | ✓ |
|---------|---|

## Services (optional)

|                                        |         |
|----------------------------------------|---------|
| Article number for factory calibration | 961-290 |
|----------------------------------------|---------|

## Packing & Shipping

|                                        |                |
|----------------------------------------|----------------|
| Dimensions transport container (W×D×H) | 170×110×50 mm  |
| Delivery time                          | 1 d            |
| Dimensions packaging (W×D×H)           | 170×110×50 mm  |
| Shipping method                        | Parcel service |
| Net weight approx.                     | 0,15 kg        |
| Gross weight approx.                   | 0,35 kg        |
| Shipping weight                        | 0,31 kg        |

## Product information

|                      |                          |
|----------------------|--------------------------|
| GTIN/EAN number      | 4045761335523            |
| REACH classification | no prohibited substances |

## Pictograms

### STANDARD

