DR101-60
As an entry-level model for the digital refractometry, the DR101-60 covers the measurement ranges between nD 1.3330–1.4419 and 0–60 % Brix. Thanks to the automatic temperature compensation for the Brix scale, you can achieve reproducible measurement results even under changing environmental conditions. As a water-tight device, the DR101-60 meets the IP65 standard and can be cleaned under running water.

DR201-95
The compact handheld refractometer DR201-95 offers an extended measurement range of the refractive index and the sugar content of nD 1.3330–1.5318 and 0–95 % Brix. The automatic temperature compensation for the Brix scale helps the user with the measurements of beverages and sugary confectionary products. The device is splash-proof and meets the IP64 standard.

DR301-95
As a mobile handheld device or digital tabletop unit, the DR301-95 can measure the refractive index or the sugar content within a measurement range of nD 1.3330–1.5318 or 0–95 %Brix. In addition, the device measures the salinity and allows for the use of two additional freely definable scales. The automatic temperature compensation for the Brix scale can be optionally connected.
An alarm option can be set up for monitoring the limit values in production processes. The provided mains adaptor turns the DR301-95 into a small lab refractometer; for a mobile use it is operated with a 9 V monobloc battery.

HANDHELD REFRACTOMETERS

Hand refractometers are barely bigger than a torch and can be used anywhere in mobile applications. They are especially easy to use, very robust and require no batteries. The devices differ mainly in the selectable scales, e.g. for the determination of the salinity, water content in honey, serum protein content, Oechsle, Brix and potential alcohol content as well as ethylene- and propylene glycol content. No manual conversion is required thanks to the scales and application errors are ruled out.

The majority of our handheld refractometers are equipped with an automatic temperature compensation. The measured values are therefore already corrected to 20 °C when taking a reading. For a consistent measurement accuracy, we recommend to calibrate the devices daily with distilled water; you can use the provided calibration bodies and contact fluids for the adjustment.

You will find the range of our HR series together with the technical specifications on page 30.

HR serie

TEMP. COMPENSATION

OVERVIEW OF REFRACTOMETERS, ACCESSORIES AND CONSUMABLES

ORDER NUMBER	ABBE REFRACTOMETERS
AR4	Analogue Abbe refractometer, measurement range nD 1.3000–1.7200, measurement accuracy nD ±0.0002
AR2008	Digital Abbe refractometer, measurement range nD 1.3000–1.7200, measurement accuracy nD ±0.0002

ORDER NUMBER	ACCESSORIES/CONSUMABLES ABBE REFRACTOMETERS
AR11	Measurement prism for AR4 and AR2008
AR12	Illumination prism for AR4 and AR2008
AR15	Funnel flow-through cell for AR4 and AR2008
AR16	Flow-through cell for AR4 and AR2008
AR17	Thermosensor for AR2008
AR18	Digital thermometer for AR4
AR41	Temperature sensor for AR4
ARK01	Illumination cable for AR2008, incl. LED
ARFT	Filter for thermostat

ORDER NUMBER	DIGITAL HANDHELD REFRACTOMETERS
DR101-60	Digital handheld refractometer, measurement range nD 1.3330–1.4419, measurement accuracy nD ±0.0005
DR201-95	Digital handheld refractometer, measurement range nD 1.3330–1.5318, measurement accuracy nD ±0.0003
DR301-95	Digital handheld refractometer, measurement range nD 1.3330–1.5318, measurement accuracy nD ±0.00015

ORDER NUMBER	ACCESSORIES/CONSUMABLES DIGITAL HANDHELD REFRACTOMETERS
DR301-300	Mains adaptor for DR301-95

ORDER NUMBER	HANDHELD REFRACTOMETERS
HRB10-T	Handheld refractometer, determination of Brix, measurement range 0–10 %Brix, measurement accuracy ±0.1 %Brix
HRB18-T	Handheld refractometer, determination of Brix, measurement range 0–18 %Brix, measurement accuracy ±0.1 %Brix
HRB32-T	Handheld refractometer, determination of Brix, measurement range 0–32 %Brix, measurement accuracy ±0.2 %Brix
HRB62-T	Handheld refractometer, determination of Brix, measurement range 28–62 %Brix, measurement accuracy ±0.2 %Brix
HRB82-T	Handheld refractometer, determination of Brix, measurement range 45–82 %Brix, measurement accuracy ±0.2 %Brix
HRB92-T	Handheld refractometer, determination of Brix, determination of Baumé, determination of water content in honey, measurement range 58–92 %Brix, 38–43 °Bé, 12–27 % water content in honey, measurement accuracy 0.5 %Brix, ±0.5 °Bé, ±0.5 % water content in honey
HRB90	Handheld refractometer, determination of Brix, measurement range 0–90 %Brix, measurement accuracy ±0.2 %Brix (with thermometer 6–36 °C)
HRH30-T	Handheld refractometer, determination of water content in honey, measurement range 12–30 % water content in honey, measurement accuracy ±0.1 % water content in honey
HRND	Handheld refractometer, determination of refractive index, measurement range 1.3330–1.5170, measurement accuracy ±0.0005 (with thermometer 6–36 °C)
HRS10-T	Handheld refractometer, determination of salinity (NaCl), specific gravity (D 20/20), measurement range 0–10 %, 1.000–1.070, measurement accuracy ±0.1 %, ±0.001
HRS28-T	Handheld refractometer, determination of salinity (NaCl), measurement range 0–28 %, measurement accuracy ±0.2 %
HRM18-T	Handheld refractometer, determination of refractive index, serum protein and specific gravity of urine, measurement range 1.3330–1.3600, 0–12 g/dl, 1.000–1.050 UG, measurement accuracy ±0.0005, ±0.2 g/dl, ±0.002 UG
HRO32-T	Handheld refractometer, determination of Oechsle, determination of Brix and potential alcohol content, measurement range 0–32 %Brix, 30–130 °Oe, 4.4–19 % alcohol, measurement accuracy ±0.2 %Brix, ±1 °Oe, ±0.1 % alcohol
HRKFZ-T	Handheld refractometer, battery fluid and radiator antifreeze tester for ethylene and propylene glycol content, measurement range antifreeze: -50–0 °C, battery acid: 1.10–1.30 g/cm³, measurement accuracy antifreeze: ±5 °C, battery acid: ±0.01 g/cm³
HRKFZG-T	Handheld refractometer, battery fluid G11/12 & G13, windshield wiper water (ethanol & isopropanol), Measurement range battery acid: 1.10-1.40 g/cm³, G11/12 & G13: -50-0 °C, windscreen wiper water: -40-0 °C Measurement accuracy battery acid: ±0.01 g/cm³, G11/12 & G13: ±1 °C, windscreen wiper water: ±5 °C