

SmartRef

DIGITAL REFRACTOMETER

Smart technology for consistent measurement results & convenient monitoring:

- › Measuring range from 0 to 85 °Brix
- › High accuracy of 0.2 °Brix
- › Auto. temperature compensation
- › 15+ measurement units
- › Free app for iOS & Android

The SmartRef Digital Refractometer is a portable smart device suitable for a wide range of requirements. In combination with a free mobile app, this refractometer offers more than 15 different measurement units. Depending on your need SmartRef enables you to measure the salt content of your saltwater aquarium or pool, the extract content of your beer, the sugar content in wine, the sweetness of fruits and vegetables, the moisture of honey, and much more.

SmartRef is the result of high-precision craft and passion for research. Made in Austria.

More info
www.my-smartref.com



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MEASUREMENT

The SmartRef refractometer measures the **refractive index of fluids**. This allows to retrieve relevant sample properties in a wide variety of applications.

Fast temperature stabilization and automatic temperature compensation of the measurement results make additional calculations and correction tables obsolete.

The unit has an **IP66** rating and an easy-to-clean stainless steel sample well.

The SmartRef supports an **one-point zero adjustment** with distilled water and requires only a few drops of sample (0.4 mL).

It displays results in under **2 seconds** and has a measurement range of 0 to 85 °Brix with an accuracy of 0.2 °Brix.



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SMART TECHNOLOGY

- Connects to existing free apps
Brew Meister: Plato & SG w/ wort & alcohol correction
Wine Meister: Babo, Baume, Brix, KMW, Oechsle
- New apps
Reef Meister for saltwater aquariums
Lab Meister for general measurements
- **SmartGuide+** detects and helps to eliminate any problems
 - high ambient light detection
 - check prism status
 - sample condition and more.
- Quick & continuous measurement mode
- Automatic Temperature Compensation
- Over-the-air updates
Introduction of new units and features on a regular basis



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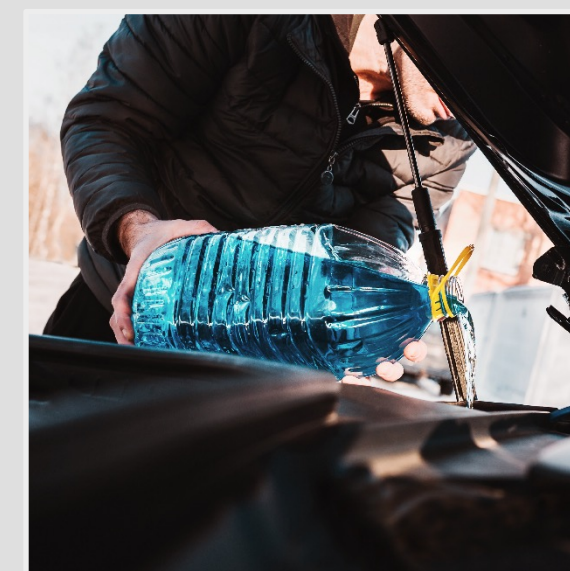
APPLICATIONS

Brix Refractometer for **honey, wine, juice, sauces, jams, fruits, vegetables, and maple syrup**: The SmartRef measures the sugar content in °Babo, °Baumé, °Brix, °KMW, and °Oechsle.

Salinity Refractometer: The SmartRef determines the salt content in your **saltwater aquarium and pool** in Salinity specific gravity (SG 20/20), Practical Salinity Units (PSU), and Salinity in parts per thousand (ppt).

Beer Refractometer: The SmartRef shows the extract content of wort in °Plato.

As a smart device, the SmartRef offers a constant expansion of measurement units. **All available scales are provided within the app.**



Unit	Accuracy	Resolution	Range	(ATC)
Babo (°Babo)	±0.2	0.1	0 to 30	10°C to 85°C
Baumé (°Bé)	±0.2	0.1	0 to 40	10°C to 85°C
Brix (°Bx)	±0.2	0.1	0 to 85	10°C to 100°C
Ethylene Glycol (% v/v)	±0.4	0.1	0.0 to 60.0	10°C to 80°C
Ethylene Glycol (% w/w)	±0.4	0.1	0.0 to 60.0	10°C to 80°C
Ethylene Glycol Freezing Point (°C EG)	±0.5	0.1	0 to -40	10°C to 40°C
Ethylene Glycol Freezing Point (°F EG)	±1	0.1	32 to -40	10°C to 40°C
KMW (°KMW)	±0.2	0.1	0 to 30	10°C to 85°C
Oechsle CH (°Oe)	±1	1	0 to 205	10°C to 85°C
Practical Salinity Units (PSU)	±2	1	0 to 50	10°C to 40°C
Propylene Glycol (% v/v)	±0.4	0.1	0 to 50	10°C to 70°C
Propylene Glycol (% w/w)	±0.4	0.1	0 to 60	10°C to 70°C
Propylene Glycol Freezing Point (°C PG)	±0.5	0.1	0 to -40	10°C to 40°C
Propylene Glycol Freezing Point (°F PG)	±1	0.1	32 to -40	10°C to 40°C
Refractive Index (nD) at 20°C	±0.0003	0.0001	1.3330 to 1.5040	No ATC
Salinity in Parts per Thousand (ppt)	±2	1	0 to 150	10°C to 40°C
Salinity S.G. (SG 20/20)	±0.002	0.001	1.000 to 1.114	10°C to 40°C
Temperature (°C)	±0.5	0.1	10 to 100	No ATC
Temperature (°F)	±0.9	0.1	50 to 212	No ATC
Water in Honey (%)	±0.2	0.1	13 to 25	10°C to 30°C
Wort Plato (°P)*	±0.2	0.1	0 to 40	10°C to 100°C
Wort S.G. (SG 20/20)*	±0.001	0.001	1.000 to 1.200	10°C to 100°C

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SPECIFICATIONS