

Handheld Digital Refractometer PCE-DRH 1 Honey



PCE-DRH 1 Honey Handheld Digital Refractometer

Waterproof IP65-rated Brix / water content / degrees Baumé (Bé°) / refractive index (nD) refractometer with easy-to-read LCD

PCE-DRH 1 is a handheld digital refractometer used to determine the sugar content / water content / degrees Baumé (Bé°) / refractive index of honey in the 0 ... 90 % Brix / 5 ... 38% water / 33 ... 48 Bé° / 1.3330 ... 1.5177 nD measuring range. This waterproof IP65-rated digital refractometer features automatic temperature compensation (ATC) from +10 ... +40 °C / +50 ... +104 °F, as well as a large, easy-to-read LCD that shows both the measured value and the temperature.

Honey refractometer is a real weapon in the hands of the professional honey-makers, since it helps to fight against bad-quality product that may reach the customer. In fact, it helps to carry out the structural analysis of the substance, in particular, honey, and determine the presence or absence of the required elements in the required proportions in the honey. Not only honey-makers may use this device as a perfect auxiliary tool during the production of honey, but also those who are regular honey consumers or sellers, since by carrying out a quick and easy test with the help of the honey refractometer, they may avoid purchasing and consuming low-quality product containing additives, extra sugar or excessive moisture fraction. Though, numerous honey kinds exist, in the ISO catalogue, separate paragraphs are dedicated to the bee products. So, to meet the official requirements, the producers should provide that all the honey parameters correspond to the accepted standards. Honey refractometer provides the measurement of all the three parameters: sugar content (Brix), density (be°, Baume), and the water content. The values within the permissible range confirm high quality of the product. Due to the automatic temperature compensation, the device may be used under the condition of changing temperatures and should not be calibrated each time the temperature goes up or down. The shifts of the optical system do not affect the measurement then, since the influence of the temperature on the refraction coefficient is absolutely compensated. To provide correct operation of the device careful handling is recommended, which includes cleaning, and avoiding shocks, extreme vibrations and other negative impacts. Calibrated honey refractometer in the hands of the professional as well as when used by the consumer, is an indispensable assisting tool, which helps to make the right choice of the natural and good-quality honey.

- ▶ Measurement parameters: Brix, water content, degrees Baumé (Bé°), refractive index, temperature
- ▶ Automatic temperature compensation (ATC) from +10 ... +40 °C / +50 ... +104 °F
- ▶ Handheld and portable
- ▶ User-friendly 3-button operation
- ▶ Fast and precise measuring results in approx. 1 sec.
- ▶ ABS plastic housing with IP65 ingress protection rating against water and dust
- ▶ Large, easy-to-read digital LCD shows both the measured value and the temperature
- ▶ Average function measures same sample 15 times and displays the mean value
- ▶ Stainless-steel ring on sample well protects glass prism from damage
- ▶ Internal light source for improved accuracy
- ▶ Small liquid sample size of just 4 to 5 drops
- ▶ Easy calibration with distilled water
- ▶ Battery-saving automatic power off after 1 min. of inactivity

Subject to change

Specifications

Measuring range

0 ... 90% Brix (sucrose or sugar content)

5 ... 38% water content

33 ... 48 degrees Baumé (Bé°)

1.3330 ... 1.5177 nD (refractive index)

0 ... +40 °C / +32 ... +104 °F temperature

Resolution

0.1 % Brix / 0.1 % water / 0.1 Bé° / 0.0001 nD / 0.1 °

Accuracy

±0.2 % Brix / ±0.2 % water / ±0.2 Bé° / ±0.0003 nD / ±0.5 °C

General specifications

Automatic temperature compensation (ATC) range: +10 ... +40 °C / +50 ... +104 °F

Measurement speed: Approx. 1 sec.

Sample size: 4 to 5 drops of liquid

Sample well: Stainless steel ring over glass prism

Housing: ABS plastic, IP65 ingress protection rating against water and dust

Power supply: 1 x 1.5V AAA battery

Dimensions: Approx. 121 x 58 x 25 mm / 4.76 x 2.28 x 0.98"

Weight: Approx. 90 g / 0.2 lb (without battery)

Subject to change

