

# Handheld Digital Refractometer PCE-DRC 1 Coolants / Batteries




## PCE-DRC 1 Handheld Digital Refractometer

**Waterproof IP65-rated refractometer with easy-to-read LCD for use with coolants, antifreeze, battery acid and cleaning products**

>PCE-DRC 1 is a handheld digital refractometer used to determine the specific gravity (sg) of electrolyte solution batteries as well as the freezing point of propylene or ethylene glycol-based coolants. Maintaining the proper antifreeze concentration in an engine can prevent costly repairs. Thus, this tool is used worldwide by trucking and automotive technicians to ensure proper dilution. The refractometer works well for measuring cleaning products too. 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.

\*\*Close lid before measuring\*\*

### Fields of application

The task of any serious producer is providing good quality and safety, the wish of the user is to get a reliable product /mechanism with a long-term service life. Avoiding faults and failures is the mutual desire of both sides.  Refractometer for coolants, batteries and cleaners. Application of auxiliary devices, like, in this case, coolant refractometer, incredibly reduces the risks of equipment failure, deterioration of the quality during the manufacturing processes. Modern powerful equipment often causes extreme heating of the substances and liquids and application of low-quality coolants and anti-freezers leads guaranteed to failures and quick wear-out. Handheld coolant refractometer is an instrument helping the drivers and operators strictly control the condition of the liquids applied for the support of the engine operation. Both, under- as well as excessive concentration may be "deadly" dangerous to the engine and other parts of the vehicle. The system may be plugged with the contaminants, surfaces may be overheated, different types of corrosion, leakages and many other problems – these are the results of the application of the antifreeze or coolant with the presence of unnecessary additives and bubbles. In daily life, coolant refractometer is a reliable guardian that helps to prolong a "healthy life" of the vehicle.

- ▶ Measurement parameters: Coolant or antifreeze (ethylene glycol), propylene glycol, battery acid, cleaning supplies, 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

-50 ... 0 °C coolant or antifreeze

1,000 ... 1,500 specific gravity (sg) battery acid

-40 ... 0 °C cleaning products

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

## Resolution

0.1 ° / 0.001 sg

## Accuracy

±0.5 °C / ±0.005 sg

## 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

