

ABBE-Refractometers



AR 2008 Digital ABBE Refractometer

Refractive index or Brix degree and temperature are simultaneously displayed on the LCD automatically. Temperature compensation is automatically switchable. Connection for thermostat control bath is available. Results with date/time stamp can be transmitted via serial port to a PC or printer, (for example CBM 910, 24 characters/line, needle printer). The built-in light source is a 589 nm LED used on the measuring prism.

- ▶ Measuring range: Sugar scale 0 - 95 % Brix
Refractive index 1.3000 - 1.7200 nD
Temperature 0 - 99 °C
- ▶ Resolution: 0.0001 nD 0.1 % Brix
Temperature 0.1 °C
- ▶ Accuracy: Refraction index 0.0002 nD
0.2 % Brix
complies with ASTM D1218
- ▶ Temperature compensation: 0 - 90 °C
- ▶ Data port: serial RS-232 9600 Baud
serial RS-422 9600 Baud
- ▶ Power: 115/230 VAC, 50/60 Hz, 40 W



Accessories:

- ▶ Thermostat
- ▶ Printer CBM 910, 24 characters, normal paper
- ▶ More versatile accessories see price list



AR 4D ABBE Refractometer

Only a small quantity of sample is needed to measure with the AR 4D. It is perfect for solid, viscous and liquid samples (transparent or opaque). Measures refractive index (nD), dispersion (nF-nC) and concentration in Brix. Measures by the Abbe principle.

- ▶ Supplied with scale illumination
- ▶ Readings via scale window and ocular
- ▶ LED-illumination (589 nm) for prism
- ▶ Adjustment made by crosshair
- ▶ Measuring range: Sugar scale 0 - 95 % Brix
Refractive index nD 1.300 - 1.700
- ▶ Scale division: 0.0005 nD 0.25 % Brix
- ▶ Accuracy: 0.0002 nD 0.1 % Brix
- ▶ Prisms can be temperature-controlled
- ▶ Adjustable scale
- ▶ Thermometer
- ▶ Tools for adjustment
- ▶ Contact liquid
- ▶ Calibration-glass block with engraved refractive index

AR 3D ABBE Refractometer

Accessories and measurement range is the same as AR 4D, but without LED-illumination for prism. With scale illumination.

AR 6D ABBE Refractometer

As for AR 4D, but with a digital thermometer (0 - 100 °C), resolution 0.1 °C.

AR 4 ABBE Refractometer

Readings are made via the ocular.

- ▶ With scale illumination
- ▶ LED-illumination (590 nm) for prism and scale
- ▶ Adjustment made by crosshair
- ▶ Measuring range: Sugar scale 0 - 95 % Brix
Refractive index nD 1.300 - 1.700
- ▶ Scale division: 0.0005 nD 0.25 % Brix
- ▶ Accuracy: 0.0002 nD 0.1 % Brix
- ▶ Prisms can be temperature controlled
- ▶ Adjustable scale
- ▶ Thermometer
- ▶ Tools for adjustment
- ▶ Contact liquid
- ▶ Calibration-glass block with engraved refractive index



Refractometers

AR 3 ABBE Refractometer

Same as AR 4, but without LED-illumination for prism and scale.

AR 6 ABBE Refractometer

Same as AR 4, but with a digital thermometer.

Reading via eyepiece.

AR 51/52 ABBE Refractometer

Equipment the same as the AR 4, but with flow-through cell which can be temperature-controlled by a circulating thermostat bath. The flow-through cell is ideal for quick and easy sample change, to measure volatile liquids and for measuring solutions containing alcohol.

Accessories:

- ▶ Thermostat bath
- ▶ For more versatile accessories see price list

AR 2 ABBE Refractometer

This economical instrument is supplied with a solid-glass measuring block, a container of 1-bromonaphthalene (for calibration) and a screwdriver.

- ▶ Refractive index: nD 1.300 - 1.700 0 - 95% concentration (sugar-scale)
- ▶ Scale division: 0.001 nD 0.5% concentration
- ▶ Precision: 0.0003 nD 0.2 % concentration
- ▶ Thermometer: mercury in glass 10 ° - 50 °C
- ▶ Illuminator: LED-illumination (can be ordered extra)

ER 6012 Table Refractometer

The ER 6012 is a compact refractometer used for determination of the refractive index of liquids and the concentration of binary liquid mixtures.

- ▶ Large field of view
- ▶ Monochromatic filter
- ▶ Polarizing filter
- ▶ Shade cover
- ▶ Measurement range: nD 1.30 - 1.83
- ▶ Scale division: 0.01 nD
- ▶ Illumination: BM 614, PK 12, KL 5120 (can be ordered extra)

