

# Abbe 5 Refractometer

FOR ACADEMIA, RESEARCH AND GENERAL LABORATORY APPLICATIONS



The Abbe 5 is an affordable refractometer ideally suited for use where a wide refractive index measurement range is required such as in small contract laboratories or applications where sample throughput is relatively low. The instrument is also ideal for practical demonstrations and experiments in chemistry and physics laboratories of schools, colleges and universities.

The instrument features both refractive index and Brix scales, with the prism temperature being monitored electronically and displayed on the integral digital display. Waterbath connections provide prism temperature control facilitating accurate readings to 4 decimal places RI (1 decimal Brix). Dispersion measurements of solids materials such as glass, contact lenses and fibre optics may be made in accordance with standard practice.

The Abbe 5 refractometer is supplied with a glass calibration plate, contact liquid, and instruction manual and is packed in a hard flight case for easy transportation and storage. Limited warranty is 24-months.

- Dual Scale
- Refractive Index & 0-95 Brix
- Dispersion Measurement
- Optional Light Source



# **Abbe 5 Refractometer**









### **Specifications**

Scale	0-95 °Brix / 1.30 - 1.70 RI
Resolution	0.1 / 0.0001
Operating temperature	5-70 °C
Temperatue resolution	0.1°C
Ambient temperature	5-40°€
Power supply (temperature)	Battery (1 x 1.5V AA alkaline). Approx. life 12 months continual use

#### **Order Codes**

Code	Description
44-501	Abbe 5 refractometer supplied with glass calibration plate, contact liquid and instruction manual packed in a hard flight case for easy storage
44-520	Abbe 5 light source for mounting on instrument base. UK/EU plug. 230v~, 50-60Hz
44-525	Abbe 5 light source for mounting on instrument base. US plug. $110v\sim$ , $50-60Hz$
44-522	Abbe 5 light source - spare bulb (pack of 5)
44-590	Spare prism box assembly
72-200	Traceable calibration plate (silica: $1.45839 \pm 0.0001  RI  at  20  ^{\circ}C$ )
10-43	Contact liquid (monobromonapthalene) for test plates and solid samples with an RI up to 1.65 RI. Quantity 6ml.
10-61	Contact liquid (methyl iodide) for test plates and solid samples with an RI up to 1.74 RI. Quantity 6ml.

## **Weights & Dimensions**

Weight (gross)	3.5 kg
Weight (net)	2.55kg
Dimensions (packed):	27 x 37 x 18cm (0.018m <sup>3</sup> )

The ABBE RERACTOMETER derives its name from the 19th Century physicist and father of modern optical technology, Ernst Abbe (1840-1905). He was the co-founder of the Carl Zeiss Jena Optical Company and Schott Glasswerk.

Abbe designed an instrument for measuring dispersion which became the precursor for a refractometer – the so-called Abbe Refractometer.





# Want to know more?

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