

# RE Refractometers

Benchtop / Abbe

## ATAGO® Programmable Digital Refractometers

### Measure refractive index samples from 1.32500 to 1.7000

- Built in thermo module ensures precision accuracy and eliminates the need for a water bath circulator
- Model 81100-34 features a flat sample stage—providing a smooth clean surface for any beverage

Process control and quality assurance has never been made easier with these programmable automatic refractometers. Refractive index, Brix, and percent concentration can be all measured with precision accuracy. These units are ideal for use in the food and beverage, pharmaceutical, chemical and cosmetic industries. Determine the refractive index of citrus, animal or vegetable oils, methylene chloride, polymers, medicinal liquids and chemicals with the widest refractive index range of 1.32500 to 1.7000. Take precise Brix measurements of fruit and concentrated juices, canned syrups, liquid sugars and glucose with a Brix range of 0.00 to 95.00%. Three separate mode types provide user flexibility of taking measurements with or without automatic temperature compensation.

Measure your sample directly after it reaches the set target temperature in mode 1. Select mode 2 for measuring the refractive index and temperature at a fixed interval, displaying the estimated value at the set target temperature. In mode 3, measurements start immediately after the sample is placed on the prism and the start key is pressed—measurement start time can be manually delayed after pressing the start key.

### Specifications & Ordering Information

Sample volume: 0.1 mL, minimum      Output: RS-232      Display: LCD      Dimensions: 14½"W x 5½"H x 10¼"D

Catalog number	Range	Resolution	Accuracy	ATC	Power	Price
K-81100-30	0.00 to 95.00% Brix, 1.3250 to 1.7000 nD	0.01% Brix, 0.00001 nD	±0.1% Brix, ±0.0001 nD	41 to 158°F, (5.00 to 70.00°C)	100 to 240 VAC, 50/60 Hz	
K-81100-32	0.00 to 95.00% Brix, 1.32700 to 1.58000 nD	0.01% Brix, 0.00001 nD	±0.03% Brix, ±0.00004 nD	41 to 140°F, (5.00 to 60.00°C)		
K-81100-34						

**New**



81100-34

These units feature built-in peltier temperature control that eliminates the need for a water bath circulator. A conversion formula is automatically created if three points of a user scale corresponding to the refractive index are inputted. Program up to 30 different user scales. The LCD display with backlight provides mode, date, time, measurement, ambient and target temperature readings. Extended memory capability allows you to display the last 30 measurements. The rugged stainless steel sample well makes clean up easy. Print out measurement data or download information directly to your PC with RS-232 output capabilities.

**What's included:** a 115 VAC adapter, 6-ft power cord, keyboard mask, plastic sample spoon and instruction manual.

ISO9001:2000  
SUPPLIER CERTIFIED



## Reichert Abbe Refractometer

### Electronic temperature control eliminates the need for a water bath circulator!

- Automatic temperature equilibration detection ensures highly accurate readings
- Ensure accuracy with up to five user definable calibration points

Whether you are measuring high fructose corn syrup; sugar content of fruit products; or determining solvent purity of polymers, adhesives, or other chemicals; this is the only instrument you need. Use this Abbe refractometer for measuring translucent, transparent, or opaque samples. You can select the desired operating temperature from 10 to 100°C in 0.01°C increments. Simply apply the sample, press read, and your results are displayed instantly on the large graphic display. The automatic temperature equilibration detection controls the prism, well, and sample temperature, allows you to apply hot or cold samples making processing easy and immediate. Constructed of sapphire prism is bonded with solvent resistant epoxy and 416-grade stainless steel sample well for excellent corrosion resistance. The unique Peltier electronic temperature control feature provides improved accuracy by eliminating the need for water baths and manual adjustments, reducing the probability of human error.

Calibration is easy using distilled water and up to five user-definable points throughout the reading range. Store user-definable calibration points in the history log for future reference. The software menu

### Specifications & Ordering Information

Sample volume: 0.1 mL minimum      Display: graphic LCD      Temperature control: 10 to 100°C user-definable at standard room temperature in 0.01° increments      Dimensions: 13"W x 4½"H x 16"D

Catalog number	Range	Resolution	Accuracy	ATC	Power	Price
K-81002-30	0 to 85% Brix; 1.33000 to 1.60000 RI	0.01% Brix; 0.00001 RI	±0.01% Brix; ±0.00001 RI	32 to 104°F (0 to 40°C)	115 VAC, 60 Hz 230 VAC, 50 Hz	
K-81002-35						

provides the date and time, and allows you to set the parameters with ease. Password protect the system for sensitive data and for the ability to monitor multiple operator usage. This unit features two RS-232 serial ports with baud rates up to 115200 bps allowing you to easily download sample data for analysis. Improve efficiency, productivity and quality control by utilizing one instrument for a wide range of samples.

**What's included:** NIST-certified calibration oil, dust cover, and 5-ft power cord with plug.



81002-30