

# Refractometer Polarimeter

2 in 1

## Display

Purity, International Sugar Scale, Specific Rotation, and Concentration are automatically calculated from the measured refractive index and angle of rotation. Temperature is displayed constantly.

Refractive index and angle of rotation are measured simultaneously. 3mL of liquid is all RePo-1 requires for one swift measurement.



## Evaluation Indicator

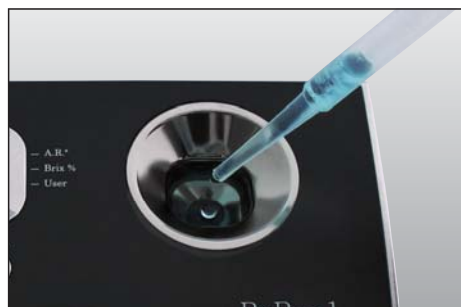
Measurement evaluation is indicated by green or red light.

# Portable Refracto-Polarimeter RePo-1

# A fusion of index of refraction and angle of optical rotation - Making the invisible, visible -

Brix alone can only indicate the overall amount of dissolved solids in a solution. With RePo-1, it is now possible to know the actual quantities of each dissolved solids, such as fructose and glucose content, in a measured solution.

## Measurement in 3 easy steps



1. Fill the sample stage up to the fill line (approx. 3mL).



2. Press START.



3. Measurement is displayed.

## Automatically calculated scales

Press "User" to select the desired scale: Purity, International Sugar Scale, Specific Rotation, and Concentration.



A.R. - Angle of Rotation



Brix - Brix



User - Factory Setting:  
Purity \*

\*Pressing "User" switches the scale in the following order: Purity → International Sugar Scale → Specific Rotation → Concentration

## Measurement Evaluation Indicator

Measurements are evaluated against pre-set tolerance limits and the result is indicated by green or red light. (Upper and lower tolerance limits must be set in advance to using this function)



Green light  
[Within tolerance]



Red light  
[Outside tolerance]

## Specifications

RePo-1 Cat.No.5010

Measurement scales	Angle of Rotation, Brix (%), International Sugar Scale, Temperature (°C, °F)	Resolution	Angle of Rotation: 0.01° Brix (%): 0.1% International Sugar Scale: 0.1°Z Temperature: 0.1°C
Measurement readings	Angle of Rotation, Brix (%), Temperature (°C, °F) User (International Sugar Scale/Purity/Specific Rotation/Concentration) Brix (%), Purity, International Sugar Scale with Automatic Temperature Compensation	Measurement accuracy	Angle of Rotation: ±0.1° (at 20°C) Brix (%): ±0.2% International Sugar Scale: ±3°Z (at 20°C) Temperature: ±1°C
Measurement range	Angle of Rotation: -5 to +5° International Sugar Scale: -130 to +130°Z Brix (%): 0 to 85% Temperature: 15 to 40°C	Measurement time	12 seconds
Display range	Angle of Rotation: -5.99 to +5.99° Brix (%): -2.0 to 86.6% International Sugar Scale: -130 to +130°Z* Purity: -120 to 120%* Specific Rotation: -999 to +999* Concentration: -2.0 to 999%* Temperature: 14 to 41°C	Ambient temperature	15 to 40°C
		Storage temperature	0 to 65°C
		Temperature compensation range	Brix (%): 15 to 40°C Purity: 18 to 40°C International Sugar Scale: 18 to 40°C
		Sample volume	3ml
		Measurement wavelength	589nm (near D-line)
		Light source	LED
		Power supply	Size AAA alkaline battery × 4
		International protection class	IP64
		Dimensions and weight	101×160×38mm, 325g (main unit only)

## Fields of Application

- Sugar industries (sugar manufactures and refineries)
- Analyzing inverted sugar syrups
- Analyzing fragrances
- Honey industries
  - Investigating how fast different honey crystallizes by determining the fructose and glucose content.
  - Researching honey collected from the same district, or honey collected from the same flower.

Feel free to contact us on other possible fields of application

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**ATAGO CO., LTD.**



ISO9001

H.O. & Factory

**HACCP GMP GLP**