



RA-130

**Applications:** Measurement of sucrose concentration of fruit juices • Measurement of sucrose concentration of jam and honey • Brix measurement on beverages • Brix measurement on liquid seasonings • Concentration control on pharmaceutical & medical liquid samples.

**RA-130, Portable Refractometer Datalogger**

**Features:**

- Wide measuring range: Brix 0~85% Refractive index 1.3200~1.5000
- Data storage: Up to 1100 measurements results
- Data transfer to your computer by supplied software via infrared port. Can also output via RS232C with RS converter for infrared (Option).
- Can display measurement results in Refractive Index (RI), Temperature compensated RI, Brix % and the like.
- Automatic data saving and Automatic data output can be chosen.
- Three different sucrose conversion tables Brix and isomerized sugar HFCS42, HFCS55.
- Data can be converted to user-defined concentration and the unit can be used as a concentration meter.

Model	RA-130
<b>Measurement method</b>	Optical detection of critical angle with Na-D line
<b>Measurement objects</b>	Liquids such as water solution like fruit juices or soft drinks and organic solvents
<b>Measurement range</b>	nD 1.32 ~ 1.50 Brix 0 ~ 85% HFCS42 0 ~ 76% HFCS55 0 ~ 80%
<b>Accuracy</b>	nD ±0.0005 Brix ±0.2% HFCS42 /55 ±0.2%
<b>Resolution</b>	nD 0.0001, Brix 0.1%, HFCS42 /55 0.1%
<b>Temperature range</b>	10 ~ 40°C
<b>Display contents</b>	Refractive index, Temp. comp. RI, Brix, HFCS42, HFCS55 and Temperature (°C/°F). Sample number, Data storage, Data output, Data deletion, Battery alarm and the like.
<b>Temperature compensation</b>	Up to 10 kinds of input for temp. compensation coefficients of measured samples and Compensation temperatures
<b>Data storage</b>	1,100 measurement results
<b>External output</b>	Computer or printer (either, not both) can be connected • IrDA connection is standard supplied • RS232C connection requires optional RS converter for infrared (#029-0007)
<b>Weight</b>	Approx. 200g
<b>Power source</b>	DC 3V (2 x 1.5V alkaline AAA dry cells)
<b>Battery life</b>	60 hours (one measurement in one minute)
<b>Sampling method</b>	2 ways selective – Dipping or Dripping method available



REF-85

The REF-85 – digital refractometer eliminates the uncertainty associated with mechanical refractometers and is easily portable for measurements in the field. The measurement technique & temp. compensation employ methodology recommended in the ICUMSA Methods Book (Internationally recognized body for Sugar Analysis). Temperature (in °C or °F) is displayed simultaneously with the measurement on the large dual level display along with icons for Low Power and other helpful message codes.

**Key features include:** Dual-level LCD • Automatic Temp. Compensation (ATC) • Easy setup & storage • Battery operation with Low Power indicator (BEPS) • Automatically turns off after 3 minutes of non-use.

**REF-85, Portable Refractometer**

The REF-85 – is an optical instrument that employs the measurement of refractive index to determine the % Brix of sugar in aqueous solutions. The method is both simple & quick. Samples are measured after a simple user calibration with deionized or distilled water. Within seconds the instrument measures the refractive index of the sample and converts it to % Brix concentration units.

Model	REF-85	
<b>Range</b>	0 to 85% Brix	0 to 80°C / 32 to 175°F
<b>Resolution</b>	0.1% Brix	0.1°C / 0.1°F
<b>Accuracy</b>	±0.2% Brix	±0.3°C / ±0.5°F
<b>Light Source</b>	Yellow LED	
<b>Measurements Time</b>	Approximately 1.5 seconds	
<b>Min. Sample Volume</b>	100 µL (cover prism totally)	
<b>Sample Cell</b>	SS ring and flint glass prism	
<b>Temp. Compensation</b>	Automatic between 10 and 40°C / 50 to 104°F	
<b>Case Material</b>	ABS	
<b>Enclosure Rating</b>	IP 65	
<b>Battery Type</b>	1 x 9V AA (included)	
<b>Battery Life</b>	5000 reading	
<b>Auto-shut off</b>	after 3 minutes of non-use	
<b>Dimensions</b>	192x102x67mm	
<b>Weight</b>	420g	