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ATR-C

Refractometer

SPECIFICATIONS	ATR-C
Measuring scales	Refractive Index (RI), Sucrose (%Brix) 10 standard scales can be reloaded via PC: Inverted Sugar (%), Fructose (%), Glucose (%), Honey (% water), Phenol (%), Acetic Acid (%), Oechsle (°Oe), Propylene Glycol (%), Zeiss, H_2O_2 (%)
Measuring range	1.3200 - 1.5800 RI / 100% Brix
Resolution	0.0001 RI / 0.05% Brix
Precision	± 0,0001 RI / ± 0.05% Brix
Reproducibility	± 0.0001 RI / ± 0.05% Brix
Ambient temperature	+ 10° to + 40°C
Automatic temperature compensation	+ 5° to + 50°C
Temperature measurement	NTC sensor for measurement of sample temperature placed inside the prism
Temperature control Temperature range[1]	Standard version without Peltier-thermostat / Optional with integrated Peltier-thermostat[1] 20°C / 25°C
Measurement mode	Single sample
Prism	YAG
Light source / wavelength	LED, interference filter 589 nm
Display	Two lines
Operation	Continous measurement, start-up, configuration, calibration via external PC
Interfaces	1 x RS232, 1 x USB (B)
Standard models	ATR-C 100: without sample temperature maintaining ATR-C 110: with Peltier driven temperature control
Conformity	International Pharmacopoea, ASTM, AOAC, DIN, FDA, ICUMSA and others
Highlights	Robust enclosure for rough enviroments; High performance and accuracy; Continuous measurement; ESH[1] chamber; MBS[2] as stand alone or with PC; Easy calibration; GLP/GMP; 21 CFR part 11 ready[3]; LED light source; Very low noise; Maintenance friendly by remote diagnostic; TFT touchscreen; Intuitive user handling guided OP system; Installation wizzard; Full traceability of records; Ext. LIMS integration; Huge storage for 1000 products each with 1000 methods [1] Easy sample handling; [2] Modular build-in-system; [3] Optional software module

* Standard conditions (589 nm, 20°C)
** Optional

Refractometer applications

The applications of Refractometers are highly diverse.

Applications often used

- Determination of refractive index
- Determination of dry substance
- Determination of mass percent
- Brix measurement
- Standard scales (Brix, Oechsle, Zeiss, Fat, Honey) with automatic temperature compensation
- Qualitative analysis – identification of samples
- Quantitative analysis of dissolved solids in water or other solvents

Typical applications of the model

- Standard measurement of known solutions
- Food and beverage
- Dairy products (e.g. flavoured yoghurt, ice cream, etc.)
- Fruit juice
- Jam, marmalade
- Cocoa
- And many more

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