

- L** LABORATORY
- P** PROCESS
- S** SOFTWARE
- A** AUTOMATION

# ATR-C

---

## Refractometer

---



## SPECIFICATIONS

## ATR-C

Measuring scales	Refractive Index (RI), Sucrose (%Brix) Standard scales can be reloaded via PC
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 Brix
Temperature measurement	NTC sensor for measurement of sample temperature placed inside the prism
Temperature control Temperature range <sup>1</sup>	Standard version without Peltier-thermostat / Optional with integrated Peltier-thermostat <sup>1</sup> + 20°C to + 25°C for the ATR-C 110
Measurement mode	Single sample
Prism	Sapphire
Light source / wavelength	LED, interference filter 589 nm
Display	Two line LCD visual Display
Operation	Continous measurement, start-up, configuration, calibration via external PC
Interfaces	1 x RS232, 1 x USB Adapter**
Standard models	ATR-C 100: without sample temperature maintaining ATR-C 110: with Peltier driven temperature control
Conformity	Pharmacopoea, ASTM, ICUMSA and others
Highlights	Robust enclosure for rough environments; High performance and accuracy; Continuous measurement; ESH <sup>1</sup> chamber; MBS <sup>2</sup> as stand alone <sup>4</sup> ; Easy calibration; LED light source; Very low noise; GLP/GMP; With the L-Display: Maintenance friendly by remote diagnostic; Intuitive user handling guided OP system; Installation wizard; Full traceability of records; Ext. LIMS integration; Huge storage for 1000 products each with 1000 methods; 21 CFR part 11 ready conformity <sup>3</sup> <sup>1</sup> Easy sample handling; <sup>2</sup> Modular build-in-system; <sup>3</sup> Optional software module for the L-Display; <sup>4</sup> With Two Line Visual Display or PC
Weight / dimensions	Measuring Head: 4.9 kg; 210 x 210 x 160 mm (width x depth x height) Display: 110 x 60 x 175 mm (width x depth x height)

### Refractometer applications

The applications of Refractometers are highly diverse.

\* Standard conditions (589 nm, 20°C)

\*\* Optional

#### 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
- Sugar industry
- Food and beverage
- Dairy products (e.g. flavoured yoghurt, ice cream, etc.)
- Fruit juice
- Jam, marmalade
- And many more