

L LABORATORY

P PROCESS

S SOFTWARE

A AUTOMATION



**SCHMIDT
HAENSCH**
innovators by tradition since 1864

ATR-P

Refractometer



SPECIFICATIONS

ATR-P

Measuring scales	Refractive Index (RI), Sucrose (%Brix) Up to 1000 scales freely definable
Measuring range	1.33200 - 1.55000 RI / 100% Brix
Resolution	0.00001 RI / 0.01% Brix
Precision	± 0,00002 RI / ± 0.02% Brix
Reproducibility	± 0.00001 RI / ± 0.01% 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 correction	External cooling thermostat
Measurement mode	Single sample or flow through measurement, horizontal or vertical usage / Various sample room covers available**
Prism	YAG
Light source / wavelength	LED, interference filter 589 nm
Display	7" Touchscreen, 800 x 480 Pixel, 16 Bit colors
Operation	Touchscreen, keyboard**, mouse**, barcode reader**, remote via PC**
Interfaces	1 x RS232 C serial, 3 x USB (A), 1 x USB (B), 1 x Ethernet, Easy connection of keyboard, mouse, printer, barcode reader, PC and network
Standard models	ATR-P 132
Conformity	International Pharmacopoea, ASTM, AOAC, DIN, FDA, ICUMSA and others
Highlights	Robust enclosure for rough environments; Waterproof measuring head made from stainless steel; High performance and accuracy; Continuous measurement; ESH chamber; MBS ² as stand alone or with PC; Easy calibration with sucrose solution; GLP/GMP; Energy saving LED light source; Very low noise; TFT touchscreen; Intuitive user handling guided OP system; Installation wizard; Full traceability of records; Ext. LIMS integration; Huge storage for 1000 products each with 1000 methods ² Modular build-in-system – stand-alone device or measuring head connected with PC

* 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 with aut. temperature compensation
- Qualitative analysis – identification of samples
- Quantitative analysis of dissolved solids in water or other solvents

Typical applications of the model

- Sugar analysis
- Beverages (juices with pulp)
- Cosmetic (e.g. shampoo, toothpaste, etc.)
- Food (oil from palm, corn, sunflower, soya)
- Essential oil