

L LABORATORY

P PROCESS

S SOFTWARE

A AUTOMATION



**SCHMIDT
HAENSCH**
innovators by tradition since 1864

ATR-P

Refractometer

For the use in harsh
rugged environments:
Measuring Head IP65



SPECIFICATIONS

ATR-P

Measuring scales	Refractive Index (RI), Sucrose (%Brix) Up to 1000 scales freely definable
Measuring range	1.33200 - 1.54000 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 control	Temperature control prism + 5° to + 50°C / sample by external water bath
Measurement mode	Single sample or flow through measurement (with an optional compartment door) / horizontal or vertical usage
Prism	Sapphire
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 model	ATR-P 132
Conformity	International Pharmacopoea, ASTM, AOAC, DIN, FDA, ICUMSA and others

Highlights

Robust stainless steel measuring head for rough environments (IP65); high performance and accuracy; continuous measurement; ESH¹ chamber; MBS² as stand alone or with L-Display or Polarimeter; easy calibration; GLP/GMP; compartment door for flow through measurement available**
With the L-Display: Intuitive user handling guided OP system; installation wizard; full traceability of records; huge storage for 1000 products each with 1000 methods; 21 CFR part 11 ready³

¹ Easy sample handling ² Modular build-in-system ³ Optional software modul for the L-Display

* 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 scale (Brix) 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 industry** (main application)
- Beverages (juices with pulp)
- Samples with suspended particels
- Food (oil from palm, corn, sunflower, soya)

