

L LABORATORY

P PROCESS

S SOFTWARE

A AUTOMATION



**SCHMIDT
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ATR-P

Refractometer



SPECIFICATIONS

ATR-P

| | |
|--|---|
| Measuring scales | Refractive Index (RI), Sucrose (%Brix) Up to 1000 scales freely definable |
| Measuring range | 1.32000 - 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 control Temperature range | Temperature control prism / sample by external water bath 5°C / 50°C |
| Measurement mode | Single sample or flow through measurement / horizontal or vertical set-up possible |
| Prism | Sapphire |
| Light source / wavelength | LED, interference filter 589 nm |
| Display | VariControl, 7" Touch colour screen |
| Operation | Touchscreen, keyboard**, mouse**, barcode reader**, remote via PC** |
| Interfaces | 1 x RS232 C serial, 2 x USB (A), 1 x Ethernet, Easy connection of keyboard, mouse, printer, barcode reader, PC and network |
| Conformity | International Pharmacopoea, ASTM, AOAC, DIN, FDA, ICUMSA and others |
| Highlights | Robust stainless steel measuring head for rough environments; high performance and accuracy; continuous measurement; ESH ¹ chamber; ABS ² as stand alone with VariControl or polarimeter; easy calibration; GLP/GMP; With the VariControl: Maintenance friendly by remote diagnostic; intuitive user handling guided OP system; installation wizard; full traceability of records; ext. LIMS integration ¹ Easy sample handling; ² Modular build-in-system |
| Weight / dimensions | Measuring Head: 4.5 kg; 200 x 160 x 135 mm (width x depth x height) VariControl: 2.0 kg; 250 x 170 x 180 mm (width x depth x height) |

* 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 automatic temperature compensation
- Qualitative analysis – identification of samples
- Quantitative analysis of dissolved solids in water or other solvents
- Quantitative analysis of sugars, solves, glycol, oechsle...

Typical applications of the model

- Sugar industry (main application)
- Beverages (juices with pulp)
- Samples with suspended particles
- Food (oil from palm, corn, sunflower, soya)



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