

iPR HR2

High-Res Inline Process Refractometer

Our process refractometer for all applications where inline measurements need to be as precise as laboratory analysis



SPECIFICATIONS

iPR HR2

Measuring range	1.3200 - 1.3720 RI / 0 - 25 Brix
Accuracy	± 0.00004 / ± 0.003 Brix
Resolution	± 0.000005 / ± 0.001 Brix
Reproducibility	± 0.00002 / ± 0.002 Brix
Process temperature	-10°C up to + 100°C (with water cooling installed)
Ambient temperature	-10 - 45°C
Pressure load capacity	MPa (145 psi, 10 bar) - up to 30 bar available with APV connection
External power supply	20 V - 30 V DC (at 24 V and 0.11 A)
Interfaces	2 insulated 4 - 20 mA analog outputs 2 digital output switch (up to 1 A) 1 serial output (RS232, alternatively RS485 or USB)
Power supply	24 V DC
Prism	YAG
Light source / wavelength	589 nm LED
Process contact material	YAG, Stainless steel or Hastelloy
Mounting accessories	VariVent (Tuchenhagen), APV or TriClamp*

* 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
- Quality and concentration control
- Standard scales (Brix, Oechsle, Degree Plato, Zeiss, Fat, Honey) with automatic temperature compensation
- Qualitative analysis – identification of samples
- Interface detection
- Quantitative analysis of dissolved solids in water or other solvents
- Quantitative analysis of condensates
- Disinfectants
- Purity control for pharmaceuticals
- Liquid-liquid extraction
- Water purity
- and many more

Typical industries of the model

- Pharmaceutical industry
- Chemical industry
- Food & Beverage
- Sanitary Industry
- Packaging Industry



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