

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

# iPR FS

Inline Process Refractometer  
Certified Hygienic Design



## SPECIFICATIONS

## iPR FS (Food Safety)

Measuring scales	Refractive Index (RI), Sucrose (Brix) (already included) Up to 4 scales freely definable
Measuring range	1.32000 - 1.52000 RI / 0 - 85 Brix
Resolution	0.00001 RI / 0.01 Brix
Accuracy	± 0,00014 RI* / ± 0.1 Brix*
Reproducibility	± 0.00014 RI / ± 0.1% Brix
Ambient temperature	- 10°C to + 50°C
Sample temperature	0°C to + 90°C
Temperature measurement	NTC sensor for measurement of sample temperature placed inside the prism
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	Sapphire
Light source / wavelength	589 nm, LED
Process pressure (max.)	MPa (145 psi, 10 bar)
Process contact material	Sapphire, Stainless steel
Mounting accessories	VariVent (Tuchenhagen) or APV

\* Standard conditions (589 nm, 20°C)

Food safety requires certification according to European standard EHEDG. This is comparable to AAA.

- Hygienic design
- Rounded edges
- No slotted screws
- CIP/SIP possible (60 min max.)
- Material in contact with media: stainless steel, sapphire, PEEK
- Determination of dry substance
- Determination of mass percent
- Brix measurement
- Standard scales (Brix, Oechsle, Zeiss, Fat, Honey) with automatic temperature compensation

Typical applications of the model

- Sugar industry
- Beverages
- Food (oil from palm, corn, sunflower, soya)
- Essential oil in aroma
- Sweets and chocolate

