

iPR EX

ATEX Certified Inline Process Refractometer

Consists of an intrinsically safe, single-certified sensor,
which can be installed in hazardous areas



SPECIFICATIONS	IPR EX MEASURING HEAD
ATEX-Label	ATEX Ex II 1G Ex ia IIC T4 Ga
Standards	EN IEC 60079-0: 2018, EN 60079-11: 2012
Measurement principle	Total internal reflection refractometer
Measuring scales	100+ standard scales, freely definable custom scales, internal storage one scale
Measuring range	1.32000 - 1.52000 RI / 0 - 90 Brix
Accuracy	± 0.00014 RI / ± 0.1 Brix*
Resolution	0.00001 RI / 0.01 Brix
Reproducibility	0.00007 RI / 0.05 Brix
Process temperature	- 20 to + 130 °C (CIP/SIP up to 150 °C for 30 minutes)
Ambient temperature	- 10 to + 55 °C
Temperature sensor accuracy	± 0.2 °C
Temperature measurement	NTC sensor for measurement of sample temperature placed inside the prism
Process Pressure	0 - 10 bar
Interface standard	RS485 Modbus RTU
Interface optional	2x 4-20mA, Switching output (only with 350005 Modbus 4-20mA converter)
Mechanical interface standard	APV 1.4404 Stainless steel
Dimensions	330 mm x Ø 149 mm
Weight	9600 g
IP class	IP69K
Light source, wavelength	LED, 589 nm
Power supply	24 V DC
Current consumption	typ. 50 mA
Wetted parts	Sapphire, FFKM, 1.4404 Stainless steel
Housing material	1.4404 Stainless steel
PC Software	UniConfig
Available immersion depths	On Request

*Standard conditions (t= 20 °C, p= 1013 mbar)

SPECIFICATIONS	IPR EX CONTROL UNIT
Operation	1 and 2 measuring headsets are available, connectable with built-in Zener barriers
Display	7" Touchscreen
Interface	Ethernet
DIN rail parts (expandable)	Switch inputs (24 V) and outputs (24 V / relay / 4-20mA) / Communication (RS232 / RS485), CAN, UPC Server
Highlights	Configuration of measuring head and outputs / Adjust switching thresholds and analog outputs / Concentration and other scales user programmable
Power	85V ... 265V 50/60Hz
Protection class	IP69K

