Intelligent CO₂ Sensor for Fermentation

In-line, Fast and Simple



ISM technology

- Plug and Measure for seamless installation
- Pre batch diagnostics for best measurement performance
- Full traceability for complete documentation



High performance

- Inline measurement for real-time process control
- Reliable CO₂ measurement
- Fast response
- High signal stability thanks to new probe design



Easy handling

- Proven membrane body concept for low maintenance
- Only process calibration is needed



Hygienic design

- Fully SIP resistant and autoclavable
- Teflon coated membrane to avoid biofouling
- FDA compliant design and materials



InPro 5000 i – The most intelligent way to measure dissolved CO₂

The InPro 5000 i combines proven measurement technology based on the Severinghaus principle with Intelligent Sensor Management (ISM) to simplify ${\rm CO_2}$ measurement.

The robust and fully sterilizable sensor design meets all requirements for hygienic processes.

ISM technology provides all sensor relevant information for maintenance planning, and pre-batch or real-time diagnostics. For full traceability, all pertinent data such as calibration details and number of SIP or autoclavings are stored inside the sensor.

Plug and Measure with factory-calibrated sensors sets a new benchmark in simplicity for in-line ${\rm CO}_2$ measurement.



Technical data of the InPro 5000 i

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Measurement range	10 to 1000 mbar CO ₂	
Accuracy	\pm (10% of the reading + 10 mbar)	
Operating temperature	060°C (32140°F)	
Mechanical temperature resistance	−20 130°C (−4 266°F)	
Operating pressure	0.22 bar (330 psia)	
Mechanical pressure resistance	Max. 3 bar (42 psia) at 25 °C (77 °F)	
Steam sterilizable and autoclavable	Yes	
Cable connection	AK9	
O ₂ selective membrane material	Teflon/Silicone	
Shaft diameter	12 mm	
Available lengths	120 mm, 220 mm, 320 mm	
Certificates	Quality certificate, Material certificate 3.1, Surface finish certificate 2.1,	
Response time t ₉₀ at 25 °C (77 °F)	<120s	

www.mt.com/InPro5000i

Additional information

Designation	Compatible Transmitter	Suitable Housing
InPro 5000i	M400 Type 3	InFit 761 e
	M800	InTrac 777 e/797 e



iSense Asset Suite

PC software tool to simplify calibration and documentation. iSense provides accurate prebatch diagnostics for maximum reliability of the measurement.

ISM connector

Sensor head

Threaded sleeve Pg 13.5

Washer O-Ring

Sensor shaft Ø 12 mm (0.47")

Cap sleeve

Membrane body

85 mm (3.35")



Transmitters:

Multi-parameter transmitters leverage the full ISM functionality of the sensors for best process control and ease of use.



www.mt.com/pro

For more information

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Management System certified according to ISO 9001 / ISO 14001

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