

Single-Use pH Sensor For Bioprocesses



Improved Bag Availability

The sensor shelf life of 30 months enables enhanced bag inventory control at bag manufacturers and end-user sites, and helps to ensure availability of bags in critical times of higher demand.



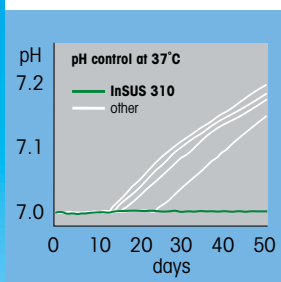
Highest Bag and Sensor Integrity

To ensure bag protection during transport and preparation, these single-use pH sensors have round-edged protective guards to prevent damage to the glass elements and the bag.



Easy Installation

The output signal of these single-use pH sensors is identical to that of reusable pH probes, to allow easy integration into existing transmitters or controller environments.



Longer In-Process Lifetime

Long-term signal stability of up to 50 days enables the sensor's implementation into equipment designed for intensified bioprocessing or semi-continuous processes.



InSUS 310 Single-use pH Sensor For integration in single-use bags

The measurement principle of the InSUS™ 310 single-use pH sensor is based on proven pH glass technology and offers identical reliability and accuracy as reusable pH sensors. The sensors are gamma and X-ray sterilizable and factory pre-calibrated for convenient installation and operation in single-use process devices such as bioreactors and mixing bags for biopharmaceutical manufacturing.

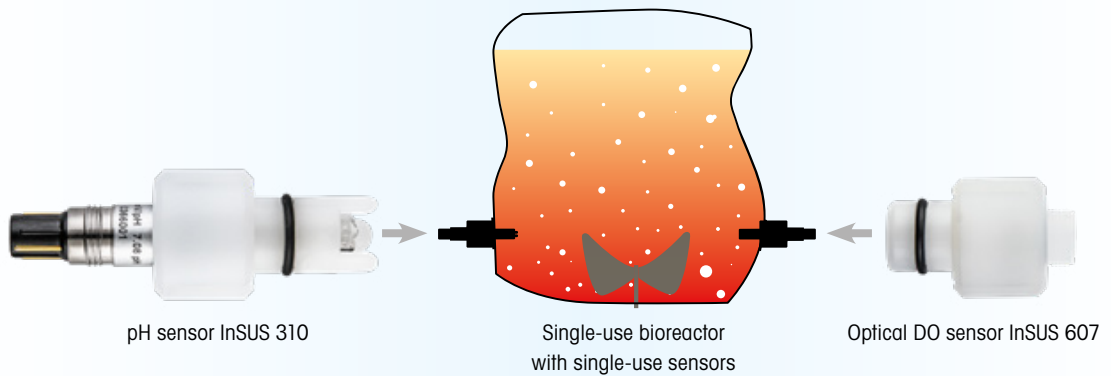
Once integrated, these single-use pH sensors allow specifying a long shelf life of up to 30 months (dry storage capacity) for up- and downstream process devices. Their robustness ensures sensor and bag security during bag storage, transport and startup. For efficient process integration, the sensor's output signal is identical to that of a reusable sensor.

Technical data of the InSUS 310 single-use pH sensor

Measuring Principle	pH sensitive glass electrode, silver/silver chloride reference electrode
Measurement range	pH 3–10
Operating Conditions	
Maximum shelf life	30 months (dry storage)
Sterilization method	Gamma- and X-Ray irradiation 25–45 kGy
Temperature range during measurement	5–60 °C (41–140 °F)
Mechanical pressure resistance during measurement	Up to 2 barg/40 °C (29 psig/104 °F)
Design	
Body material	HPDE
Wetted O-rings	EPDM
Bag port (process connection)	Eldon James® 1" weld-in port
Temperature compensation	Built-in Pt1000
Cable connection	Vario Pin (IP68)
Regulatory compliances	
CE EMI	•
USP88 class VI and USP 87 for wetted polymer materials	•

► www.mt.com/InSUS

Get a complete solution for your application with METTLER TOLEDO's single-use offerings for pH and dissolved oxygen measurements!



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