

OptaProbe™

Optical DO Sensor for Bioprocess Applications

Operational Principle

Oxygen Dependent Luminescence Quenching

- No Electrolyte Requirement
- No Flow Requirement
- No Oxygen Consumption

SMART features

- Plug-and-Play with SMART Calibration
- Bubble Deflecting 45° Sensing Surface
- Retains Calibration History
- Retains User Metadata for Tracking
- Autonomous Autoclave/SIP Counter
- FDA & USP Class VI Compliant Materials



OptaProbe™ is a SMART optical dissolved oxygen (DO) sensor for use in bioprocess applications with autoclave and/or steam-in-place (SIP) requirements.

New and novel features significantly increase measurement precision in challenging bubble-filled aeration environments.

Measurement errors caused by bubbles striking the measurement surface are drastically reduced and in many cases eliminated.



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PRODUCT SPECIFICATIONS

Sterilization Temperature

Autoclave or SIP up to 135° C

Accuracy

Within 1% full range (%SAT or PPM)

Response Time

T98 < 15 seconds @37° C; N2 to AIR

T98 < 15 seconds @37° C; AIR to N2

Connector

VarioPin VP8 (IP68)

Design Features

Easily Replaced Optical Cap

45° Angled Sensing Surface

Autonomous Heat Cycle Counter

Wetted Materials

All wetted materials are USP Class V

Stainless Steel: 316L Ra20 EP

O-rings: EPDM

Cap: PES (Polyethersulfone)

Membrane: Silicone Rubber

Power Supply

5 VDC supplied by Power Module or Transmitter

Sensor Measurement Output Signal Mode 1

Full Digital Output with Native SensorTalk™

Process Variable: Range 0-300 % SAT

Operational Temp: Range 5-50° C

Sensor Measurement Output Signal Mode 2

Full Analog Output with OptaSync® Module

Process Variable Output in nA 0 -500 nA = 0 -300% SAT

Temperature: Analog 22k Ohm NTC



Order information:

OptaProbe™ D.O. Sensor

Insertion Length	Part Number
125 mm	B2020-125-V8
225 mm	B2020-225-V8
325 mm	B2020-325-V8
425 mm	B2020-425-V8