

METERS

O₂ °C

OXY-1 SMA trace



As a successor of our established Fibox 3 trace, the OXY-1 SMA trace convinces with its compact design and versatile applicability. The USB-powered oxygen meter is compatible with sensor spots, dipping probes and flow-through cells type PSt3 (detection limit 15 ppb dissolved oxygen, 0 - 100 % oxygen) and type PSt6 (detection limit 1 ppb dissolved oxygen, 0 - 5 % oxygen). This temperature compensated system ensures most precise oxygen measurements in environments with changing temperatures. OXY-1 SMA trace is operated with the PreSens Measurement Studio 2 software, which offers numerous functions - like additional pressure and salinity compensation - and enables simultaneous control of several devices.

- 0 - 5 % trace oxygen measurement range
- Compact system with small outer dimensions
- Lightweight (only 128 g)
- USB-powered
- Controlled by PreSens Measurement Studio 2
- Compensation of temperature, pressure and salinity
- For use with non-invasive sensors, dipping probes and flow-through cells
- One calibration for a multitude of sensor spots

TECHNICAL

ACCESSORIES

Polymer Optical Fiber POF



A polymer optical fiber (POF) is needed to transfer excitation light to the sensor and the sensor response back to the meter. We offer different versions for different meters depending on their optical connector type. A POF enables non-invasive and non-destructive measurements to be made from the outside through the wall of a transparent or slightly colored container. The POF with SMA connector is compatible with meters of the Fibox, OXY-1 SMA, OXY-1 WM, OXY mini and pH-1 SMA series, as well as the CO₂-1 SMA. The POF with ST connector is compatible with meters of the Microx 4 and OXY-1 ST series. Different standard lengths are offered, e. g. 2.5 m, and fibers with connectors on one or both ends are available, depending on your adapter or sensor application.

- Enables contactless measurement
- Versatile light guide
- Different lengths available

TECHNICAL

Specifications	SMA	ST
Dimensions	Optical diameter: 2 mm Outer diameter (incl. black cladding): approx. 2.7 mm Min. bending radius: 40 mm	Optical diameter: 1 mm Outer diameter (incl. black cladding): 2.2 mm Min. bending radius: 17 mm
Connector type	SMA connectors on one or both ends available for use with SOA or ARC	ST connectors on one or both ends available for use with SOA or ARC-1 ST
Length of fiber	Available standard lengths 1.0, 2.5 and 5.0 m; for lengths of more than 5 m, please contact our service team	
Compatibility	All devices with SMA connector, e.g. Fibox, OXY-1 SMA, pH mini series, pCO ₂ mini	All devices with ST connector, e.g. Microx 4 or OXY-1 ST series

SENSORS



Oxygen Sensor Spot SP-PSt6-NAU



Sensor spots are the most versatile version of non-invasive optical oxygen sensors. They can be attached to the inner surface of any transparent glass or plastic vessel like e. g. used for packaging. Oxygen is measured contactless through the transparent vessel wall. The SP-PSt6-NAU has a measurement range of 0 – 5 % oxygen, dissolved or in the gas phase. The oxygen sensitive coating is immobilized on a 125 µm flexible transparent polyester foil, which does not stand autoclaving.

- Non-invasive measurements through the vessel wall
- No consumption of oxygen
- Signal independent of flow velocity
- Measures oxygen in liquids as well as in gas phase



YOUR CONFIGURATION



PRODUCT
FINDER






PreSens
PRECISION SENSING

TECHNICAL



Specifications	Gaseous & Dissolved O ₂	Dissolved O ₂
Measurement range	0 – 5 % O ₂ 0 – 41.4 hPa	0 – 2 mg/L 0 – 56.9 µmol/L
Limit of detection	0.002 % oxygen	1 ppb
Resolution	± 0.0007 % O ₂ at 0.002 % O ₂ ± 0.0015 % O ₂ at 0.2 % O ₂ ± 0.007 hPa at 0.023 hPa ± 0.015 hPa at 2.0 hPa	± 0.0003 mg/L at 0.001 mg/L ± 0.0006 mg/L at 0.09 mg/L ± 0.010 µmol/L at 0.03µmol/L ± 0.020 µmol/L at 2.8 µmol/L
Accuracy*	± 1 ppb or ± 3 % of the respective concentration; whichever is higher	
Drift at 0 % oxygen	< 2 ppb within 30 days (sampling interval of 1 min.)	
Measurement temperature range	from 0 to + 50 °C	
Response time (t ₉₀)	< 6 sec.	< 40 sec.
Properties		
Compatibility	Aqueous solutions, ethanol, methanol	
No cross-sensitivity	pH 1 – 14 CO ₂ , H ₂ S, SO ₂ Ionic species	
Cross-sensitivity	Organic solvents, such as acetone, toluene, chloroform or methylene chloride Chlorine gas	
Sterilization procedure	Ethylene oxide (EtO) Gamma irradiation	
Cleaning procedure	Cleaning in place (CIP, 2 % NaOH, + 80 °C, + 176 °F) 3 % H ₂ O ₂ Acidic agents (HCl, H ₂ SO ₄), max. 4 % – 5 % Ethanol Aqueous solutions	
Calibration	Two-point calibration with oxygen-free environment (nitrogen, sodium sulfite) and a second calibration value optimally between 1 % and 2 % oxygen	
Storage stability	60 months provided the sensor material is stored in the dark	
*after two-point calibration as described in the manual		

GET IN CONTACT

-  **Request more info**
-  **Request a quote**
-  **Rent-a-meter**

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