METERS

O_2 °C OXY-4 SMA (G3)

This multi-channel oxygen meter is ideally suited for benchtop applications. It is compatible with non-invasive sensors, dipping probes and flow-through cells of type PSt3 (detection limit 15 ppb dissolved oxygen, 0 – 100 % oxygen). Each channel of OXY-4 SMA has separate temperature compensation, so most precise measurements in environments with changing temperatures can be taken. The oxygen meter is USB-powered and operated with the PreSens Measurement Studio 2 software, which enables simultaneous control of several devices, so measurement networks can be set up. With numerous features and additional pressure and salinity compensation, the software makes the OXY-4 SMA applicable in almost any application.

- Measurement range of 0 - 100 % O_2
- Individual temperature compensation for each channel
- Pressure & salinity compensation
- For use with non-invasive sensors, dipping probes & flow-through cells

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 conncetors 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

O_2 Flow-Through Cell FTC-PSt3

Miniaturized chemical optical oxygen sensors integrated in flow-through cells (FTC-PSt3) allow non-invasive online monitoring of oxygen in perfusion systems. The sensors are fixed to color coded sticks, which can be attached to flow-through cells of different size and shape according to your requirements. A polymer optical fiber connects the sensor inside the flow-through cell to the respective O_2 meter (e. g. Fibox 4). The FTC-PST3 cells are made of polycarbonate.

- Precise online monitoring of oxygen
- Different sizes and shapes for various flow rates
- Easy connection to external tubing

TECHNICAL

Specifications	Dissolved O_2
Measurement range	0 – 45 mg/L 0 – 1400 µmol/L
Resolution	± 0.004 mg/L at 0.091 mg/L ± 0.04 mg/L at 9.1 mg/L
Accuracy at + 20 °C*	± 0.4 % O_2 at 20.9 % O_2 ± 0.05 % O_2 at 0.2 % O_2
Drift at 0 % oxygen	< 0.03 % O_2 within 30 days (sampling interval of 1 min.)
Measurement temperature range	From 0 to + 50 °C
Response time (t_{90})**	< 30 sec.
Properties	
Compatibility	Aqueous solutions, ethanol, methanol
Cross-sensitivity	Organic solvents, such as acetone, toluene, chloroform or methylene chloride Chlorine gas
Sterilization procedure***	Irradiation Ethylene oxide (EtO)
Calibration	Sensor sticks are pre-calibrated; Two-point calibration in oxygen-free environment (nitrogen, sodium sulfite) and air-saturated environment
Storage stability	Up to 60 months provided the sensor material is stored in the dark at room temperature
T-cell formats	Luer T-cell (delivered), inner diameter 5 mm, cell volume 0.3 mL; 1/4" x 1/4" (Qosina), cell volume 2.1 mL; 3/8" x 3/8" (Qosina), cell volume 4.6 mL; 1/2" x 1/2" (Qosina), cell volume 8.3 mL

*after two-point calibration as described in the manual
**equilibrated FTC with physiological solution and sufficient flow rate (min. 15 mL/min) at 37 °C
***recalibration may be required

GET IN CONTACT

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

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