



METERS

O₂ °C

Microx 4



The Microx 4 is a completely stand-alone, portable fiber optic oxygen meter. It can be used with non-invasive sensors & probes (1 mm fiber), and oxygen microsensors (200 µm fiber) in different designs. This oxygen meter is compatible with the wide range of sensors type PSt7 (detection limit 15 ppb, 0 – 100 % oxygen). With its integrated barcode reader the Microx 4 can easily recognize and assign calibration data to sensors in just one scan. The implemented sensor management system allows storing data of up to 100 sensors. Microx 4 has 16 GB internal memory which allows prolonged computer-independent operation. It is delivered with the PreSens Datamanager software: sensor, user and measurement data is easily transferred between the PC and the oxygen meter. The data management and easy data export will facilitate and speed up your analysis.

- For use with non-invasive sensors, probes & microsensors
- Straightforward measurement due to unique sensor ID
- Simple calibration via barcode scan
- 16 GB internal memory
- Compensation of temperature, pressure and salinity
- Energy management for long term measurements
- Optional database supported software offers simultaneous control of multiple devices

TECHNICAL

Specifications	
Oxygen sensor	PSt7 (optical ST connector)
Temperature sensor	Pt100 temperature connector (sensor not included)
Temperature performance	from 0 °C to + 50 °C, Resolution ± 0.1 °C
Power supply	4 AA nickel-metal hybrid cells (min. 2,200 mAh) Use only AC Adapter (5 VDC / min. 1 A) supplied for recharging
Max. battery operating time	16 hrs. (3 sec. interval measurement, Default LED intensity, Display backlight OFF, at room temperature)
Temperature: operating / storage	from 0 °C to + 50 °C / from - 20 °C to + 70 °C
Relative humidity	up to 80 % (non condensing)
Dimensions	37 mm x 180 mm x 119 mm
Weight	0.65 kg (w/o batteries & protection kit) 0.78 kg (with batteries & protection kit)
Digital interface	USB Interface (cable included)
Display	3,5 " color TFT, 320 x 240 pixel
Internal memory	16 GB Memory (~ 40,000,000 data sets) Export via included software

SENSORS



O₂

Needle-Type Oxygen Microsensor with Fixed Sensor Tip NFSG-PSt7




The NFSG-PSt7 is specially designed for headspace measurement in packaging or other applications where gaseous oxygen measurements in small compartments have to be conducted. The sensor tip of this microsensor is fixed inside a steel needle, so it does not protrude the needle tip. Secured this way inside the needle, the sensor can be pierced through material and the oxygen content in smallest headspace volumes can be determined. The NFSG-PSt7 has a measurement range of 0 – 100 % oxygen, with a limit of detection of 0.03 % oxygen.

- High spatial resolution
- High temporal resolution ($t_{90} < 3$ sec.)
- No consumption of oxygen
- Signal independent of flow velocity
- Measurement in headspace or smallest volumes

TECHNICAL

Specifications*	Gaseous O ₂
Measurement range	0 – 100 % O ₂ 0 – 1000 hPa
Limit of detection	0.03 % oxygen
Resolution	± 0.01 % O ₂ at 1 % O ₂ ± 0.05 % O ₂ at 20.9 % O ₂
Accuracy at + 20 °C**	± 0.05 % O ₂ or ± 3 % rel.
Measurement temperature range	from 0 to + 50 °C
Response time (t ₉₀)	< 3 sec.
Properties	
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)
Cleaning procedure	3 % H ₂ O ₂ Ethanol Soap solution
Calibration	Two-point calibration with oxygen-free environment (nitrogen, sodium sulfite) and air-saturated environment
Storage stability	60 months provided the sensor material is stored in the dark at room temperature
*data for microsensor TF = flat-broken sensor tip with 230 µm diameter	
**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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