

FireStingGO₂

Pocket Oxygen Meter
with long-term logging



Simplify & boost your
field and lab research

One Device –
Many Applications

- stand-alone oxygen meter
- smart LCD user interface
- rechargeable battery
- for long-term logging (up to >1 year)
- REDFLASH technology
- 1 oxygen & 1 temperature channel
- broad oxygen sensor portfolio
- can be operated also via iOS/Android App (Bluetooth) and via Windows PC (USB)

pyroscience 
sensor technology

high performance & fair prices

Pocket Oxygen Meter with long-term logging

Hand-held oxygen meter FireStingGO2

The FireStingGO2 is a fiber-optic oxygen meter based on the established FireSting technology featuring:

- broad oxygen sensor portfolio (micro- and minisensors, robust probes, cap probes, sensor spots, flow-through cells, respiration vials)
- sensors for the full and the trace oxygen range
- automatic temperature and pressure compensation
- proven REDFLASH technology



New Features:

- integrated high contrast LCD display
- integrated rechargeable battery
- extremely low power consumption for long-term logging (up to >1 year)

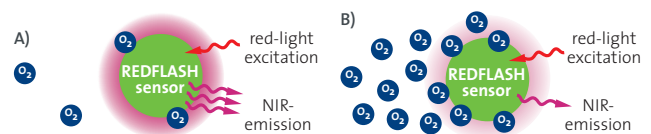
Operation Modes:

- stand-alone via intuitive LCD user interface
- with smartphone/tablet App (iOS, Android) via Bluetooth
- with Windows PC via USB

Innovative REDFLASH technology



The REDFLASH technology is based on the unique oxygen-sensitive REDFLASH indicators showing excellent brightness. The REDFLASH indicators are excitable with red light ($\lambda=620$ nm) and show an oxygen-dependent luminescence in the near infrared (NIR). The REDFLASH technology impresses by its high precision, high reliability, low power consumption, low cross-sensitivity, and fast response times. The red light excitation significantly reduces interferences caused by autofluorescence and reduces stress in biological systems.



Principle: red light excited REDFLASH indicators show luminescence in the near infrared (NIR), which decreases with increasing oxygen (quenching effect).
A) high NIR emission at low oxygen and **B)** low NIR at high oxygen

Specifications

Weight	150 g
Dimensions (w x l x h)	52 x 97 x 20 mm
Interface	LCD, Bluetooth, USB
Operation Modus	stand-alone, smartphone/tablet App (iOS, Android), Windows PC
Logging Memory	2 GB
Battery	rechargeable Li-Ion battery max. 2 h charging via micro-USB
App	iOs, Android
PC Software	Windows XP, Vista, 7, 8
Operating Conditions (instrument)	<ul style="list-style-type: none"> • 0-50°C • non-condensing conditions
Oxygen Sensors (1 channel)	microsensors, minisensors, robust probes, cap probes, sensor spots, respiration vials, flow-through cells
Temperature Sensors (1 channel)	Pt100 temperature sensors
Measuring Range (optimum)	<ul style="list-style-type: none"> • 0-50% O₂ (full range sensor) • 0-10% O₂ (trace range sensor) • 0-50°C
Detection Limit	<ul style="list-style-type: none"> • 0.02% O₂ (full range sensor) • 0.005% O₂ (trace range sensor)
Accuracy (2-point calibrated)	<ul style="list-style-type: none"> • 0.2% (at 20% O₂) • 0.02% (at 1% O₂)

The New All-rounder

Pocket Oxygen Meter

with

- unbeatable size & performance
- large application spectrum
- multiple operation modes
- broad sensor portfolio
- long-term logging (months even with activated display)

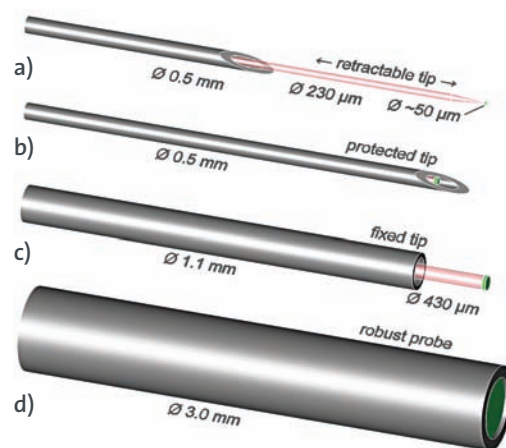
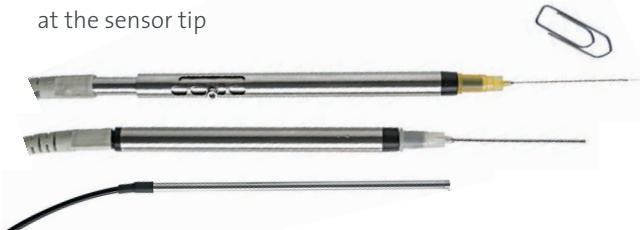
Simplify & Boost your Field and Lab Research!



One Device – Many Applications with various fiber-optic oxygen sensors

Needle-type Oxygen Sensors and Robust Probes

- **Tip Diameters:** from 50 μm to 3 mm (microsensors, minisensors, robust probes).
- **Concentration Range:** full range 0-100% oxygen (0-40 mg/L dissolved oxygen), trace range 0-21% oxygen (0-8 mg/L dissolved oxygen)
- **Options:** protected tip, optical isolation, fast response time
- **Calibration:** 1-point or 2-point calibration
- **Measurement:** with oxygen-sensitive REDFLASH indicators at the sensor tip



Examples of available tips:

- a) retractable needle-type microsensor, b) needle-type minisensor with protected tip or c) fixed sensor tip and d) robust probe

Oxygen Cap Probe

Probe with exchangeable oxygen sensor cap

- **Diameter:** 8 mm



Oxygen Sensor Spots

- **Standard Spot Diameter:** 5 mm on PET foil
- **Concentration Range:** full range 0-100% oxygen (0-40 mg/L dissolved oxygen), trace range 0-21% oxygen (0-8 mg/L dissolved oxygen)
- **Placement of spots:** on transparent inner container wall enclosing a liquid or gas
- **Measurement:** with spot fiber connected to a spot adapter fixed at the outer container wall
- **Options:** custom spot material/ dimensions



Respiration Vials

Ready assembled respiration vials of different volume with integrated oxygen sensor as plug & play solution.



Flow-through Cells

Online monitoring of oxygen in a liquid or gas pumped through the flow-through cell with an integrated oxygen sensor. Small and large version available with luer-lock adapters for easy integration into experimental set-ups.

Contact and Service

Please contact us for more information concerning the

- different fiber-optic oxygen meters
- broad range of available sensors and probes
- set-ups for automatized microprofiling and
- OEM solutions available from Pyro Science GmbH

Profit from our innovation, scientific expert knowledge and flexibility to develop customized solutions for high performance sensing technology.

In cooperation with leading international academic research groups and universities:

Sensor development

Graz University of Technology (Austria)
Institute of Analytical Chemistry and Food Chemistry



Application development for research

Max-Planck-Institute for Marine Microbiology (Germany)
University of Copenhagen (Denmark)
University of Southern Denmark (Denmark)



Pyro Science GmbH

Hubertusstr. 35
52064 Aachen · Germany

fon: +49 (0) 241 518322-10

fax: +49 (0) 241 518322-99

info@pyro-science.com

www.pyro-science.com