

Datasheet: Oxygen Data Logger



This portable battery-powered CO2Meter, Inc. meter is designed to measure oxygen levels in real-time in inaccessible areas for applications like fermentation, fire suppression testing, biological incubators, agricultural O2 uptake analysis, grain mold monitoring and leak detection. Its internal memory allows the user to record oxygen level data over time.

Features

- Portable meter with lightweight handheld easy-grip design
- Various measuring ranges to choose from
- Back-lit LCD display with programmable CO2 level-responsive 3-color alarm
- Built-in 1,000-hour micro pump
- Fully compatible with Windows 7, 8, XP or later¹
- Includes impact-resistant case, power supply, tubing/filter kit, and USB cable
- Records up to 60,000 data points in internal memory

O2 Sensor Ratings

Measurement Range.....	0.1-25% Oxygen by volume
Detection Method.....	Fluorescence quenching by oxygen
Sampling Rate.....	1 Sample/second
Accuracy.....	Better than 2% at full scale
Resolution	0.10% / 0.1 mbar
Response Time.....	T90 < 30s (typical)
Life Expectancy.....	5+ years on sensor
Pressure Dependence.....	± 1.6% reading deviation / kPa (from 100 k Pa) / 0.13% of reading per mm Hg

General Performance

Operating Temperature Range.....	0 to +50 °C
Operating Humidity Range.....	0 to 95% RH (non-condensing)
Maintenance Interval.....	No maintenance required

Models Available

- **CM-0505: 25% O2 Data Logger**

Pump Characteristics

Max. Flow Rate.....	500 ml/min (STP)
Max. Pressure.....	50 kPa
Max. Vacuum.....	15 kPa
Life Expectancy.....	1,000 hours (depending on sampling interval) 10,000 hour pump available on request.

Power

Input Voltage.....	6 VDC
Source.....	International wall power supply (included)
Battery Type.....	Four (4) AA Alkaline (not included)
Consumption.....	~0.5 Watt Avg. (pump running)

Communication

Cable Type.....	USB cable, Type A to Mini-B, 6-foot long
Software ¹	Compatible with our complimentary GasLab® software, as well as our legacy DAS software

Physical

Material.....	Black polycarbonate enclosure with yellow rubber side grips
Display.....	Back-lit liquid crystal display (LCD), dual character row (shows CO2 level, data logging, and % free memory)
Ports.....	Protected Mini-USB connector, inlet/outlet Lure-type fittings, Power & Log Latching switches, Power jack
Operating Environment.....	Non-corrosive. Indoors: laboratory, residential, commercial or industrial. Outdoors optional.
Dimensions (WxHxD).....	4.82 x 7.10 x 2.05 inches (122 x 181 x 52 mm)

¹ For minimum system requirements, please visit our website at <http://www.co2meter.com/pages/downloads>.