Datasheet: CO2 Data Loggers

This portable battery-powered CO2Meter, Inc. meter is designed to measure carbon dioxide (CO2) in real-time in inaccessible areas for applications like fermentation vats & barrels, biological incubators, and CO2 leak detection. Its internal memory allows the user to record CO2 concentration 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 later[1]
- Includes impact-resistant case, power supply, tubing/filter kit, and USB cable
- Records up to 60,000 data points in internal memory

CO2 Sensor Ratings

	1% CO2	5% CO2	10% CO2	30% CO2	60% CO2	100% CO2
Measurement Range	0-10,000 ppm	0-50,000 ppm	0-100,000 ppm	0-30% of volume	0-60% of volume	0-100% of volume
Repeatability	± 20 ppm, ± 1 % of measured value	± 0.1% vol. ± 2 % of measured value				
Accuracy	± 30 ppm, ± 5 % of value	±70 ppm ± 5% of value		± 0.5% vol. ± 3 % of measured value		

Detection Method.....................................Sampling (drawn through tubing or inlet)
Response Time (T1/e)...< 20 seconds tube IN/OUT (0.2 l/min gas flow)
Life Expectancy..> 15 years
Pressure Dependence..± 1.6% reading deviation per k Pa (from atmospheric pressure, 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

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)

Models Available

- **CM-0001:** 1% CO2 Data Logger
- **CM-0056:** 5% CO2 Data Logger
- **CM-0010:** 10% CO2 Data Logger
- **CM-0002:** 30% CO2 Data Logger
- **CM-0050:** 60% CO2 Data Logger
- **CM-0003:** 100% CO2 Data Logger

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.