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Q2 – Portable O2 / CO2 Analyzer for MAP testing

The Q2 is a Portable Oxygen and CO2 analyzer, used for research or package testing.
The Q2 is a portable headspace analyzer for measurement of O2 and CO2 levels in gas flushed MAP packages (such as coffee or meat products). Alternately, the Q2 can be used for portable O2 and CO2 measurements for research applications (such as cell culture incubators).

It weighs only 2 lbs, and comes with rechargeable batteries, sample probe, charger, and accessories to begin sampling. There is also an optional hard carry case for easy portability and protection.

ULTRA FAST

The Model Q2 incorporates the latest fast response O2 and CO2 sensors, which allows results to be obtained in 15 seconds for rapid spot checks. The oxygen sensor is also rated for 5 years of life, which is far better than the competition. Other analyzers utilize cheap oxygen sensors which may last 18-24 months.

EASY SAMPLING METHOD Our standard sample probe assembly for food package testing connects to the Model Q2 – this sample probe is interchangeable with all of our other analyzers, and is a durable double tubed, single piece.

The probe is tipped with a liquid blocking filter and tri-beveled, non coring needle. The filter will block liquid and particle intake into the analyzer, and the needle is specially designed to prevent "coring", or plugging, and is incredibly tough.

USER FRIENDLY, ACCESSIBLE CONTROLS

On the side of the instrument there are five adjusting potentiometers – you can adjust the oxygen span, pump time, CO2 span, and other parameters on the fly. There's no need to reboot and no need to warmup – it's as easy as it gets.

ABOUT THE SENSORS

The infrared CO2 sensor utilizes NDIR technology for maximum stability, and has a theoretically unlimited lifespan. Its ultra low power consumption allows for 10-14 hours of runtime for the analyzer before recharging is required.

It has no moving parts, no consumables, and is housed in a compact optical cell. The sensor responds to CO2 only.

The electrochemical O2 sensor life is typically 4-5 years, unlike other analyzers with an electrochemical sensor that last 1-2 years. When required, replacement is easy and inexpensive.

Both sensors are unaffected by high levels of background gases such as nitrogen.

WARRANTY STATEMENT

The Model Q2 is backed up with a two year warranty, twice the industry standard.

Our service team responds quickly to the repair needs of our customers.

Specifications

Technical Specifications – Oxygen Channel

- **Oxygen Sensor Type:** Proprietary Electrochemical
- **Expected Lifetime:** 4-5 years
- **Oxygen Range:** 0 to 100%
- **Oxygen Sensitivity:** 0.1% O2
- **Oxygen Minimum Detection Limit:** 0.1% O2
- **Oxygen Calibration Controls:** SPAN adjustment, zero adjustment
- **O2 Calibration Frequency:** Weekly; set with room air set to 20.9% O2.
- **O2 Resolution:** 0.1% O2

Technical Specifications – Carbon Dioxide Channel

- Carbon Dioxide Sensor Type: Solid-state Infrared
- Expected Lifetime: Theoretically unlimited
- Measurement Ranges: 0-100%
- Accuracy (for 0-100% range): ± 1% of reading, or ± 0.2% CO2 (whichever is greater)
- CO2 Minimum Detection Limit: 0.1% (0-100% range)
- CO2 Calibration Controls: Potentiometer SPAN adjustment for CO2 and zero adjusment
- CO2 Calibration Frequency: Every 18 months; calibration gas recommended.

Technical Specifications - All

- **Sample Pump** - Miniature diaphragm type with ~5cc/sec flow
- **Pump Timing** – 2-12 second adjustable pump time, potentiometer on side of analyzer
- **Sampling Port** - Double reinforced sample probe (~12in. length)
- **Exhaust port** – Vents to air
- **Power Supply:** Four "AA" NiMH rechargeable batteries; auto shut-off after 45 minutes idle. 100-240V (50-60Hz) Charger included, with US or international interchangeable plug adapter (upon request)
- **Backup Power:** Four "AA" alkaline batteries (not included)
- **Input Voltage:** 100-240V, 50-60Hz
- **Battery Life:** 10-14 hours before recharging
- **Size:** 8 x 4 x 1.8 in. (200 x 100 x 40 mm)

- **Weight:** 1 lb. (450 gms)
- **Standards** - CE, RoHS,

Applications

Food Package Applications:

- Dairy Products
- Produce
- Snack Foods
- Baked Foods
- Prepared Meals
- Coffee
- Pet Foods
- Desserts
- Meats
- ... and many more

Research and Industrial Applications:

- Bioreactors
- Gas Blending Systems
- Fruit Storage Areas
- Fermentation
- Algae Experiments
- Welding Gases
- Controlled Atmosphere Rooms
- Carbon Capture and Storage
- Incubation Experiments
- Cell Culture analysis
- Greenhouse CO2 Research
- Biofuel Experiments
- CO2 Mitigation Research
- ..... and Many More

What's Included

- Built-in pump, sample probe.
- Starter pack of 200 foam septas
- 2 needles.
- 2 particulate filters,
- 2 moisture blocking filters,
- Power supply / charger (for analyzers with optional internal battery) - (International compatible 100-240V)

Carry case:

Optional Items