

FL23 Algal CO₂ Package

The FL23 Algal CO₂ package is designed for measurements of CO₂ exchange from the algal suspension inside a flow-through algal chamber and the head space of the chamber. The system employs an infrared CO₂ gas analyzer for measurements of CO₂ in the 0-2000ppm range

KEY FEATURES

- CO₂ Analyzer 0-2000ppm
- Gas Pump 1LPM
- Flow Meter or Flow Monitor (optional)
- Algal Gas Exchange Chamber (80ml)
- Data Acquisitions Interface (4 channels) and Software
- Gas Supply Bags
- Nafion RH Equilibrator
- LED Light Source Calibrated in Software (optional)



Gas with constant CO₂ concentration is supplied to the algal chamber via a gas pump and a flow meter or flow monitor (optional) at a known flow rate. The gas inlet of the chamber is attached to tubing with an air stone that is placed below the level of the liquid. The bubbling of the gas through the algal suspension causes release of the dissolved CO₂ from the suspension to the head space of the chamber. Gas from the head space enters the outlet of the chamber and the PTFE filter which stops any unwanted liquid from entering the CO₂ analyzer. The water content of the gas is reduced by passing through the Nafion RH equilibrator and the gas is dried further by passing through the drying column before entering the CO₂ analyzer. The FL23 Algal CO₂ package can be used for measurements of photosynthetic CO₂ consumption when the algal suspension is illuminated or CO₂ production during dark respiration.

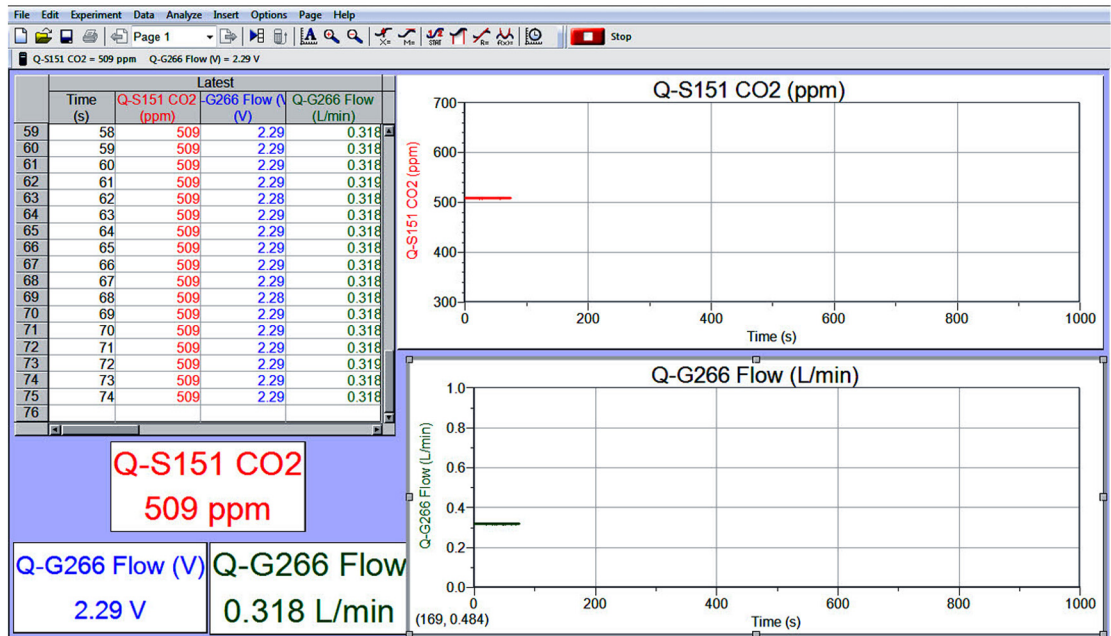
APPLICATIONS

- Algal Photosynthesis Measurements
- Algal Respiration Measurements
- Bacterial Suspension Respiration
- Fermentation Measurements



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SOFTWARE



Sample Data

Software Features

- 4 Data Channels
- Variable Data Acquisition Rate
- Graph, Table and Meter Displays
- Suite of Analysis Functions (Statistics, Curve Fit, Integration etc.)
- Control of Devices Using Input data
- Multi-Page Reporting
- Data Replay Function
- Simple Equation Input and Editing
- Numerous Mathematical Functions
- Automated Calculations On-The-Fly

FL23 Algal CO₂ Package can be complemented with Z985 Aquapen – hand-held Chlorophyll Fluorescence measuring device. For growing and monitoring algae please consider our Photo-bioreactors and Multicultivators. Contact Qubit Systems for details.

This package is compatible with any data acquisition system you may already possess



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