

Soil CO₂ FLUX systems

The method of measuring soil respiration where a chamber of known volume is placed by the robot arm on the soil and the rate of increase in CO_2 within the chamber is monitored. With this system, the air is continuously sampled in a closed circuit and the soil respiration rate is calculated, displayed and recorded by the instrument. The air within the chamber is carefully mixed to ensure representative sampling without generating pressure differences which would affect the evolution of CO_2 from the soil surface.

System Features

- lightweight and portable (battery operated)
- integrated temperature, presure, and humidity sensor
- closed system measurement
- user friendly operation
- simple setup
- data logging, storage and output of data



BlistO₂

an Automatic System for Oxygen Analysis in Blister Packs

Innovative patented measuring system is made for the automatic analysis of oxygen content in blister packs. The analysis is accurate, reproducible and eliminates the possibility of human errors.

BlistO2 is perfectly suitable for all kinds of final quality controls. There is no limit to the shape or material type of the blister pack or vials.



HandO₂

manual needle type oxygen micro-sensor

HandO $_2$ enables micro-invasive measurements with sensor tips smaller than 140 μ m. The most commonly it is used for determination of headspace and dissolved oxygen content in packages (food & beverage, pharmacy, biotechnology & microbiology and scientific R & D).





INNOVATIVE HIGH QUALITY SENSOR SYSTEMS

INSTRUMENTS, SOFTWARE
AND INTEGRATED ANALYTICAL
SENSOR SYSTEMS

Our systems incorporate state-of-theart electro-optic technologies and are integrated with appropriate sensor technologies and robust mechanical systems to provide innovative solutions to demanding system requirements.

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- Simultaneously mixes up to three gases in a balance gas at different concentrations
- Precise dilution of gases prior to analysis
- Allows multi-point calibration of analysers

Gas mixing devices

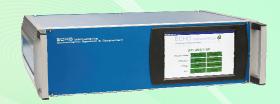
- Validation of gas analysis
- Use of dry corrosive gases: SO₂, NO, NO₂, Cl₂, H₂S
- Suitable for all clean gases including corrosive and reactive gasses
- Used in chemical, biotechnical, pharmaceutical, environmental field, chemical experiments (reactors) and biological tests (like respirometers), emission and imission measuring systems
- Gas mixtures for analytical, production or industry application ranging from % down to ppm range
- Mass Flow controllers calibrated to specific gas
- Possible to order custom designed instruments to meet customer needs

Accredited laboratory for gas flow measurement SIST EN ISO 17025:2005

Gas analyser

Stationary gas analysers and gas analysis systems for laboratory and industry

- Infrared, paramagnetic and electrochemical gas sensors
- Standard or high precision sensors
- 1 to 8 sensors in 19" enclosure
- configuration on demand
- Touch screen interface
- Autocalibration option





TEHNICAL DATA:

- Different interface possibilities:
 Serial interface, USB/RS232, RS485, MODBUS, ETHERNET
- Touch screen interface



Respirometry systems

ECHO Instruments manufactures respirometry systems that are used for conducting diagnostic tests, measuring and monitoring the following:

- Bio-reactions in aerobic and anaerobic processes
- Plastic degradation at high temperature according to: ISO 14855, ISO 14852
- Decomposition efficiency of different types of material: solid waste or wastewater treatment plant
- Microorganism activity (pharmacy, production of medicines)
- Biological activity of organisms (concentration of carbon dioxide in the expired air)
- Food production (fermentation activity in wine production and milk industry)