

6000 Precision Headspace Analysers



Advanced Products for Measurement of O₂ and CO₂ in MAP/CAP Headspace Atmospheres



Applications

Fresh Meat	Cooked Meat	Vegetables	Salads
Bakery	Snack Foods	Ready Meals	Fish
Pharmaceutical Vials		Pharmaceutical Packaging	

Features & Benefits

- Easy to set up and use
- Intuitive menu
- Auto calibrate
- Set tests for pass or fail
- Printer option
- Computer software option

The Systech Illinois 6000 range offers three different models to accommodate your oxygen and carbon dioxide measurements.

The compact enclosure maximizes space on carts and table tops. Seamless cover design and polycarbonate operator's panel sheds spills and resists most chemicals and solvents.

6500 measures oxygen levels only



6600 measures both oxygen and carbon dioxide concentrations.



6700 measures carbon dioxide only



Systech Illinois is recognised worldwide for its line of precision trace oxygen and carbon dioxide analysers.

The Systech Illinois 6000 headspace analysers offer high levels of performance technology and operator ease to fulfill the latest industry demands for accuracy and reliability.

These highly advanced instruments are equipped with integral sampling systems, unique miniature zirconia and infrared sensors, and microprocessor control to deliver the most accurate and repeatable performance possible. One touch automated calibration and product analysis make these analysers easy to use.

Rugged and compact epoxy clad cabinetry, seamless operator's console and no-compromise engineering make these instruments ideal for both the laboratory or the demanding climate of the production floor.

RS232 output

RS232 output prints product description and sample data to 40 column thermal desktop printer for hard copy of calibration and test results. Prints test "Fail" according to user defined alarm settings.

Unique sensors

Analysis of small sample volumes. Response is typically less than five seconds for oxygen and ten seconds for carbon dioxide. Internal microprocessor manages calibration, autoranging, pump speed and duration and many other functions to ensure consistent, error-free results.

Precision flowmeter

Precision flowmeter provides visual confirmation of sample flow. Unlike warning lights, users can monitor system performance and resolve potential problems before they occur.

Display hold

Locks most recent high or low concentration value. Bright, large character display is easy to read in any lighting condition. Status lights indicate mode of operation.

Timed Analysis

Timed, automatic analysis is provided at the touch of a button. Programmable sampling duration and data integration make these among the most advanced headspace analysers available.

Autocalibration

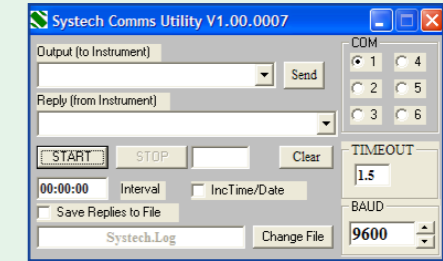
With a single button the instrument self calibrates in just 30 seconds using ambient air.

Sample probe

The robust sample probe is designed to accept standard luer accessories and includes easily replaced needles and particulate filters. With a convenient sample probe holder to prevent needle contamination and sample line damage.

Software

User friendly software parameters are easy to enter and can be secured against accidental change.



Automated sampling

Automated package sampling is easy. Insert the sampling needle into the package and press analyse. The instrument does the rest; extracting the sample, analysing sensor output and holding the results for viewing on the bright autoranging display.

Samples injected directly

Headspace samples can be injected directly into the instrument when automated sampling is not practical.

Accessories

The can piercing station is perfect for rigid packaging and has proven to be stable and reliable in hundreds of demanding applications.



Can Piercing Station



Principle of operation

Oxygen

The oxygen detector utilises a high purity, stabilised zirconia ceramic and platinum sensor maintained within a high temperature environment. The sensor produces a log output which is converted and linearised to yield a digital readout directly proportional to a sample's oxygen content.

Carbon Dioxide

This sensor integrates a solid state infrared source and detector into a single high performance assembly. Narrow wavelength filtering and strict temperature compensation ensure that only carbon dioxide is measured, even within complex gas mixtures. Precise signal conditioning and microprocessor control provide direct digital indication of CO₂ concentrations.

Technical Specifications

Oxygen Range	Autoranging from 0.001 to 100% (models 6500 & 6600)
Carbon Dioxide Range	Autoranging from 0.1 to 100% (models 6600 & 6700)
Displays	Bright 4 Digit LED, Display Hold, Analyse, and Calibration Status Indicators
Response Time	<5 seconds (O ₂), <10 seconds (CO ₂)
Accuracy: Oxygen	10 to 100%, 0.2% absolute (max 2% of reading) and ±1 on the last digit. 1 to 9.99%, 0.02% absolute (max 2% of reading) and ±1 on the last digit. 0 to 0.999%, 0.005 % absolute and ±1 on the last digit.
Accuracy CO2	±2% FSD
Ambient Temperature	+5 to +40°C
Internal Sample Pump	Processor Controlled Diaphragm Type
Syringe Injection	Via Male Luer Syringe Adaptor (supplied)
Enclosure	Epoxy Coated Steel, Polycarbonate Operators Panel
Dimensions	305mm W x 254mm D x 152mm H
Weight	5.3 kg

Options

Computer Interface	RS232 Port for Computer/Data Printer
Rigid Pack Sampler	Extracts samples from cans, jars, bottles, etc. Includes all necessary fittings and supplies.
Compact Printer	40 Column Thermal Desktop Printer

Power Requirements

Mains power	110 / 220 VAC, 50 / 60 Hz. 100 Watt Maximum
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Systech Illinois have over 25 years experience of providing analysis solutions for a wide range of industries. From our manufacturing plants in the UK and U.S we produce gas analysers for industrial process industries, headspace analysers for monitoring gas flushing of food products, and our range of permeation analysers.

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