

MAPtest 3050 Food Packaging Atmosphere Analyser



HPS-137

Features

- ◆ **Auto-calibrating**
- ◆ **Very fast and easy to use**
- ◆ **Pumped or syringe-injection sampling**
- ◆ **Multiple pass/fail programmable limit sets**
- ◆ **1000 results storage with optional down-load software**



The MAPtest 3050 is one of the most advanced analysers of its type. Controlled by a microprocessor and housed in a stainless steel bench-top enclosure, it is designed to be used by all types of personnel.

Operation is simplicity itself. Ease of use and neatness of operation were two of the key design requirements. Equally at home in the research lab and the shop floor, no exceptional skills are required to operate the instrument and precision results can be flawlessly produced by everyone.

Advanced sensors measure the carbon dioxide and oxygen content of the sample. Their outputs are analysed by the microprocessor, which displays the results within five seconds.

Auto calibration is achieved by use of highly stable sensors. The initial calibration is performed after warm-up, with subsequent ones automatically activated at appropriate intervals. The automatic calibration process can be manually activated. **No calibration gases are required.**

An illuminated four-line graphical display is used to show the results. Oxygen, carbon dioxide and nitrogen balance are shown as percentage concentrations, along with pass/fail messages if the limit sets are activated. Oxygen results below 10% are resolved to a precision of 0.01%, enabling very exact measurements of residual oxygen. **Four sets of limits**, that are user

programmed, are provided to detect a pass/fail result of the analysis. Each set may be easily selected as required.

1000 results can be stored (concentrations, time, date) and downloaded to a personal computer using optional software. The data can be read by all leading spreadsheet packages for analysis, printing etc.

A fast external printer is available as an option to provide a timed and dated hard-copy of the analysis. Both printing and storage functions may be switched on and off by the operator.

Two sampling methods are provided. Firstly, the built-in pump can be used to withdraw a sample from a pack using the sample probe supplied. The probe is suitable for single-handed operation, and the pump can be programmed to withdraw volumes of 5ml to 90ml. Alternatively, a manual syringe can be used to inject a sample through a septum port. When using this method the sample flow is automatically detected and the analysis automatically produced 5 seconds after the end of the sample delivery.

A comprehensive set of sampling accessories and consumables is also provided.

SPECIFICATION

Display

4 line graphical illuminated LCD

Data Storage

1000 results (Optional MAPlog software available for downloading data to standard P.C.)

Ranges

Oxygen, carbon dioxide and nitrogen all 0/100%

Accuracy

Oxygen: $\pm 2\%$ reading or 0.5% whichever is the smaller
Carbon dioxide: $\pm 1\%$ of span
Nitrogen: Sum of CO₂ and O₂

Speed of response

5 seconds from completion of sampling

Sample volume

5ml minimum: 20ml optimum
Maximum pumped volume: 90ml

Outputs

Serial RS232 for computer link

Optional Printer

24 column plain paper desk-top model

Ambient temperature

-5°C to +40°C

Power requirements

110/120v or 220/240v 50/60Hz at 100VA

Dimensions & weight (approximate)

325W x 280D x 135H: 6.5