

MAPtest 4050 food packaging atmosphere analyser



Features

- ◆ **Auto-calibrating**
- ◆ **Pumped or syringe-injection sampling**
- ◆ **Multiple pass/fail programmable limit sets**
- ◆ **Built-in printer**
- ◆ **5 second response time**



The MAPtest 4050 is one of the most advanced analysers of its type. Controlled by a microprocessor and housed in a fully waterproof case, it is designed to be used by all types of personnel.

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.**

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.

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.

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.

A fast built-in printer provides a timed and dated hard-copy of the analysis. This function may be turned off when it is not required.

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

SPECIFICATION

Display

4 line graphical illuminated LCD

Printer

24 column: dot matrix: plain paper

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

Ambient temperature

-5°C to +40°C

Power requirements

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

Dimensions & weight (approximate)

400W x 325D x 175H: 8kg