Model

1737 *Oxygen and Carbon Dioxide Analyser*

Oxygen and Carbon Dioxide measurement made simple

The 1737 oxygen and carbon dioxide analyser is the third generation of MAP gas analysers from Novatech Controls. It incorporates a novel zirconia oxygen sensor and an infrared CO_2 measuring cell. It brings a new level of automated gas sampling for the food and pharmaceutical industry by including features such as:

- BlueTooth data uploads
- 200 Product categories
- Power or battery operation
- Sample gas flow measurement and control
- Large graphic display
- Performs automatic zero calibration when reading ambient air
- Data memory for 3700 measurements

The 1737 analyser comes with a variety of gas measurement ranges that covers oxygen from ppm levels up 100%, and the option of CO_2.

The sample gas flow rate is measured using a true mass flow sensor and allows the 1737 to maintain a constant flow rate and alarm if there is a blockage.

The Novatech 1737 Oxygen and Carbon Dioxide Analysers are especially suited to food and beverage applications including:

- Head space analysis in closed packages
- Head space analysis in cans
- Continuous process measurement

Accuracy and reliability

The oxygen and carbon dioxide sensors provide accurate and virtually drift-free measurement for years. The oxygen sensor is automatically zeroed whenever the sample is from ambient air and only requires a calibration gas for the ppm level sensor.

The carbon dioxide is also zeroed whenever the sample is from ambient air and uses a simple keyboard operation for the span calibration.

Product categories

The 1737 allows entry of up to 200 products by name and product number, entered from the instrument keypad or from a computer. Selecting a product automatically enables the preset alarm levels for the gas concentration and the measured results are stored in sets with a date/time stamp. The data can be transferred easily without errors or missed readings to a computer using the Novatech software in CSV (comma separated variable) format straight into the common spreadsheet applications. The software is provided free of charge.

Automatic operation

The operator does not need to touch the analyser once the product has been selected. Every time the sample gas returns to ambient air the alarm levels are checked, the minimum/maximum measurements are stored and the display is updated.

The analyser can then be brought to within 10m of the computer, a button can be clicked on the PC and the data will be transferred by the radio link. It is not necessary to plug a communication cable into the analyser.

Tailor the analyser to the application

The Novatech 1737 analysers are available for oxygen only, or for both CO_2 and oxygen with three oxygen ranges. The instruments can be selected with a pump where samples need to be aspirated, and with accessories (see reverse side) including:

- Metal can piercing tool
- Hypodermic needles for plastic packs
- Septum
- Filters for dry particulate

Easy Upload Using Bluetooth Communications

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Measuring range

Oxygen	30ppm to 25%, 0.1 to 25% or 0.1 to 96%
CO_2	0 to 100%

Accuracy

Oxygen	(25-96%)	+/- 2% of the reading
Oxygen	(10-25%)	+/- 0.05% oxygen
Oxygen	(0.4-10.0%)	+/- 0.01% oxygen
Oxygen	(100-1000ppm)	+/- 30ppm oxygen
CO_2	(0-40%)	+/- 1.5% CO_2
CO_2	(40-95%)	+/- 2% CO_2

Resolution

Oxygen	30.0 to 96.0%	0.1%
	1.00 to 29.99%	0.01%
	0.001 to 0.999	0.001%
	100 to 999ppm	1ppm
	0.1 to 99.9ppm	0.1ppm
CO_2	0.1 to 100%	0.1%

Head space volume

Oxygen, sample flow 50cc/m

1% to 10%	15cc
100 to 1,000ppm	40cc

Oxygen, sample flow 150cc/m

1% to 10%	30cc
100 to 1,000ppm	90cc

CO_2, sample flow 150cc/m

1% to 40%	20cc

Warm up time

Oxygen and CO_2	1 minute

Gas Sample Flow range

Automatic control	50 to 250cc/min
Manual control	30 to 350cc/min

Gas connection

1/8" Swagelok tube connection

Communications

Data transfer	BlueTooth to PC

Power supply

Voltage	12vDC
Current	1.8A max. (batteries on fast charge)
	0.8A max. (batteries on trickle charge)

Batteries

Type	7x AA (2400mAH)
Battery life	1.5 hours after a full charge

Environmental

Ambient temperature	-20° to +35°C
Ambient humidity	10 to 90% non-condensing
IP rating	IP54

Ordering information

Models with oxygen only measurement:

1737-1	Oxygen only (0.1 to 25%) MAP packaging
1737-2	Oxygen only (30ppm to 25%) MAP packaging
1737-3	Oxygen only (0.1 to 96%) MAP packaging

Models with oxygen and CO_2 measurement (0-100%):

1737-1C	Oxygen (0.1 to 25%) and carbon dioxide MAP packaging
1737-2C	Oxygen (30ppm to 25%) and carbon dioxide MAP packaging
1737-3C	Oxygen (0.1 to 96%) and carbon dioxide MAP packaging

Dimensions

280L x 180W x 115H

Weight

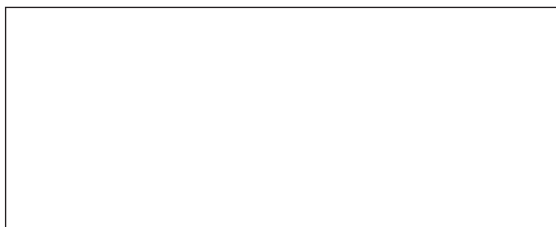|	
Analyser	2kg
Power pack	0.5kg

Mounting

Desk top

Accessories

Metal can piercing tool
Hypodermic syringe for plastic packs
Septum – silicon strip
Filters for dry particulate
Filters for blocking condensate
Sample lines
Rugged carry-case

Also available in rugged carry case

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Data Sheet 1737