

MODEL 9000MGA



TRIPLE GAS ANALYSER

True three in one Gas Analyser with:

- ◆ Dual gas filter correlation NDIR for two gases.
- ◆ Paramagnetic sensor for oxygen.
- ◆ Separate microprocessor for each gas channel.
- ◆ Separate span and sample gas Inlets.
- ◆ Wide ranges available from 0-50ppm to 100%
- ◆ Very high water vapour and CO₂ rejection on low CO and NO channels.
- ◆ 3U high 19" rack mount enclosure.
- ◆ Two year warranty.
- ◆ Remote control RS232, 0-10Vdc and 4-20mA outputs.

Gases measured:
CO₂, CO and O₂
CO, NO and O₂
CO₂, NO and O₂
Other gases possible

Applications include:
Combustion research
Automotive exhaust
Gas Turbine emissions
Continuous Emission Monitoring
Air/Fuel Ratio Studies

9000MGA SPECIFICATIONS*

DETECTOR

Non dispersive infra-red correlation rotary filter system with solid state detector and dumb-bell paramagnetic.

RANGES

Dependent on gas (see separate data sheet).

CO from 0-100ppm to 100%

CO₂ from 0-50ppm to 100%

NO from 0-100ppm to 100%

O₂ from 0-1 to 0-100%

RESPONSE TIME

Dependent on gas and settings. Typically less than 15 seconds (IR) and 5 seconds for paramagnetic.

FLOW SENSITIVITY

Less than $\pm 1\%$ from 1 to 2 L/min into ambient pressure exhaust.

ACCURACY AND REPEATABILITY

Better than $\pm 0.5\%$ of range.

LINEARITY

Better than $\pm 0.5\%$ of range.

DETECTOR NOISE

Gas and range dependant (see separate sheet).

DRIFT

Zero & span drift are less than 1% of range in 1 hour at constant temperature and pressure.

POWER REQUIREMENT

Switchable 115/230VAC 50/60Hz compatible.

Max power at warm up 500VA

DISPLAY

Three 240 x 640 pixel LCD displays with switchable back-light showing concentration units and gas in large clear characters. Vertical bar graph of chart output with alarm markers and sample flow indication. Range control and message areas. Multi-screen operation for full analyser status and configuration.

OUTPUTS

Non isolated 0-10Vdc, isolated 4-20mA analogue outputs of displayed range. Range analogue output. Digital lines are provided for the remote indication of analyser status. Range input port, calibration in progress, calibration failed, high alarm and low alarm are available. 0-24V output for pump control/relay.

REMOTE CONTROL

Serial interface using RS232. All functions by AK protocol with variable baud rate.

INPUTS

Digital control lines are provided for the remote control of range, input port, standby and calibration. The inputs are arranged for contact closure to common return to represent the true condition.

AUTO-CALIBRATION

Controlled by microprocessor, RS232 or switched logic.

SAMPLE CONDITION

Gas to be analysed must not exceed 40°C, with a dewpoint below local ambient temperature.

DIMENSIONS

19" rack mount, 3U high, 550 to 590mm behind the front panel.

Weight approximately 19kg.

OTHER PRODUCTS AVAILABLE

1100M SO₂ analyser

3000 range of fixed and portable FIDs

4000 range of Chemiluminescence analysers for NO_x

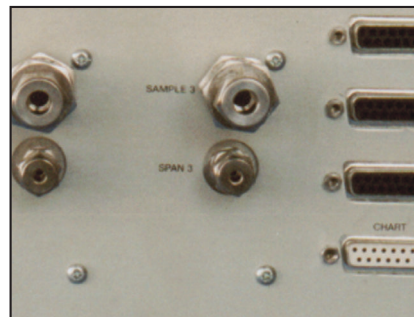
7000 range of GF NDIR analysers for CO, CO₂, NO, SO₂, etc

8000M O₂ analysers

Complete range of sampling accessories and test equipment

*Every effort has been made to ensure the accuracy of information supplied in this publication. However, due to a policy of continuous development, specifications may change without notice. Signal cannot be held responsible for any damage, loss, or expense arising as a result.

Represented by:-



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