



R5100

R5100, Portable Multigas Analyser

The R5100 Multigas Analyser is a high specification instrument designed for the analysis, control and monitoring of gas in a wide range of applications including; biogas analyser, syngas, anaerobic digestion and fermentation processes. Housed within an heavy-duty IP66 case, this analyser makes for a truly portable field instrument with laboratory functionality.

Up to six gases are simultaneously measured using a range of high precision gas sensors; each sensor is specially designed and calibrated to avoid any cross interference effects with the background process gas. Safety is ensured by the inclusion of flashback arrestors in the gas measuring circuit where required. Supporting syngas and biogas analysis, other measurable gases include amongst others: CO₂, CO, H₂O, O₂, C₂H₄, SO₂, CH₄, H₂ and H₂S.

When configured for applications where the gases contain energy (e.g. Biogas, Syngas) the calorific value of the gas sample is determined using thermodynamic calculations and simultaneously logged and displayed on-screen.

An optional pump enables two modes of operations. For samples that are taken from a gas source at atmospheric pressure or below, the pump is activated to draw a sample through the analyser. Alternatively, the pump can be deactivated when sampling from a source at greater than atmospheric pressure, allowing the gas to flow through the analyser. Gas flow is regulated manually via a rotary knob on the fascia and displayed electronically on the screen.

A 7" (180mm) full-colour touch screen interface with soft menu keys allows for easy operation in either permanent monitoring or sampling modes. All data is continuously logged for review and inspection and Excel compatible data can be downloaded via a USB memory stick.

MRC offers a range of R servicing options. Regular gas analyser calibration significantly increases the measurement, reliability & repeatability of equipment. A full service is available via state-of-the-art automated stations, designed to calibrate R gas analysers accurately and efficiently.

Features:

- Modular design allows for bespoke sensor combination upon request
- Full laboratory functionality within a truly portable field instrument
- Housed within a heavy-duty IP66 case
- 7" (180mm) full-colour touch screen interface with soft menu keys
- Permanent or sampling modes available
- All data is continuously logged and Excel compatible data can be downloaded via a USB memory stick
- Operates on any worldwide mains voltage (90–260VAC)
- Thermal printer provides on-site test results
- Fully programmable alarm settings
- Multi-language (Please contact for details)
- Password protection feature.

Applications:

Biogas • Combustion • Emissions • Gas • Research & Development • Syngas.

Accessories & Options:

Sample Probe



Sample Hose



Gas Recovery Bag



Calibration Gas & Servicing



Model	R5100
Sample connections	4mm ID / 6mm OD Rectus style, closed coupled fittings
Warm-up time	3–4 minutes at 20°C
Measurement time	Approximately 2–4 minutes (dependant on sensor configuration)
Data output	Excel compatible data via USB memory stick
Data storage	4GB internal data storage allowing for approx. 1 year of continuous monitoring
Max. inlet temperature	50°C
Max. inlet pressure	10 bar gauge
Operating temperature	-10°C to 40°C
Optional pump	0–1 litre per minute
Calibration	Zero and span calibration with two user-selectable gases
Battery life	In excess of 8 hours, 4–6-hour charge
Voltage (charging)	90–260VAC, 50/60Hz
Display	7" (180mm) full-colour LCD with touch screen operation
Printer	Thermal printer allows output of results on demand
Analyser Dimensions	180mm(H) x 480mm(W) x 360mm(D)
Weight	7kg