

SWG 100 *biogas*

The versatile analyser

Stationary Biogas-measuring system
for continuous measurements

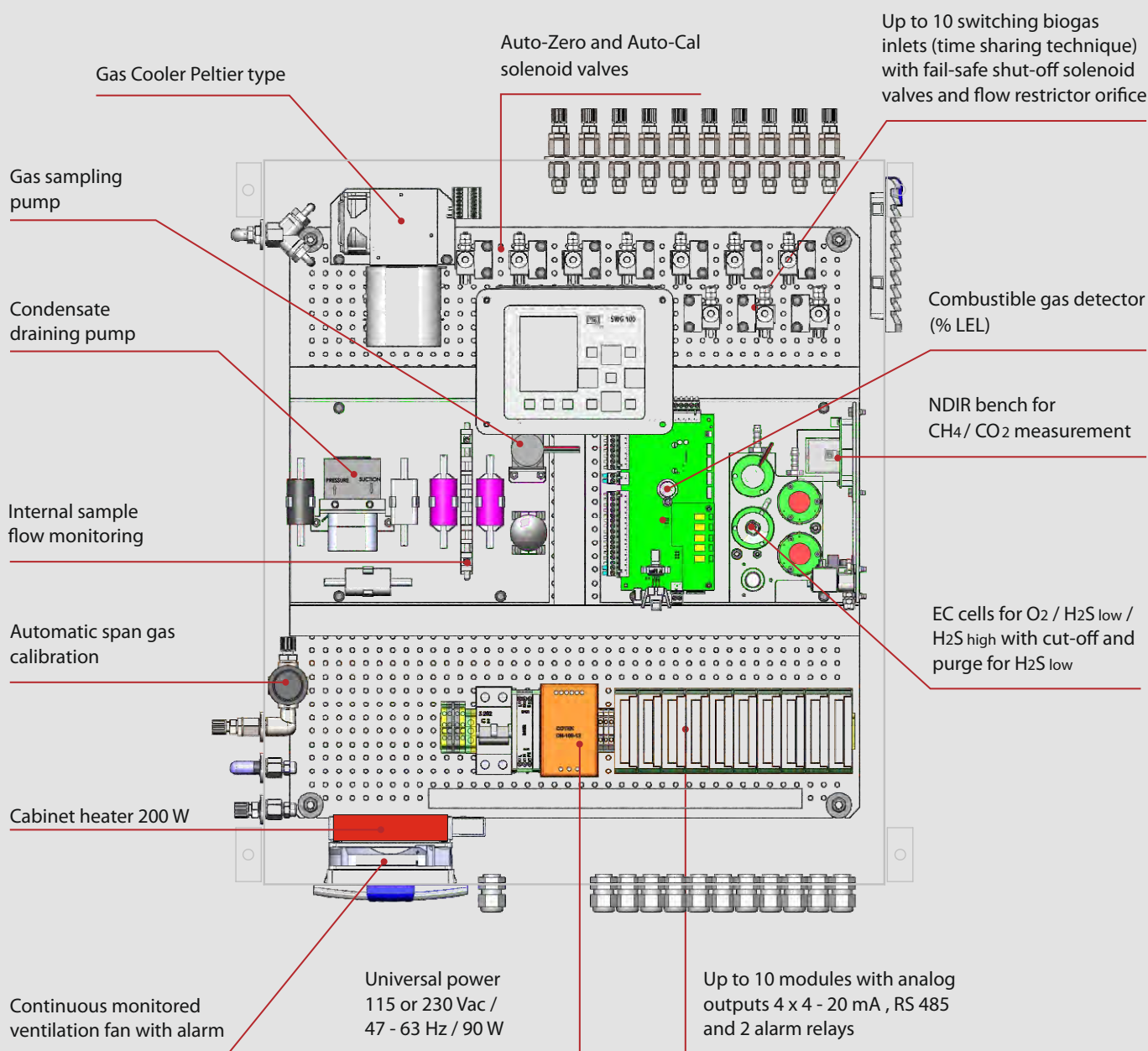


- For Biogas, Biomethane, Landfill Gas, Coalbed Methane
- Continuous measurement
- Up to 10 sites monitoring
- Ready to run delivery, minimum installation work

The versatile analyser for Biogas, Biomethane, Landfill Gas, Coalbed Methane

MRU biogas analyser of series SWG100, are designed for use in the harsh industrial environment of different sites where biogas is produced.

The analyser can be installed in outdoor or indoor location, can sample dry or wet biogas, pressurized or low pressure gas and can be used from single point sampling up to max 10 sampling points.





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Convincing benefits:

- industry compatible rugged design for harsh industrial environment
- standard system safety included with continuously monitored fan ventilation of cabinet, gas flow restrictor orifice at gas inlet
- efficient sample gas preparation for fast and reliable measurements
- no dilution of the sample gas, neither use of compressed air is required
- direct and continuous/discontinuous measurement, with pressure and temperature compensation and event data logging
- up to 10 sites monitoring (time sharing technique) with only one analyser
- ready to run delivery, minimum installation work

SWG 100 <i>biogas</i>	Standard	Option
Basic analyser for wall (rack) mounting, IP54 aluminum cabinet with anti-corrosive red structural lacquer	●	
Monitored ambient air ventilation with display and system alarm, including flow restrictor orifice and cutoff gas supply solenoid valve	●	
Sample gas pump and internal sample flow monitoring with display and system alarm	●	
Solenoid valve for auto-zero with ambient air and calibration	●	
Auto-calibration using span gas mixture cylinder	●	
1/8" threads for all sample gas, zero gas and calibration gas inlets, fittings for DN6/4 mm tube	●	
3,5" TFT color, backlit display and keyboard, password protected operation	●	
RS 485 digital data transfer (Modbus RTU)	●	
Combustible gas detector (%LEL) mounted inside analyser cabinet (alarm limit value based on CH ₄)		●
Electric gas cooler (Peltier) with automatic condensate draining pump		●
Multiple sampling point switchover from 2 up to maximum 10 sites		●
Module with 4 channel analog outputs/inputs 4 - 20 mA and 2 x alarm relays		●
Analyser remote control using 4 external relay contacts		●
Converter module of RS 485 into Profibus		●
Cabinet heater for freeze protection		●
Flame arrester		●



Product information:
see www.mru.eu

or scan adjacent QR-code

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Technical specifications

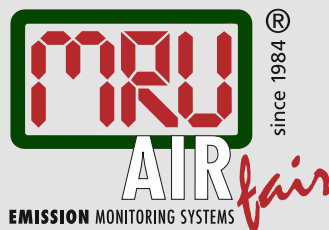
Measured components	Measuring method	Range	Resolution	Accuracy
Methane CH ₄	infrared	0 – 100 %	0,1 Vol%	± 0,3 Vol% / 3 % of reading**
Carbon dioxide CO ₂	infrared	0 – 100 %	0,01 Vol%	± 0,3 Vol% / 3 % of reading**
Oxygen O ₂	ec, continously	0 – 25 %	0,01 Vol%	0,2 % abs.
Hydrogen sulfide H ₂ S	ec, discontinously	0 – 2.000/4.000 ppm*	1 ppm	± 10 ppm / 10 % of reading**
Hydrogen sulfide H ₂ S low	ec, discontinously	0 – 200/1.000 ppm*	1 ppm	± 5 ppm / 10% of reading**
Hydrogen sulfide H ₂ S high	ec, continously	0 – 10.000/50.000 ppm*	1 ppm	± 50 ppm / 5 % of reading**
Hydrogen H ₂	ec, discontinously.	0 – 1.000/2.000 ppm*	1 ppm	± 10 ppm / 10 % of reading**
Calculated components	Calorific value: 0 – 50 MJ/m ³ ; MJ/kg			
HMI human machine interface	3,5" TFT color display Backlit keyboard, password protected operation 4 analog output 4-20 mA, floating, max. load 500R 2 alarm relays, potential free contacts 24 Vdc/5 A RS 485 digital interface (Modbus RTU) DIN-rail RS 485 / ProfiBus converter			
System safety components	Monitored cabinet ventilation fan Stainless steel flow restrictor orifice Sample gas shut-down solenoid valve LEL (CH ₄) monitoring inside cabinet (option)			
Sample preparation	Stainless steel gas fittings with 1/8" ID threads Electric gas cooler Teflon Partikelfilter Monitored and regulated sample flow 40...60 l/h Sample inlet pressure: -100 mbar to + 300 mbar Sample venting: atmosphere pressure			
Cabinet dimensions	700 x 600 x 210 mm (H x W x D) for wall or rack mounting			
Weight / Protection	25 kg / IP54			
Installation site	Indoor or outdoor (rain and sun shade is mandatory user scope of supply)			
Ambient temperature	+5°C...+45°C or -10°C...+45°C with cabinet heater			
Cabinet conditioning	Continuous, monitored fan ventilation Cabinet heater 200 W (option)			
Power supply	115 or 230 Vac / 47 - 63 Hz / 90 W (300 W with cabinet heater)			

* overload for short-term measurements only
** the higher value applies

Data subject to change without notice
W 9513GB-Bio - K1-XX-097

MRU – over 30 years of innovative gas analysis!

MRU-representative:



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