

# SWG 100 BIOGAS

## LANDFILL & BIOGAS ANALYSIS

For optimizing production, performance, and reporting



- Industry compatible rugged design for harsh industrial use
- Sampling from low suction up to high pressure gas
- Direct and continuous / discontinuous measurement
- No dilution of the sample gas
- Easy installation & start-up



since 1984 ®

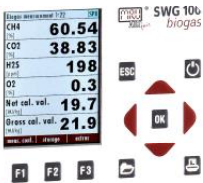
**AIR** fair

EMISSION MONITORING SYSTEMS

Over 30 years of innovative gas analysis!

# THE COMPLETE SOLUTION ...

DIRT resistant keypad and bright display



Customisable display with 6 or 2 values per screen



OPTIONAL with AUTO-Calibration



OPTIONAL with gas cooler

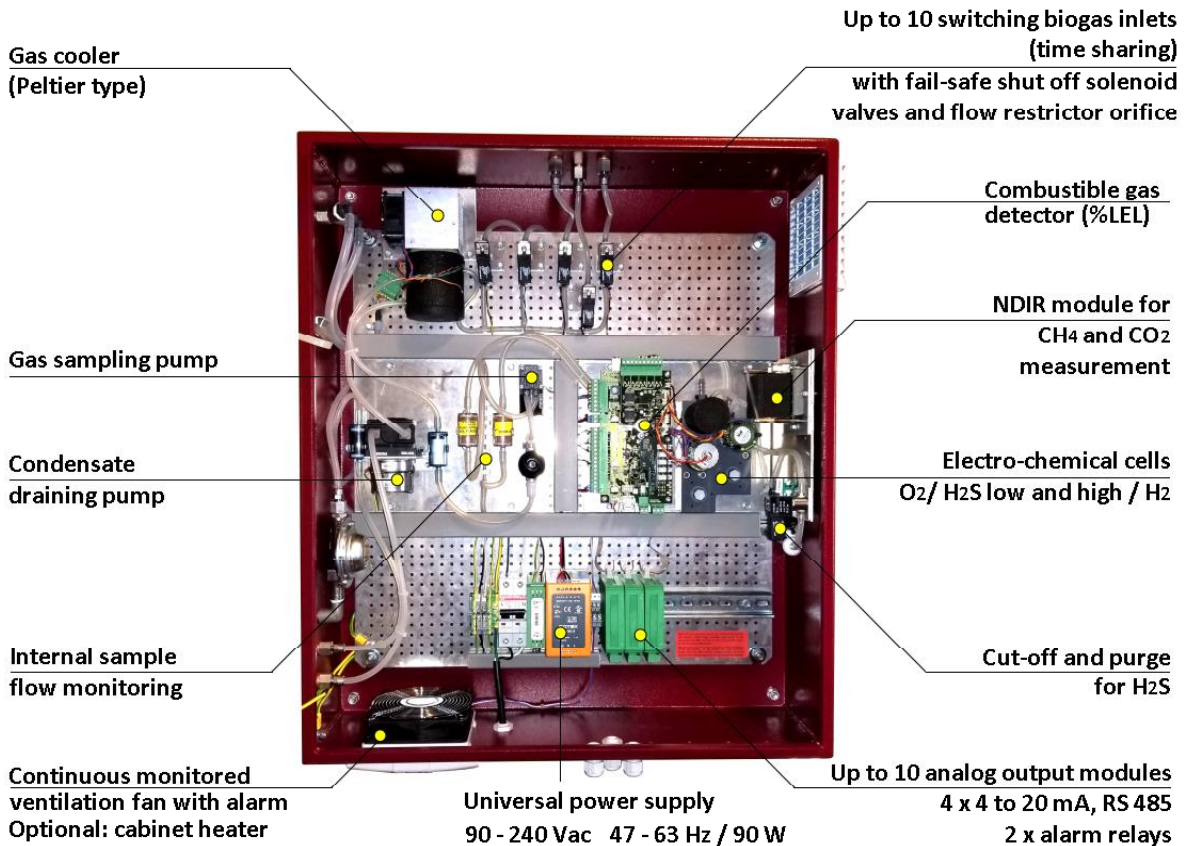


Field replaceable pre-calibrated sensors



Measuring CH<sub>4</sub>, CO<sub>2</sub>, O<sub>2</sub>, H<sub>2</sub>S (high & low ranges), H<sub>2</sub> and calculated caloric values

- Continuous or Semi-continuous operation
- Efficient gas prep provides fast and reliable measurements
- Sampling from low suction to high pressure
- Up to 10 sites monitoring via Time Sharing
- Fresh air auto zero
- Multiple inputs / outputs of (4) 4 to 20mA, (2) alarm relays, RS485 Modbus, Ethernet even Profibus
- Safety: Monitored ventilation fan, gas flow restrictor, optional %LEL detector and fame arrester
- Fast & easy installation: Connect and go with no need for compressed air for dilution
- Optional Auto Calibration



# THE IDEAL SOLUTION FOR ...

- Landfill sites
- Anaerobic digesters
- CHP / WTE cogeneration engines
- Municipal or industrial waste water treatment plants
- Flare inlet / outlets
- CPG production
- Food or animal waste process plants
- Coal bed methane sites



Sample gas inlet port (ports)

Vent outlet

Display

Keypad

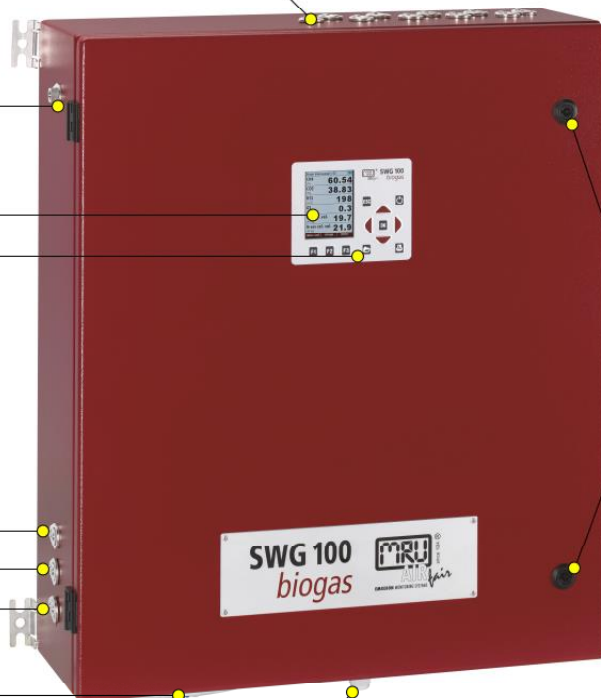
Calibration gas inlet

Zero gas inlet

Condensate outlet

Cabinet ventilation

Inlet cable gland



Cabinet lock

## TECHNICAL SPECIFICATIONS

Measurement components		Measuring range	Measuring method	
CH4	Methane	0 – 100 %	NDIR	
CO2	Carbon dioxide	0 – 100 %	NDIR	
O2	Oxygen	0 – 25 %	electrochemical, continuous	
H2S	Hydrogen sulfide	LOW	0 - 200 / 1,000ppm	electrochemical, discontinuous
H2S	Hydrogen sulfide	STANDARD	0 - 2,000ppm / 4,000ppm	electrochemical, discontinuous
H2S	Hydrogen sulfide	HIGH	0 - 10,000ppm / 50,000ppm	electrochemical, continuous
H2	Hydrogen	0 - 1,000ppm	electrochemical, discontinuous	
Calculated component		Calorific value: 0 – 50 MJ/m <sup>3</sup> ; MJ/kg		
HMI human machine interface		3.5" TFT color display Backlit keyboard, password protected operation 4x analog output 4-20 mA, floating, max. load 500R 2 alarm relays, potential free contacts 24 Vdc/5 A RS485 digital interface (Modbus RTU) DIN-rail RS485 / Profibus converter		
System safety components		Monitored cabinet ventilation fan Stainless steel flow restrictor orifice Sample gas shut-down solenoid valve LEL (CH4) monitoring inside cabinet		
Sample preparation		Stainless steel gas fittings with 1/8" ID threads Electric gas cooler Teflon particulate filter, internal Viton hosing Monitored and regulated sample flow 40...60 l/h Sample inlet pressure: -40 inH2O to +120 inH2O (-100 mbar to +300 mbar) <b>Sample venting: atmosphere pressure</b>		
Cabinet dimensions		Aluminum with anti-corrosive structural painting 27.55" x 23.61" x 8.26" (700 x 600 x 210 mm) ( H x W x D ) for wall or rack mounting		
Weight / Protection		55lbs (25kg) / IP54		
Ambient temperature		41°F ...113°F (+5°C...+45°C) or -4°F ...113°F (-20°C...+45°C) with cabinet heater		
Installation site		Indoor or outdoor (rain and sun shade is mandatory user scope of supply)		
Cabinet conditioning		Continuous, monitored fan ventilation Cabinet heater 200 W (option)		
Power supply		Universal 90 - 240 Vac / 47 - 63 Hz / 90 W (300 W with cabinet heater)		

Data subject to change without notice