

# SWG-100 BIOGAS compact

## SWG 100 BIOcompact Biogas Analyzer



Biogas or landfill gas monitoring  
at combined heat and power (CHP) engines



# SWG-100 compact BIOGAS

**This biogas analyzer is designed for use in the harsh industrial environment of combined heat and power (CHP) engine gas monitoring**

## MAIN FEATURES

- cost effective stationary biogas analyser
- accurate measurements, incl. plug&play, pre-calibrated sensors
- safety in use with gas flow restrictor orifice at gas inlet and ventilation
- sampling from low suction up to high pressure gas
- sample gas conditioning for fast and reliable measurements
- no dilution of the sample gas, nor use of compressed air is required
- discontinuous measurement, user settable up to 24 measurements per 24 hours
- up to 2 sites monitoring (time sharing technique) with only 1 analyser
- IP 54 cabinet for use in harsh environment
- ready to run delivery, minimum installation work, low service downtime

## TECHNICAL SPECIFICATIONS

DATA SUBJECT TO CHANGE WITHOUT NOTICE

Measurement components	Measuring range	Measuring method
CH4 Methane	0 – 100 %	NDIR
CO2 Carbon dioxide	0 – 100 %	NDIR
O2 Oxygen	0 – 25 %	electrochemical
H2S Hydrogen sulfide	0 - 2,000ppm / 5,000ppm*	electrochemical * overload for short term measurements only
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 RS485 digital interface (Modbus RTU) Data storage and event logging on SD card	
System safety components	Stainless steel flow restrictor orifice Sample gas shut-down solenoid valve	
Sample conditioning	Stainless steel gas fittings with 1/8" ID threads Condensate trap with automatic condensate draining pump Teflon particulate filter, internal Viton hosing Sample flow 40 ... 60 l/h Sample inlet pressure: -40 inH <sub>2</sub> O to +120 inH <sub>2</sub> O (-100 mbar to +300 mbar) <b>Sample venting: atmosphere pressure</b>	
Cabinet dimensions	15.74" x 19.68" x 11.81" (400 x 500 x 300 mm) ( H x W x D ) for wall or rack mounting	
Weight / Protection	31lbs (14kg) / 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)	
Power supply	Universal 90 - 240 Vac / 47 - 63 Hz / 90 W (300 W with cabinet heater)	
Options	Flame arrestor I/O-module with: 4x analog output 4...20 mA, floating, max. load 500R, 2x alarm relays, potential free contacts 24 Vdc/5A, DIN rail RS 485, Profi bus converter, cabinet heater 100W LEL (CH4) monitoring inside cabinet	

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