Multi-component Analyser Biomethane

MGC 16

Flow computers | Measuring Systems | Remote Terminal Unit | Analysis system

The MGC 16 is a new generation analyser for the analysis of all types of gas compounds.

In its biomethane application, the MGC 16 analyses all the required components while limiting the gas consumption to carry out the measurements. Its embedded website allows user-friendly operation without software or specific license.

Very low gas consumption

Thanks to its innovative concept with no cold spots and the measurement of all the required component in a single analyser, the MGC 16 allows an exceptionally low gas consumption of 1-2 ml / min as well as a consumption of carrier gas from 2-4 ml / min.

Scalable configuration with low maintenance

The MGC 16 offers a modular global solution for scalable on-site configuration.
The MGC 16 allows maintenance at low cost (possible replacement of columns, TCD, injector ...).
The maintenance center of the analyser is based in France.

Technical data - Analyser Biomethane MGC 16

Model	MGC 16 Biomethane	
	Biogas analysis, biomethane station, reverse station	
	Measurement acquisition, calculation, alarm management, monitoring of Analog and logic input / output status, secure recording, PLC and supervisory communication, remote and wireless server	
Calculated values	Density, Zb, SCV, ICV, Relative Density, Wobbe index, Dewpoint, unit conversions averages	
	1 DI, 2 AO, 1 AI, 2 RJ45, 1 RS485, USB, maintenance button Other I/O possible on request	
Display	Optional touch display HMI via embedded web server (unlicensed)	
Enclosure	Frame : 1 - 5 modules Dimensions : 47,5 cm (P) x 43,2 cm (L) x 44 cm (H) Weight < 20 kg	
Process gas connection	Fluid : 1/8 OD, et 1/16 OD Electrical: removable screw terminal blocks	
	Modules	Low limit of quantification
THT	UM4	0.9 ppm
O2, N2, CO, H2	W02	50 ppm and 100 ppm for H2
CH4	W02	100 ppm
C2, C3, CO2	UR4	10 ppm
C4+	UR4	1-5 ppm
H2S-COS	UR4	1.4 ppm
H2O	H2O	Less of 1 ppm
	2 x Ethernet TCP/IP Modbus 1 RS485 dedicated to the communication with Modbus master (SM@RT U, others.)	
	0.5 to 1 relative bar. 5 ml per injection, ie 1-2 ml / min	
	He, argon (from 2-4 ml) of minimum quality 5.5. Recommended 6.0 for low grade compounds. Relative pressure from 4 to 6 bar	
	Up to 16 channels with MGC 16-controlled rotary valve (via USB port)	
	< 0,1% RSD for retention times < 1% RSD on peak areas for concentrations > = 0.1% < 0.1% RSD on the SCV	
	10^6	
	On RAM saved: min, max average of calculated value + THT mg / Nm3, H2O mg / Nm3 and SCV	
Monthly registration	12 months	
Daily registration	30 days	
Hourly recording	7 days	
Journal	500 events, 500 metrological alarms	
Analyzes	100 to 2000 analyzes on time files + 1 year of chromatograms	
	French, English, on request for other languages	
Temperature	0 to 40°C	
Relative humidity	< 95% without condensation	
Programming in column temperature	Column temperature: up to 250 ° C T° programming: 5 °C/s max according to column Resolution : 0,1°C	
Power supply	Power supply 100-240 VAC, 50-60 Hz, 5 A	
Standards and recommendations used	ASTM D7833-14, ASTM D3588, GPA 2172, GPA 2145-09, ISO 6976 :2016, GPA 2261-13 Dewpoint based on the methods of ISO 18453 and IGT Bulletin #8, OIML R140	
Custody transfer approval	N° LNE-36247	
Analysis time	< 5 minutes	

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