



# Multi-component Analyser Natural gas



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 natural gas 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 components 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 change of columns, TCD, injector ...).  
The maintenance center of the analyser is based in France.



Model		MGC 16 Natural gas + H2	
		Pure gas, natural gas, biogas, biomethane, LNG and other fluids. Delivery station, pressure reduction station, production station, isolated post, biomethane 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	
Component		Modules	Low limit of quantification
	THT	UM4	0.9 ppm
	O2, N2, CO, H2	W02	50 ppm and 100 ppm for H2
	CH4	TC0	100 ppm
	C2, C3, CO2	TC0	10 ppm
	C4, C5, C6, C7, C8	TC0	1-5 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 bar relative. 5 ml per injection soit 1-2 ml/min	
		He, Argon (from 2-4 ml) of minimum quality 5.5. Recommended 6.0 for low grade compounds. Pressure 4 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 SVC	
		10 <sup>6</sup>	
		On RAM saved: min, max average of% gross and normalized + THT mg / Nm3, H2O mg / Nm3 and SCV	
	Monthly registration	12 months	
	Daily registration	30 days	
	Journal	500 events, 500 metrological alarms	
	Hourly recording	7 days	
	Analyzes	100 to 2000 analyzes on time files + 3 years of chromatograms	
	Hourly and daily time averages	SCV, Wobbe index, Zb, relative density, gas composition	
		French, English, on request for other languages	
	Temperature	0 à 50°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 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, OILM R140	
	Custody transfer approval	N° LNE-36247	
	Analysis time	< 5 minutes	

#### Headquarters and Manufacturing facility

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