



Multi-component Analyser

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 and installed in a safe area (ATEX version zone 1 on request).

It 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.



Technical data – Analyser MGC 16

Model	MGC 16
Applications	Pure gas, natural gas, biogas, biomethane, LNG and other fluids. Delivery station, pressure reduction station, production station, isolated post, biomethane station
Functions	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 according to ISO6976: 2016, Dewpoint, unit conversions, averages
Inputs/Outputs	1 DI, 2 AO, 1 AI, 2 RJ45, 1 RS485, USB, maintenance button Other I/O possible on request, 1 DO
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 of Biomethane	THT, Methylmercaptan, i-Propylmercaptan, t-butylmercaptan, Ethylmercaptan, n-Propylmercaptan, TBM
	Ar, He, CH ₄ , Xe, Kr, O ₂ , N ₂ , CO, H ₂
	C3 isomers, C4 isomers, C5 isomers
	Ethylene, acetylene, C ₂ , C ₃ , CO ₂
	C ₄ , C ₅ , C ₆ , C ₇ , C ₈ , C ₉ , C ₁₀ , C ₁₁ , C ₁₂
	BTEX, methanol, ethanol, H ₂ O
	H ₂ S-COS, NH ₃ , isopropanol, acetone, acetaldehyde, acetonitrile, diethylether, ethyl acetate, dichloromethane, 1,2 dichloromethane, chloroform, cyclohexane, 2 butanol, THF, siloxanes D3, D4, D5, D6
Communication	2 x Ethernet TCP/IP Modbus 1 RS485 dedicated to the communication with Modbus master (SM@RT U, others.)
Pressure and sample gas consumption	0.5 to 1 bar relative. 5 ml per injection soit 1-2 ml/min
Carrier gas	He, Argon (from 2-4 ml) of minimum quality 5.5. Recommended 6.0 for low grade compounds. Pressure 4 bar.
Number of stream	Up to 16 channels with MGC 16-controlled rotary valve (via USB port)
Repeatability	< 0,1% RSD for retention times < 1% RSD on peak areas for concentrations > = 0.1% < 2,5% RSD on peak areas for concentrations < = 0.1%
Linearity of the detector	10 ⁶
Memorizing	On RAM saved: min, max average of% gross and normalized + THT mg / Nm ³ , H ₂ O mg / Nm ³ and SCV
Monthly registration	12 months
Daily registration	30 days
Event journal	500 events
Hourly recording	7 days
Analyzes	100 à 2000 analyzes on time files + 3 years of chromatograms
Hourly and daily time averages	SCV, Wobbe index, Zb, relative density, gas composition
Languages	French, English, on request for other languages
Operating conditions	Temperature
	0 à 50°C
Programming in column temperature	Relative humidity
	< 95% without condensation
Power supply	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
Custody transfer approval	OIML R140 (in progress), ATEX
Analysis time	<1 minute to 5 minutes

Headquarters and Manufacturing facility

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