

## Multi-component Analyser

### MGC 16



The BAGGI MGC 16 is a new generation analyser for the analysis of all types of gas components to be 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 BAGGI 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 BAGGI MGC 16 offers a modular global solution for scalable on-site configuration. The unit allows maintenance at low cost (possible change of columns, TCD, injector ...).



<b>Applications</b>	Pure gas, natural gas, biogas, biomethane, LNG and other fluids. Delivery station, pressure reduction station, production station, isolated post, biomethane station
<b>Functions</b>	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, Dewpoint, unit conversions, averages
<b>Inputs/Outputs</b>	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
<b>Component</b>	THT, Methylmercaptan, i-Propylmercaptan, t-butylmercaptan, Ethylmercaptan, n-Propylmercaptan, TBM  Ar, He, CH4, Xe, Kr, O2, N2, CO, H2  C3 isomers, C4 isomers, C5 isomers  Ethylene, acetylene, C2, C3, CO2  C4, C5, C6, C7, C8, C9, C10, C11, C12  BTEX, methanol, ethanol, H2O  H2S-COS, NH3, isopropanol, acetone, acetaldehyde, acetonitrile, dietylether, ethyl acetate, dichloromethane, 1,2 dichloromethane, chloroform, cyclohexane, 2 butanol, THF, siloxanes D3, D4, D5, D6
<b>Communication</b>	2 x Ethernet TCP/IP Modbus 1 RS485 dedicated to the communication with Modbus master (SM@RT U, others)
<b>Pressure and sample gas consumption</b>	0.5 to 1 bar relative. 5 ml per injection (1-2 ml/min)
<b>Carrier gas</b>	He, Argon (from 2-4 ml) of minimum quality 5.5. Recommended 6.0 for low grade components. Pressure 4 bar.
<b>Number of streams</b>	Up to 16 channels with MGC 16-controlled rotary valve (via USB port)
<b>Repeatability</b>	< 0,1% RSD for retention times < 1% RSD on peak areas for concentrations > = 0.1% < 0,1% RSD on the SCV
<b>Linearity of the detector</b>	10 <sup>6</sup>
<b>Data storage</b>	On RAM saved: min, max average of% gross and normalized + THT mg / Nm3, H2O mg / Nm3 and SCV
Monthly records	12 months
Daily records	30 days
Event log	500 events
Hourly records	7 days
Analysis	100 à 2000 analysis on time files + 3 years of chromatograms
Hourly and daily time averages	SCV, Wobbe index, Zb, relative density, gas composition
<b>Languages</b>	French, English, other languages on request
<b>Operating conditions</b>	Temperature
	0 à 50°C
	Relative humidity
	< 95% without condensation
Column temperature programming	Column temperature: up to 250°C T° Programming : 5°C/s max according to column Resolution : 0,1°C
<b>Power supply</b>	Power supply 100-240 VAC, 50-60 Hz, 5 A
<b>Standards used</b>	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
<b>ATEX certification</b>	ATEX version available on demand
<b>Custody transfer approval</b>	OIML R140 N° LNE-36247
<b>Analysis time</b>	<1 minute to 5 minutes