



CARBO 2100 MVE

Online ${\rm CO}_2$ Analyzer for beverages with high content of other gases like nitrogen

Carbo 2100 MVE | Online CO₂ Analyzer

Consistent and accurate CO_2 content is one of the main quality factors in the production of beer, sparkling wine, soft drinks and mineral water. In combination with other dissolved gases not only the taste, but also product safety might be affected. Consumers are continually demanding more consistent beverage quality at lower cost. This can only be attained if breweries and bottling companies run at optimum quality levels from the first to the last minute of production.

Fast and accurate online ${\rm CO}_2$ analyzers for monitoring and controlling the beverage production process are an essential prerequisite for accommodating such demands.

Measuring Principle

The manometric principle based on Henry's law has been optimized for accuracy and velocity and forms the base for Anton Paar's patented Multiple Volume Expansion method, used to great advantage in Carbo 2100 MVE: No drift through membrane ageing, no time-consuming calibration, no use of purge gas.

By measuring the equilibrium pressures and the temperature of the sampled beverage at two different volume expansions, the $\rm CO_2$ content and content of other gases are simultaneously determined. The influence of other gases on the $\rm CO_2$ measurement is completely compensated.

Therefore, Carbo 2100 MVE is especially useful for carbonized beverages with a very high content of other gases such as nitrogen or oxygen.

Specifications CO ₂ transducer	
Measuring range	0 to 20 g/L (0 to 10 Vol)
Accuracy	0.05 g/L (0.025 Vol)*
Repeatability	0.01 g/L (0.005 Vol)
Measuring temperature range	-5 to +30 °C (23 to 86 °F)
Maximum temperature	121 °C (250 °F)
Pressure	max. 10 bar (150 psi)
Cycle time	25 seconds
Air supply	10 bar compressed dry and clean air
Dimensions (W x H x D)	330 x 500 x 150 mm (13 x 19.7 x 5.9")
Classification	IP 65 (NEMA 4)
Sample connection	Thread G3/8" ISO 228 (parallel) Optional: Online Fitting DIN 11851 or VARIVENT™



Highlights

- Only electrical power and a pressurized air supply are required for operation
- Drift-free measuring principle (requires no periodic re-adjustments)
- Extremely short measuring cycles, high accuracy
- Measurement of dissolved gases
- ▶ Suitable for aseptic applications
- Extremely robust design

Anton Paar[®] GmbH

Anton-Paar-Str. 20, A-8054 Graz, Austria - Europe Tel: +43 (0)316 257-0, Fax: +43 (0)316 257-257 E-mail: info@anton-paar.com, Web: www.anton-paar.com

Instruments for:

Colloid science

Density & concentration measurement

Rheometry and viscometry

Sample preparation

High-precision temperature measurement Microwave synthesis X-ray structure analysis

CO₂ measurement



Specifications subject to change without notice.

Your distributor: