In the beer and beverage industries, the content of dissolved carbon dioxide (CO₂) and dissolved oxygen (O₂) are of utmost importance to the quality, taste and flavor stability of beer and carbonated beverages. Particularly, O₂ is becoming an increasingly important parameter, as excess O₂ can compromise the flavor stability and lead to significantly reduced product shelf life.

Because of this, breweries and soft drink manufacturers continuously seek to control and measure the concentrations of CO₂ and O₂ during production.

The In-line CO₂ Meter, type AuCoMet-i, sets standards in terms of quality, handling and ease of maintenance. It enables a fast and accurate determination of the CO₂ content in beer and beverages based on the internationally standardized method of Henry’s Law. In addition, the AuCoMet-i can easily be extended with an O₂ sensor. Pentair Haffmans’ optical O₂ measurement technology provides better response times than traditional O₂ measurement instruments, and does not require frequent calibration. With the AuCoMet-i both, CO₂ and O₂ measurements, can be done independently.

The AuCoMet-i is supplied with a separate control unit that can be field or panel mounted. This offers the operator maximum flexibility to position the control unit at a location that allows optimal access to both the operating panel and the display. One CO₂ sensor and one O₂ sensor can be connected to each control unit.

The CO₂ sensor and O₂ sensor are hygienically designed according to the EHEDG guidelines. The AuCoMet-i is easily mounted in an in-line housing with Varivent® connections.

**APPLICATIONS**

- In-line, at critical locations in the production line where the determination of the dissolved CO₂ and O₂ content (optional) is required and adjustments can be made, typically after filtration, carbonation and/or blending and before filling.

- In combination with a Pentair Haffmans’ CO₂ dosing unit, type CCR, to determine the CO₂ quantity and immediately adjust the CO₂ dosing rate if necessary.

**GENERAL PRODUCT INFORMATION**

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**BENEFITS**

- Cost saving
  - efficient production process operation
  - the need for minimal preventive maintenance reduces OPEX by more than 50%
  - robust and modular design
HAFFMANS AuCoMet-i
IN-LINE CO₂ METER

PRODUCT LEAFLET

TECHNICAL DATA

CONTROL UNIT

Power supply
85-264 V / 50-60 Hz (optional 24 VDC)

Dimensions
235 x 205 x 165 mm / 9.25 x 8.07 x 6.50 in
(LxWxH)

Mounting
Wall mounting

CO₂ CONTENT

Measuring range
2.0-10.0 g/l

Accuracy
± 0.10 g/l

Measuring units
g/l, % b.w., Vol, kPa

Measuring interval
approx. 30 sec.

O₂ CONTENT (OPTIONAL)

Measuring range
0.0-2,000 ppb

Accuracy
± 1 ppb + 2 % of m.v. (at 20 °C)

Measuring units
ppb, μg/l, ppm, mg/l, % a.s.

Measuring interval
30 sec. (adjustable from 2 - 999 sec.)

Temperature
-5.0 - 40.0 °C, acc. ± 0.1 °C

Pressure
0.0 - 10.0 bar, acc. ± 0.01 bar

Memory capacity
Up to 500 measurements

Process temperature
Max. 110 °C

Process pressure
Max. 10 bar(g)/145 psi

Power supply
85-264 VAC wide range (optional 24 VDC)

Dimensions CO₂ analyzer
200 x 135 x 280 mm (LxWxH)

Dimensions O₂ sensor
84 x 175 mm

Connection
Varivent®

Protection class
IP-67

SCOPE OF SUPPLY

• Control unit with wall mounting bracket
• CO₂ sensor
• Sensor communication cable
• Set of I/O cables
• Mains cable
• Software set
• Service set
• Pressure calibration set
• Instruction manual

OPTIONS

• O₂ sensor, type Vari/LHO, with O₂ sensor communication cable and calibration beaker assembly
• Profibus DP
• Control unit pipe/sensor mounting set
  [DN 40-DN 125]
• Control unit panel mounting set
• Extended I/O (for feedback signals)
• Certificate of measurement
• In-line housing with two Varivent® connections, inspection glasses and clamps (pipe dimensions to be specified at time of enquiry)
• O₂ calibration set

O₂ sensor (optional)