In the production of beer and other carbonated beverages the quantity of oxygen (O₂) in gases such as carbon dioxide (CO₂) and/or nitrogen (N₂) that are in contact with the beverage is a decisive factor to the product’s final quality and overall taste. A low O₂ content is crucial to avoid O₂ pick-up throughout the production process. When CO₂ is recovered from the fermentation process, the gas is liquefied so that non-condensable gases – O₂ and N₂ – can be removed. During N₂ generation the residual quantity of O₂ is continuously monitored to assure that the N₂ produced has a consistent high purity. During both of these processes the in-line O₂ Gehaltemeter, type OGM, measures the O₂ content of ultrapure gases and provides a key parameter for an efficient and economical plant operation.

The OGM uses optical technology that is not sensitive to organic substances and humidity to measure O₂. It provides greatly improved response times compared to traditional O₂ measuring devices and doesn’t require frequent calibration which reduces downtime and labor cost.

The user-friendly control unit can be supplied in either field or panel mounted versions and a maximum of two O₂ sensors can be connected to each control unit.

**APPLICATIONS**

- In-line, for the determination of the O₂ content of ultrapure gas, typically CO₂ gas from fermentation, preferably installed after the activated carbon filter/drier of a CO₂ recovery system or a nitrogen generation plant.

**GENERAL PRODUCT INFORMATION**

In the production of beer and other carbonated beverages the quantity of oxygen (O₂) in gases such as carbon dioxide (CO₂) and/or nitrogen (N₂) that are in contact with the beverage is a decisive factor to the product’s final quality and overall taste. A low O₂ content is crucial to avoid O₂ pick-up throughout the production process.

**BENEFITS**

- Cost saving
  - efficient and economical operation of CO₂ recovery or N₂ generation plants
  - reduces gas loss
  - low maintenance
  - insensitive to air humidity

**APPLICATIONS**

- In-line, for the determination of the O₂ content of ultrapure gas, typically CO₂ gas from fermentation, preferably installed after the activated carbon filter/drier of a CO₂ recovery system or a nitrogen generation plant.
# 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

## O₂ SENSOR
- **25 mm connection**
- **Dimensions**: 84 x 240 mm

## O₂ SENSOR LHG
- **Measuring range**
  - **O₂ measurement**: 0 - 200 ppm (vol/vol)
  - **Temperature**: -5.0 - 40.0 °C (23 - 104 °F)
  - **Pressure compensation**: adjustable from 0.0 - 2.000 bar (0 - 29 psi)
- **Accuracy**
  - **O₂ measurement**: ± 2 ppm + 5% of m.v.*
  - **Temperature**: ± 0.1 °C/°F
- **O₂ units**: ppm (vol/vol), %, % a.s.
- **Process temperature**: Max. 50 °C (122 °F)
- **Measuring interval**: 30 sec. (adjustable from 3 - 999 sec.)
- **Memory capacity**: Up to 500 measurements
- **Protection class**: IP-67

* at 20 °C

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# SCOPE OF SUPPLY
- - Control unit
- - O₂ sensor
- - Sensor communication cable
- - Control unit wall mounting set
- - Power supply cable
- - I/O cable for analog output
- - Set of pressure reduction accessories
- - Calibration beaker with spare O-ring 60 x 3 mm
- - Instruction manual

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# OPTIONS
- - Profibus DP
- - Control unit pipe/sensor mounting set (DN 40 - DN 125)
- - Control unit panel mounting set
- - Certificate of measurement
- - O₂ calibration set