THE NEW INNOVATIVE O₂ optical analyzer

The oxygen analyzer UG01 is a new innovative in line optical sensor able to measure accurately O₂ in each one of the different applications both in the beverage and beer industry: the installation can be easily made by means of a standard Varivent fitting.

The measurement is very fast and it helps the plant operators to control the process in real time giving the appropriate information to be used to react with corrections when needed.

The equipment is optical based on fluorescence quencing where the technology has been specifically developed by Maselli in order to improve the robustness against the challenging conditions of the daily operations.

The new design reduces to a minimum level the need of periodic calibration: the maintenance is as well easy due to the modular construction of the critical elements.

In the Maselli product range, the UG01 oxygen analyzer can be installed in combination with the UC09 carbonation analyzer where the 2 sensors are handled by a single MP01 control panel.
CO₂/O₂ combined measurement

The oxygen analyzer UG01 may be delivered in combination with the ATR based infrared carbonation analyzer UC09: the 2 analyzers may be controlled by the Maselli touch screen field panel MP01 capable to handle PLC connection for process alarm and control.

The 2 sensors may be installed in 1 single standard Varivent fitting: being a modular construction, it is possible to start with 1 element adding the second one at a later stage.

**OPERATING SPECIFICATION**

**Oxygen Measurement**

**Low Range**
- Measurement limits: 0.0 ...2,000 ppb
- Accuracy: +/- 1 ppb
- Measurement Scale: ppb, ppm, %

**High Range**
- Measurement limits: 4 ppb ...25 ppm
- Accuracy: +/- 7 ppb
- Measurement Scale: ppb, ppm, %

**CO₂ Measurement (option)**
- Measurement limits: 0...6 v/v (0...12 g/l)
- Accuracy: +/- 0.025 v/v (+/- 0.05 g/l)
- Measurement scale: “v/v (Gas/voi)” o “g/l”
- Response time: 3 sec

**TECHNICAL FEATURES**

- Measurement Temp: -5...+35 °C [23...95 °F]
- Max. sterilization temp. (Hot Water): 100°C (4 hours) in the ST configuration - CO₂ analyzer 130°C (45 min.) in the HT configuration - CO₂ Analyzer 100°C (4 hours) - O₂ analyzer
- Line pressure: 10 bar max.
- Degree of protection: IP67 from EN60529
- Power supply: AC 24V ±10% 50...60Hz, 300mA. DC 24V ±10%, 300mA.
- Digital interface: RS485 for connection to MP01/02 receivers.
- Field bus available from MP01: Profibus / Modbus TCP / Ethernet IP
- Field bus available from MP02: Profibus / Modbus TCP / Ethernet IP
- Tuchenagen Varivent N
- CO₂ unit weight: 3.3 kg
- Dim. unit: 176x192.5x132.5