

OXYSENS PLUS

- O₂ ambient monitoring with Zirconia Oxide cell technology
- Optional second O₂ cell, Temperature, Humidity and CO₂ sensors integrated in the same housing or inside an external box
- Visual monitoring of the unit status through LCD with multi-color backlight: green (normal), yellow (pre-alarm), red (alarm)
- Acoustic signal with recovery function (programmable)
- 4-20mA linear output signals and digital output signals for remote monitoring including tower lights
- Output for external hooter and input for external ack button
- Network interface RS485 SDAMNet Plus or RS485 with ModBus protocol
- Unit programming by Windows SW *OxySens Plus Programming Tool* for unit area identification, relay output contacts, thresholds (alarm/ pre-alarm: min/max), delay and hysteresis

- Typical applications:

- O₂ monitoring in gas cylinders storage areas

- O₂ monitoring in cryobank rooms, laboratories and hospital rooms



Ambient Oxygen gas sensor with Zirconia Oxide cell

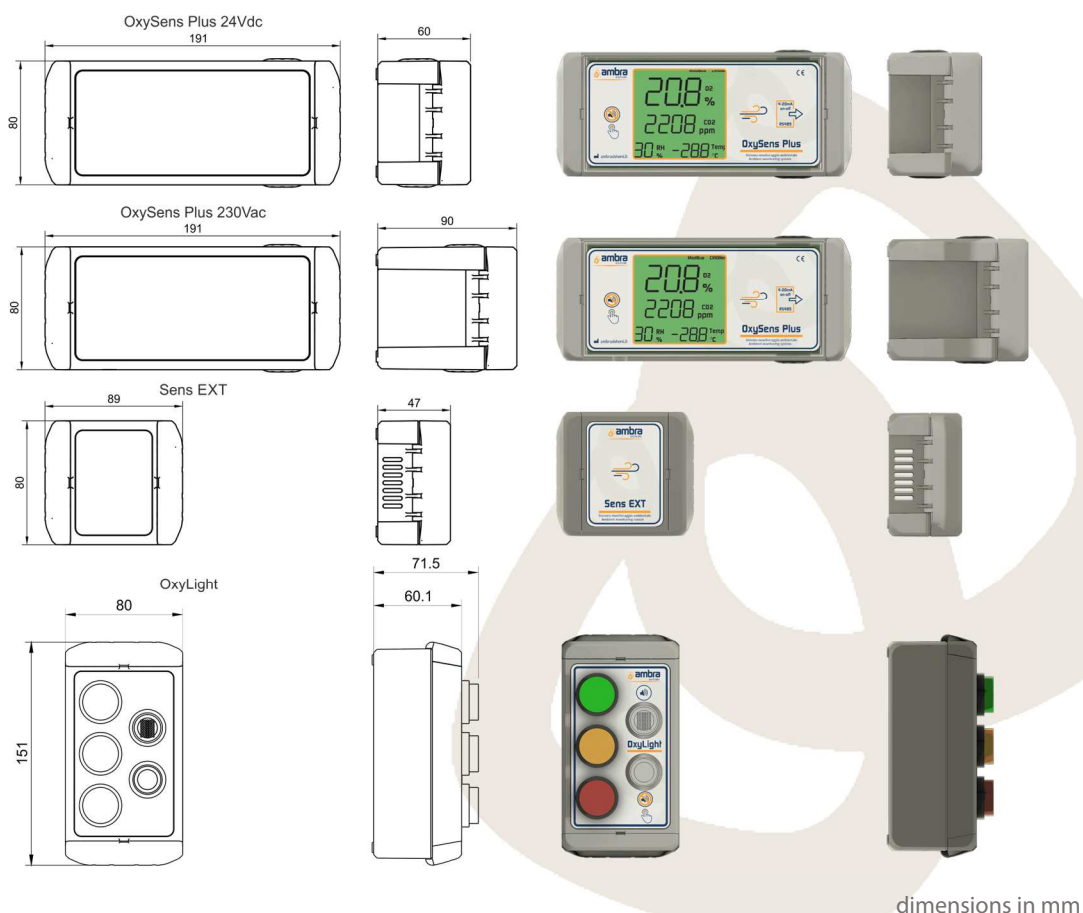
GAS ANALYSIS

TECHNICAL SPECIFICATIONS

Power supply	24 Vdc, Pmax. 5 VA, fuse 0,5 A 230 Vac Pmax 5VA, fuse 0,5A (specific version)
Measuring range	O ₂ : 0...25 %, 0...95 %, Vol. O ₂ CO ₂ : 0...5.000ppm Vol. CO ₂ (optional) Temp, Humidity: -20/+70°C , 0...100 RH% (optional)
Visual indications	LCD display backlight three colors O ₂ : 3 digit H= 15mm O ₂ (2 nd) or CO ₂ : 4 digit H=10mm Temp/ Humidity: 10mm Backlight three colors with viewing angle 180°
Alarm sound	Piezoelectric speaker, volume adjust up to 85 dB @ 1 m
Output 4...20 mA	1 Active linear output signal, maximum load 1 Kohm 2 Active linear output signals, maximum load 1 Kohm (If Second O ₂ or CO ₂ sensors are present)
Output contacts	4 isolated output contacts configurable by OxySens Plus PT SW Vmax 400Vdc-280Vac, Imax 120mA
Power out	24Vdc for external power of OxyLight or relays
Response time	T90 (O ₂) <30 sec T90 (CO ₂) <90 sec T90 (Temp & Humidity) <60 sec

Warm-up time	3 minutes
Combined error	O2: $\pm 1\%$ of F.S. – full range CO2: ± 50 ppm + 3% of reading Humidity: $\pm 3\%$ RH % range 20-80% / $\pm 5\%$ RH % otherwise Temperature: $\pm 0.5\text{ }^\circ\text{C}$
Barometric pressure dependency	O2: Unaffected CO2: Compensated
Temperature dependency	CO2: $\pm(1 + \text{reading} / 1\ 000)$ ppm/ $^\circ\text{C}$
Long term drift	O2: $< 2\%$ of F.S. over 5 years CO2: < 20 ppm / year
Expected lifetime	O2: Over 5 years CO2: 5 year Temp, Humidity: undefined
Housing	Ver. 24Vdc: Plastic box IP30 for wall mounting Dim. 191x80x60 mm Ver. 230Vac: Plastic box IP30 for wall mounting Dim. 191x80x90 mm Sens EXT: Plastic box IP30 for wall mounting Dim. 89x80x47 mm
Serial output	RS485 bidirectional with SDAMNet Plus or ModBus protocol
Weight	780 gr. (24Vdc)/ 900 gr (230Vac)/ Sens EXT 300gr.
Operating temperature	0...60 $^\circ\text{C}$
Reference standards and directives	CE

DIMENSIONS



PRODUCT CODES

CODE	DESCRIPTION
0005-08-001	OxySens Plus 0-25% O2 int 24Vdc: Oxygen gas sensor with zirconia oxide cell range 0...25% Vol. O2 (integrated), serial interface RS485 SDAMNet Plus or ModBus, 1 output 4-20mA, 4 digital outputs configurable
0005-08-011	OxySens Plus 0-25% O2 int 24Vdc + Temp/ Hum int: Oxygen gas sensor with zirconia oxide cell range 0...25% Vol. O2 (integrated), serial interface RS485 SDAMNet Plus or ModBus, 1 output 4-20mA, 4 digital outputs configurable + Sensor Temperature and Humidity (integrated)
0005-08-101	OxySens Plus 0-25% O2 int 24Vdc + O2 ext: Oxygen gas sensor with zirconia oxide cell range 0...25% Vol. O2 (sensor integrated), serial interface RS485 SDAMNet Plus or ModBus, 2 output 4-20mA, 4 digital outputs configurable + Sensor 0...25%Vol. O2 (external)
0005-08-111	OxySens Plus 0-25% O2 int 24Vdc + Temp/ Hum int + O2 ext: Oxygen gas sensor with zirconia oxide cell range 0...25% Vol. O2 (integrated), serial interface RS485 SDAMNet Plus or ModBus, 2 output 4-20mA, 4 digital outputs configurable + Sensor Temperature and Humidity (integrated) + Sensor 0...25%Vol. O2 (external)
0005-08-501	OxySens Plus 0-25% O2 int 24Vdc + CO2 int: Oxygen gas sensor with zirconia oxide cell range 0...25% Vol. O2 (integrated), serial interface RS485 SDAMNet Plus or ModBus, 2 output 4-20mA, 4 digital outputs configurable + Sensor 0...5.000ppmVol. CO2 (integrated)
0005-08-511	OxySens Plus 0-25% O2 int 24Vdc + Temp/ Hum int + CO2 int: Oxygen gas sensor with zirconia oxide cell range 0...25% Vol. O2 (integrated), serial interface RS485 SDAMNet Plus or ModBus, 2 output 4-20mA, 4 digital outputs configurable + Sensor Temperature and Humidity (integrated) + Sensor 0...5.000ppmVol. CO2 (integrated)
0005-08-611	OxySens Plus 0-25% O2 int 24Vdc + Temp/ Hum int + CO2 ext: Oxygen gas sensor with zirconia oxide cell range 0...25% Vol. O2 (integrated), serial interface RS485 SDAMNet Plus or ModBus, 2 output 4-20mA, 4 digital outputs configurable + Sensor Temperature and Humidity (integrated) + Sensor 0...5.000ppmVol. CO2 (external)
0005-08-621	OxySens Plus 0-25% O2 int 24Vdc + Temp/ Hum ext + CO2 ext: Oxygen gas sensor with zirconia oxide cell range 0...25% Vol. O2 (integrated), serial interface RS485 SDAMNet Plus or ModBus, 2 output 4-20mA, 4 digital outputs configurable + Sensor Temperature and Humidity (external) + Sensor 0...5.000ppmVol. CO2 (external)
0005-08-100	OxySens Plus 0-25% O2 ext 24Vdc: Oxygen gas sensor with zirconia oxide cell range 0...25% Vol. O2 (external), serial interface RS485 SDAMNet Plus or ModBus, 1 output 4-20mA, 4 digital outputs configurable
0005-08-600	OxyLight: Tower light system with lamps green, yellow, red, in plastic box for wall mounting
0005-08-601	OxyLight: Tower light system with lamps green, yellow, red, in plastic box for wall mounting + hooter and cumulative silence button integrated
0005-08-XXXX	OxySens Plus 230Vac O2 version
0005-08-XX3	OxySens Plus 0-95% O2 int / 0005-08-4XX OxySens Plus 0-95% O2 est