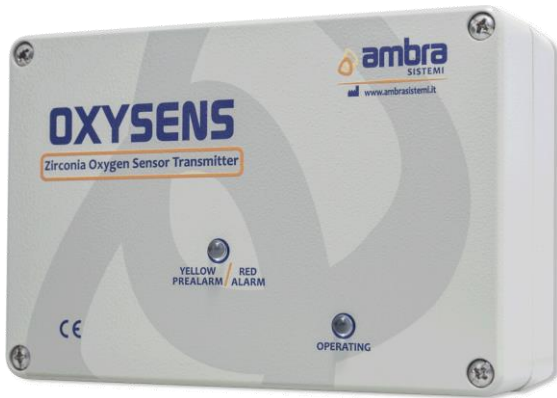


# OXYSENS



## Oxygen gas sensor with zirconia oxide cell

**OXYSENS 25** 0...25,00 % Vol O<sub>2</sub>  
**OXYSENS 95** 0...95,00 % Vol O<sub>2</sub>

OXYSENS sensors use a miniaturized zirconia oxide cell based on current limitation effect on diffusion zone,

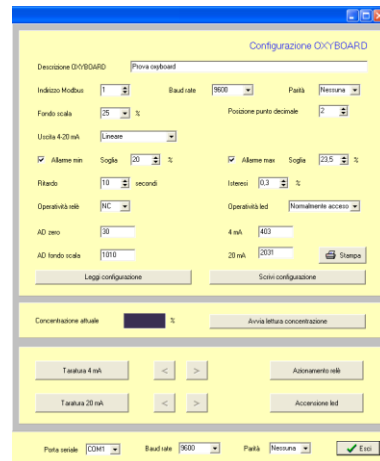
known as "Kundsen effect".

This technology, developmental if compared to the traditional electrochemical cells, offers excellent performances as long term drift, large operating temperature range, no periodical maintenance, weight and dimensions reduced.

The device is completely controlled by a microprocessor; it allows preserving the sensor operating functions with a specific electronic circuit also in high O<sub>2</sub> concentration expositions.

The basic functions allow satisfying every kind of required application and include:

- Control by a microprocessor;
- 2 set-point configurable by the user, with cumulative output relay;
- Active 4...20mA linear output signal;
- Bidirectional serial interface RS485 or RS485 with Modbus RTU protocol;
- Trimmers for Zero and Span calibration on the electronic motherboard;
- Device programming by specific software: Modbus data configuration, thresholds, alarms delay, hysteresis.



### Technical characteristics

RESPONSE TIME	< 30 sec. from 0 to 99 % del F.S.
WARM-UP TIME	3 minutes
EXPECTED LIFETIME	Sensor not subject to exhaustion
COMBINED ERROR	<±1 % of F.S. – full range
ATMOSPHERIC PRESSURE DRIFT	Irrelevant (included in the combined error)
LONG TERM DRIFT	<2% of F.S. over 5 years
OUTPUT 4...20mA	Active linear output signal, maximum load 1 KOhm
SERIAL OUTPUT	RS 485 bidirectional or RS 232 bidirectional with Modbus protocol
RELAY OUTPUT	N.O. and N.C. configurable output switch Vmax.=30Vdc/220Vac; I <sub>max</sub> =5°
POWER SUPPLY	24Vdc – 5 VA max, fuse 0,5A
HOUSING	Metallic box IP30, for wall mounting Dim. 150x100x54mm
WEIGHT	680 gr.
OPERATIVE TEMPERATURE	5...60°C
REFERENCE STANDARD AND DIRECTIVE	CE