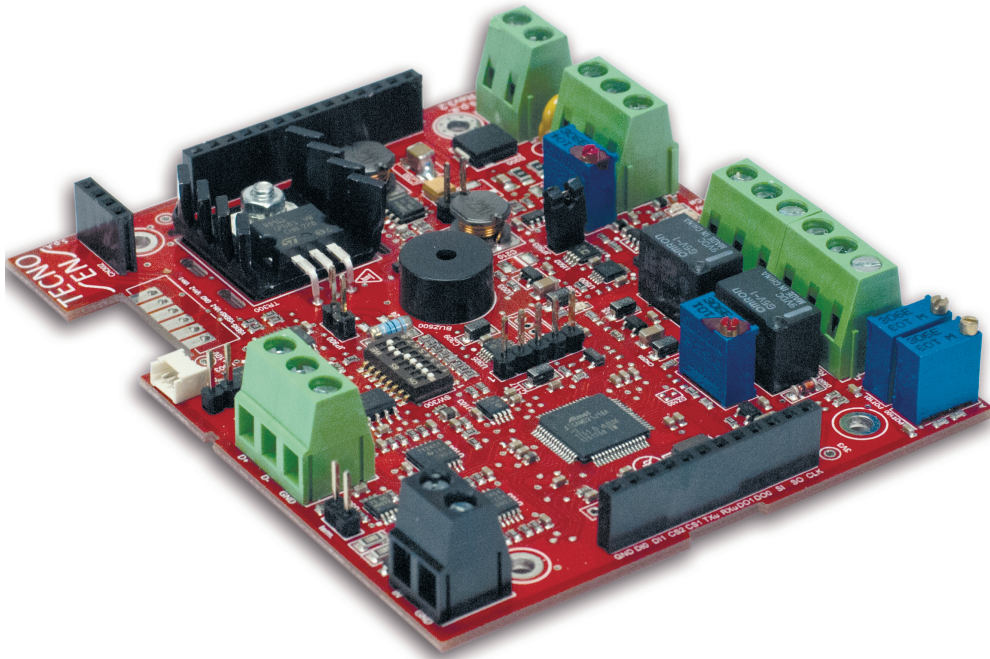


Oxygen measurement modules



TEC-OXY is the last release of Tecnosens board for oxygen measurement based on zirconium oxide sensor. The range of measurement goes from 10ppm up to 96%, allowing the integration of the product in several applications.

The technology of zirconium oxide allows to make measurements with high precision and good stability during time, reducing the maintenance and the replacement of the sensing element, a great advantage with respect to other technologies.

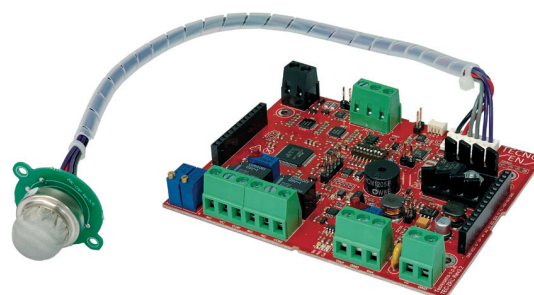
Our board allows the management of the oxygen sensor and supplies a linear output related to the measured oxygen concentration.

The electronic on board keeps the sensing element temperature constant, in order to guarantee the correct operation independently from temperature ambient conditions.



## Main application

- › Oxygen generators
- › Nitrogen generators
- › Controlled atmosphere
- › Gas analysis
- › Climate control
- › Food storage
- › Food package
- › Gas supplying systems



## Board range selection guide

TEC-OXY can be calibrated in a great variety of ranges. This features make it suitable for different field of applications.

Here is how to choose Board model: **TEC-OXY - Model - Range**

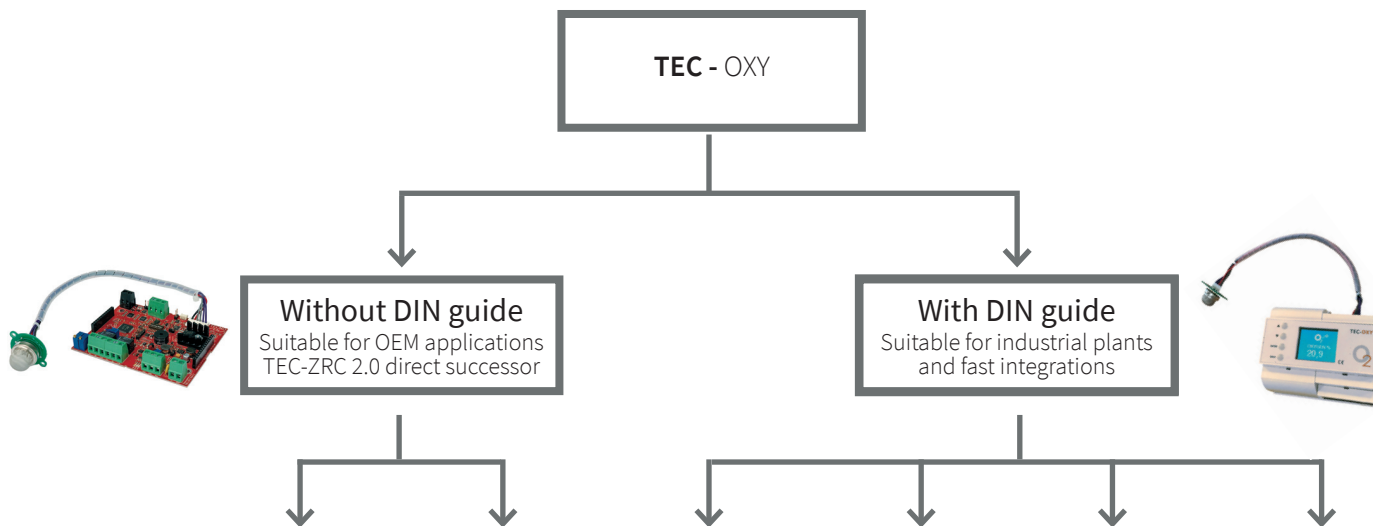
Code	Range	Accuracy
TEC-OXY-XY*-1000	10-1000 ppm	± 5 % FS
TEC-OXY-XY*-01	0.05-1 %	± 5 % FS
TEC-OXY-XY*-02	0.05-2 %	± 3 % FS
TEC-OXY-XY*-03	0.05-3 %	± 3 % FS
TEC-OXY-XY*-05	0.05-3 %	± 2 % FS
TEC-OXY-XY*-025	0.1-25 %	± 1 % FS
TEC-OXY-XY*-095	0.1-95 %	± 0.5 % O <sub>2</sub>
TEC-OXY-XY*-096	0.1-96 %	± 0.5 % O <sub>2</sub>

\* XY refers to the board model (eg. -D-3 is Din Guide Version 3)

## Board model selection guide

TEC-OXY is a smart product, which can be adapt to the different customer needs thanks to a wide range of options.

Here is how to choose Board model: **TEC-OXY - Model - Range**



Model	TEC-OXY-S0-ZZ	TEC-OXY-S1-ZZ	TEC-OXY-D0-ZZ	TEC-OXY-D1-ZZ	TEC-OXY-D2-ZZ	TEC-OXY-D3-ZZ
	Easy integration via PLC or $\mu$ C	Flexible management over ModBus	Easy integration via PLC or $\mu$ C	Flexible management over ModBus	Advanced systems with several I/O	On-board visualization of O <sub>2</sub>
Features						
4-20mA Output	✓	✓	✓	✓	✓	✓
0-10 V Output	✓	✓	✓	✓	✓	✓
RS485 with MODBUS protocol	x	✓	x	✓	✓	✓
2 relè with settable threshold	x	✓	x	✓	✓	✓
2 optoisolated digital inputs	x	x	x	x	✓	✓
4 analogue 0-5V inputs	x	x	x	x	✓	✓
1 RS232 port	x	x	x	x	✓	✓
1 USB port	x	x	x	x	✓	✓
2 transistors outputs	x	x	x	x	✓	✓
Graphic display	x	x	x	x	x	✓

\*\* ZZ refers to the board measurement range

## Product example

Ordering Code: **TEC-OXY-D3-05**

- TEC-OXY** -> Product name
- D3** -> Version 3: Main Board, RS485, I/O and Display in DIN Guide housing
- 05** -> Measurement Range 0.05 – 5% O<sub>2</sub> +/- 2% FS

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