

TEC-OXY

TEC-OXY plokštė leidžia matuoti deguonies kiekį 50 ppm–96 % O₂ diapazone, naudojant cirkonio oksido jutiklį. Prietaisas tiekiamas jau sukalibruotas su kalibravimo sertifikatu, atitinkančiu vieną iš galimų pilnos skalės matavimų.

Oxygen measurement modules - Technical manual

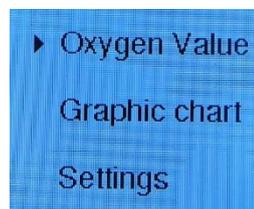


4.6 Display

The display feature is available only for D3 TEC-OXY; display model is a 1,8" TFT.

The navigation in the menus is possible via the three switches: “up”, “down”, “enter” and “back”.
With the graphical display it's possible to:

- Visualize the O₂ concentration in real-time;
- Change the Relay threshold (if the relays are available on-board);
- Visualize the information about the board (serial number, FW version etc.);
- Set the display sampling frequency;



a) O₂ CONCENTRATION O₂ koncentracija

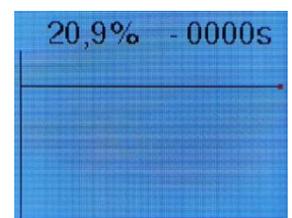
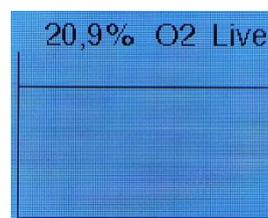
O₂ value is displayed in 2 different menus, one under the “O₂ value” menu (select it via the up/down switch and then press enter):

% or PPM will be displayed accordingly to the TEC-OXY board FS:

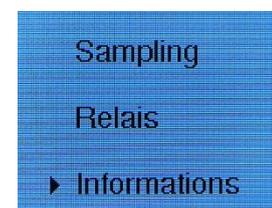
- 1% 2% 3% 5% FS boards will have a resolution of two decimal numbers;
- 25% 95% 96% FS boards will have a resolution of one decimal number;
- ppmFS board will be integer numbers.



Under the menu “Graph”, O₂ values are displayed in a graph, where the Y axis is the O₂ value and the X axis is the time. Such values are stored and can be seen by pressing “Enter”, using the arrows you will move along the measurements taken and stored.



Under the menu “Settings” you will find three settings options:



b) RELAYS THRESHOLD

Thresholds are expressed in % or ppm accordingly to the TEC-OXY board FS. Just like the O2 concentration the resolution of the threshold is one decimal number for the 25% 95% 96% FS, two decimal numbers for 1% 2% 3% 5% FS and integer numbers for the ppm FS.

| Thresholds | H |
|-------------------------|------|
| R1 \updownarrow 17,5% | 0,1% |
| R2 \updownarrow 15,0% | 0,1% |

2.3. „Deguonies koncentracijos matavimo skalė min. 0.1 %“

Under the “Relays” menu, by using the up/down switch, it’s possible to select the threshold for relay 1 or for relay 2.

Press “enter” to modify the selected threshold and use the up/down switch to increase/decrease the threshold value itself, press “enter” again to save the value; if you press “back” while a threshold is selected the value modification won’t be saved.

Under the H column you can see the hysteresis but it cannot be changed from the display interface, to change that parameters please see the ModBus Command section of this manual.

c) BOARD’S INFORMATION

Under this menu it is possible to see:

- Board’s SN;
- Sensor’s SN;
- FW version;
- Board’s FS;

```
s/n board:
0123456789
s/n sensor:
0123456789
FS: 0025
FW: 01010005
```

Those information are read only, that means the user cannot modify them

d) SAMPLING TIME

Under this menu it is possible to select the desired sampling frequency, using up/down switch to increase or decrease the sampling time, expressed in seconds.

```
Sampling time
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 $\updownarrow$  001s
```

NOTE: While the board is heating it is not possible to read O2 values (a message will be displayed instead of the O2 value), while it is possible to change language, read the board’s info and change the relays thresholds.