pyroscience FDO2 Evaluation Kit User Guide

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sensor technology

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Product Information

The FDO2 Evaluation Kit is a sensor module that measures the oxygen partial pressure (hPa) at the sensing membrane. It includes pressure and humidity sensors that are placed inside the module, and these parameters are measured through a venting capillary at the backside of the housing. The internal pressure can be used for converting the oxygen partial pressure (hPa) into units of %O2 if the air pressure at the oxygen sensing membrane is identical to the air pressure at the venting capillary. For more detailed information on handling, communication, and calibration, please refer to the FDO2 datasheet, which is available on PyroScience's website.

Product Usage Instructions

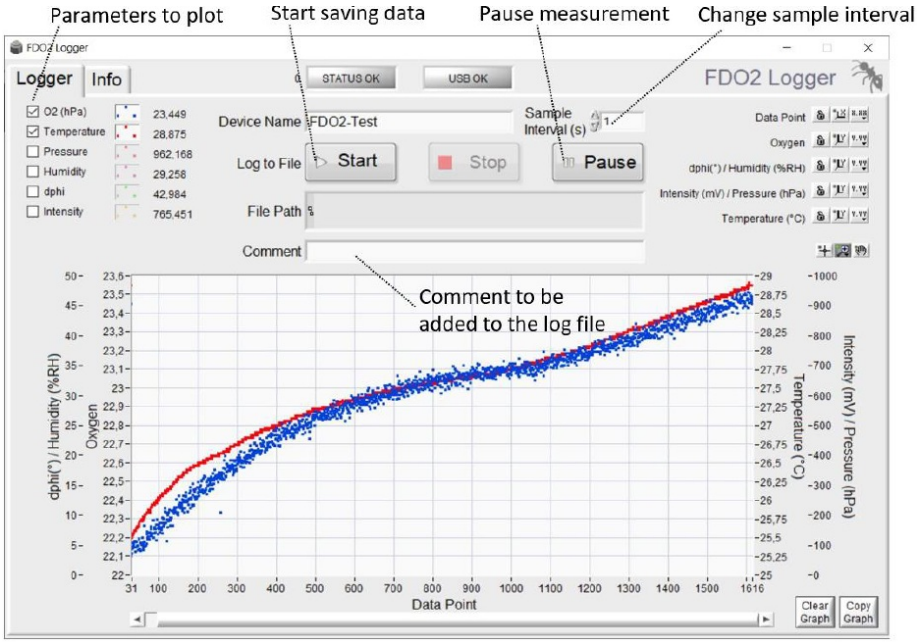
1. Make sure you have all the necessary components: FDO2 Evaluation Kit, power supply (5V), and computer

with USB port.

2. Connect the FDO2 Evaluation Kit to the power supply using the provided cable.
3. Connect the FDO2 Evaluation Kit to your computer using the provided USB cable.
4. Install the necessary drivers if prompted by your computer.
5. Open your preferred data acquisition software and connect to the FDO2 Evaluation Kit.
6. Start taking measurements and recording data.
7. Refer to the FDO2 datasheet for calibration instructions.
8. If you encounter any issues or have questions, please contact PyroScience GmbH using the contact information provided on their website.

The evaluation kit consists of the FDO2 oxygen gas sensor, FDO2-FTC flow-through cell and the FDO2-USB interface cable.

- **Step 1 – Setting up**
- Download the “FDO2 Logger” software from our website (www.pyroscience.com)
- Unzip, start the installer and follow the instructions
- connect the interface plug of the USB cable to the FDO2
- connect the USB plug to an USB port of the PC
- The status LED of the FDO2 should flash shortly indicating the correct startup of the module
- **Step 2 – Starting a measurement**
- Start the FDO2 Logger software
- The FDO2 is pre-calibrated and ready to use
- Attach the FDO2-FTC flow-through cell if you want to measure in a gas-stream
- An internal temperature sensor automatically compensates for temperature changes
- Adjust the Sample Interval and start logging the data by clicking on “Start”.



The actual measured parameter is the oxygen partial pressure (hPa) at the sensing membrane. Pressure and humidity sensors are placed inside the FDO2 and these parameters are measured through a venting capillary at the backside of the housing. If the air pressure at the oxygen sensing membrane is identical to the air pressure at the venting capillary (backside of the sensor), the internal pressure can be used for converting the oxygen partial pressure (hPa) into units of %O2.
For more information on handling, communication and calibration refer to the FDO2 datasheet (available on our

website).

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Documents / Resources

	pyroscience FDO2 Evaluation Kit [pdf] User Guide FDO2, Evaluation Kit, FDO2 Evaluation Kit

References

- Sensor technology - PyroScience GmbH
- FDO2 - PyroScience GmbH