Portable Oxygen Analyzer Quick Start Guide

First span calibration and measurement

PST-QSG-3203-01

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Welcome to the Quick Start Guide for first span calibration and first measurement using your ppm portable analyzer.

Here, you will find information covering **gas connection in section A**, and **first span calibration in section B**.
Please read the safety information below.

Start here

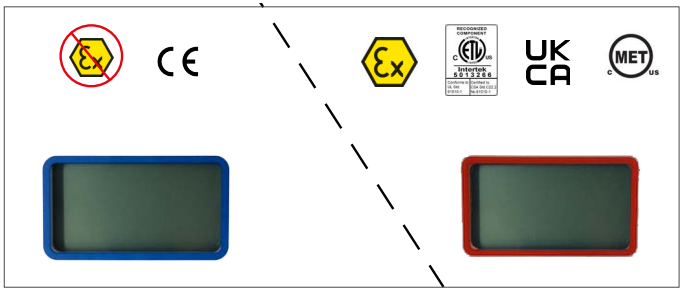
Safety information

- Avoid covering the vent for the test flow indicator when gas is flowing to the sensor. This can pressurize the sensor causing damage.
- If your analyzer has a pump, open the metering valve completely before switching on the pump.
- To remove moisture and particulates, open the sensor housing and either blow on the sensing surface or gently wipe the surface with a damp cloth. Ensure ppm sensors have minimal exposure to air.
- Only charge your analyzer in a safe (non-Ex) area, and do not charge for more than 24 hours.
- You must connect the analog signal output to a recording device in accordance with local safety directives. Ensure the recording device does not generate a voltage greater than 12 V DC.

The first calibration is of utmost importance as all subsequent calibrations are based on the initial one.

NOTE: Your portable analyzer is supplied with an oxygen sensor installed. We recommend you use certified span gas for calibration to ensure the best measurement readings.

The GPR-series of portable oxygen analyzers is compliant with the following safety approvals and directives:



A unit with a blue display outline is for general purpose, red is for hazardous area, as shown above.

User Interface (UI)

Button	Function
⏻	On/Off
☰	Menu
↵	Enter
↓	Previous (decrement)
↑	Next (increment)

A. Gas connection

NOTE: The calibration span gas should be 50...80% of the required measurement range or one range above. E.g. For a 1 ppm measurement, span gas should be 5...8 ppm or 50...80 ppm.

GPR-1200 / GPR-3500 MOVR

⚠ The GPR-1200 and GPR-3500 MOVR portable analyzers are equipped with a bypass valve. Always ensure it is in the **Bypass** position before connecting to gas.

1. With the bypass valve in the **Bypass** position, connect your span gas line to the **Sample In** port, using the fitting provided.
2. Set the flow rate to 1...2 SCFH (refer to Figure 1 on page 4), and allow the span gas to flow for 2...3 minutes to purge the bypass valve.
3. Now turn the bypass valve to the **Sample** position and continue to **section B.**

GPR-1100

⚠ The GPR-1100 is equipped with quick disconnect fittings. Please ensure the system is not pressurized before connecting your span gas.

1. Set your flow rate to 1...2 SCFH before connecting gas.
2. Connect fitting to one of the ports. Ensure gas is venting to the atmosphere.
3. Start the flow of your span gas, then connect your process gas line to the other port and allow gas to flow for 2...3 minutes. This will purge the system. Continue to **section B**.

GPR-2000

1. Set your flow rate to 1...2 SCFH before connecting gas.
2. Connect your span gas line to the port, using the fitting provided.
3. Start the flow of gas and allow it to flow for 2...3 minutes. Continue to **section B**.

B. First span calibration

1. After connecting the calibration span gas, press ⏻ on your analyzer flow gas for 10...15 minutes to allow the sensor to stablilize near the span gas value.
2. Now press ☰ and use ↓ and ↑ to navigate to **Calibration** > **Span Calibrate**.
3. Use ↓ and ↑ to enter the span gas value. Ensure the reading has stabilized before continuing.

NOTE: When a Span or Zero Cal starts, only "Abort" with ↓ is shown until the reading is stable, then "Accept" with ↑ appears.

4. Use ↑ to **Accept**, and ↓ to **Abort**. Your portable analyzer is now ready to use.

C. Gas disconnection

GPR-1200 / GPR-3500 MOVR

1. Turn the bypass valve to the **Bypass** position, then stop the flow of gas.
2. Disconnect your span gas lines from the **Sample In** port.

GPR-1100

1. Disconnect your span gas line using the quick disconnect fitting.
2. Stop the flow of gas.
3. Now disconnect the gas line venting to the atmosphere using the quick disconnect fitting.

GPR-2000

1. Stop the flow of gas.
2. Disconnect your gas line by loosening the fitting.

D. Making your first measurement

To make your first measurement, connect your process gas lines by following the procedure relevant to your analyzer model in **section A**.

E. Figures

Components may vary between analyzer models.

Figure 1 - Setting flow rate: GPR-1200

F. Useful links

Scan below for more information.

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