

Loop Barrier Oxygen Analyzer Quick Start Guide

First span calibration and measurement

PST-QSG-3205-01



Welcome to the Quick Start Guide for first span calibration and first measurement using your loop barrier 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

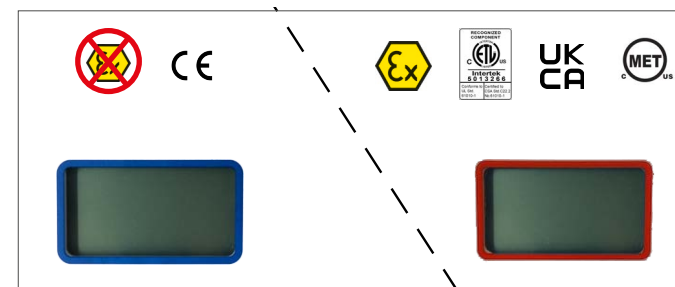
Safety information


- Avoid covering the vent when gas is flowing through the analyzer.
- 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.
- You must connect the analog signal output to a recording device in accordance with local safety directives.

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





 **NOTE:** We recommend you use certified span gas for calibration to ensure the best measurement readings.

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



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

User Interface (UI)

Button	Function
	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.

1. Connect your span gas line to either of the ports on your analyzer.
2. Ensure the flow rate is at 1...2 SCFH and allow the span gas to flow for 2...3 minutes. This will purge the system.
3. Continue to **section B** and follow the procedure relevant to your analyzer model.

B. First span calibration



GPR-1500

The GPR-1500 is delivered without the sensor installed to preserve its operational life. To install the sensor:

1. Apply power to your analyzer (refer to Figure 4 on page 5).
2. Using the two latches, open the front window.
3. To open the sensor housing, loosen the star wheel then disengage the top sensor housing by turning it 90° counter-clockwise. Refer to 'b' in Figure 2 on page 4.
4. Remove the sensor from its packaging, remove the shorting flags and **immediately** place in the bottom sensor housing (refer to Figure 1 on page 4 for guidance).
5. Now re-connect the top sensor housing and secure using the star wheel.
6. Use the two latches to close the front window on your analyzer.

7. Now press and use and to navigate to **Calibration > Span Calibrate**.
8. 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.

9. Use to **Accept**, and to **Abort**. If you selected **Accept**, your analyzer is now calibrated.



GPR-2500

The GPR-2500 is delivered with the sensor installed:

1. Apply power to your analyzer (refer to Figure 4 on page 5).
2. Using the two latches, open the front window.
3. Now press and use and to navigate to **Calibration > Span Calibrate**.
4. 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.

5. Use to **Accept**, and to **Abort**. If you selected **Accept**, your analyzer is now calibrated.

C. Gas disconnection

1. Stop the flow of gas.
2. Disconnect your gas line from the port on the analyzer.
3. Immediately reconnect process gas.

NOTE: Exposing ppm sensor to ambient air for extended periods may cause irreversible damage to sensor.

D. Making your first measurement

To make your first measurement, connect your process gas lines by following the procedure in section A.

E. Figures



Figure 1 - **GPR-1500:** Aligning your sensor

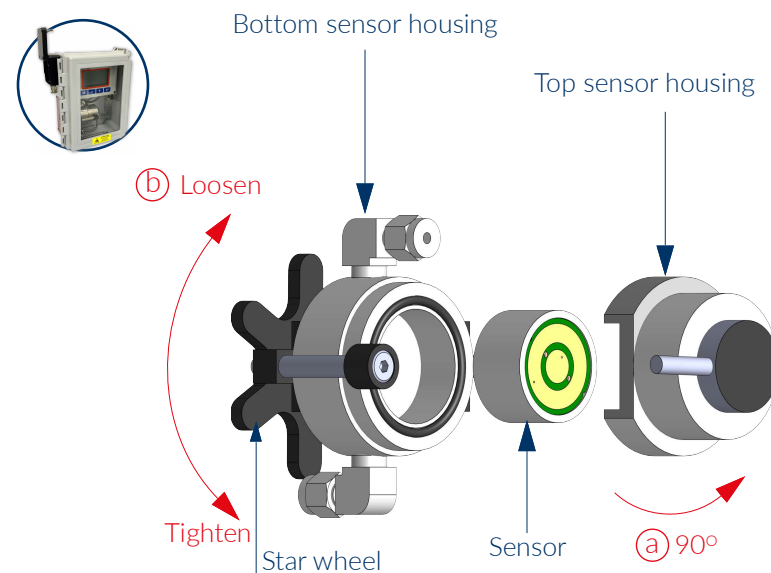


Figure 2 - **GPR-1500:** Installing and uninstalling your sensor

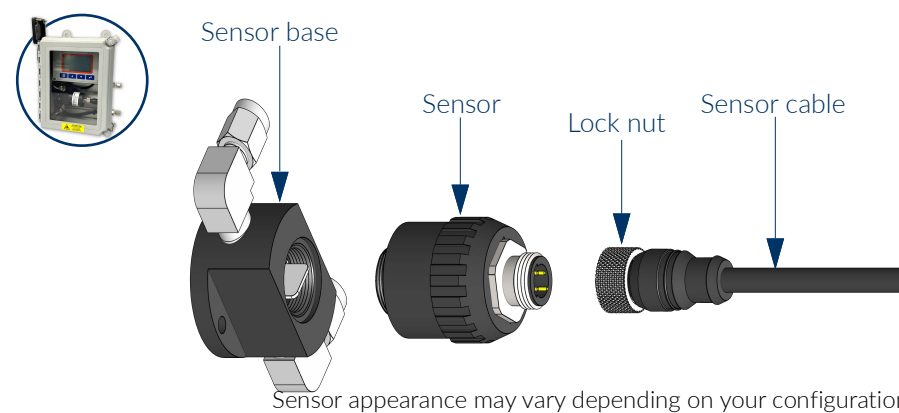


Figure 3 - **GPR 2500:** Installing and uninstalling your sensor

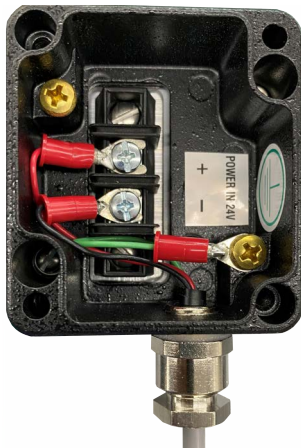


Figure 4 - Wiring your analyzer

F. Useful links

Scan below for more information.



