

Performance of Long-Life Oxygen Sensor



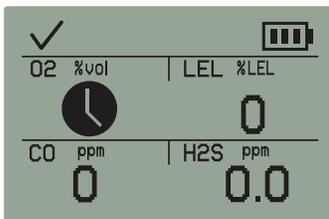
The Ventis™ Pro Series long-life Oxygen sensor (part number 17155304-Y) was introduced to solve a common problem in the gas detection industry – failure of Oxygen sensors after eighteen to thirty months of use. The long-life Oxygen sensor is designed to perform in the field for three to five years.

The extended useful life is the result of a change in sensor chemistry. A drawback of this change is that the long-life O₂ sensor requires continuous power in order to provide accurate, stable readings. Sensors that require continuous power are commonly known as biased sensors.

Biased Oxygen sensor readings will become unstable if:

1. The battery has been removed from the instrument
2. The instrument powered off after the critical-battery warning

Users can identify sensor instability by viewing the home screen. If a clock icon appears in place of the O₂ reading, the instrument has detected an unstable sensor. The clock icon will remain onscreen for 10 minutes or until the O₂ readings fall below 21.5% vol. If the sensor remains unstable after 10 minutes, a reading will appear on-screen that is likely higher than the actual concentration in the environment. This reading will gradually decrease over time. Please use the table as a guide to estimate when the Oxygen sensor will stabilize and the instrument can be zeroed in a clean air environment.



UNPOWERED TIME	CHARGING TIME TO STABILIZE
15 minutes	15 minutes
1 hour	25 minutes
10 hours	75 minutes
1 day	2 hours
1 week	3 hours

Please note that biased sensors also consume power when the instrument is powered off. As a result, a fully charged instrument will have one hour of runtime remaining after 15 days of unpowered storage.

In summary, the long-life O₂ sensor will reduce maintenance costs and hassle when used properly. If you find that the limitations described above outweigh the benefits, please continue to use the traditional O₂ sensor (part number 17155304-3).

For additional information on this new sensor, contact your local Industrial Scientific representative. Contact information can be found at www.indsci.com/offices.