

Oxygen sensors background notes

This device is a Micro Fuel Cell, commonly known as a Galvanic oxygen sensor. It generates a current (which may be displayed as a voltage) depending on the Partial Pressure PPO_2 it is exposed to.

Developed for NASA it was involved in the moon landings. Subsequently reduced in size (hence Micro fuel cell) it was found to be able to measure the PPO_2 of oxygen rather than produce power.

It is not a medical device per se. The greater number are supplied to Industry, Automotive, Petrochemicals and Diving. It is not a medical device per se. The greater number are supplied to Industry, Automotive, Petrochemicals and Diving.

There are no special requirement except input impedance which may effect the temperature compensation The monitor, analyser or control equipment accepts a voltage of 0 to approximately 55mV depending on the Partial Pressure PPO_2 of oxygen present.

The oxygen sensor is not an instrument. It is a Micro Fuel Cell generating an electrical output directly proportional to the Partial Pressure PPO_2 of Oxygen. This device will do so even when the instrument is disconnected. It can be used in any instrument which employs a form of metering eg. analogue or digital including a standard digital panel meter. Like a battery it is easily connected to an instrument.

Any installation instructions need to be contained with the associated instrument.

The end user can be anyone in any discipline who requires a measurement or display of oxygen PPO_2 .