

# Dr.Lavoisier

## OXYGEN MONITORING



- Oxygen monitoring of atmospheric air in rooms where a supply of other gasses may reduce the oxygen level
- 2 alarm levels with separate output for flashlight/siren
- Easy operation
- Sealed to IP 65
- Built-in datalogger
- RS485-port for communicating with PC and Speech Processor
- Optional: Information in clear speech: alarm cause and statement of current measured level

## Oxygen-monitoring of atmospheric air

Dr.Lavoisier can be used to monitor the oxygen level in atmospheric air in places where gasses are stored or where gasses may reduce the oxygen level thus endangering the lives of humans or animals.

## Easy operation

Each function is selected with one selector knob and set values are altered with keyboard arrows. Altering set values are password protected.

## Alarm

A low warning level can be set at e.g. 19.0% and a low alarm level to be e.g. 17.0%. In case of alarm gas supply may be terminated. Furthermore, a high warning level can be specified, which can be used to indicate a need for re-calibration of the oxygen probe.

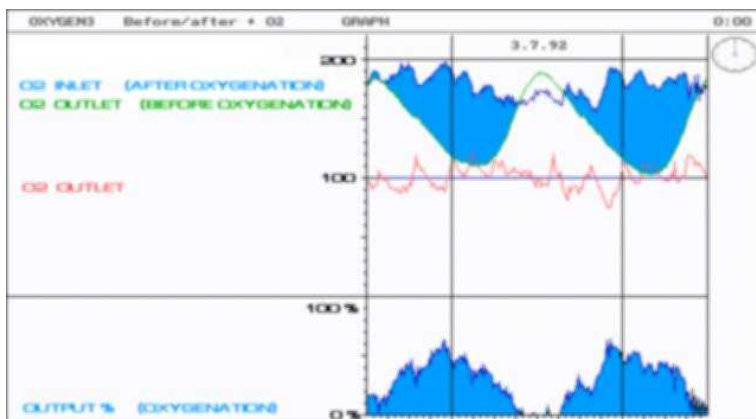
## Calibration

Calibration of the oxygen probe is done in fresh atmospheric air. For that purpose the probe is fitted with a feedback pipe stub where fresh air can be applied through a hose if the surrounding air is not 100% fresh.



## Data logging

The built-in datalogger stores the oxygen level together with all parameters. Data can be transmitted to a PC through the built-in RS485 communication port.



## Speech Processor (optional)

The optional Speech Processor introduces a new user-friendly alarm system: instead of a siren the warning is announced in the loudspeaker: **"oxygen level to low, 18.9 %"**.

In this way, the situation can be followed closely. If the alarm level is reached, the Speech Processor can extend the announcement to **"Please leave the room"**.

It is also possible for the Speech Processor to perform an alarm call to 4 preset telephone numbers, even a pager and security company. Finally, the Speech Processor can be dialed and inform about e.g. current oxygen level in clear speech.

## Safety

In case of power failure the 12V/3Ah battery will keep Dr.Lavoisier running. In case of broken cables or oxygen probe an alarm will be generated and the loudspeaker will inform about the problem in clear speech. The Speech Processor and Dr.Lavoisier are independent units that communicate with each other using a local RS485 network. They monitor each other and will generate an alarm, if one or the other unit stops responding. This provides a high level of security ensuring that the system is operational.



## Antoine Lavoisier (1743-1794)

*Acknowledged for the discovery of oxygen in atmospheric air. He invented a high precision scale which, by experiments, enabled to prove that mass will increase during oxidation (combustion). At his time it was believed that water was the fundamental element, and that water could be changed into soil and from there to gold. Alchemist dreams were thus crushed by Lavoisier and put a lid on dreams and wish full thinking, and the foundation of modern chemistry was made. The law of mass preservation is a fundamental law within chemistry.*