

# ANALOX

## O2NE+

Your lab, your safety, **OUR** priority

## What?

The O2NE+ is an oxygen depletion monitor ideal for use where there is threat of a potential leak or build-up of an inert gas such as:-

- Nitrogen
- Argon
- Helium

The O2NE+ provides two audio visual alarms which are pre-set at 19.5% & 18% (but can be adjusted) to warn personnel of a potentially dangerous depletion of oxygen in the workplace.

## Why?

The use of inert and specialty gases is widespread and varied and includes many industries and processes, some of which are listed below. Should there be a leak or build-up of these gases in a confined space this will deplete the level of oxygen and can pose a danger to employees and members of the public visiting your workplace. Employers have a duty of care to risk assess areas using inert gases and the O2NE+ is a simple and cost effective safety solution which could save lives.

### Nitrogen

- Food production and transportation
- Beverage dispense and production
- Cryopreservation (blood, sperm, eggs etc)
- Packaging
- Laboratory processes including carrier gases
- Cryogenics
- Promession
- CCD cameras
- Cryotherapy
- Tissue preservation
- Coolants
- Mechanical shrink-welding
- Molecular gastronomy
- Container "Inerting"
- Cattle branding
- Pest control
- Hypoxic fire suppression

### Argon

- Welding shielding gas
- Titanium blanketing
- Light bulb production
- Silicon growth atmospheric protection

### Helium

- Commercial diving
- Technical scuba diving
- Breathing observation
- Light weight aircraft fuel
- Coolant for superconductors such as MRI scanners
- Balloon gas
- Shuttle, blimp and hot air balloon fuel

## Where?

The O2NE+ main sensor unit is wall mounted at normal working head height in the area/s recommended as a result of a risk assessment (often where the gases are stored and/or piped). The repeater unit/s (which take their power from the main unit) are then sited at the entrance/s to the area to provide an early warning before entering.

\*Oxygen sensor lives are affected by variables such as the amount of oxygen they are exposed to and the environmental temperature and humidity.



## Key features

- Simple Calibration - The O2NE+ can be calibrated on "pure air" which is easy to source and ship globally and affordable too
- Long life O2 sensor - Can last up to 10 years\*
- Minimal maintenance - Unlike other oxygen monitors the O2NE+ only needs calibrating every 18 months and the sensor does not need changing every 2 years
- "Plug and play" - The O2NE+ is easily wall-mounted and basic installation does not require a qualified electrician
- Repeater Included - The O2NE+ comes complete a repeater which is to be placed at the entrance to provide an early warning before entering the room
- Suitable for use with helium - The presence of helium can affect the readings of most O2 monitors
- but the O2NE+ will provide accurate, reliable readings if helium is one of the gases you are concerned about
- No risk of accidental calibration - The O2NE+ does not allow the user to calibrate it using ambient air. A certified calibration gas must be passed over the sensor at 18 month periods. This is a safety feature which prevents a potentially false calibration being made.



## Sensor specifications:

### Measurement technique:

O<sub>2</sub> - partial pressure electrochemical cell with atmospheric pressure compensation

### Range:

O<sub>2</sub>: 0.1 to 25.0%

### Accuracy:

Better than  $\pm 0.75\%$  O<sub>2</sub> over 5.0 to 25.0% O<sub>2</sub>  
Better than  $\pm 1.00\%$  O<sub>2</sub> over 0.1 to 5.0% O<sub>2</sub>

### Response time (T90):

O<sub>2</sub> - 60 seconds

### Warmup time:

30 seconds

### Expected sensor life:

10 years\*

### Sensor warranty:

2 years

### Sensor calibration period:

1.5 years

## Analyser specifications:

### Analyser type:

Fixed

### Supply voltage:

230V AC, 110V AC, 9 to 24V DC

### Operating temp:

0 to 40 °C

### Power consumption:

< 5 Watts

### Display:

4 digit LCD

### Dimensions:

Analyser 175 x 110 x 75mm  
Repeater 72 x 170 x 45mm

### IP Rating:

Analyser IP65  
Repeater IP65 (quick connect IP43)

### Sounder:

85dbA @ 10cm

### Alarms:

18.0% Alarm  
19.5% Alarm

### Options:

4 to 20mA, 0 to 1V, 2 x relays

### Warranty:

2 years

### Approvals:

EMC Directive 89/336/EEC  
(EN50270:1999, EN61000-6-3:2001+A11:2004)  
Low Voltage Directive 73/23/EEC  
(BS EN 61010-1:2001, IEC 61010-1(2ed))  
AS61010.1-2003  
(Australia & New Zealand)  
CSA (cCSAus),  
Master Contract 239512,  
Certificate 1909026