## Macurco Building & Home Solutions

# Cryosauna & Cryogenics









### Fixed Gas Detection for Oxygen Depletion, Shut-Down Control & Notification

The cryosauna installation shall include an oxygen detection system set to activate an alarm at  $19.5\%~O_2$  by volume or sooner. The detector should be installed near the sauna cabin, in proximity to the occupant's breathing zone. The alarm shall provide both audio and visual notification to notify both the occupant and operator when oxygen levels fall below the alarm set point.

O2 (Vol %)	Effects and Symptoms
18-21	No discernible symptoms can be detected by the individual. A risk assessment be must be undertaken to understand the cause and determine whether it is safe to continue working.
11-18	Reduction of physical and intellectual performance without the sufferer being aware.
8-11	Possibility of fainting within a few minutes without prior warning - Risk of death below 11%.
6-8	Fainting occurs after a short time. Resuscitation possible if carried out immediately.
0-6	Fainting almost immediate. Brain damage even if rescued.

- Inert cryogenic liquids like nitrogen when vaporized produce a large volume of cold inert gas displacing air causing oxygen deficiency, and may accumulate in low points.
- Storage and handling of Nitrogen must meet the applicable requirements of NFPA 55, Compressed Gases and Cryogenic Fluids Code 2013.
- Customers need to consult with local and state agencies on all building, installation and usage permitting and licensing requirements.

#### OX-6 Oxygen (O<sub>2</sub>) Detector, Controller & Transducer

#### **Key Features**

- Dual alarm relay (Low & high levels)
- Digital display / Onboard buzzer
- Low voltage (OX-6) 12-24AC/DC or line Voltage (OX-12) 120VAC
- Can be used standalone or connected to burglar / fire panel, or Macurco panel

#### **Applications**

- Food Packaging
- Electronics
- Therapy chiropractors
- Fitness and athletic centers
- Hospitals / R & D laboratories
- Pharmaceuticals

#### **Accessories**

- Horn and Strobe (16 32 VDC only)
- PS-24 (Plug in 24VDC power)
- DVP-120 control panel
- O<sub>2</sub> test gas



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