

Noventis Technologies

Dual Oxygen – Carbon Dioxide Detector

labsafe



Versatile and Cost Effective

The Noventis Labsafe Dual Oxygen / Carbon Dioxide Detector unit is designed to detect the presence of Oxygen and Carbon Dioxide in ambient air for the protection of people in confined spaces and laboratories. The monitor provides audible and visual indication of potentially dangerous levels of CO₂ as well as low Oxygen levels in the air surrounding the instrument.

The instrument uses an Infra Red sensor for detection of Carbon Dioxide and an Electrochemical sensor for detection of Oxygen. All together in an IP65 splash proof housing, its provides long, trouble free service, with minimum maintenance.

The Alarm Repeater mimics the status indicators on the main detector enclosure. It also provides a push-button which operates in the same manner as the mode switch on the main enclosure. If you have more than one entrance to your store room you may need more than one remote repeater. Up to three repeaters can be daisy chained (one repeater linked to another) covering up to three entrance doors.

- economical and reliable
- two sensor technology for detection of oxygen and carbon dioxide
- plug & play, cable – 7 metres included
- easy installation and maintenance
- inclusive relay outputs for connection to BMS or ventilation system
- dual 4-20mA outputs
- inclusive power supply
- Inclusive two displays, one at the sensor and second at entrance facility
- in compliance with AS5034-2005



Specifications

GENERAL

Operating power	115 – 250VAC
Operating Temp	0 ...50 C
Humidity	0 to 90% non condensing
Storage Conditions	-40 ...70 C
Protection	IP55
Housing Material	ABS
Dimensions main	126 (h) x 170 (w) x 63 (d) mm
Dimensions remote	110 (h) x 80 (w) x 36 (d) mm
Display	Large, displaying Oxygen, CO2 and Temperature
Analogue outputs	Dual 4-20mA
Relays	2 Amp max @ 30VDC or 250VAC
Relay assignment	One for Oxygen and one for CO2 alarm
Audible Alarm	80 dB on both master and slave unit
Visual Alarm	Bright LED on master and slave unit
Low Alarm	Amber LED
High Alarm	Red LED
System standby	Green LED
Cable Entries	4 x M16
Calibration	Annually
EMC Compliance	EN50270
Other Compliance	5034-20005
Warm-up time	1 minute

SPECIFICATION – OXYGEN

Sensing Method	Electrochemical
Sampling Method	Diffusion
Range	0-30 %VOL
Resolution	0.1 %VOL
Accuracy	Better than $\pm 3\%$ of FS
Repeatability	Less than $\pm 1.0\%$
Response time	<30 seconds for 90%
Oxygen sensor life	2 years
Alarm 1 Preset	19.0 %VOL
Alarm 1 Preset	17.0 %VOL

SPECIFICATION – CARBON DIOXIDE

Sensing Method	NDIR (Infrared)
Sampling Method	Diffusion
Range	0-50,000 ppm
Resolution	100 ppm
Accuracy	$\pm 100\text{ppm}$ or $\pm 5\%$ reading
Repeatability	$\pm 20\text{ppm}$ @ 400ppm
Response time	<60 seconds for 90%
Oxygen sensor life	8 years
Alarm 1 Preset	1.5 %VOL
Alarm 1 Preset	3.0 %VOL

WHAT'S IN THE BOX

- One main detection unit
- One remote slave unit
- Interconnecting cable (7M)
- One power supply
- Two mounting brackets
- Instruction manual

