

5IO SERIES OXYGEN DEFICIENCY MONITOR





APPLICATIONS

To monitor confined spaces, labs, control rooms, tunnels, oxygen plants, etc. for oxygen (O₂) deficiency or excess.

FEATURES

- Best value high accuracy O₂ monitor
- Bright digital readout
- 4 to 5 year life electrochemical O2 sensor
- · Available with pumped or diffusion-style sampling
- · Easy to use and calibrate
- Fast response (T90 6 to 8 seconds)
- NEMA 12 dust tight enclosure
- 4-20 mA or 0-1 VDC recorder output

OPTIONS

- Two levels of O₂ alarm with LED indicators, relay contacts, and 'Sonalert' audible alarm with 'Acknowledge' button
- Remote diffusion-style sensors (DR-models) can monitor up to four separate areas
- · Low flow alarm on pumped sample models
- NEMA 4 weather-resistant enclosure
- Strobe light for alarm indication

CALIBRATION

- Although calibration of zero should not be necessary, it can be checked on nitrogen
- Analyzed gas or outside ambient air with 20.9% O₂ for span

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510D - Diffusion Style in Nema 12 Enclosure



510P - Pump Style in Nema 12 Enclosure



510DR1 - Alarm Unit and Single Diffusion-Style Sensor in Separate Enclosures



510DR2 - Alarm Unit and Dual Diffusion-Style Sensors in Separate Enclosures

DESCRIPTION

The Nova 510 Series oxygen deficiency or excess alarm monitors are designed as an O_2 'watchdog' against accidental displacement of ambient air in a confined space by inert gases, or by a buildup of too much O_2 from an O_2 leak in the room. The monitors all utilize a long life electrochemical O_2 sensor. Actual O_2 concentration is shown on a digital meter on the front panel.

Optional dual level alarm with indicator lights, relay contacts, and audible alert available. Alarm set points are pre-set at Nova but are field adjustable if desired. Flashing strobe light and upgraded cabinets also available.

MODELS

- 510D Diffusion sensor, no pump
 510P Pumped sample version
- 510DR1 with one remote O₂ sensor
 510DR2 with two remote O₂ sensors
- 510DR3 with three remote O₂ sensors
- sensors 510DR4 with four remote O₂ sensors

SPECIFICATIONS

Nova reserves the right to specification changes which may occur with advances in design without prior notice.

Description	
Method of Detection:	Customer replaceable electrochemical 'fuel cell' oxygen sensor, expected life 5 years
Ranges Available:	0-30% O ₂ (other ranges available)
Resolution:	0.1% O ₂
Accuracy and Repeatability:	± 2% of full scale
Drift:	Less than 1% of full scale per month
Response Time (T-90):	6-8 seconds to 90% step change
Ambient Temperature Range:	40° to 104°F (5° to 40°C), may be operated at lower temperature with auxiliary heater
Linearity:	± 2% of full scale
Size and Weight:	12" H x 10" W x 6" D @ 6lbs. (30 x 25 x 15 cm @ 2.7kg)
Power:	12 or 24 VDC; 115VAC / 60 Hz; or 220VAC / 50 Hz operation
Output Options:	0-1VDC or 4-20mA
Alarms:	Optional High and/or Low O2 alarm with SPDT contacts with 10A 115VAC rating, audible alarm with reset button, and indicator light for each alarm level; optional Low Flow alarm and strobe light also available

UNIQUE APPLICATIONS

All Nova analyzers are built using proven technologies and techniques. If this product does not suit your application, please contact Nova at 1-800-295-3771. In many cases, we are able to build an analyzer specific to your needs.



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