

# 523 SERIES CARBON DIOXIDE ALARM MONITOR



# **APPLICATIONS**

For continuous carbon dioxide (CO<sub>2</sub>) monitoring of controlled atmosphere (C/A) food storage rooms, breweries, wineries, food packaging plants, or any area where CO<sub>2</sub> is handled.

## FEATURES

- Solid state infrared CO2 detector no moving parts
- · Fast warm-up, approximately 1 minute
- Built-in sample pump included in analyzer
- Unaffected by moisture and humidity
- · Easy to use and calibrate
- Dust-tight NEMA 12 enclosure
- 4-20 mA or 0-1 VDC recorder output

#### **OPTIONS**

- 1 or 2 levels of CO<sub>2</sub> alarm with relay contact and 'Sonalert' audible alarm with 'Acknowledge' button
- · Low flow alarm
- NEMA 4 or 4X weather-proof enclosure
- · Bright red strobe light for visible alarming

#### CALIBRATION

- On ambient air for zero (CO<sub>2</sub> scrubber included)
- Analyzed calibration gas of CO<sub>2</sub> in N<sub>2</sub> for span



**523 - Nema 12 Enclosure** (shown with optional strobe light)

#### DESCRIPTION

The Nova 523 Series Carbon Dioxide alarm monitors are designed for the continuous detection of CO<sub>2</sub> in ambient air or in air drawn from a confined space or C/A room. A built-in sample pump draws in a sample through a filter and flowmeter and then on to the CO<sub>2</sub> detector. This model uses a solid state infrared CO<sub>2</sub> detector which continuously detects and displays the CO<sub>2</sub> on a front panel digital meter. A 0-1V or 4-20mA linear output signal is available for input to a recorder or similar device.

## SPECIFICATIONS

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

Description	
Method of Detection:	Single cell NDIR
Ranges Available:	choice of $5,000 / 10,000 \text{ PPM CO}_2$ choice of $0-1.0 / 5.0 / 10.0 \% \text{ CO}_2$ (other ranges may be available, contact Nova)
Resolution:	10 PPM for PPM versions; 0.1 % for % versions
Accuracy and Repeatability:	± 2% of full scale
Drift:	Less than 2% of full scale per week
Response Time (T-90):	15 seconds to 90% step change
Ambient Temperature Range:	40° to 120°F (5° to 50°C), may be operated at lower temperature with auxiliary heater
Linearity:	± 2% of full scale
Size and Weight:	12" H x 10" W x 7" D @ 8lbs. (30 x 25 x 17.5 cm @ 3.6kg)
Power:	12 or 24 VDC; 115VAC / 60 Hz; or 220VAC / 50 Hz operation
Output Options:	0-1VDC or 4-20mA (select one); isolated 4-20mA also available as option
Alarm Options:	Optional High alarm with SPDT contacts 10A 115VAC rating, with indicator light for each alarm level; 'Sonalert' audible alarm with reset button; optional Low Flow alarm and strobe light also available. All alarms are 'fail safe'.

#### 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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