

# 423 SERIES CARBON DIOXIDE ANALYZER



## **APPLICATION**

For continuous carbon dioxide (CO<sub>2</sub>) monitoring and control of greenhouses, mushroom farms, controlled atmospheres for produce storage, and others.

### **FEATURES**

- · Bright digital readout
- Solid state infrared CO<sub>2</sub> detector no moving parts
- Fast warm up approx. 1 minute
- Built in sampling pump
- Unaffected by moisture or humidity
- · Dust-tight fiberglass enclosure
- Can be used with Nova auto sequencer for multi-point sampling
- · Modular layout that is easy to maintain

# **OPTIONS**

- Hi/Low gas and low flow alarms available
- Cold weather package for low temp use to -5°F (-20°C)
- Relay contacts available for On/Off CO<sub>2</sub> control
- 4-20mA or 0-1VDC outputs

### **CALIBRATION**

- Air (scrubbed of CO<sub>2</sub>) for zero
- Analyzed CO<sub>2</sub> cylinder for span

graphic to be added later

NOVA ANALYTICAL SYSTEMS INC.

### DESCRIPTION

The Nova 423 Series Carbon Dioxide monitor/controller has a sensitive solid-state infrared CO<sub>2</sub> detector which continuously displays detected CO<sub>2</sub> on a front panel digital meter. A built in sample pump draws in a sample through a filter and flow meter then on to the solid state infrared detector for analysis. A 4-20mA linear output signal is available for operation of a recorder or input to a computer. The Model 423 CO<sub>2</sub> Monitor can be time shared between a number of sample points using a Nova automatic sequencer. Calibration need only be done once per year. Applications include HVAC and IAQ systems, CO<sub>2</sub> monitoring and control of greenhouses, wineries, breweries, food processing plants or any area requiring a stand-alone CO<sub>2</sub> monitor or controller.

#### MODELS

Other models available:

- 423C Control or alarm relay contacts allow on-off control of a CO<sub>2</sub> burner or CO<sub>2</sub> addition system
- 423A The above mentioned contacts may be used for alarms in process applications.

Relays for both models adjustable from 0-100% span; adjustable dead band; contact rating 5A @ 230VAC SPDT

## **SPECIFICATIONS**

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

Description	
Method of Detection:	Solids State NDIR infrared detector with no free air path
Ranges Available:	0-2000, 0-3000, 0-5000, 0-10,000, 0-20,000 PPM CO <sub>2</sub>
Resolution:	10 PPM
Accuracy and Repeatability:	± 2% of full scale
Drift:	less than 100 PPM per month non-accumulative
Response Time (T-90):	20-30 seconds
Ambient Temperature Range	32° to 122°F (0° to 49°C)
Linearity:	1% of full scale
Size and Weight:	10" H x 8" W x 5" D (25 x 20 x 13 cm), 6lbs. (2.7kg)
Power:	115VAC 60 Hz or 220VAC, 50 Hz
Output Options:	4-20mA, 0-1VAC, RS232
Alarms:	Non latching control relay with set point

#### 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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