

# NOVA MODEL 423

## CARBON DIOXIDE MONITOR/CONTROLLER

### APPLICATIONS

*For CO<sub>2</sub> monitoring and control of greenhouses and mushroom farms, or in some process gas applications.*



### FEATURES

- Solid state infra red CO<sub>2</sub> detector - no moving parts
- No free air optical path
- Fast warm up - approx. 1 minute
- Built in sampling pump
- Unaffected by moisture or humidity
- Relay contacts available for On/Off CO<sub>2</sub> Control
- Dusttight fiberglass enclosure
- 4-20 ma recorder or computer output
- Digital indicating meter
- Can be used with Nova auto sequencer for multipoint sampling

## DESCRIPTION

The Nova Model 423 Carbon Dioxide Monitor/Controller has a sensitive solid state infra red 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 flowmeter then on to the solid state infra red detector for analysis. A 4-20 ma linear output signal is available for operation of a recorder or input to a computer.

Control or alarm relay contacts are also provided to allow on-off control of a CO<sub>2</sub> burner or CO<sub>2</sub> addition system (Model 423C). Alternatively, these contacts can be used for alarm in process applications (Model 423A).

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 standalone CO<sub>2</sub> monitor or controller.

## SPECIFICATIONS

DESCRIPTION	
<b>Method of Detection:</b>	Solid State NDIR (infra red) with no free air path
<b>Ranges Available:</b>	0-2000, 0-3000, 0-5000, 0-10,000, 0-20,000 PPM CO <sub>2</sub> (Other ranges available)
<b>Accuracy:</b>	± 2% of full scale
<b>Repeatability:</b>	± 1% of full scale
<b>Output:</b>	0-1V or 4-20 ma linear
<b>Optional Control or Alarm Relays: (Model 423C or 423A)</b>	Non latching control relay with set point adjustable from 0-100% span. Adjustable dead band. Contact rating 5A @ 230 VAC SPDT
<b>Indicator Lights:</b>	Alarm or control relay activated
<b>Power:</b>	115VAC / 220VAC 50 / 60Hz @ 3 Watts
<b>Zero Drift at Constant Temperature:</b>	Less than 100 PPM per month non-accumulative
<b>Zero Drift Due to Ambient Temperature:</b>	Less than 10 PPM per °C
<b>Operating Temperature:</b>	0 to 50°C
<b>Storage:</b>	-20 to 70°C
<b>Size:</b>	10"H x 8"W x 5"D (25 x 20 x 13 cm)
<b>Weight :</b>	6 lbs. (2.7 kg)

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

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