NOVA

Dependable Gas Analysis Solutions

480 SERIES

CONTINUOUS PROCESS ANALYZER FOR PPM LEVEL CARBON MONOXIDE

APPLICATIONS

For continuous analysis of up to 0-40,000 PPM carbon monoxide (CO) in process gas streams using an electrochemical detector.

FEATURES

- Best value continuous low-range CO analyzer
- Long life (1-3 years) electrochemical CO sensor
- Bright digital readout
- Fast response (T90 - 6 to 8 seconds)
- Microprocessor control with push button calibration
- Explosion-proof version has magnetic calibration
- Easy-to-maintain modular layout
- Built-in sample pump or pressure regulator
- Sensor is temperature controlled for maximum stability
- 4 - 20 mA output

Wall Mount (N4) Enclosure

OPTIONS

- Hi/Low gas, low flow, and diagnostic alarms available
- Isolated 4-20mA, RS232, RS485, MODBUS®, and Ethernet outputs available
- Cabinet purge system available for use in hazardous areas
- Full automatic calibration with touch screen LCD display
- Cold weather package for operation to -5°F (-20°C)
- Cabinet coolers can be fitted to most models
- High temperature filters and probes

Explosion-Proof (N7MC) Enclosure

CALIBRATION

- Nitrogen for zero
- Analyzed CO calibration gas for span

NOVA ANALYTICAL SYSTEMS

www.nova-gas.com

DESCRIPTION

The Nova 480 Series represent Nova's best value in continuous low range CO process analysis. This analyzer utilizes a long-life electrochemical 'fuel cell' sensor for the detection of CO in process gases. The sensor produces a small millivoltage output which is directly proportional to the CO detected. The output is then amplified and displayed on a digital readout meter and recorder output. The 480 can be supplied with a sampling pump or pressure regulator to suit most applications.

MODELS

There are seven types of mounting configurations available:

- 480N4 - Wall mounted NEMA4 (IP65) enclosure rating
- 480N4X - Wall mounted corrosion-resistant NEMA4X (IP65) enclosure rating
- 480RM - 19" (483mm) rack mounted, on sliding rails
- 480N7MC: Wall mounted NEMA7 UL/CSA ex-proof with non-intrusive magnetic calibration, Class 1 Div 1 Group BCD
- 480RMN7: Wall mounted NEMA7 sensor housing with rack mounted control cabinet (two separate enclosures)

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' CO sensor. Expected life 1 to 3 years depending on measurement concentrations.
Ranges Available:	choice of 0-100 / 200 / 500 / 1,000 / 2,000 / 5,000 / 10,000 / 40,000 PPM CO
Resolution:	1 PPM CO up to 2,000 PPM; 10 PPM for greater than 2,000 PPM
Accuracy and Repeatability:	±1% of full scale based on 0-2,000 PPM range
Drift:	Less than 1% of full scale per month or 10 PPM, whichever is greater
Response Time (T-90):	20-30 seconds to 90% step change
Ambient Temperature Range:	32-122°F (0-50°C). Lower temperatures (-5°F, -20°C) with Cold Weather Package.
Linearity:	Better than 1% of full scale
Size and Weight:	Dimensions will vary depending on enclosure style and options required
Power:	115VAC 60Hz (220VAC 50Hz available)
Output Options:	4-20ma into 500 ohms non-isolated standard Isolated 4-20mA, RS232, RS485 optional
Alarms:	High and/or low alarm contacts available, relay contacts SPDT 5A @ 220VAC rating. Low flow alarm optional

UNIQUE APPLICATIONS

The electrochemical CO sensor is unsuitable with certain background gases such as hydrogen. Also, this cell requires that a small amount of O_2 be present in the sample, or that it be metered into the sample. Consult Nova for each application.

NOVA ANALYTICAL SYSTEMS
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