

# **302A SERIES** PORTABLE ANALYZER FOR CARBON DIOXIDE







## APPLICATIONS

For checking carbon dioxide (CO<sub>2</sub>) content in mushroom growing rooms, food storage, incubators, natural gas, controlled atmosphere storage rooms, welding gas mixtures, and other process applications.

#### FEATURES

- Rugged design that is easy to operate
- Fast warm-up and response
- Solid state infrared detector
- · Digital readout meter with backlight
- Modular layout that is easy to maintain
- Rechargeable battery operation
- Built-in sample pump, filter, and flowmeter
- · Weatherproof (WP) cabinet with clear Lexan cover

#### **OPTIONS**

- Recorder outputs of 0-1V or 4-20mA
- Sample pre-cooler for hot samples
- Condensate removal for wet applications
- Suitcase (K) style cabinet available
- AC power only operation
- CO<sub>2</sub> alarm with LED
- Detachable/portable datalogger

### CALIBRATION

- Air for zero (except low range models which have a CO<sub>2</sub> scrubber for zeroing).
- Analyzed CO<sub>2</sub> cal gas for span.

NOVA ANALYTICAL SYSTEMS www.nova-gas.com



Weatherproof (WP) Enclosure



Suitcase (K) Enclosure



Optional Precooler for hot or wet sample gases

#### DESCRIPTION

The Nova 302A Series Portable Gas Analyzers have been designed for accuracy, reliability, and ease of use and service. The 302A uses a solid state infra red detector which reponds quickly to CO<sub>2</sub> present in the gas sample.

In operation, a built-in sample pump draws in the gas sample through the sample hose, condensate removal filter, secondary filter and flow meter then on to the infrared CO<sub>2</sub> detector. The detected CO<sub>2</sub> is displayed on an LCD digital meter which has a switchable backlight for use in dark areas.

A rechargeable battery provides enough power for about 8 hours of continuous operation and the analyzer can be used while it is being recharged. A red LED tells when to recharge and a green LED verifies that it is receiving recharging power. The recharger is included.

SPECIFICATIONS	Nova reserves the right to specification changes which may occur with advances in design without prior notice.
Description	
Method of Detection:	Microprocessor based infrared detector for CO2
Ranges Available:	0-3000, 0-5000, or 0-10,000 PPM; 0-2%, 0-5%, 0-10%, 0-20%, 0-50% or 0-100% $CO_2$
Resolution:	0.1 % CO2 on % versions; 10 PPM on PPM versions
Accuracy and Repeatability:	Within ± 2% full scale
Drift:	Less than 1% full scale per 8 hours of continuous operation
Response Time (T-90):	30 - 40 seconds
Ambient Temperature Range:	40° to 120°F (4° to 49°C)
Linearity:	Better than 1.0% of full scale
Size and Weight:	WP style - approx. 11½" L x 8" W x 7¼" H @ 8 lbs (29 x 20 x 18 cm @ 3.6 kg) K style - approx. 14" L x 10½" W x 6" H @ 12 lbs (36 x 27 x 15 cm @ 5.5 kg)
Power:	AC/DC operation. 115VAC 60Hz for recharging (other voltages available)
Output Options:	4-20 mA or 0-1 VDC
Alarms:	High or low CO <sub>2</sub> alarms with LED (optional)

#### 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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