



CO & N₂O ANALYZERS

FAST • SENSITIVE • ACCURATE



Designed for many demanding applications including eddy-correlation flux measurements, chamber flux measurements, combustion diagnostics, and trace-gas monitoring, these Analyzers have already been demonstrated successfully onboard NASA DC-8 aircraft for measurements in the upper troposphere/lower stratosphere. In fact, the High-Sensitivity CO Analyzer and the High-Sensitivity N₂O Analyzer are ideal for measuring carbon monoxide and nitrous oxide, respectively, in ambient air with data rates of up to 10 Hz, less than 1% uncertainty, and better than 0.1% repeatability. Neither analyzer is affected by other atmospheric gases or changes in ambient atmospheric pressure.

Built using quantum-cascade lasers operating in the mid-IR, these instruments require cryogenic operation (using liquid-nitrogen cooling) of the laser and photodetector to provide state-of-the-art performance.

For applications requiring unattended long-term stand-alone operation, an included internal computer can store data practically indefinitely on its hard drive, and can send real-time data to a data logger through its analog, digital (RS232), and ethernet outputs.

Accurate

Screenshot of real-time CO measurements recorded using the Instrument onboard a NASA DC-8.



Typical Operational Parameters

- Concentration Range**
0.3 ppbv–10 ppmv
- Response Time**
<0.1 seconds (with optional external pump (see DSVP below))
<2 seconds (internal pump)
- Accuracy**
Better than 1% of reading
- Repeatability/Precision**
Better than 0.3 ppbv precision
- Zero And Span Drift**
None
- Outputs**
Digital (RS232), Analog, Ethernet
- Data Storage**
Internal Hard Drive (20 gigabytes)
- Data Rate**
0.01–20 Hz (user selectable)
- Display**
12.1" Color TFT
- Sample Temperature**
0–50 °C
- Operating Temperature**
5–45 °C
- Ambient Humidity**
<98% RH Non-Condensing
- Warm-Up Time**
<60 seconds
- Inlet/Outlet Fittings**
3/8", 1/2" Swagelok® (fast flow, optional external pump);
3/8", 1/4" Swagelok® (slow flow, internal pump)
- Power Requirements**
115/230 VAC; 50/60 Hz; 200 W (excluding optional external pump)
- Dimensions**
10" H×38" W×26" D
- Weight**
Less than 150 pounds (68 kg)

Ordering Information

- Price:** \$89,950
- CO Analyzer**
Model Number: 910-0001
- N₂O Analyzer**
Model Number: 910-0002

Please Specify When Ordering

- 110 VAC**
Add -0 to Model Number
- 220 VAC**
Add -1 to Model Number

Opt. Dry-Scroll Vacuum Pump (DSVP)

Model	Name	Price
-9001	Dry Scroll Vacuum Pump	\$8,500
-9002	DSVP Maintenance Kit	\$400
-9003	DSVP Connection Kit	\$150
-9004	DSVP Exhaust Silencer	\$250

These analyzers have been used to record CO levels above the arctic circle.

Field-deployed
in some of the
harshest envi-
ronments on
earth, LGR
Analyzers are
designed to
work as hard
as you do.



Phone: +1 650 965-7772 • Fax: +1 650 965-7074
sales@lgrinc.com • support@lgrinc.com

www.lgrinc.com



Los Gatos Research

67 East Evelyn Avenue, Suite 3
Mountain View, CA 94041-1529