Single Laser Trace Gas Monitors: The Mini Monitor

Sensitive, rapid, highly specific and continuous measurements of atmospheric trace gases in ambient air.

**APPLICATIONS**

- Detection of a wide variety of atmospheric trace gases, such as: methane, nitrous oxide, nitric oxide, nitrogen dioxide, carbon monoxide, carbon dioxide, formaldehyde, formic acid, ethylene, acetylene, carbonyl sulfide, acrolein, ammonia and others.
- $\text{N}_2\text{O}$ Monitors provide simultaneous monitoring of $\text{N}_2\text{O}$, water vapor and either $\text{CO}$, $\text{CO}_2$, or $\text{CH}_4$.
- Isotopic monitoring of $\text{CO}_2$, $\text{CH}_4$, and $\text{N}_2\text{O}$.
- Combustion monitoring and characterization.
- Isotopic monitoring for source/sink characterization.
- Eddy Covariance measurements for nitrous oxide and other trace gases.
- Fast response plume studies.
- Breath analysis.
- Air quality monitoring.
- Mobile measurements from ship, truck, and aircraft platforms.

**ADVANTAGES**

- Our smallest IR laser trace gas monitor with electronics and optics in a single compact unit.
- Absolute trace gas concentrations without calibration gases.
- Fast time response.
- Free from interferences by other atmospheric gases or water vapor.
- Turnkey and unattended operation.
- Ready to be deployed in field measurements and on moving platforms.
- Optical path length up to 76 meters.
- Data rates up to 1 to 10 Hz (depends on specific instrument and vacuum pump).
MECHANICAL SPECIFICATIONS FOR SINGLE LASER TRACE GAS INSTRUMENT:

Dimensions: 430 mm x 660 mm x 270 mm (W x D x H) (core instrument)
Weight: 35 kg (core instrument)
Electrical Power: 500 W, 120/240 V, 50/60 Hz (with Varian IDP-3 vacuum pump)

REFERENCES: