Dual Laser Trace Gas Monitor

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

APPLICATIONS

• Extremely sensitive 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.

• Combustion monitoring and characterization.

• Isotopic monitoring of CH₄ and N₂O for source/sink characterization.

• Eddy Covariance measurements.

• Fast response plume studies.

• Air quality monitoring.

• Mobile measurements from ship, truck, and Aircraft platforms.

ADVANTAGES

• 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.

• Two lasers allow simultaneous measurement of more species.

• Optical pathlength of either 76 meters or 210 meters.
POPULAR INSTRUMENTS

HIGHER PRECISION AND ACCURACY IS OBTAINABLE WITH MID-INFRARED LASERS

Clumped CO₂ Isotopes*  CH₄ Isotopes

CO₂, Water Isotopes  N₂O Isotopes

NO, NO₂

CH₄, N₂O, CO, CO₂, H₂O, C₂H₆

MECHANICAL SPECIFICATIONS FOR DUAL LASER TRACE GAS MONITOR:
Dimensions: 560 mm x 770 mm x 640 mm (W x D x H)
Weight: 75 kg
Electrical Power: 250-500 W, 120/240 V, 50/60 Hz (without pump)

MULTIPASS CELL:
Choice of 76 meter standard cell (V=0.5 liters) or 210 meter “Super Cell” (V=2 liters)

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REFERENCES: