

# TILDAS Compact Single Laser Trace Gas Analyzer

*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.
- N<sub>2</sub>O monitors provide simultaneous monitoring of N<sub>2</sub>O, water vapor and either CO, CO<sub>2</sub>, or CH<sub>4</sub>.
- Isotopic monitoring of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>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)

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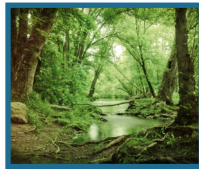
## POPULAR INSTRUMENTS

HIGHER PRECISION AND ACCURACY IS OBTAINABLE WITH MID-INFRARED LASERS

OCS, CO<sub>2</sub>, H<sub>2</sub>O



CO<sub>2</sub> Isotopes



N<sub>2</sub>O, CO<sub>2</sub>, CO, H<sub>2</sub>O



CO



HCHO



C<sub>2</sub>H<sub>6</sub>, CH<sub>4</sub>



CH<sub>4</sub>, N<sub>2</sub>O, H<sub>2</sub>O



NH<sub>3</sub>



## MECHANICAL SPECIFICATIONS FOR SINGLE LASER TRACE GAS INSTRUMENT

Dimensions: 440 mm x 660 mm x 6U (267mm) (W x D x H) (core instrument)

Weight: 35 kg (core instrument)

Electrical Power: 250 W, 120/240 V, 50/60 Hz (without pump)

## REFERENCES

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