GasScouter™
CH_4, C_2H_6 and H_2O Analyzer

PICARRO

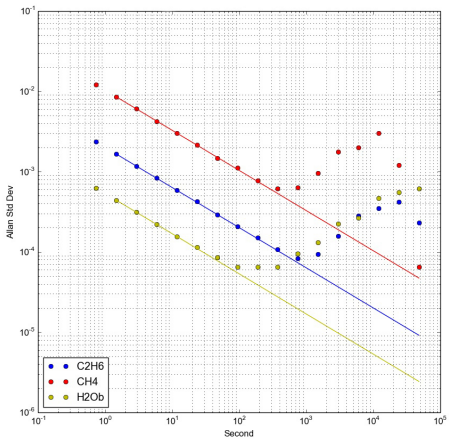
- High-precision ppb measurements of C_2H_6 and CH_4 concentrations
- Portable, lightweight and low power
- Built-in rechargeable Li-ion battery for up to 6 hours of continuous operation, and seamless battery switching for uninterrupted measurement
- Built-in WiFi for mobile operation with a tablet or smartphone in remote locations
- Optional accessories for mobile soil flux system and GPS

The **Picarro G4302 GasScouter** is a new generation, light-weight, portable, battery-powered cavity ring-down spectroscopy (CRDS) gas concentration analyzer design for science on the move. It is a perfect mobile solution for real-time methane emission source attribution in the world's most challenging, remote environments.

The GasScouter operates in two different modes: 1) Methane only mode to precisely measure trace level of methane in the atmosphere and 2) Ethane/Methane mode to measure the ethane-to-methane ratio for determining the emission source.

The GasScouter has a built-in WiFi card to connect with a tablet or smartphone for viewing its web-based graphical user interface (GUI) in remote locations. You can also connect directly to a computer by USB port.

Allan Deviation Plot



Patented Cavity Ring-Down Spectroscopy (CRDS) Technology

Picarro's patented CRDS technology enables an effective measurement path length of up to 20 kilometers in a compact cavity, which results in exceptional precision and sensitivity from a small footprint analyzer. A meticulously designed small optical cavity incorporates precise temperature and pressure control. The result is an analyzer that delivers a best-in-class combination of precision, accuracy, low drift and ease-of-use.

Picarro G4302 GasScouter Performance Specifications			
Mode 1: Ethane/Methane	CH_4	C_2H_6	H_2O
Precision (1 sec)	30 ppb	10 ppb	100 ppm +5%
Precision (100 sec)	3 ppb	1 ppb	10 ppm +5%
Drift (24 hr, peak-to-peak 50-min average)	20 ppb	6 ppb	–
Operating Range	1–5000 ppm	0–500 ppm	0–3% (non-condensing)
Measurement Interval (sec)	<1	<1	<1
Response Time (Fall/Rise)	<1	<1	<1
Mode 2: Methane Only			
Precision (1 sec)	3 ppb	–	100 ppm +5%
Precision (100 sec)	0.3 ppb	–	10 ppm +5%
Drift (24 hr, peak-to-peak 50-min average)	1 ppb	–	–
Operating Range	1–800 ppm	–	0–3% (non-condensing)
Measurement Interval (sec)	<0.5	–	<1
Response Time (Fall/Rise)	<1	–	<1

Picarro G4302 GasScouter System Specifications	
Operating Temperature	10°C to 45°C
Ambient Humidity	<99% (non-condensing)
Dimensions	14'' w × 6.95" d × 18.2'' h (35.6 × 17.7 × 46.4 cm)
Sample Flow Rate	Built-in vacuum pump, ~2 sl/m at atmospheric pressure
Weight	25 lbs (11.3 kg)
Power Consumption	35 W
Battery	Built-in Li-ion battery, 223 Wh/60300 mAh, in/out 12-19 V, charge time 5-8 hours
Sample Inlet/Outlet Connections	Colder non-valved quick-connect
Data Output	USB (x2), Wi-Fi Connectivity
Operating System	Windows 7 Professional

Picarro G4302 Accessories	
GPS Kit (A0946)	GPS antenna and module (connected via USB). Includes Picarro software upgrade to report GPS parameters in raw data file that is exportable to KML format
Mobile Soil Flux System (A0947)	Gas flux chamber (stainless steel with inlet/outlet quick disconnect fittings) and flux computational software

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