

Picarro G4301

CH₄ and CO₂

Concentration Analyzer

PICARRO

The World's Leading Instruments for
Carbon and Water Cycle Measurements

Cavity ring-down analyzer for measuring
greenhouse gas on the move

- High-precision measurements of CO₂ and CH₄ concentrations with minimal drift
- Portable and lightweight (25 lbs /11.3 kg)
- Low power (25W)
- Built-in rechargeable Li-ion battery – up to 8 hours of continuous operation
- Seamless battery switching for uninterrupted measurements



The Picarro GasScouter analyzer is the first of a new generation of ultra-lightweight and portable, battery-powered analyzers. Featuring Picarro's patented, award-winning CRDS technology, the GasScouter is optimal for mobile, high precision greenhouse gas measurements.

Intuitive: The GasScouter begins measuring within a minute of powering on. It connects to a smartphone or tablet via WiFi to monitor measurements in real-time.

Performance: The GasScouter provides ppb levels of precision and drift over 24-hr for CO₂ and CH₄ measurements. The low power demand of the analyzer allows continuous measurements for 8 hours on one full-charged battery.

Applications: The backpack design of the GasScouter allows for easy surveying of remote areas on foot to measure atmospheric concentrations of GHG . It can also be connected to a soil chamber in a closed-loop or open path for soil flux or concentration measurements.

Picarro's Patented CRDS Technology: Our sophisticated time-based measurement uses a laser to quantify spectral features of gas phase molecules in an optical cavity. Picarro's unique design enables an effective measurement path length of up to 20 kilometers in a compact cavity, which results in exceptional precision and sensitivity in a small footprint.

TECHNICAL SPECIFICATIONS:

G4301

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Performance Specifications			
Specification	CO ₂	CH ₄	H ₂ O
Raw precision (5 sec)	0.4 ppm	3 ppb	100 ppm + 5%
Precision (5 min)	0.03 ppm	0.3 ppb	10 ppm + 5%
Drift (24 hr, peak-to-peak 50 min average)	0.5 ppm	1 ppb	-
Measurement range	0 - 3 %	0.01 - 800 ppm	0 – 3% (non-condensing)
Measurement Interval	3 sec		
Response Time (Fall/Rise)	5 sec		

System Specifications	
Operating Temperature	10°C to 45°C
Ambient Humidity	< 99% (non-condensing)
Dimensions	14" w x 6.95" d x 18.25" h (35.6 x 17.7 x 46.4 cm)
Sample flow rate	Built-in vacuum pump, ~1 sl/m at atmospheric pressure
Weight	25 lbs (11.3 kg)
Power Consumption	25 W at steady state
Battery	Built-in Li-ion battery, 223 Watt-hour/60300 mAH, in/out 12-19 V, charge time 5-8 hrs, charger included, hot-swappable
Sample inlet/outlet connections	Colder non-valved quick-connect
Data Output	(x2) USB, Wi-Fi Connectivity
Operating System	Window 7 Professional