

GasScouter Accessories

GPS Kit and Mobile Soil Flux System

PICARRO



To make the Picarro GasScouter mobile analyzer even more beneficial for remote research studies, we've added two **NEW accessories** that ease and enhance scientific investigations far off the grid.

GPS Kit

The **GPS Kit** option, A0946, adds geo-referencing of data with time-synched, latitude and longitude measurements. This enhanced, high-frequency dataset enables the user to produce and interpret high-resolution spatial maps of concentration during outdoor campaigns.

The following components are provided with the GPS Kit:

- GPS antenna and built-in GPS receiver with USB connection cable
- GPS data integration with Picarro's raw concentration data
- KML Converter Software to generate KML files that are used in mapping applications (ex: Google Earth) for geospatially displaying data.

As the instrument starts, it will register the presence of the GPS and begin a continuous streaming and data recording. You can access the latitude and longitude from the data drop-down menus in the GUI in real-time. After measurements conclude, the time-synched GPS data will be written into the raw data files which can be converted into a KML file for further data processing.



GPS
Antenna

GasScouter

Picarro Advantage

Adding geolocation data to the G4301 and G4302 GasScouter has never been easier. Effortless reporting with GPS parameters that are automatically synced with easy to use hardware and software. *True GPS integration!*

GPS Specifications

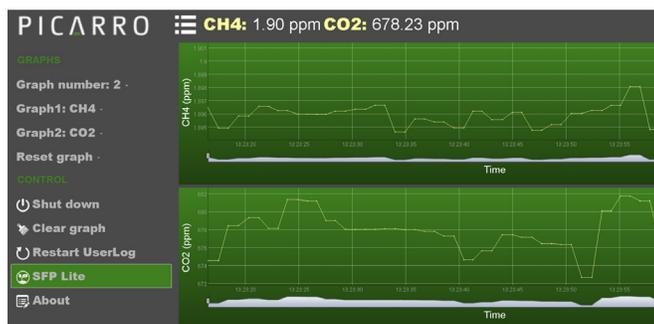
Position Accuracy	<3 m
Velocity Accuracy	0.1 m/s
Update Rate	1 Hz
Power	5V, 20mA
Connection	USB
Antenna	Included

Mobile Soil Flux System

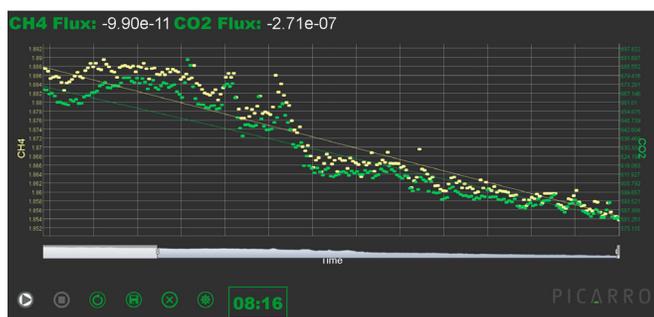
The **Mobile Soil Flux System**, A0947, combined with the G4301 GasScouter analyzer provides a fully integrated solution for soil flux measurements. The stainless-steel gas accumulation chamber with quick connect/disconnect fittings attaches to the GasScouter gas inlet and outlet ports. The close-loop configuration allows continuous and real-time concentration measurements with high temporal resolution (1Hz) and high precision (ppb) of the gases collected in the chamber. A complementary software, Soil Flux Processor Lite (SFPlite), also computes CO_2 and CH_4 soil flux on the tablet or smart phone in real-time. This system is also compatible with the GPS Kit.

The following components are provided with the Mobile Soil Flux System:

- Gas accumulation chamber
- Soil Flux Processor lite for smart phone or tablet



Web-based GUI showing 2 plots for CH_4 and CO_2 . Drop down selection menu allows the user to configure the graphs and provides additional functionalities including access to the SFPlite module.



SFPlite GUI shows the CH_4 and CO_2 concentration trends. The data can be fitted to different models to determine the fluxes.



GasScouter

Mobile Soil Flux System

Picarro Advantage

Why create your own flux chamber? Eliminate the hassle with Picarro's Mobile Soil Flux system which is designed with easy connect/disconnect hardware and real-time software to fully integrate with the GasScouter System.

Soil Flux Process Lite (SFPlite) is a complementary application to the Picarro web-based GUI. The user selects the starting and ending times of the concentration measurement and within this time interval, the SFPlite calculates the flux by fitting the concentration trend into a flux model (linear, quadratic, Hutchinson and Mosier). Additional parameters such as temperature, pressure and chamber volume can be entered by the user.

Chamber Specifications

Dimension	11" OD x 6" H (28 cm x 15 cm), Wand: 36" (91 cm)
Volume	570 in ³ (1448 cm ³)
Material	Stainless steel, rubber gasket
Tubing	1/8" ID x 14" OD (0.31 cm x 35 cm) Bev-A-Line™
Connections	Non-valved coupling

Flux Processor Specifications

Flux Fitter Model	Linear, quadratic, Hutchinson and Mosier, or customizable
Inputs	Analyzer and chamber volumes, chamber pressure and temperature

Please visit the [Picarro GasScouter webpage](#) to learn more.

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