### Soil & Net Canopy CO<sub>2</sub> Flux Survey & Long-Term Solutions



Redefining the Boundaries of Life Science Research

## EGM-5 Portable CO<sub>2</sub> Gas Analyzer

As versatile as it is mobile, the popular EGM-5 Portable  $CO_2$  Gas Analyzer is the instrument of choice for the survey measurement of soil  $CO_2$  efflux when your application demands portability along with a high level of accuracy and control at an affordable price. Quick set up and intuitive software provides a highly user-friendly experience for monitoring, logging and recording environmental sensor data in real time.



Optional collars are available for use with the SRC-2 (shown) & CPY-5 chambers.

#### Powerful Battery Technology

An energy-efficient, rechargeable Li-ion battery allows for up to 16 hours of field operation.

#### Touch Display

The large, high-contrast display offers outstanding readability in the brightest sunlight.

#### **Rugged Portability**

Compact and lightweight (1.5 kg), the rugged aluminum enclosure and shock-absorbing polyurethane base provide absolute reliability under the harshest environmental conditions.

#### **Integral Sampling Pump**

A miniature, long life air sampling pump comes standard for dynamic gas sampling and if needed, is easily disabled for static measurements.

#### Minimal Maintenance

No need for factory recalibration — saving you both time and money.

"After trying several different IRGAs, I quickly settled with EGMs. They offer highly accurate, real-time on-screen flux calculations, withstand harsh field conditions, and are very portable and affordable. I have now used EGM-4s & EGM-5s with SRC chambers in several countries."

— Louis-Pierre Comeau Agriculture and Agri-Food Canada

#### Additional environmental chambers & sensors to meet your soil measurement needs:

Soil CO<sub>2</sub> Efflux



SRC-2 Soil Respiration Chamber With built-in temperature sensor





STP-2 Soil Temperature Probe Commonly used with our SRC-2 Soil Respiration Chamber

Soil Moisture & Soil Temperature



Stevens HydraProbe

Net Canopy CO<sub>2</sub> Flux



CPY-5 Canopy Assimilation Chamber Includes sensors for measurement of air temperature and PAR

# CFLUX-1 Automated Soil CO<sub>2</sub> Flux System

The CFLUX-1 Automated Soil CO<sub>2</sub> Flux System is the latest innovation in a long line of trusted and tested technology for the measurement of soil respiration from PP Systems. The CFLUX-1 is a dedicated, self-contained system for long-term deployment and unattended operation. Fully automatic and programmable, the CFLUX-1 is ideal for both spatial and temporal analysis.

#### Built-in CO<sub>2</sub> & H<sub>2</sub>O Gas Analyzers

Eliminate issues associated with long distances between chambers, analyzers and multiplexing devices. Rely on accurate measurements and fast response times regardless of where each system is stationed.

#### Large Hemispherical Chamber (2500 cm<sup>3</sup>)

The large chamber is articulating for automated soil measurements with repeatable placement, with a power-efficient actuator and electronics to control the opening and closing of the chamber at user-defined time intervals.

#### Soil Moisture & Soil Temperature

Soil moisture and soil temperature can be measured and recorded along with flux data. (Optional)

#### WiFi

Set up and monitor the system remotely from your phone or computer. Connect to a local computer with a router — monitor from anywhere in the world.

#### Data Storage

Enjoy the option of full data storage direct to a USB Flash Drive (memory stick) or to an external data logger.

#### Software & Data Analysis

Conveniently view sensor data and information via a computer or your mobile device.





Soil Moisture & Soil Temperature



Stevens HydraProbe (Optional)

"I am into my second year with my CFLUX-1 systems and continue to be impressed with how low maintenance they are. They keep collecting great data with very minimal effort on my lab's part."

Caitlin Hicks Pries
Dartmouth College

With all key components built into a single station, there is no limit to where systems can be placed in the field. No need for multiplexing chambers!

#### Already have our CIRAS-3 or TARGAS-1 Portable Photosynthesis Systems?

Expand these already highly portable and versatile instruments with our environmental chambers and sensors. Check the chart below for compatibility.



Chambers & Sensors	EGM-5	TARGAS-1	CIRAS-3
SRC-2 Soil Respiration Chamber	•	•	•
CPY-5 Canopy Assimilation Chamber	•	•	•
STP-2 Soil Temperature Probe	•	•	
Stevens HydraProbe (Soil Moisture & Soil Temperature)	•	•	

PP Systems has been in the soil and canopy CO<sub>2</sub> flux business since 1984. Trusted as the industry standard, our products are well proven, tested and widely published in scientific literature. The innovation and design built into our products is the result of many years of experience as well as working closely with experts in the field of soil and canopy flux measurement. When you compare technical specifications, performance, reliability, and reputation, you will not find better all-around, field-portable solutions for high-level research.

### Accurate • Reliable • Field-Proven



If you would like to learn more about this application or speak with one of our experienced technical staff, please feel free to get in direct contact with us via any of the contact information listed below:

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