SRC-1 Soil Respiration Chamber

For use with the EGM, CIRAS-1, CIRAS-2, & CIRAS-3 Portable Photosynthesis Systems

The SRC-1 Soil Respiration Chamber is compatible with all EGM models as well as the CIRAS-1, CIRAS-2, and CIRAS-3 Portable Photosynthesis Systems.

The method of measuring soil respiration is that described by Dr. K.J. Parkinson in 1981, where a chamber of known volume is placed on the soil and the rate of increase in CO_2 within the chamber is monitored. In the original method, air samples were withdrawn at one minute intervals and separately analyzed. With this system, the air is continuously sampled in a closed circuit through the EGM or CIRAS, and the soil respiration rate is calculated, displayed and recorded by the analyzer. The air within the chamber is carefully mixed to ensure representative sampling without generating pressure differences which would affect the evolution of CO_2 from the soil surface.

An optional STP-1 Soil Temperature Probe is also available for use with all EGM's, CIRAS-1, CIRAS-2, and CIRAS-3 Systems. It is suitable for static temperature measurements where a robust unit is required. The sensor is mounted in the tip of a stainless steel tube and protected by a stainless steel cap.

SRC-1 Soil Respiration Chamber Specifications

Chamber Materials	Rugged PVC with stainless steel ring
Measurement Range	0 - 9.99 g CO_2/m^2/hour
Fan	12V DC
Dimensions	150mm H x 100mm D (excluding handle)
Weight	0.9 kg.

STP-1 Soil Temperature Probe Specifications

Probe Construction	Electronics housed in anodized aluminium with stainless steel tip (sensor housing)
Connector	1 Meter cable fitted with appropriate connector
Power Supply	7. - 12V DC @ 33 mA
Measurement Range	0 - 50 ^oC
Accuracy	0.5 ^oC
Output	0-1V
Dimensions	400mm L x 19mm D (excluding handle)
Weight	0.2 kg.

Contact Us At:
PP Systems - 110 Haverhill Rd., Suite 301 - Amesbury, MA 01913 U.S.A.
Tel: +1 978-834-0505 Fax: +1 978-834-0545

E-Data Sheet