

PLC5 (N) Automatic Narrow Leaf Cuvette



For Use With CIRAS-1 and CIRAS-2 Portable Photosynthesis Systems

The PLC5 (N) Automatic Leaf Cuvette is designed specifically for measurement on grasses and cereal crops. Our innovative design features a wide range of temperature control from approximately 10 °C below ambient up to 40 °C.

This lightweight cuvette has a simple and convenient thumb-clamping mechanism allowing you to set the leaf material inside the cuvette with ease greatly reducing the risk of damage to the sample. Excellent cuvette air mixing is ensured using a specially designed motor and stirring fan to minimize boundary layer resistance.

Specifications

Cuvette Materials	Aluminium Alloy
Window Material	Glass IR Interference Filter
Window Size	50mm L x 20mm W
Leaf Seal	Closed cell foam gaskets
Impeller	Stainless steel
Air Temperature Sensor	Precision Thermistor Software Linearization: +/- 0.10 °C from 0 °C - 60 °C Accuracy: +/- 0.3 °C at 25 °C
Leaf Temperature	Energy Balance
PAR Sensor	Filtered Silicon Cell (Cosine Corrected) Response: 400-700 nm Precision: 10 μmol m ⁻² s ⁻¹
Temperature Control Range	Automatic from approximately 10 °C below ambient up to 40 °C.
Handle Dimensions	29 cm L x 4.5 cm D
Weight	0.9 kg.

A PAR sensor is located inside the cuvette near the sample providing accurate determination of PAR (Photosynthetically Active Radiation) in the range of 0-3,000 μmol m⁻² s⁻¹.

Air temperature is accurately measured using a precision thermistor. Leaf temperature is calculated based on an energy balance.

An optional quartz halogen light source is also available for automatic control of light (0-1,100 μmol m⁻² s⁻¹) if required.

A “Manual” version of the PLC5 (N) Narrow Leaf Cuvette is available for measurements under ambient conditions. An optional light unit is also available for use with the

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