

PLC5 (N)

Automatic Narrow Leaf Cuvette

For over 25 years, PP Systems has been manufacturing leaf cuvettes and soil/canopy chambers for researchers worldwide. The **PLC5 (N)** is designed specifically for measurement on grasses and cereal crops. Our innovative design provides automatic temperature control from approximately 8 °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 leaf sample. Excellent cuvette air mixing is ensured using a carefully selected motor and stirring fan to minimize boundary layer resistance. A PAR sensor is located inside the cuvette near the leaf sample providing accurate determination of PAR (Photosynthetically Active Radiation). Air temperature is accurately measured using a precision thermistor. Leaf temperature is calculated based on an energy balance.

Automatic Light Control (Optional)

An LED light unit is available for use with the PLC5 (N) for automatic control of light from 0-1,100 $\mu\text{mol m}^{-2} \text{s}^{-1}$.



Technical Specification

Cuvette Materials

Components: Aluminum alloy
Window: Glass IR interference filter
Leaf gasket: Closed cell foam
Impeller: Stainless steel

Window Size

80 mm L x 30 mm W

Air Temperature Sensor

Precision Thermistor
Software Linearization: +/- 0.10 °C from 0-60 °C
Accuracy: +/- 0.3 °C at 25 °C

PAR Sensor

Filtered silicon cell (fully cosine corrected)
Range: 0-3,000 $\mu\text{mol m}^{-2} \text{s}^{-1}$
Precision: 10 $\mu\text{mol m}^{-2} \text{s}^{-1}$

Automatic Temperature Control

Peltier elements mounted to the cuvettes and fitted with heat sinks and fans
Control Range: Approx. 8 °C below ambient up to +40 °C

Automatic Light Control (Optional)

LED (red and white) light unit
Control Range: 0-1,100 $\mu\text{mol m}^{-2} \text{s}^{-1}$

Handle Dimensions

29 cm Length x 4.5 cm Diameter

Weight

0.9 kg

PP Systems is continuously updating its products and reserves the right to amend product specifications without notice.

Convert from PLC5 (N) Narrow to PLC5 (C) Automatic Conifer Leaf Cuvette

A head plate is available to easily convert the cuvette head to a PLC5 (C) Automatic Conifer Leaf Cuvette.

For further information,
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