



The Ultra Compact Photosynthesis System



Designed for field use

Weighing only 2kg

Affordable and robust, with 2 year warranty

Miniaturised analyser in chamber head

Real time graphic display

Widest range of plant chambers for experimental applications

The smallest, lightest photosynthesis system from ADC Bioscientific Ltd.

The LCi comes with incredibly user friendly software and data management via SD card.

An advanced yet affordable research instrument in use worldwide to investigate current topics such as commercial crop response to environmental stresses.

Now available with PLU5 White LED light unit, controllable up to 2,000 $\mu\text{mol s}^{-1}$.



Technical Specification

Measurement range and technique:

CO₂: 0-2000ppm, 1ppm resolution
Infrared gas analysis; differential open system, auto zero, automatic atmospheric pressure and temperature compensation

H₂O: 0-75mbar, 0.1mbar resolution
Two laser-trimmed, fast response water vapour sensors

PAR: 0-3000 μ mol m⁻² sec⁻¹
Silicon photocell

Chamber Temperature: -5°C to 50°C
Precision thermistor
+/- 0.2°C accuracy

Direct Leaf Temperature: -5°C to 50°C Self positioning microchip thermistor/Energy balance/manually positioned thermistor

Flow rate to leaf chamber: 100 to 500ml min⁻¹

Automatic Environmental Control:

Programming: Internal LC*pro*-SD menu drive software. Automatic and independent control of environmental conditions within the leaf chamber. For automatic response curves, sequential control levels and dwell times may be set.

CO₂: Up to 2000ppm CO₂, by integral elevated CO₂ supply system

H₂O: Above and below ambient (dependent on ambient conditions), by on-board self-indicating conditioning chemicals

Temperature: Micro-peltier element. Broad chamber typically +/- 14°C from ambient. Other chambers with temperature control better than +/- 10°C from ambient.

PAR: Up to 2000 μ mol m⁻² sec⁻¹, (conifer up to 1500 μ mol m⁻² sec⁻¹) by high efficiency, low heat output, mixed red-blue LED array unit.

Warm up time: 5 minutes @ 20°C

Display: 240 x 64 dot matrix super twist graphic LCD

Recorded Data: Removable SD cards typically store 16 million sets of data on a 1GB card.

Battery: 7.0Ah 12V lead acid battery
Up to 16 hours between charges

Battery Charger: Universal input voltage intelligent control

Electrical Outputs: Mini-B
USB connection: Function as a mass storage device

RS232 output: 9 Pin "D" type
User-selectable rates of up to 230400 baud for computer or printer connection

Operating temperature range: 5°C to 45°C

Dimensions H X W X D:

Console: 230 x 110 x 170mm

Plant Leaf Chamber: 300 x 80 x 75mm

Weight:

Console: 4.5kg
Plant Leaf Chamber: 0.8kg