LI-600 Porometer/Fluorometer Quick Start Guide

Online resources

lacksquare

Computer Software

Configuration and data management, calibration, barcode generator: licor.com/600software

Instruction Manual

Operating instructions, maintenance, and theory of operation: licor.com/600manual

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Technical Support

Manuals, software, videos, FAQs, tech tips, application notes, and more: <u>licor.com/600support</u>

What's what

1 Aperture: Active measurement site, surrounds the leaf gasket.

2 Enter button: Powers on, selects options, initiates or logs a measurement.

3 USB port: Charges and connects to a computer with a micro-USB cable.

4 Fluorometer: (Optional) Measures PAM chlorophyll a fluorescence.

5 Porometer: Measures stomatal conductance.



Charge the battery

The LI-600 arrives partially charged. Connect the LI-600 to a power source with the USB cable and charge to 100%.

Take a measurement in auto mode

The following instructions are for the preloaded **Auto** configuration on the instrument.

Step 1: Power on the LI-600.

Press and hold the Enter button.

Step 2: Select a configuration.

The **Select Configuration** screen will appear with two configurations. Select the Auto configuration and press the **Enter button**.

Step 3: Take a measurement and view the data.

The LI-600 will match and go to the Measurement screen. Clamp onto a leaf at the prompt. The LI-600 will search for stability, then log a measurement and beep when stability is reached. Release the leaf and view your data on the display. Press the **Enter button** to initiate a new measurement, or press the left arrow twice to navigate to **Settings** to shut down the instrument.

Step 4: Download the data.

To download data, install the LI-600 computer software. Connect the LI-600 to the computer via USB and download the data to the computer software. Export the data from the software as a .zip file that contains .csv and Excel files.



Working in auto mode

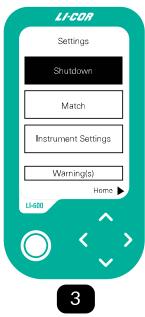
The workflow for taking a measurement will vary depending on settings in the configuration. The following is for auto mode with prompt on log disabled. See the user manual for detailed instructions on those settings.



Select Configuration and Press the Enter button.
The instrument will match.



Clamp to a leaf. The LI-600 will automatically log a measurement. Unclamp the leaf and press the Enter button to initiate a new measurement.



When finished, press the left arrow twice, select Shutdown and press the Enter button.

Measurement techniques

- Fully fill the aperture with the leaf. To get reliable stomatal conductance readings, the chamber must be covered and sealed.
- Maintain the original orientation of the leaf. Do not alter the angle or positioning of the leaf you are measuring.
- Maintain the light conditions of the leaf. Do not alter the light or shade the leaf you are measuring. If, while taking a measurement, you shade the leaf you plan to measure next, unshade the leaf and wait 60 seconds before measuring it.
- Match the quantum sensor's light conditions to those of the leaf. If the leaf you measure is in the light, ensure that the quantum sensor is also in the light. A mismatch between the leaf and the quantum sensor may result in a significant error in ETR calculation.
- Avoid measuring a wet leaf. If the leaf has water or condensation on it, gently and thoroughly dry the top and bottom of the leaf. Measuring
 a wet leaf may result in overestimation of stomatal conductance, and water ingress into the instrument may cause damage.
- Avoid clamping onto the veins of the leaf. The uneven surface may prevent the aperture clamp from properly sealing.

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