



CI-202 Portable Laser Leaf Area Meter

DESCRIPTION

The CI-202 Portable Laser Area Meter uses advanced laser technology to provide researchers with a precise and convenient way to measure leaf area. The high-resolution laser scanner, data logger, and display are all enclosed in a durable, handheld scanner and detachable palette.

The CI-202 is used to perform non-destructive measurements on the leaves of living plants by placing the leaf on the palette and sliding the scanner over the leaf, enabling collection of data from the same plant, or even the same leaf, throughout its life span. The transparent, protective sheath on the palette makes it easy to capture precise leaf area measurement on tender or intricate leaves.

Weight and dimension

Dimensions: 38.5L x 29W x 12.5H cm

Weight: 1,500g

Display: 16 characters x 2 lines LCD

Scanning Speed: 200mm/second

Battery: 7.2 volt rechargeable NiMH

Battery Capacity: Over 250 scans per charge

Operating Temperature: 0-50°C



CI-202 Portable Laser Leaf Area Meter:

Collect precise leaf area measurements with this high-resolution, battery-powered laser scanner. Durable and self-contained, researchers use the CI-202 in the field or in the lab to measure virtually any type of leaf, needle, or seed. Store more than 8000 data points on the device and export for further statistical analysis.

To measure a leaf, lift the transparent film, place the leaf on the palette, place the transparent film over the leaf, and slide the laser scanner over the board. The CI-202 yields instant results for

leaf area, length, width, perimeter, ratio, and shape factor measurements.



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THEORY OF OPERATION

The CI-202 measures length, width, area, and perimeter, and calculates ratio and shape factor once a measurement is completed.

Each time the control unit detects that the laser scanner has progressed 1 mm, the computer checks to see if the width reading is non-zero. If the width measurement is non-zero, the computer takes the following actions:

- The length measurement is increased by 1 mm.
- The width measurement is added to the area accumulator.
- If the width measurement is greater than the currently stored maximum width, the maximum

Product Features:

- Measures area, length, width, and perimeter and calculates shape factor and ratio
- Non-destructive and versatile Flattens curled leaves to provide precise measurements
- Resolution of .01cm² Simple, straight-forward operation
- Stores up to 8,000 single measurements
- Lightweight and self-contained instrument with built-in data logger and LCD display
- Rechargeable battery
- USB port transfers data to computer and charges the device as needed
- No user calibration required
- Includes operational manual and hard-shell carrying case

APPLICATIONS

- Botanists use the CI-202 to quantify phenotypic changes of measure leaf area in-situ
- Plant physiologists use the CI-202 to measure leaves and relate changes in shape characteristic to physiological function.
- Scientists apply the CI-202 to a range of organic and inorganic materials, like seeds, wings, and manufactured parts
- Ecophysiological differences between fringe and dwarf *Avicennia marina* mangroves
- Food plant selection by stick insects (Phasmida) in a Bornean rain forest

Contact info



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Durable and Field-Ready

This Instrument is manufactured by our principle company

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