



KLABS Fully Automatic Portable Leaf Area Meter



Product Description

The KLABS Fully Automatic Portable Leaf Area Meter is a high-precision handheld instrument designed for rapid and accurate measurement of leaf characteristics in laboratory and field environments. Featuring an advanced photosensitive sensing system, large color display, rechargeable lithium-ion battery, Bluetooth connectivity, and Type-C data transfer, it provides fast, reliable, and non-destructive leaf analysis for agricultural, botanical, forestry, and environmental research applications.



Working Principle

- The instrument measures leaf parameters by scanning the leaf surface using a high-precision photosensitive sensor and magnetic rotary encoder.
- During scanning, the system automatically calculates leaf dimensions, leaf area, perimeter, and other geometric characteristics while displaying the measurement results on the built-in LCD.
- Measurement data can be stored in the internal memory, transferred through the Type-C interface, or synchronized via the Bluetooth application for convenient data management and further analysis.

Characteristics

- **Measurement Function:** Measures leaf length, leaf width, aspect ratio, perimeter, leaf area, shape factor, and ambient temperature with high accuracy.
- **Bluetooth App Function:** Supports wireless data transfer, hardware program upgrades, and synchronization of longitude and latitude information with the instrument.
- **Data Viewing:** Allows browsing of historical measurement data and stored leaf shape records directly from the instrument memory.
- **Time Function:** Built-in date and time functions automatically save the measurement time along with the recorded data.
- **Data Transmission:** Equipped with a Type-C interface for data transfer and battery charging. Supports universal Type-C cables and is driver-free for plug-and-play operation.
- **Power Supply:** Features a rechargeable lithium battery with low power consumption, providing up to 16 hours of continuous operation. Designed for safe, reliable, and easy maintenance.
- **Portable Design:** Highly integrated, lightweight, and easy to operate, making it suitable for both indoor and outdoor applications.

Application/ Uses

- Agricultural Research
- Crop Science Laboratories
- Plant Physiology Studies
- Forestry Research
- Botanical Research
- Horticulture Research
- Environmental Monitoring
- Plant Breeding Programs
- Universities & Educational Institutions
- Greenhouse Research
- Seed Technology Laboratories
- Biological Research Centers

Technical Specification

Description	Details
Operatonhumidity	0%~100%RH (Frost ree)
Working Temperature	0~40 °C
LCD	480*854 RGB Chinese interface display
Battery	5AH, rechargeable lithium-ion battery, 16h endurance
Max scan length	3000 mm
Max effective scanning width	210 mm
Scanning speed	150mm/s
Sensor	Photosensitive sensor, magnetic rotary encoder
Unit of measure	mm,mm ² Max scan length: 3000 mm
Max effective scanning width	210 mm Scanning speed: 150mm/s
Accuracy of area measurement	< ±2% FULL
Length resolution	0.1 mm
Width resolution	0.1 mm
Max measured thickness	≤6.5 mm
Interface	Type-C Data interface/charging interface
Internal Memory	Interior storage: stored with 1000 groups of measurement data; Extended storage: 29G, large storage space
Overall Dimensions	420*50*54 mm