

Chlorophyll Meter *Model : SPAD-502PLUS*

Changes in measurement data over time can be seen, and abnormal values can be noticed at a glance.

Compact and lightweight for portability

The SPAD-502Plus is small enough to fit in a pocket and is extremely lightweight (only 200 g) so it can be easily taken anywhere.

Quick, easy measurements

Measurements are taken by simply inserting a leaf and closing the measuring head. It is not necessary to cut the leaf, so the same leaf can be measured throughout the growing process.

Water-resistant

The SPAD-502Plus is water-resistant (IPX-4), so it can be used outside even in the rain.

*It is not immersible, and should not be cleaned with water.

Low power consumption

The SPAD-502Plus uses LED light sources, resulting in extremely low power consumption. One set of two AA-size alkaline-manganese batteries can provide approximately 20,000 measurements.

Small measuring area

The measuring area is only 2 x 3 mm, allowing measurements of even small leaves. A sliding depth stop is included for accurate positioning on sample leaves.

High accuracy

High measuring accuracy (± 1.0 SPAD unit for rice-plant leaves) allows close examination of growing conditions.

The SPAD-502Plus has memory space for 30 measurements. Data in memory can be recalled or deleted at a later time, and the average value of all data in memory can be automatically calculated.



Reading checker

A reading checker enables users to check that the SPAD-502 is functioning correctly and providing accurate readings.

Names of parts



Specifications

Measurement subject	Crop leaves	
Measurement method	Optical density difference at 2 wavelengths	
Measurement area	2 mm×3 mm	
Subject thickness	1.2 mm maximum	
Subject insertion depth	12 mm (with stopper having position adjustable from 0 to 6 mm)	
Light source	2 LED elements	
Receptor	1 SPD (silicon photodiode)	
Display	LCD panel showing 4-digit measurement value (values shown to first decimal place) and 2-digit number of measurements; Trend graph of values in memory can also be shown.	
Display range	-9.9 to 199.9 SPAD units	
Memory function	Memory capacity for up to 30 values; Calculation/display of average of data in memory also possible	
Power	2 AA-size alkaline batteries	
Battery performance	More than 20,000 measurements (when using new alkaline batteries under Konica Minolta test conditions)	
Minumum measurement interval	Approx. 2 seconds	
Accuracy	Within ±1.0 SPAD units (for SPAD value between 0.0 and 50.0 under normal temperature/humidity) *** added to display when measurement exceeds 50.0 SPAD units	
Repeatability	Within ±0.3 SPAD units	For SPAD value between 0.0 and 50.0 (with no change in sample position)
Reproducibility	Within ±0.5 SPAD units	
Temperature drift	Within ±0.04 SPAD units/°C	
Operation temperature/humidity range	0 to 50°C; Relative humidity of 85% or less (at 35°C) with no condensation	
Storage temperature/humidity range	-20 to 55°C; Relative humidity of 85% or less (at 35°C) with no condensation	
Size(WxHxD), Weight	78 x 164 x 49 mm, 200g (excluding batteries)	
Other functions	Warning buzzer; User compensation factor	
Standard accessories	Depth stop; Strap; 2 AA-size alkaline batteries; Soft case; Reading checker	