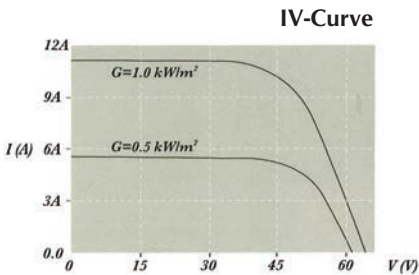


Solar Panels



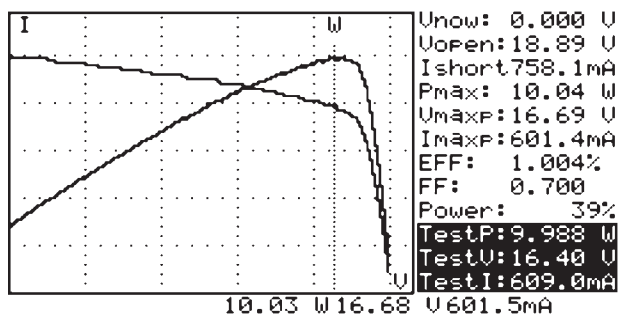
9009

MECO Solar Module Analyzer Model 9009 is a portable analyzer used for testing, maintenance and finding efficiency of various parameters of solar panels and cells. Analyzer can be used to design Solar System to generate specific power. It can identify Solar Power System requirement, best angle of Solar Panel installation and Broken / Worn-out cells

## Features

- I-V Curve Test for Solar Panel/Module/Cell
- Max. Solar Panel/Module/Cell Power (Pmax) search by Auto-Scan: 60V, 12A (500W Capability)
- Best Resolution: 1mV, 1mA
- Manual Single Point I-V Test
- Max. Voltage (Vmaxp) at Pmax
- Max. Current (Imaxp) at Pmax
- Voltage at Open Circuit (Vopen)
- Current at Short Circuit (Ishort)
- I-V Curve with Cursor to Display each Data Point
- Efficiency (%) Calculation of Solar Panel
- Solar Panel Area Setting: 0.001 m<sup>2</sup> ~ 9999 m<sup>2</sup>
- Standard Light Source Setting: 10 W/m<sup>2</sup> ~ 1000 W/m<sup>2</sup>
- Communicate with PC via USB Cable
- AC Adaptor and Rechargeable Lithium Battery
- Memory Size: 100 Records
- Sampling Time of Data Logging: 0 ~ 99 min.
- Large LCD with Backlight

## IV-Curve



## General Specifications

<b>Battery Type</b>	Rechargeable Lithium Battery, 3400mAh
<b>Battery Life</b>	400 times of linear scan from 60V to 0V and 0A to 12A.
<b>Data Logging Memory Size</b>	100 records
<b>AC Adaptor</b>	AC 110 ~ 240V Input, DC 15V / 1 ~ 3A Output
<b>Standards</b>	EN 61326 - 1:2006 EN 61010 - 1:2001 CAT I 60V Pollution Degree 2
<b>Operation Environment</b>	5°C ~ 50°C, <85% RH
<b>Temperature Coefficient</b>	0.1% of full scale / °C (<18°C or >28°C)
<b>Storage Environment</b>	-20°C ~ 60°C, <75% RH
<b>Dimension</b>	257 x 155 x 57mm (approx.)
<b>Weight</b>	1160gms Including Battery (approx.)
<b>Accessories</b>	User Manual x 1, AC Adaptor x 1, Optical USB Cable x 1, Rechargeable Lithium Battery (installed) x 1, Software CD x 1, Software Manual x 1, Kelvin Clips (12A max) x 1 Set, 4 Wire to 2 Wire Connector (10A Max and 12A for 1minute) x 1 set, Carrying Bag x 1

**Electrical Specifications** (23°C ± 5°C, Four-Wire Measurement  
Maximum Power Limit is 500W)

## DC Voltage Measurement

Range	Resolution	Accuracy
0 – 10V	0.001V	$\pm 1\% \pm (1\% \text{ of } V_{open} \pm 0.1V)$
10 – 60V	0.01V	$\pm 1\% \pm (1\% \text{ of } V_{open} \pm 0.1V)$

**Vopen** : Open Circuit Voltage of Solar Cell or Module

## DC Current Measurement

Range	Resolution	Accuracy
0.01 – 10A	1mA	$\pm 1\% \pm (1\% \text{ of } I_{short} \pm 9mA)$
10 – 12A	10mA	$\pm 1\% \pm (1\% \text{ of } I_{short} \pm 0.09A)$

**Ishort** : Short Circuit Current of Solar Cell or Module

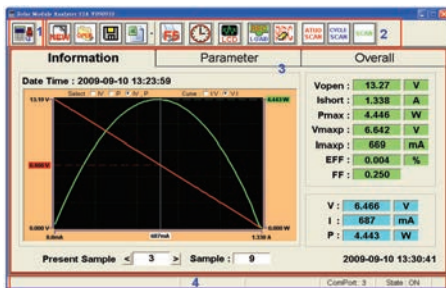
## DC Current Simulation

Range	Resolution	Accuracy
0.01 – 10A	1mA	$\pm 1\% \pm 9mA$
10 - 12A	10mA	$\pm 1\% \pm 0.09A$

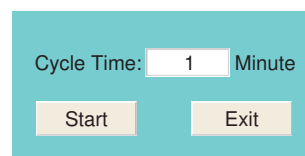
## User Interface & Data Acquisition Software

Solar Module Analyzer is supplied with user friendly software for Data Storing and Analysis. Users can store Data (.CSV/.TAB) that can be read in MS EXCEL and Print Waveform / Graph via Printer

### Software Window



### Cycle Scan



## Product Kit



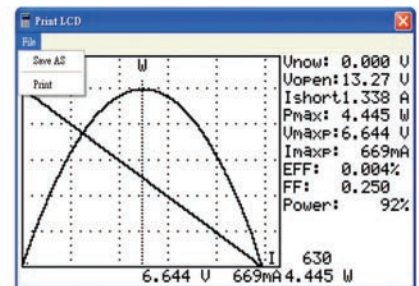
## Rear Panel Connections



## Applications

- Quality Control at Production Line, Warehouse or Site of Installation
- Identify Requirements of Solar Power System
- Maintenance of Solar Panels
- Verify the Best Installation Angles of Solar Panels
- Research and Development

## Print LCD



## 4 Wire Measurement



## Solar Panel Connections

