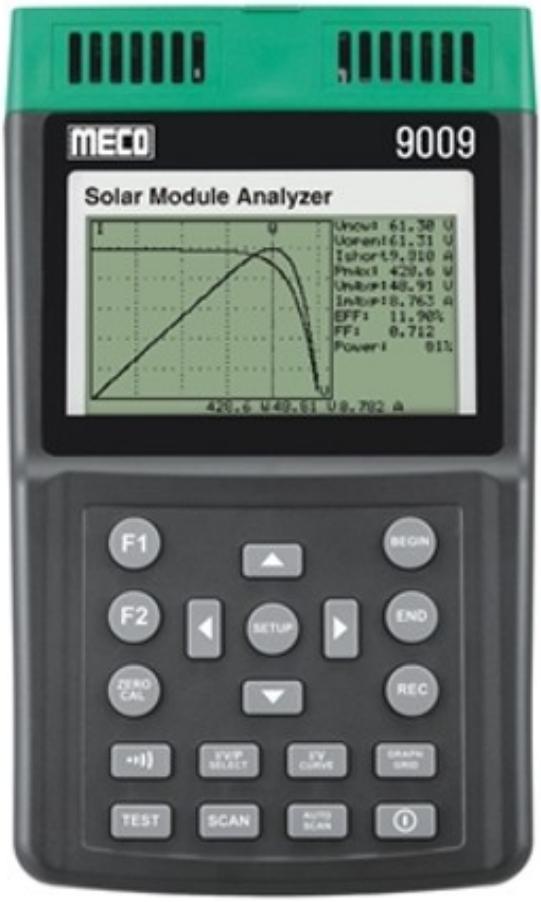


MECO 9009 Solar Module Analyzer Instructions

MECO®

Instructions



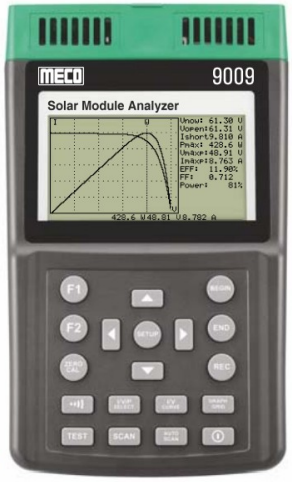
Solar Module Analyzer (Photovoltaic I-V Curve Tester)

Contents

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2 Features
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5 Product Kit
6 Documents / Resources
6.1 References

9009 Solar Module Analyzer





9009

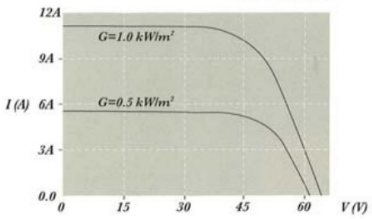
Solar Cell



Solar Panels



IV-Curve

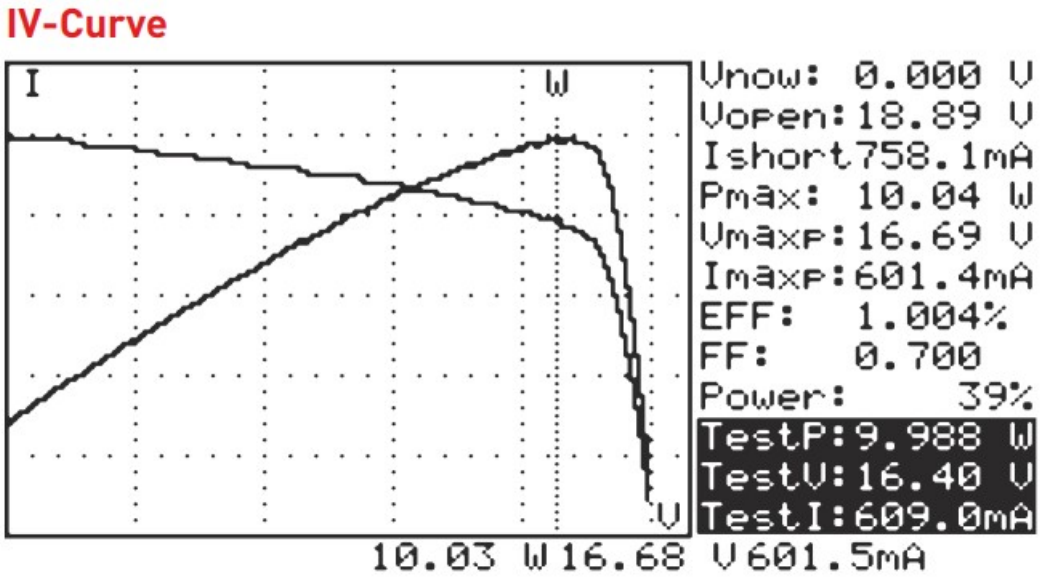


MECO Solar Module Analyzer Model 9009 is a portable analyzer used for testing, maintenance and finding efficiency of various parameters of solar panels and cells. Analyzer can be used to design Solar System to generate specific power. It can identify Solar Power System requirement, best angle of Solar 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 22
- Solar Panel Area Setting : 0.001 m ~ 9999 m 22
- Standard Light Source Setting : 10 W/m ~ 1000 W/m
- 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



General Specifications

Battery Type	Rechargeable Lithium Battery, 3400mAh
Battery Life	400 times of linear scan from 60V to 0V and 0A to 12A.
Data Logging Memory Size	100 records
AC Adaptor	AC 110 ~ 240V Input, DC 15V / 1 ~ 3A Output
Standards	EN 61326 – 1:2006 EN 61010 – 1:2001 CAT I 60V Pollution Degree 2
Operation Environment	5 °C ~ 50 °C, <85% RH
Temperature Coefficient	0.1% of full scale / °C(<18 °C or >28 °C)
Storage Environment	-20 °C ~ 60 °C, <75% RH
Dimension	257 x 155 x 57mm (approx.)
Weight	1160gms Including Battery (approx.)
Accessories	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 0 °C±5 0 °C, Four-Wire Measurement Maximum Power Limit is 500W)
DC Voltage Measurement

Range	Resolution	Accuracy
0 ~ 10V	0.001V	± 1% ± (1% of Vopen ± 0.1V)
10 ~ 60V	0.01V	± 1% ± (1% of Vopen ± 0.1V)

Vopen : Open Circuit Voltage of Solar Cell or Module
DC Current Measurement

Range	Resolution	Accuracy
0.01 ~ 10A	1mA	± 1% ± (1% of Ishort ± 9mA)
10 ~ 12A	10mA	± 1% ± (1% of Ishort ± 0.09A)

Ishort : Short Circuit Current of Solar Cell or Module
DC Current Simulation

Range	Resolution	Accuracy
0.01 ~ 10A	1mA	± 1% ± 9mA
10 ~ 12A	10mA	± 1% ± 0.09A



Applications

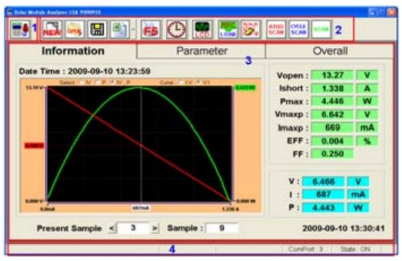
- Quality Control at Production Line, Warehouse or Site of Installation
- Identify Requirements of Solar Power System
- Maintenance of Solar Panels
- Verify the Best Installation Angles of Solar Panels

- Research and Development

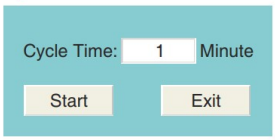
User Interface & Data Acquisition Software

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

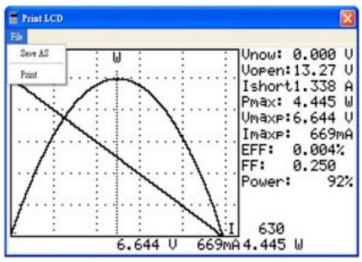
Software Window



Cycle Scan



Print LCD



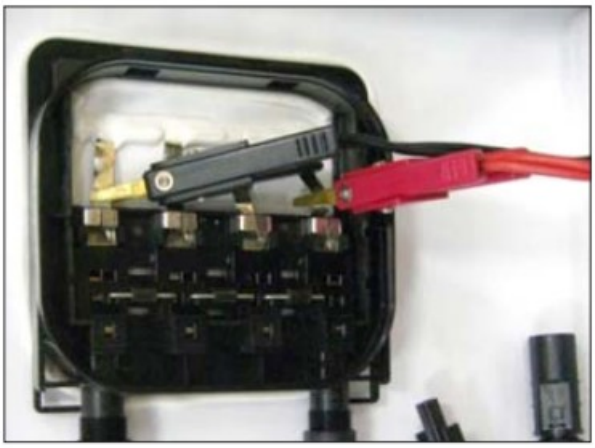
Product Kit



4 Wire Measurement

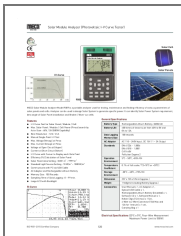


Solar Panel Connections



ISO 9001-2015 Certified Company
www.mecoinst.com

Documents / Resources

	MECO 9009 Solar Module Analyzer [pdf] Instructions 9009 Solar Module Analyzer, 9009, Solar Module Analyzer, Module Analyzer, Analyzer

References

- Panel and Switchboard Instructments,Test And Measuring Instruments, Power and Harmonics Analyzers by Meco Instruments Pvt. Ltd. Mumbai.
- User Manual

Manuals+, Privacy Policy