

# PROVA 200A-24 Solar Module Analyzer

#### Features:

- I-V curve test for solar cell/panel
- Max. solar panel power (Pmax) search by auto-scan: 24V, 600mA
- Best resolution: 1mV, 10µA
- 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/m² ~ 1000 W/m²
- Communicate with PC via USB cable
- Min. power setting for alarm function
- Built-in calendar clock
- Built-in battery charging circuit
- AC power adapter
- Rechargeable lithium batteries: 11.1V 1600mAh x 1pc.
- Memory size: 100 records
- Large LCD with backlight
- **Application:** Quality control in the production line, warehouse, or site of installation.

Identify the solar power system requirement.

Maintenance of solar panels.

Verify the best installation angle of solar panels

# **Electrical Specifications:**

(23°C±5°C, four-wire measurement)

#### **DC Voltage Measurement:**

Range (24V / 600mA)	Resolution	Accuracy of Reading
0 ~ 10 V	0.001 V	±1% ± (1% of Vopen ± 9mV)
10 ~ 24 V	0.01 V	±1% ± (1% of Vopen ± 0.09V)

Vopen: open circuit voltage of solar cell or module.

#### **DC Current Measurement:**

Range	Resolution	Accuracy of Reading
(24V / 600mA)		
1 ~ 100 mA	0.01 mA	±1% ± (1% of Ishort ± 0.09mA)
100 ~ 600 mA	0.1 mA	±1% ± (1% of Ishort ± 0.9mA)

**Ishort:** short circuit current of solar cell or module.

Internal Resistance at Ishort: 0.05 Ohm.

#### **DC Current Simulation\***

Range	Resolution	Accuracy of Reading
(24V / 600mA)		
1 ~ 100 mA	0.01 mA	±1% ± 0.09mA
100 ~ 600 mA	0.1 mA	±1% ± 0.9mA

<sup>\*</sup> If current is greater than 600 mA, test (Auto-Scan, Scan, or Test) can not be performed.

## **General Specifications:**

Battery Type:	Rechargeable Lithium Battery (1600mAh)	
AC Power Adapter:	AC 100V~240V input, DC 12V / 1~3A output	
Data Logging Memory Size:	100 records	
Dimension:	257 (L) x 155 (W) x 57 (H) mm	
	10.1" (L) x 6.1" (W) x 2.2" (H)	
Weight:	1160g / 40.0oz (Batteries included)	
Operation Environment:	5°C ~ 50°C, 85% RH	
Temperature Coefficient:	0.1% of full scale / °C (<18°C or >28°C)	
Storage Environment:	-20℃ ~ 60℃, 75% RH	
Accessories:	User manual x 1, AC power adapter x 1,	
	Rechargeable lithium battery x 1,	
	Optical USB cable x 1, Software CD x 1,	
	Software manual x 1, Carrying bag x 1,	
	Kelvin clips (2 clips, 6A max) x 1 set,	
	4-wire to 2-wire connector x 1 set	



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<sup>\*</sup> Max. duration of simulation is 9.999 seconds if power is less than 100W.

<sup>\*</sup> Duration of simulation is 10m seconds if power is greater than 100W.