

## Model: SPG-AB1

# Solar Power Generator

Portable "Plug-and-play" Design



Standard 120V AC Power Inverter Included System Recharges with Solar Panel Portable Design with Rugged Enclosure Pre-engineered, Ready-To-Run Includes Solar Charger, Inverter and Batteries Use any 60 to 120 Watt Solar Panel To Re-charge

### APPLACATIONS

Emergency Power System Recreational Power System Festival or Fair Vendor Booth Power Trade Show Booth Power Supply

### DESCRIPTION

Unit comes pre-wired ready to use and includes a rugged portable enclosure with a hinged door. Each model includes all the required system components to get you up and running right out of the box. The externally mounted solar charge controller allows a standard 60 to 120 watt solar panel to re-charge the built-in batteries.

#### DC/AC Power Inverter

Unit converts the DC solar power into 120V AC voltage to power small appliances and consumer electronics.

#### Solar Charge Controller

Specifically designed for deep-cycle charging, the controller in this system features precise voltage and current regulation and over voltage cut off protection.

#### **Deep-cycle SLA Batteries**

Maintenance free, long life, high-energy sealed Lead Acid design provides years of reliable service under the most extreme conditions.



#### **GENERAL SPECIFICATIONS**

Max Ambient Temperature: -40 to 140 °F (-40 to 60 °C)

System Enclosure: Rugged Plastic

Max Run Time At Full Rated Output: See chart below

System Output: 12V DC, 120V AC

Estimated Battery Life: 4+ Years\*

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Includes Solar Charge Controller, Dc-Ac Power Inverter, Deep-cycle SLA Batteries, Portable Enclosure and Solar Power Cable

Model Number	SPG-AB1-75W	SPG-AB1-150W
Capacity (Fully Charged)	120V AC @150 Watts	120V AC @150 Watts
Recommended Solar Panel	60-120 Watts	60-120 Watts
Charge Controller	12V, 20A	12V, 20A
Battery Capacity	12V, 12 Ah (x2)	12V, 12 Ah (x2)
Max Load/Hour	75 Watts	150 Watts
120V AC Power Inverter	75 Watts	150 Watts



Solar Extension Cable Set Included

#### SYSTEM CAPACITY EXAMPLES

Model Number	SPG-AB1-75W	SPG-AB1-150W
Run Time @ 15 Watts/Hr Load	10 Hours	10 Hours
Run Time @ 25 Watts/Hr Load	6 Hours	6 Hours
Run Time @ 50 Watts/Hr Load	3 Hours	3 Hours
Run Time @ 75 Watts/Hr Load	2 Hours	2 Hours
Run Time @ 150 Watts/Hr Load	N/A	1 Hours

\*Battery life is dependent on system load, depth of charge cycles and ambient temperature conditions.







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#### IMPORTANT NOTES ABOUT THIS SYSTEM

- 1. A Solar panel is not included with this model. You must purchase a 12V, 60 to 120 watt panel separate.
- 2. A solar power cable 10 feet long is included with this unit. The cable includes standard MC4 connectors.
- 3. This unit is not waterproof and should not be used in a wet environment such as rain or snow.
- 4. This unit has a standard 12V DC receptacle where the inverter is plugged in.
- 5. The inverter included provides standard USB style charging ports.
- 6. The unit requires a solar panel connected that is placed in direct sunlight to re-charge.
- 7. The unit can still be used while being charged by the solar panel.
- 8. When the batteries are drained to 50% of their nominal capacity the solar charge controller will disconnect the batteries from the output load to prevent damage to the batteries by being drained to low. The stated system capacity run time in the table above is based on the 50% battery level cutoff.

#### Estimated Re-charge Time

Solar Panel Wattage	Average Re-charge Time
60 Watts	5-6 Hours
80 Watts	4-5 Hours
100 Watts	3-4 Hours
120 Watts	2-3 Hours

#### DC-AC 120V Power Inverter Included



Note: Continued product improvements make specifications subject to change without notice. Check www.imagineinstruments.com for the latest product information and updates

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