

SemiFlex Solar Panel with Integrated Charge Controller Operating Instructions

Soltronix Solar Panels include semi-flexible fiberglass backing and whole-cell design for maximum power and reliability.

To see our full line of solar products, accessories, and FAQs visit us at: www.powerfilmsolar.com

Important Notes

If the panel is wet, wipe it down before storing it in a cool dry environment.

All connections must be solar positive (red) to battery positive and solar negative (black or blue) to battery negative. Reversing can damage the solar panel. Consult your battery manufacturer if you have questions about the specifications of your battery.

How To Charge

1. Set the panel on the ground (or other surface) with the solar side facing up and pointing towards the sun.
2. Use the grommets on each of the corners and a tie cord to hold the panel in place and reduce loss or damage from high winds.
3. Connect the appropriate accessory and cable for the type of device you will be charging.

Charging Electronics

1. Connect the 12V Female Car Charger Adapter (RA-2) (not included) to the panel.
2. Use your own USB car charger adapter to connect your device to the RA-2 or use a 2.4A Dual USB 12V Adapter (RA-14B) (not included) to charge USB electronics.

Selecting A Battery

Soltronix Solar Panels are compatible with all 12V flooded lead acid and AGM batteries (10Ah or larger are recommended) and many LiFePO and Li-ion batteries (consult battery manufacturer to confirm solar compatibility).

Charging 12V Batteries

1. Connect the desired cable to the output of the charge controller or panel. Use the 15 ft. Extension Cord with O-ring Connectors (RA-11) (included) or 15 ft. Extension Cord with Alligator Clips (RA-8) (not included) when connecting directly to the battery. Use the 12V Male Car Charger Adapter (RA-1) (not included) when connecting through a

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vehicle's cigarette lighter or accessory outlet.

2. If using an RA-8 or RA-11, connect the red connector to the + battery connection and the blue or black connector to the - battery connection. If using the RA-1, plug into your vehicle's cigarette lighter or accessory outlet. Note: in some vehicles, these outlets are not connected to the battery when the ignition is off, so the solar panel will not charge the battery. Consult your vehicle's owner's manual for more information.

How To Clean Your Solar Panel

Use a damp cloth and a mild soap solution to wipe each of the panel's modules. Wait a few minutes for the panel to dry before folding and storing it.

Specifications

	27W	50W	110W
Operating Voltage	13.8 float, 14.5 max	13.8 float, 14.5 max	13.8 float, 14.5 max
Operating Current	1.5-2.0A	2.8-3.8A	6.0-8.5AA
Weight	1.5 lb / 0.7 kg	3.0 lb / 1.4 kg	5.5 lb / 2.5 kg
Dimensions (in/mm)	24.0 x 13.0 x 0.1 609.6 x 330.2 x 2.5	29.6 x 17.0 x 0.1 751.8 x 431.8 x 2.5	44.5 x 20.9 x 0.1 1,130.3 x 530.9 x 2.5

* Tests performed at Standard Test Conditions (STC) (Spectrum: AM1.5, Intensity: 1000W/m², Temperature: 25C). Power performance may vary due to temperature, spectral, and intensity variation.

Certifications

- CE (Directives 2014/30/EU and 2014/35/EU)
- MIL-STD-810G
- RoHS
- Berry Amendment Compliance

Full compliance statements are available at: www.powerfilmsolar.com