

flexible solar panel

Operating instructions

Product Description: Flexible solar panel for 12 Volt batteries.

Product Specifications (@ STC*):

Specifications	Sunslick 7 W	Sunslick 14 W	Sunslick 27 W
Operating Voltage (VDC)	15	15	15
Operating Current (mA)	450	900	1800
Weight (Kg)	0.48	0.90	1.5
Dimensions (mm)	350 x 695	350 x 1305	642 x 1305

* measured @ Standard Testing Conditions (STC): 1000W/m2, AM 1.5, 25°C

Temperature Operating Range: -20°C to +60°C

Disclaimer of Liability

This user manual contains safety, installation, performance, maintenance and technical information, which you should be familiar with before using your Flexcell solar panel. Please read it carefully!

Caution

Photovoltaic modules produce electricity when exposed to light. The voltage from a single module is not considered hazardous, however, if connected in series the shock hazard increases, due to increase in voltage.

When connecting the Sunslick to batteries and other electrical equipment, please observe industry standards and manufacturer's safety precautions.

"Rules to respect"

- Make electrical connections to or from the Sunslick preferably in low light conditions to reduce risk of electrical sparking.
- Make connections in a well-ventilated area free of flammable gases or vapours.
- Check polarity! All connections must be positive (Red, +) to positive; and negative (Black, -) to negative. Incorrect connection will damage the Sunslick and may result in electrical shock or fire hazard.
- DO NOT attempt to recharge NON-RECHARGEABLE batteries.
- Attach the Sunslick securely on a support structure to avoid the panel flapping in the wind.
- Always roll the Sunslick with the cell side (purple side) facing outwards.

Installation instructions

- 1) Select the best mounting location: Mount the Sunslick, with the cell side oriented to the sun, in a location that will receive direct sunlight throughout the day. For maximum performance position the solar panel to face the midday sun.
- 2) Use corner grommets to properly tie or fasten the Sunslick to a fixed structure. The solar panel must be sufficiently secured to avoid flapping in the wind.
- 3) If required, connect the solar panel cable to the 3 meter extension cable.

4) Identify the correct polarity (Red+, Black-) and connect the red terminal of the 3 m extension cable to the positive post of the battery, charge controller or any other 12 Volt device, and the black terminal to the negative post.

Warning: Reverse connection to the battery is a fire hazard and could damage your solar panel.

5) You may leave the panel permanently connected to your battery since a blocking diode in the panel's junction box prevents reverse leakage of current from the battery at night.

FAQs

How do I know which Sunslick size I need?

Consult the application chart below.

How do I know if the Sunslick is working?

You can check the solar panel output with a volt-meter.

Will this product drain my battery at night?

No. There is a built-in blocking diode to prevent reverse draining of current.

Can I leave the Sunslick outside permanently?

Yes, if properly attached and secured. Terminals should be kept clean and firmly connected.

What if the product gets wet?

The product is waterproof.

What if the product is submerged in water?

Simply wipe the Sunslick with a dry cloth. Avoid having the Sunslick completely submerged for an extended period of time.

How do I clean and maintain the sunslick?

The Sunslick requires practically no maintenance. Simply wipe the surface with a damp cloth or with a mild soap solution to clean the panel. Do not use any abrasive cleaner or solvent as this will damage the panel.

Do I need a charge controller?

A charge controller is used to prevent overcharging. A charge controller should be used if the current output of the solar panel (in Amps) is more than 1% of the battery capacity (in Amp-hours). Consult the battery manufacturer for complete battery information and recommendations. As an example, with a Sunslick 7 Watt (450 mA), a charge controller would be recommended with a battery that is less than 45 Amp-hours.

Troubleshooting

- 1) **Connection** - Inspect your wiring for any sign of loose wires or corrosion. Check polarity!
- 2) **Voltage** - Use a voltmeter to test the open circuit voltage between the positive (Red+) and negative (Black-) terminals.
- 3) **Battery** - Ensure that your battery continues to be able to be recharged. Contact your battery's manufacturer for more detailed guidelines on battery testing.
- 4) **Size** - Make sure you are using a properly sized system. Consult the application chart below for guidelines.

Installation

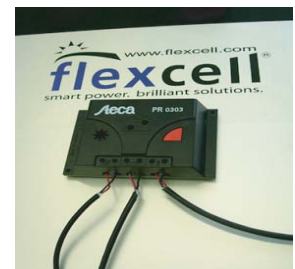
First connect your solar panel via the AMP Supersed IP67 waterproof connector to the 3 m extension cable (included).



Then either connect the Sunslick directly to a 12V battery with the appropriate terminals (not included).



or connect your Sunslick, your battery and your load (e.g. a light) to a charge controller (not included).



sunslick application chart

3 years warranty



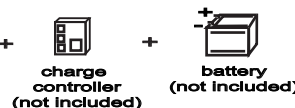
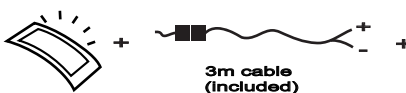
flexible



do not fold



waterproof



battery capacity (mAh) / charging time in hours (@STC*) :	600	900	1500	2000	4000	8000
7W 15VDC 450mA	1h20	2h00	3h20	4h30	9h00	18h00
14W 15VDC 900mA	0h40	1h00	1h40	2h15	4h30	9h00
27W 15VDC 1800mA	0h20	0h30	0h50	1h10	2h15	4h30