



SunSport 6 Amp - Advanced Solar Chargers

Our latest innovation in solar charge controllers, the SunSport series. Tough, easy to install and practically indestructible.

This high performance solar charge controller increases battery life by preventing overcharging. Starts charging at 2.5 battery volts.

The control also prevents power loss back into the solar modules at night, so an external blocking diode is not required.

Unique no battery drain - Battery standby power consumption is zero! In the dark they use absolutely zero power, ideal for PV systems where efficiency is important. Boaters can leave it connected all winter without draining the batteries. Other controls, which have a standby current draw, will drain the battery over the winter with no solar input, reducing the freeze protection of the battery.

Efficient Design - our latest innovation; automatic nighttime shutdown with an intelligent design results in the controller using < 1/10th the power of the industry average. Other controls stay on all night, wasting precious power. **Save up to 10% more power from a 5 Watt module.**

Safer - SunSport controls have **more built in protection and safety features** than any others on the market. They feature automatic over-temperature shutdown, protection from battery removal conditions, over-current, solar and battery reverse polarity, short circuit and over-voltage protection of the inputs and outputs. Eco Energy is the first to combine all of these safety features into one controller. In remote applications, there is no need to worry about accidentally damaging the controllers.

Optional Dual Charging - can charge two separate batteries using only one solar module. Perfect for boats, RVs and other systems with two batteries.

Many innovations in a sleek new design. Going solar with confidence has never been easier.

[Install Manual \(208kB pdf\)](#)

The new [SunSport 6 Amp](#) charge controllers provide you with many benefits over the Sunguard.

	Morningstar Sunguard	Eco Energy SunSport 6 Amp	Benefit to You
Minimum Battery Charging	Approx 6 Volts	2.5 Volts	System keeps working longer
Battery Self Consumption	6 mA	0 mA - No Battery Drain	Save 1.8 Wh per day
Radio Interference	Unknown	No Interference	Better radio reception
Protection Circuits	Damaged by PV short circuit	Protected from PV short	Improved Reliability
Case Design	Plastic	Sleek Solid Aluminum Case	Improved Design
PV current	4.5 Amps	6.0 Amps	More Power
Display	No information	LED shows Charging	Easy to Check
Made in	Singapore	North America	Easy to customize for you

Features

- Unique - Zero Battery consumption
- Protection (PV & Batt), against short-circuit & reverse polarity, overload, over temperature & battery removal
- Can charge a completely discharged battery
- Extreme design -40° to +85°C (-40° to +185°F)
- Series design (not shunt)
- Reliable - 100% solid state
- No radio interference
- Silent
- No need to derate
- Fully encapsulated in epoxy potting
- Solid aluminum case
- 5 year warranty
- Manufactured with solar power
- Designed and built in North America

Model: S6

Electrical Specifications

Voltage configurations 12 volts (custom voltages 6 to 20 volts)
 Max. PV open circuit voltage 30 volts
 Max. Charging current (at 85 °C) 6 amps DC
 Battery consumption zero, 0.0 mA
 Typical solar consumption 8 mA daylight only, 3 mA without LED
 16 gauge wire leads
 Typical set points: Off: 14.1 Volts On: 13.3 Volts

General Specifications

Temperature range: -40° to +85°C -40° to +185°F
 Case: Solid aluminum case, completely sealed in epoxy
 Weight: 210 grams
 Size(H x W x D): 6.4 x 9.6 x 1.8 cm (2.5 x 3.75 by .6 inches)
 Mounting: wall mountable

Features & Options

Status Lights: 1 LED (charging)
 Regulation method Low frequency On-Off series type.
 Built in blocking diode.
 Custom voltage setpoints
 Custom wire lead lengths
 CSA Class I Div II Certification for Hazardous Locations

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