



SunScout Control System

Single-axis - Part SLR-CON1000
Dual-axis - Part SLR-CON2000
Power Supply - Part SLR-PWSP100

Data Specifications

Engineering and Manufacturing for the Renewable World



www.patriotsolargroup.com

Patriot Solar Group (PSG) is committed to providing the highest quality products and service in the industry. Our dedicated sales, engineering, and operations staff keeps the customer and the environment at the forefront of their minds while creating a customized solution to fit your renewable needs. PSG will work hand in hand with you from the conception of the project until completion. If you are in the market for a renewable solution and want more than "just a supplier" look to PSG for your manufacturing and engineering needs.

All Patriot Solar controllers are easy to install and program. The controllers use a time-based algorithm for tracking and can be set up to use photocells as the main tracking error, allowing proper tracking through clouds for high concentration systems.

SunScout Controllers



SunScout Control System



AC to DC Power Supply

Features/Benefits:

- ▶ Computes the position of the sun as a function of location and time of year, using precision crystal clock to calculate time
- ▶ System can have master clock reset to Web time or use reference photocell to pull clock back into <1 degree
- ▶ Two push buttons allow time set, date set and stow functions
- ▶ USB adapter port for RS 232 adapter
- ▶ Compatible with Hall Effect motor speed sensors, allowing easy integration to all types of gear motors



2.5 kW Single-axis Tracker



4.0 kW Dual-axis Trackers



5.0 kW Single-axis Tracker



2.0 kW Dual-axis Trackers

SunScout Control System

Single-axis - Part SLR-SUN1000

Dual-axis - Part SLR-SUN2000



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Controller Data:

Axis	1 or 2 axis available
Accuracy	+/- 0.3 degrees (typical, no optic sensor)
Input Voltage	Selectable 115 or 250VAC, 50-60Hz
Output Peak Current	13VDC, 12A
Output Voltage to Motors	13V
Average Power Consumption	5W
Motor Driver Output Current, Continuous	9Amps per channel
Motor Driver Output Current, Peak	30Amps per channel
Limit Switch Inputs, AZ	Magnetic or contact
Limit Switch Inputs, EL	Magnetic or contact
Encoder Inputs, AZ	Reed switch or Hall effect
Encoder Inputs, EL	Reed switch or Hall effect
Algorithm Type	Time-based
Communications	Monitoring capable
Displays	Two-color LED, two line LCD display
Data Display, Position	Azimuth, elevation angles, encoder
Data Display, Alarms and Others	Stow mode, wind, time, date
User Interface - Button Input	Two momentary contact pushbuttons
User Interface - Other Input	USB used for parameter set up

Environmental Data:

Enclosure Rating	NEMA 4X
Enclosure Material	Polymer
Enclosure Dimensions	6in x 6in x 4in (.15m x .15m x .1m)
Weight	2lbs (.91kg)
Power Supply	150W enclosed
AC Input	115Vac or 240Vac
Operating Temperatures	-40 °F/+130 °F

Options*:

High Wind Auto Stow	Available as upgrade
Backtracking Algorithm	Available as upgrade
Control Multipile Trackers	Available only on single-axis
Light Sensor	Available on CPV model
Power Supply Box	Standard on tracking systems, available as upgrade on stand alone controllers
Communications Monitoring Cable	Available as upgrade

Warranty

- ▶ Two (2) years on Electronics and Workmanship

All specifications subject to change without notice.

*Special part numbers for each of the options may apply.

Patriot Solar Group is dedicated to providing the highest quality units using only the best materials for solar and lighting products for home and commercial use that support renewable energy. Our products are environmentally safe, efficient, and affordable while offering the peace of mind of high durability able to withstand the ravages of wind, ice, and water. Our manufacturing processes are based on automotive quality standards to ensure high quality and reliability the first time.

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