

## Sun Charger<sup>™</sup> 30

30 Amp / 12 Volt Charge Controller

Introducing Sun Charger 30, Blue Sky Energy's new entry level PWM solar charge controller. We built a solid reputation developing some of the best Maximum Power Point Tracking controllers in the world. We are proud to add the top quality Sun Charger 30 to our product line for the budget minded consumer.

Blue Sky Energy's new Sun Charger 30 solar charge controller charges 12 volt batteries at up to 30 amps. The Sun Charger 30 uses precise PWM charge voltage control combined with a sophisticated 3-stage charge algorithm to optimally charge flooded, GEL or AGM lead-acid chemistry batteries. To periodically condition flooded batteries the Sun Charger 30 will also perform a manual or automatic Equalization charge.

The built in low power LED digital display combines excellent readability with very low power consumption, includes an automatic night time diming feature and may be turned off completely if desired. The high accuracy display shows battery voltage, solar charge current, and computes total solar charge amp-hours produced.

To provide optimal charge control for various battery types all charge settings are user adjustable. The automatic or manual Equalization and solar charge amp-hour counter features are unique to the Sun Charger 30.

The Sun Charger 30 will promote longer battery life by fully and properly charging batteries. Blue Sky Energy is a leading manufacture of solar panel charge controllers since 1998. We are recognized for producing reliable, quality products.

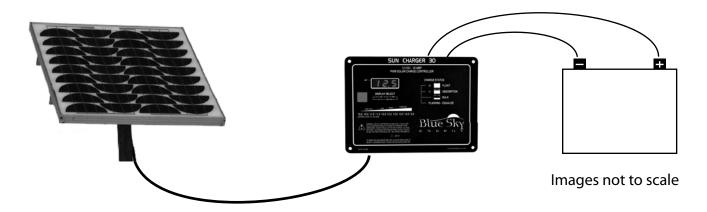
The Sun Charger 30 includes a 5 year warranty.



- Precise PWM charge voltage control
- 3-Stage charge control plus Equalization improves battery performance and life
- Low power LED digital display with auto night time dimming
- 12 Volt / 30 Amp rating supports a wide range of applications up to 450 watts of PV input
- Automatic night time disconnect
- Available battery temperature compensation
- Solar charge amp-hour counter
- Very low voltage drop
- Conformal coated electronics, anodized face plate and stainless steel fasteners resist corrosion
- Protection for reverse polarity, battery/PV swap, transient voltage, over current, over temperature
- Available with LVD and lighting control



## Typical illustration of solar panel to Sun Charger 30 to Battery



SPECIFICATIONS	Sun Charger 30		
Output Current Rating	30 Amp Maximum		
Nominal Battery Voltage	12 VDC		
PV Input Voltage	30 VDC Maximum (Recommended maximum PV Voc @ STC 24V)		
Power Consumption	14mA standby • 19mA display On		
Charge Algorithm	3-stage Bulk/Absorption/Float • plus Automatic/Manual Equalization		
Absorption Voltage/Float/EQ Voltage	14.4VDC / 13.2V / 15.2V • User Adjustable		
Temperature Compensation	Optional temperature sensor adjusts charge voltage setpoints based on measured battery temperature -5.00 mV/°C/cell correction factor (Range - 0.00 – -8.00 mV/°C/cell ) • sensor range -60 – +80°C		
Display Range Accuracy	Battery voltmeters, 30.0VDC ±0.50% FS • Output Ammeter, 35.0A ± 0.50% FS Amp-hour counter 999AH ±0.50% ±2AH		
Optional Lighting/Load Control	LVD, or LVD plus seperate PostDusk & PreDawn timers. 50mA drive signal for external power switch.  Available as part number SC30-LVD		
Environmental	-40 – +45°C, 10 – 90% RH non-condensing		
Warranty	5 Year Limited Warranty		
Panel Dimensions	4 5/8"H x 6 3/8"W x 1 1/4"D (11.75cm x 16.19cm x 3.18cm)		

## • Available From

## • Part Numbers & Shipping Weight

Sun Charger 30	SC30	1 lbs	0.46kg
SC30 w/load & lighting cont			
Battery Temp, sensor, 20' cab			