

Stackable Solar Charger / DC Load Controller



Features

- Solid-state Pulse Width Modulated (PWM) charging process with four-stage control, temperature compensation, and manual or automatic equalization to maximize system performance and increase battery life
- Three operating modes programmed: solar battery charging, DC diversion charge control or DC load control
- Electric overload and short circuit protection with automatic and manual reset capability increase the reliability of unattended systems by eliminating blown fuses and tripped circuit breakers
- LCD meter with easy to read mode/status messages built in for **SS-30C SS-45C SS-60C**
- An 8-position DIP switch to set up the controller for its intended use. All major functions can be set with DIP switches
- Rated for 12, 24, 48 volt systems, and 30, 45 or 60 amps current.
- Eight standard charging or Load programs selected with DIP switches
- LED indications and pushbutton functions
- Parallel connection for **SS-30C SS-45C SS-60C** (Max. 10 sets)
- Optional remote panel with LCD display for easy operation in distance

Specifications

MODEL	SS-30C	SS-45C	SS-60C
ELECTRICAL			
System voltage ratings	12, 24, 48 V dc		
Current ratings- Battery Charge Control	30A	45A	60A
Current ratings- Load Control	30A	45A	60A
Current ratings- Diversion Charge Control	30A Diversion load	45A Diversion load	60A Diversion load
Accuracy	12/24V : $\leq 0.1\% \pm 50\text{ mV}$ 48V : $\leq 0.1\% \pm 100\text{ mV}$		
Min. voltage to operate	9 V		
Max. solar array Voc	140 V		
Max. operating voltage	68 V		
Total current consumption	While operating -25mA, at idle -3mA		
High temp shutdown	90°C disconnect solar 90°C disconnect load / diversion load 70°C reconnect solar / load / diversion load		
Transient surge protection			
pulse power rating	4500 watts		
response	< 5 nanosec		

BATTERY CHARGING / BTS			
Charge algorithm	PWM, constant voltage		
Temp comp. coefficient	-5mV / °C / cell (25°C ref)		
Temp comp. range	0°C to +50°C		
Temp comp. setpoints	PWM, float, equalize (with BTS option)		
MECHANICAL			
Dimensions (mm)	H: 65/W: 236 /D: 35	H: 266/W: 127/D: 75	
Weight	0.8 kgs	1.5 kgs	
Power terminals	30A Rated	45A Rated	60A Rated
BTS / Sense terminals			
wire sizes	1.0 to 0.25 mm ² / 16 to 24 AWG		
torque	0.40 Nm / 3.5 in-lb		
ENVIRONMENTAL			
Ambient temperature	-40 to +50°C		
Storage temperature	-55 to +85°C		
Humidity	100% (NC)		
Enclosure	Indoor & vented, (powder coated steel)		