

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-45C and 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-45C and SS-60C (Max. 10 sets)
- Optional remote panel with LCD display for easy operation in distance
- Connection of SS-45C and SS-60C to CombiPlus/SuperCombi units to support "Green Power Smart Feature"

Specifications

Model No.	SS-30C	SS-45C	SS-60C
ELECTRICAL			
System Voltage Ratings	12, 24, 48 V d.c		
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	80°C disconnect solar 80°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 (HxWxD) mm	65 x 236 x 35	266 x 127 x 75	
Weight (kgs)	0.8	1.5	
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)