



The Powerful Advantage Since 1945

La MARCHÉ

ISO 9001:2015 CERTIFIED

SCP

SOLAR CHARGE PWM CONTROLLER



CLASS 1 DIV2 PENDING



P25-DSSCP-1
ECN 22406
12/19

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SCP

SOLAR CHARGE PWM CONTROLLER



The La Marche Solar Controller (SCP) is available in PWM technology (Pulse Width Modulation). The SCP regulates the voltage and current from the solar modules to properly charge the battery and supply the load.

The Solar Charge Controller is available in 10A and 20A versions with 12/24 V auto-select output. Both controller models features built-in protection for solar modules, batteries and load connetions. Additional features include Low Voltage Load Disconnect, Status LEDs, USB connection for diagnostic and parameters and an extra set of output terminals for additional loads.

Standard Features

- PWM Algorithms
- Intelligent Micro Controller
- High Efficiency
- Compact Design
- Status LED Indicators
- Bonus Power Terminal
- USB Connection
- Temperature Sensor
- Lightning and Surge Protection
- Solar/Battery Reverse Polarity Protection
- Overload and Short Circuit Protection
- Reverse Current Flow From Battery To Solar Module Protection
- 4 Stage Smart Charging:
Bulk, Absorption, Float and Equalize*
- Programmable for Sealed and Flooded Battery Types
- Low Voltage Load Disconnect (LVLD)

* For Flooded Batteries

Technical Specifications

ELECTRICAL	Nominal System Voltage	12V/24V
	Output Current (A)	10A 20A
	Nominal Max. Input Power	170W (12V) 340W (12V) 340W (24V) 680W (24V)
	Max. PV Open Circuit Voltage (Voc)	25V/50V
	Min. Solar Input Voltage (Voc) @ Start-up	15V/30V
	Solar Panel Recovery	17V/34V
	Battery Voltage Range	6V-15V 17V-30V
	Load Voltage	12V/24V
	LVL D (Selectable)	11V or 11.5V 22V or 23V
	LVL R (Selectable)	12.1V or 12.6V 24.2V or 25.2V
	Bonus Power Voltage	12V
	Max. Bonus Power Current	2A
BATTERY CHARGING	Charging Method	Bulk/ Absorption/Float/Equalize
	Temp. Compensation Coefficient	12V/-30mV/ °C and 24V/-60mV/ °C
	Temp. Compensation Range	-30°C to +60°C

PROTECTION

• Solar and Load

- Overload
- Short-Circuit
- High Voltage
- Reverse Polarity

• Battery

- High Voltage
- Reverse Polarity

• Other

- Reverse Current at Night
- Lightning & Transient Surge Protection
- LVL D (Low Voltage Load Disconnect)
- LVL R (Low Voltage Load Reconnect)

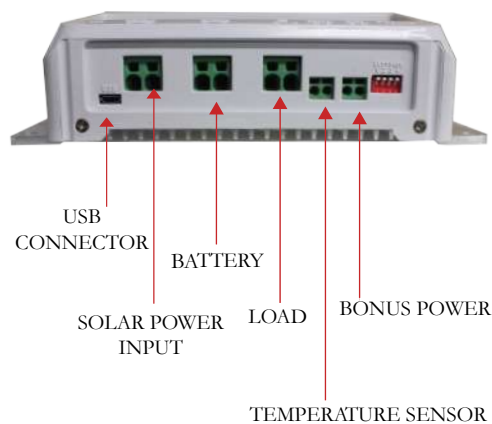
LEDs

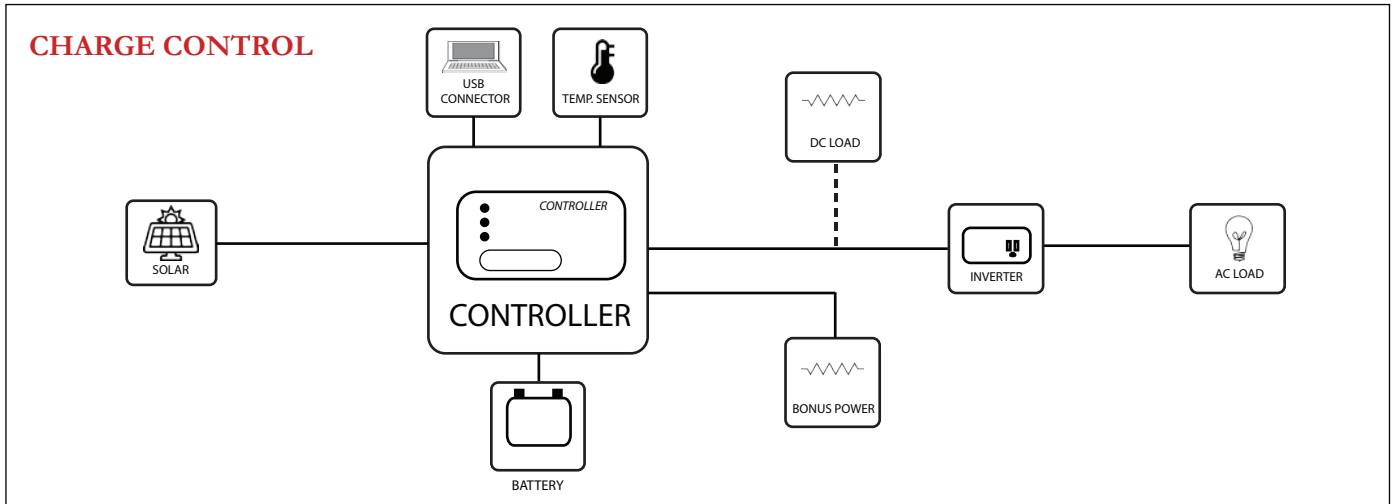
- LED 1 - Controller On
- LED 2 - Battery Charging
- LED 3 - Load On
- LED 4 - Bonus Power On
- LED 5 - Overload

TERMINALS

- Solar
- Battery
- Load
- Bonus Power
- Temperature Sensor
- USB Connector

CLASS 1 DIV2 PENDING

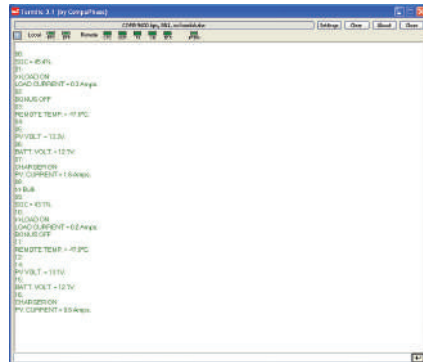




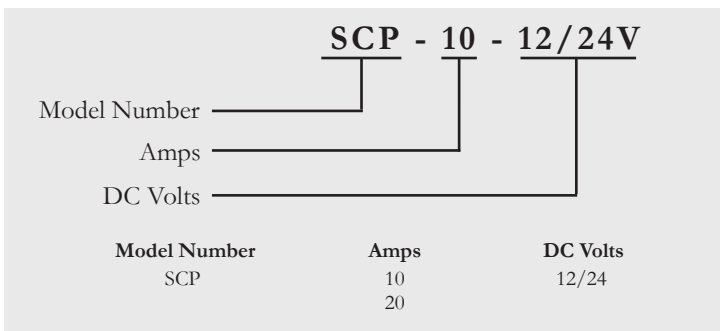
	Model Number	System Rating			Overall Dimensions W x D x H	Shipping Weight	
		Power (Nominal)	Volts (Nominal)	Amps		lbs	kgs
PWM	SCP-10-12/24V	170W/340W	12/24V	10	7.75" x 2.25" x 3.625" 196.85 x 57.15 x 92.08mm	2.25	0.6
	SCP-20-12/24V	340W/680W	12/24V	20	7.75" x 2.25" x 3.625" 196.85 x 57.15 x 92.08mm	2.25	0.7

USB DIAGNOSTICS PARAMETERS

- Charge On / Off
- PV Volt
- PV Current
- Batt Volt
- Charge state: Bulk, Absorption, Float, Night
- State of Charge (SOC)
- Load On
- Load Current
- Bonus On/Off
- Bonus Power Current
- Remote Temperature



MODEL NUMBER NOMENCLATURE



Ordering Specification

When ordering, please specify

- Model Number
- DC Amps
- DC Volts