



samlexsolar[®]
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20A



**Charge Controller
MPPT Series**

**Model
Steca Solarix
MPPT-2010
20 Amps**

Design Features

- Maximum Power Point Tracking (MPPT) for maximum energy capture
- PWM control
- Automatic battery voltage detection: 12V / 24V
- 20A charging current
- 10A load terminals for low voltage disconnect and auto reconnect
- Multistage, temperature compensated charging
- Colored LEDs for operational status, State of Charge and faults
- Electronic protections
- CE and RoHS compliant
- **Applications:** Solar home systems, telecommunications, recreation vehicles.

2 YEAR WARRANTY



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PARAMETER		SPECIFICATIONS – MODEL Steca Solarix MPPT-2010	
		12V BATTERY SYSTEM	24V BATTERY SYSTEM
SYSTEM	TYPE	MPPT	
	BATTERY TYPE	Factory preset for Lead Acid - Liquid Type (Flooded)	
	NOMINAL SYSTEM VOLTAGE	12V or 24V Auto Detection	
	NOMINAL OUTPUT POWER	250W	500W
	SELF CONSUMPTION	10mA	10mA
	MAXIMUM EFFICIENCY	> 98%	> 98%
INPUT SIDE (Solar Panel/Array)	OPEN CIRCUIT VOLTAGE, Voc (at min. operating temp.)	17V to 100V	34V to 100V
	MAXIMUM POWER POINT (MPP) VOLTAGE, Vmp	>15V to <100V	>30V to <100V
	MAXIMUM SHORT CIRCUIT CURRENT, Isc	18A	18A
CHARGING CHARACTERISTICS	CHARGING CURRENT	20A	20A
	BOOST CHARGE VOLTAGE	14.4VDC	28.8VDC
	END OF CHARGE VOLTAGE	13.9VDC	27.8VDC
	EQUALIZATION VOLTAGE	14.7 VDC	29.4 VDC
	INTERNAL TEMPERATURE COMPENSATION Voltage Coefficient of Temperature: – 4mV/°K/Cell	– 24mV/°K	– 48mV/°K
LOAD CONTROL	LOAD CURRENT	10A	10A
	LOW VOLTAGE DISCONNECT (LVD)	11.5V	23V
	LOW VOLTAGE RECONNECT (LVR)	12.5V	25V
	NIGHT LIGHT FUNCTION	Factory preset in OFF condition	Factory preset in OFF condition
MONITORING AND DISPLAY	DISPLAY TYPE	5 Multicolor LEDs	5 Multicolor LEDs
	OPERATING PARAMETERS DISPLAYED	Normal Operation, State of Charge, Load Status and Faults	
INPUT/OUTPUT CONNECTIONS	TYPE AND WIRE SIZE	Terminal with 4mm dia. tubular hole and setscrew. Will accommodate: Conductor - Stranded wire: 16mm ² / AWG #6 Conductor - Solid wire: 25mm ² / AWG #4	
SAFETY	PROTECTIONS	Overload/short circuit on PV & Load sides; Over temperature (measured inside the microcontroller); Over charge & deep discharge; Over voltage at PV input; Reverse polarity of PV panel; Reverse Battery and Load polarity; Reverse current protection at night.	
COMPLIANCE	SAFETY	CE marked - Low Voltage Directive 2006/95/EG	
	ELECTROMAGNETIC COMPATIBILITY	CE marked - 2004/108/EG	
	EUROPEAN STANDARD	EN60730-1; EN60730-2-11	
	ROHS QUALITY	Compliant ISO-9001; ISO-14001	
ENVIRONMENTAL	OPERATING AMBIENT TEMPERATURE	–25°C to + 40°C / –13°F to +104°F	
	INGRESS PROTECTION	IP 32	
GENERAL	DIMENSIONS (W x D x H)	187 x 153 x 68 mm / 7.36 x 6.02 x 2.68 in	
	WEIGHT	Approx. 900 gm. / 2 lb.	

NOTE: Specifications are subject to change without notice

12006-MPPT-2010-0314



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NOTES:

- All voltages are specified at 25°C / 77°F
- Special Order (Minimum Order Quantity applicable) with following customized programming. Customized programming is also possible with optional Programming Remote Control Model No. PA RC100:

Boost Voltage:	12V Battery: 14.0V to 14.9V; 24V Battery: 28.0V to 29.8V.
End of Charge Voltage:	12V Battery: 13.5V to 14.4V; 24V Battery: 27.0V to 28.8V.
Equalization Voltage:	12V Battery: 14.4V to 15.3V; 24V Battery: 28.8V to 30.6V.
Battery Type:	Liquid (Flooded / AGM) with Equalization; Gel without Equalization
Load Disconnect:	12V Battery: 10.8V to 12.3V; 24V Battery: 21.6V to 24.6V
Load Reconnect:	12V Battery: 11.5V to 12.9V; 24V Battery: 23.0V to 25.8V
Night Light Function:	OFF / ON or for set duration of 1 to 8 Hrs

- Optional external Temperature Sensor PA TS10 for battery temperature sensing & compensation.