

Steca Solarix MPPT

MPPT 1010, MPPT 2010

Steca Solarix MPPT is a solar charge controller with Maximum Power Point Tracking. It is specially designed to work with all established module technologies and is optimized for solar systems with module voltages higher than the battery voltage. The Steca Solarix MPPT is especially qualified in combination with grid tied solar modules. The advanced MPP-tracking algorithm from Steca assures that the maximum available power of the solar generator is charged to the batteries. The Steca Solarix MPPT with latest technology ensures full performance in all conditions, a professional battery care combined with modern design and excellent protection.



Product features

- Maximum Power Point Tracker (MPP tracker)
- Voltage and current regulation
- Automatic load reconnection
- Temperature compensation
- Positive earthing of one or negative earthing of several terminals possible
- Monthly maintenance charge

Electronic protection functions

- Overcharge protection
- Deep discharge protection
- Reverse polarity protection of module, load and battery
- Reverse polarity protection by internal fuse
- Automatic electronic fuse
- Short circuit protection
- Overvoltage protection at module input
- Open circuit protection without battery
- Reverse current protection at night
- Overtemperature and overload protection
- Load disconnection on battery overvoltage

Displays

- Multifunction LED display
- Multi-coloured LED
- 5 LEDs show operating states
- ~ for operation, state of charge, fault messages

Options

- Evening or night light function pre-set in the factory or adjustable via Steca PA RC 100
- Parameterisation of function values via Steca PA RC 100

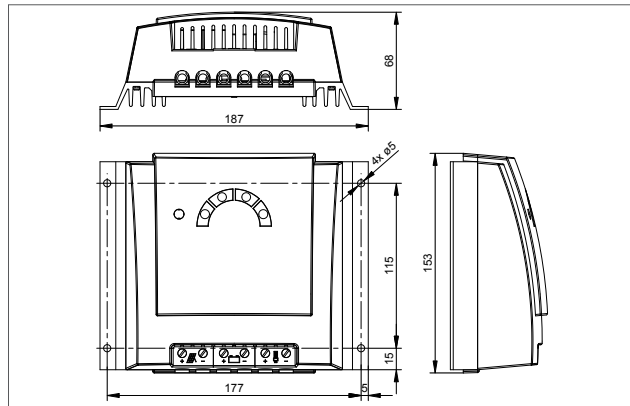
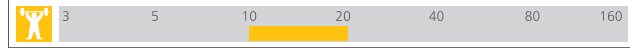
Certificates

- Compliant with European Standards (CE)
- RoHS compliant
- Made in Germany
- Developed in Germany
- Manufactured according to ISO 9001 and ISO 14001

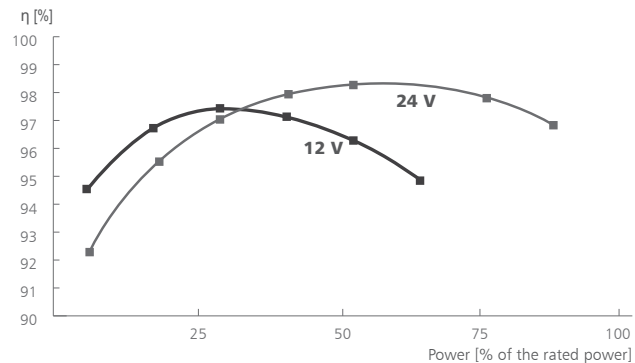
Steca accessories

- External temperature sensor Steca PA TS10
- Remote control Steca PA RC100

10 A...20 A



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Characterisation of the operating performance		
System voltage	12 V (24 V)	
Nominal power	125 W (250 W)	250 W (500 W)
Max. DC-DC efficiency	98.3 % ($U_{\text{Batt}} = 24 \text{ V}; U_{\text{in}} = 30 \text{ V}; P = 0.6 \cdot P_{\text{nom}}$)	
European efficiency	94.7 % ($U_{\text{Batt}} = 12 \text{ V}; U_{\text{in}} = 30 \text{ V}$) 96.7 % ($U_{\text{Batt}} = 24 \text{ V}; U_{\text{in}} = 30 \text{ V}$)	
European efficiency (weighted across all U_{Batt} and U_{in})	95.2 %	
Static MPP efficiency	99.9 % (DIN EN 50530)	
Dynamic MPP efficiency	97.7 % (DIN EN 50530)	
Weighted REW (Realistic Equally Weighted efficiency)	92.8 %	
Own consumption	10 mA	
DC input side		
MPP voltage	15 V (30 V) < $U_{\text{Modul}} < 75 \text{ V}$	15 V (30 V) < $U_{\text{Modul}} < 100 \text{ V}$
Open circuit voltage solar module (at minimum operating temperature)	17 V...75 V (34 V ... 75 V)	17 V...100 V (34 V ... 100 V)***
Module current	9 A	18 A
DC output side		
Load current**	10 A	
Reconnection voltage (LVR)*	12.5 V (25 V)	
Deep discharge protection (LVD)*	11.5 V (23 V)	
Battery side		
Charge current	10 A	20 A
End of charge voltage*	13.9 V (27.8 V)	
Boost charge voltage*	14.4 V (28.8 V)	
Equalisation charge*	14.7 V (29.4 V)	
Set battery type*	liquid	
Operating conditions		
Ambient temperature	-25 °C ... +40 °C	
Fitting and construction		
Terminal (fine / single wire)	16 mm ² / 25 mm ² - AWG 6 / 4	
Degree of protection	IP 32	
Dimensions (X x Y x Z)	187 x 153 x 68 mm	
Weight	approx. 900 g	



Authorized Distributor



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* adjustable via Steca PA RC100
 ** Inverters must not be connected to the load output.
 *** CAUTION: If an open circuit voltage of more than 100 V is supplied to the connected solar module, the controller will be destroyed. When selecting the solar module, it is important to bear in mind that the open circuit voltage should never exceed 100 V over the entire working temperature range. When using solar modules with a maximum open circuit voltage of between 75 and 100 V (over the entire temperature range), all installation steps must be carried in accordance with protection class II.