

Steca Solarix MPPT

1010, 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 equalisation 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

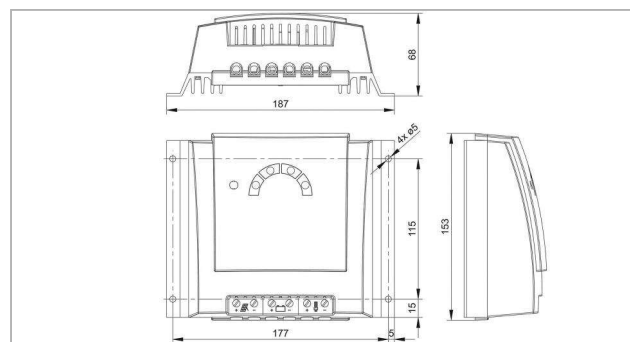
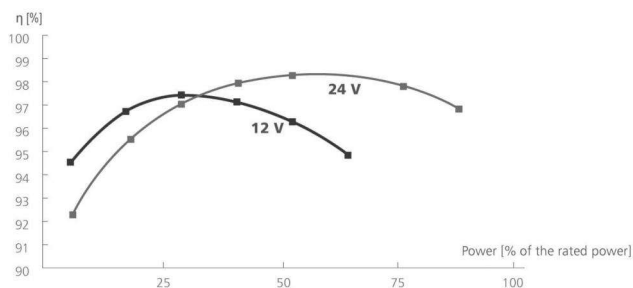
- Evening or night light function pre-set in the factory or adjustable via Steca PA RC 100
- Parameterisation of function values via Steca PA RC 100

Certificates

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

Accessories

- Steca PA RC100
- External temperature sensor Steca PA TS10



	MPPT 1010	MPPT 2010
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 _{Batt} = 24 V; U _{in} =30 V; P=0.6*P _{nom})	
European efficiency	94.7 % (U _{Batt} = 12 V; U _{in} =30 V); 96.7 % (U _{Batt} = 24 V; U _{in} =30 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 _{module} < 75 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 mm² / 25 mm² - AWG 6 / 4	
Degree of protection	IP 32	
Dimensions (X x Y x Z)	187 x 153 x 68 mm	
Weight	900 g	

- Technical data at 25 °C / 77 °F
- adjustable via Steca PA RC100: reconnection voltage, deep discharge protection, end of charge voltage, boost charge voltage, equalisation charge, battery type

- Inverters must not be connected to the load output.
- **CAUTION:** If an open circuit voltage of more than 75 V or 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 75 V or 100 V over the entire working temperature range. When using solar modules with a maximum open circuit voltage of between 60 and 100 V (over the entire temperature range), all installation steps must be carried in accordance with protection class II.