



Steca Solarix

2401, 4401

The solar charge controllers Steca Solarix 2401 and 4401 are optimally suited for inverter systems. The controller combines basic solar charger functions with a 40 A high-performance charge controller. It is available as 12 V / 24 V and 48 V system. This makes the solar charge controller very cost effective.

The load current is limited to 10 A. The charging processes are based on the voltage level, which can be individually set with the help of four buttons behind the front casing.



Product features

- Hybrid controller
- Voltage regulation
- Automatic detection of voltage
- PWM control
- Multistage charging technology
- Load disconnection depending on voltage
- Automatic load reconnection
- Temperature compensation
- Common positive grounding or negative grounding on one terminal
- Integrated self test
- Monthly maintenance charge

Electronic protection functions

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

Displays

- Text LCD display
 - for operating parameters, fault messages, self test

Operation

- Simple menu-driven operation
- Programming by buttons
- Manual load switch

Interfaces

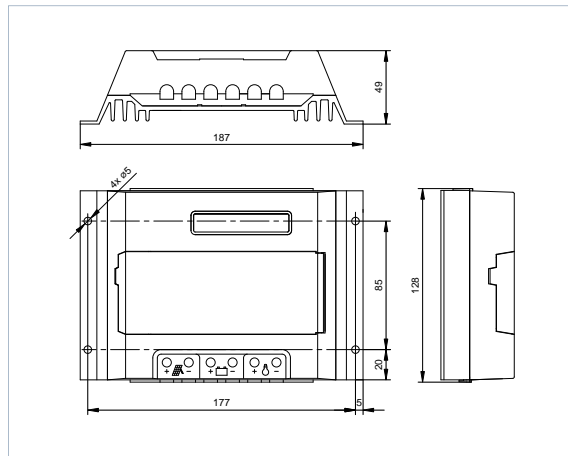
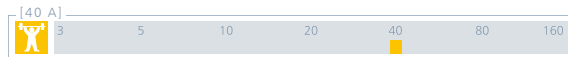
- RJ45 interface

Options

- External temperature sensor
- Alarm contact

Certificates

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



	2401	4401
Characterisation of the operating performance		
System voltage	12 V (24 V)	48 V
Own consumption	14 mA	
DC input side		
Module current	40 A	
DC output side		
Load current	10 A	
programmable	End of charge voltage	13.7 V (27.4 V) / 54.8 V
	Boost charge voltage	14.4 V (28.8 V) / 57.6 V
	Equalisation charge	14.7 V (29.4 V) / 58.8 V
	Reconnection voltage (LVR)	12.6 V (25.2 V) / 50.4 V
	Deep discharge protection (LVD)	11.1 V (22.2 V) / 44.4 V
Operating conditions		
Ambient temperature	-10 °C ... +60 °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 128 x 49 mm	
Weight	550 g	

Technical data at 25 °C / 77 °F



Steca PA TSK10 External temperature sensor



Areas of application:



BASIC



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
- PWM control
- Current compensated load disconnection
- Automatic load reconnection
- Temperature compensation
- Monthly maintenance charge

Electronic protection functions

- Overcharge protection
- Deep discharge protection
- Reverse polarity protection of load, module 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
- Battery overvoltage shutdown

Displays

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

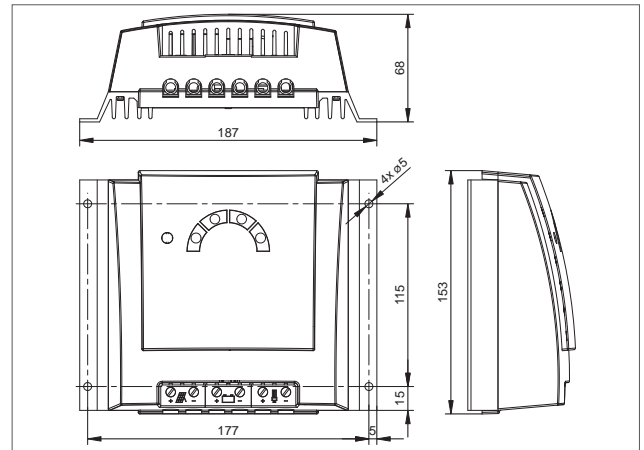
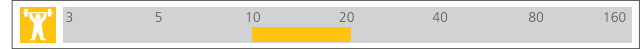
Options

- Night light function pre-set in the factory or adjustable via Steca PA RC 100
- Parameterisation of function values via Steca PA RC 100
- External temperature sensor

Certificates

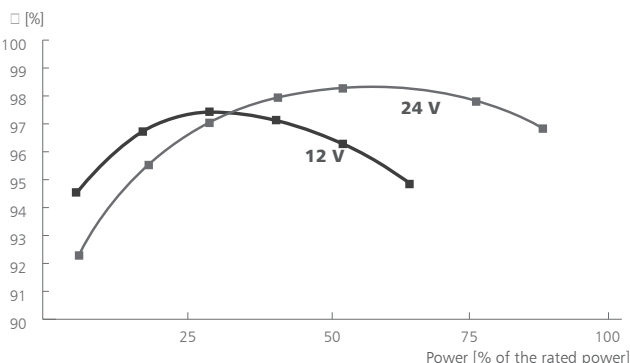
- Compliant with European Standards (CE)
- RoHS compliant
- Made in Germany
- Developed in Germany

10 A...20 A



	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. efficiency	> 98 %	
Own consumption	10 mA	
DC input side		
MPP voltage	15 V (30 V) < $V_{\text{module}} < 75 \text{ V}$	15 V (30 V) < $V_{\text{module}} < 100 \text{ V}$
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		
Charge current	10 A	20 A
Load current	10 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)	
Reconnection voltage (LVR)*	12.5 V (25 V)	
Deep discharge protection (LVD)*	11.5 V (23 V)	
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	

* see options Technical data at 25 °C / 77 °F
 **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.



Customised unit programming available at YHI