Solar Charge Controller



# **Steca Solarix PRS**

The simplicity and high performance of the new Steca Solarix PRS solar charge controller make it particularly attractive. At the same time, it offers a modern design and a convenient display, all at an extremely attractive price.

Several LEDs in various colours emulate a tank display, which gives information on the charge status of the battery. Here, Steca's latest algorithms are employed in order to guarantee optimal battery maintenance. The Solarix PRS charge controllers are equipped with an electronic fuse, thus ensuring the optimal protection. They operate on the serial principle, and separate the solar module from the battery in order to protect it against overcharging.

The Solarix PRS charge controllers are universal charge controllers, which means they can be used with lead-acid batteries or gel batteries without the need for complex configuration settings.

For larger projects, the charge controllers can also be equipped with special functions. These include the night light function, selectable charging plateau and deep-discharge protection voltages.

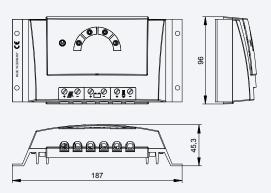
## **Functions**

- Low-loss serial controller
- PWM-controlled constant-voltage charging
- Battery charging with automatic charging mode selection (float, boost, equal)
- Recognises and carries out a maintenance charge (boost charge every 30 days if idle)
- Automatically adjusts to the voltage level 12 V/24 V
- Current-dependent load deactivation
- Automatic load reactivation
- Temperature compensation
- Grounding on the plus side
- Integrated self test (start voltage 17.0 V)

#### Display

- 4 separate LEDs to display the battery charge status
- LEDs (red/green) to display the function status

### **Technical data**



Solar charge controller with LED	PRS 1010	PRS 1515	PRS 2020	PRS 3030
System voltage	12 V (24 V)			
Battery input voltage	9.0 V - 17.0 V (17.1 V - 34.0 V)			
Max. module input short circuit current	10 A	15 A	20 A	30 A
Max. load output current	10 A	15 A	20 A	30 A
Max. self consumption	< 4 mA			
End of charge voltage (float)	13.9 V (27.8 V)			
Boost charge voltage; 1 h	14.4 V (28.8 V)			
Equalisation charge (deaktivted for gel accu); 1 h	14.7 V (29.4 V)			
Reconnection setpoint (SOC/LVR)	> 50 %/12.5 V (25.0 V)			
Deep discharge protection (SOC/LVD)	< 30 %/11.1 V (22.2 V)			
Ambient temperature allowed	-25 °C +50 °C			
Terminal size (fine/single wire)	16 mm²/25 mm²			
Enclosure protection class	IP 34			
Weight	ca. 350 g			
Dimensions I x w x h	187 x 96 x 45.3 mm			

Technical data at 25 °C / 77 °F

## Power class 10 A - 30 A









# **Protection functionality**

- Battery-overload protection (HVD)
- Deep-discharge protection (LVD)
- Automatic electronic fuse
- Reverse-polarity protection at module input, of the load and the battery connection
- Short-circuit protection of the load and the module
- Good electromagnetic compatibility
- Idling protection in case no battery is connected
- Prevention of back current into the module
- Integrated temperature compensation of the end-ofcharge voltage (0 °C to +50 °C, factor -4mV/K/cell)

### Certificates

- Manufactured in a DIN EN ISO 9001:2000 and DIN EN ISO 14001 facility
- Conform to European Standards (CE)