STECA PR

Solar Charge
Controllers

The STECA PR Solar Charge Controllers have been specially designed for operation in difficult environments with high salt, moisture and dust contents.

The PR 2020 IP is equipped with a large LCD display that shows the current state of charge (SOC) as a percentage and graphically in the form of a tank. This visual representation also provides operating parameters, failure messages and self-test.

The "auto-adaptive" state of charge algorithm results in optimal battery maintenance and control over the module output of up to 480 Wp, which can be connected to it.

Manufactured according to ISO 9001 and 14001, RoHS, European Standards and DIN IEC 68 part 2-30 (use in tropical areas).
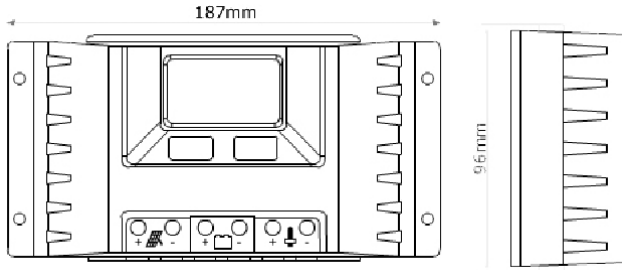
Features:

- Hybrid controller.
- State of charge determination with Steca AtonIC (SOC).
- Automatic detection of voltage.
- PWM control.
- Multistage charging technology.
- Load disconnection depending on SOC.
- Automatic load reconnection.
- Temperature compensation.
- Common grounding on one or several positive terminals, or negative grounding on one terminal.
- Integrated data logger.
- Integrated self test.
- Monthly maintenance charge.
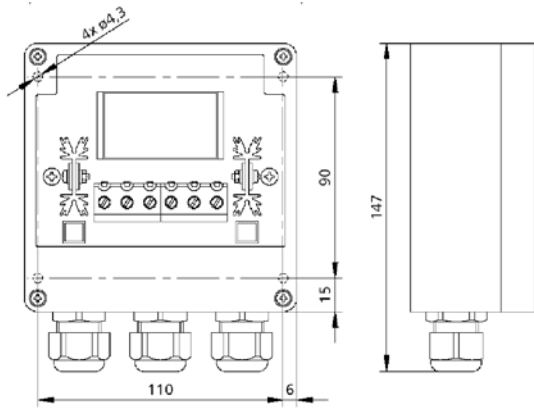- Integrated energy meter.

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PR Controller

PR2020 IP Controller

Certifications

European Standards CE	✓	✓
DIN EN ISO 9001:2000	✓	✓
DIN EN ISO 14001	✓	✓
DIN IEC 68, part 2-30 (use in tropical areas)	✓	X
RoHS	✓	X

Electronic protections

Overcharge.

Deep discharge.

Load disconnection against over-discharging.

Reverse polarity protection of solar modules.

Reverse polarity protection of load and battery.

Short-circuit protection of solar modules.

Short-circuit protection of load.

Over-temperature.

Over-voltage.

Varistor protection against electromagnetic discharges.

Open circuit protection.

Reverse current protection at night.

Model	PR2020 IP	PR1010	PR1515	PR2020	PR3030
System voltage	12V (24V)				
Module current (input side)	20A	10A	15A	20A	30A
Load current (output side)	20A	10A	15A	20A	30A
Self-consumption	<12 mA				
End of charge voltage (float)	Líquid 13.9 (27.8V) Gel 14.1V (28.2V)				
Boost charge voltage	14.4V (28.8 V)				
Compensation charge (disabled for gel batteries)	14.7V (29.4V)				
Reconnection voltage (SOC/LVR)	>50%SOC/12.6V (25.2V)				
Deep discharge protection (SOC)	>30%SOC/11.1V (22.2)				
Ambient temperature	From -10° to +50°C				
Terminal size (single/fine wire)		16mm²/25mm²	AWG 6/4		
Degree of protection	IP 65	IP 32			
Weight (gr)	350	350	350	350	350
Dimensions (mm)	122x147x55	187x96x44			