

## Steca PR

### 1010, 1515, 2020, 3030

The Steca PR 10-30 series of charge controllers is the highlight in the range. Use of the latest charging technologies combined with state of charge determination enable optimal battery maintenance and module power monitoring. A large display informs the user about all operating modes with the aid of symbols. The state of charge is represented visually in the form of a level meter. Data such as voltage, current and state of charge can also be displayed digitally as figures on the display. In addition, the controller has an energy meter which can be reset by the user.

#### Product features

- Shunt topology with MOSFETs
- 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
- Negative earthing of one or positive earthing of several terminals possible
- Integrated data logger (energy meter)
- Evening, night light and daylight functions
- Integrated self test
- Monthly equalisation charge

#### Electronic protection functions

- Overcharge protection
- Deep discharge protection
- Reverse polarity protection of module, load and battery
- 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
- Load disconnection on battery overvoltage

#### Displays

- Graphical LC display
- for operating parameters, fault messages, self test

#### Operation

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

#### Options

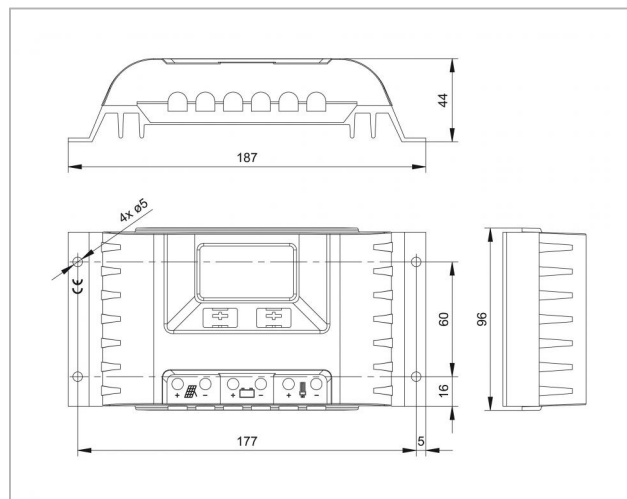
- Alarm contact

#### Certificates

- Approved by the World Bank for Nepal
- Compliant with European Standards (CE)
- RoHS compliant
- Made in EU
- Manufactured according to ISO 9001 and ISO 14001

#### Accessories

- External temperature sensor Steca PA TS10



|                                                                      | PR 1010                      | PR 1515 | PR 2020 | PR 3030 |
|----------------------------------------------------------------------|------------------------------|---------|---------|---------|
| Characterisation of the operating performance                        |                              |         |         |         |
| System voltage                                                       | 12 V (24 V)                  |         |         |         |
| Own consumption                                                      | 12.5 mA                      |         |         |         |
| DC input side                                                        |                              |         |         |         |
| Open circuit voltage solar module (at minimum operating temperature) | < 47 V                       |         |         |         |
| Module current                                                       | 10 A                         | 15 A    | 20 A    | 30 A    |
| DC output side                                                       |                              |         |         |         |
| Load current                                                         | 10 A                         | 15 A    | 20 A    | 30 A    |
| Reconnection voltage (SOC / LVR)                                     | > 50 % / 12.6 V (25.2 V)     |         |         |         |
| Deep discharge protection < 30 % (SOC / LVD)                         | < 30 % / 11.1 V (22.2 V)     |         |         |         |
| Battery side                                                         |                              |         |         |         |
| 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 (adjustable via menu) |         |         |         |
| Operating conditions                                                 |                              |         |         |         |
| Ambient temperature                                                  | -10 °C ... +50 °C            |         |         |         |
| Fitting and construction                                             |                              |         |         |         |
| Terminal (fine / single wire)                                        | 16 mm² / 25 mm² - AWG 6 / 4  |         |         |         |
| Degree of protection                                                 | IP 31                        |         |         |         |
| Dimensions (X x Y x Z)                                               | 187 x 96 x 44 mm             |         |         |         |
| Weight                                                               | 350 g                        |         |         |         |

- Technical data at 25 °C / 77 °F
- Inverters must not be connected to the load output.