# BlueSolar PWM-Light Charge Controllers 12/24V

www.victronenergy.com



**BlueSolar PWM-Light 10A**

## Features

- Load output with low battery voltage disconnect function.
- Lighting control function, one timer only.
- Two digit seven segment display for quick and easy setting of the load output functionality, including timer setting.
- Three stage battery charging (bulk, absorption, float), not programmable.
- Load output protected against over load and short circuit.
- Protected against reverse polarity connection of the solar array and/or battery.

## Day/night timing options

See manual for details

| BlueSolar PWM-Light | 12/24-5 | 12/24-10 | 12/24-20 | 12/24-30 |
|---|---|---|---|---|
| Battery Voltage | 12/24 V with automatic system voltage detection | | | |
| Rated charge current | 5A | 10A | 20A | 30A |
| Automatic load disconnect | Yes | | | |
| Maximum solar voltage | 28V / 55V (1) | | | |
| Self-consumption | < 10 mA | | | |
| Load output | Manual control + low voltage disconnect | | | |
| Protection | Battery reverse polarity (fuse) Output short circuit Over temperature | | | |
| Overload protection | Shut down after 60 s in case of 130% load | | | |
| | Shut down after 5 s in case of 160% load | | | |
| | Short circuit: immediate shut down | | | |
| Grounding | Common positive | | | |
| Operating temp. range | -20 to +50°C (full load) | | | |
| Humidity (non-condensing) | Max 95% | | | |
| **BATTERY** | | | | |
| Charge voltage 'absorption' | 14.2V / 28,4V | | | |
| Charge voltage 'float' | 13.8V / 27,6V | | | |
| Low voltage load disconnect | 11,2V / 22,4V | | | |
| Low voltage load reconnect | 12,6V / 25,2V (manual)<br>13,1V / 26,2V (automatic) | | | |
| **ENCLOSURE** | | | | |
| Protection class | IP20 | | | |
| Terminal size | 5 mm² / AWG10 | | | |
| Weight | 0,15kg | | | 0,2kg |
| Dimensions (h x w x d) | 70 x 133 x 33,5 mm (2.8 x 5.3 x 1.3 inch) | | | |
| **STANDARDS** | | | | |
| Safety | IEC 62109-1 | | | |
| EMC | EN 61000-6-1, EN 61000-6-3, ISO 7637-2 | | | |

1) For 12V use 36 cell solar panels
For 24V use 72 cell solar panels
or 2x 36 cell in series

2) The controller switches to the lower float voltage level 2 hours after the absorption voltage has been reached. Whenever the battery voltage becomes lower than 13V, a new charge cycle is triggered.