

## BlueSolar PWM-Light Charge Controllers 12/24V



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   |           | 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)  |           |                  |          |
|  | 13,1V / 26,2V (automatic)   |           |                  |          |
| Protection class   |   | ENCLOSURE | ID.              |          |
| Terminal size  | IP20  |           |                  |          |
| Weight   | 5 mm² / AWG10<br>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)   |           |                  |          |
| Difficisions (IIXW X a)  | STANDARDS   |           |                  |          |
| Safety   | IEC 62109-1   |           |                  |          |
| EMC  | EN 61000-6-1, EN 61000-6-3, ISO 7637-2  |           |                  |          |
|  |   |           | 3. 7 37          |          |
| 1) For 12V use 36 cell solar panels<br>For 24V use 72 cell solar panels<br>or 2x 36 cell in series | 2) The controller switches to the lower float voltage level 2<br>hours after the absorption voltage has been reached.<br>Whenever the battery voltage becomes lower than 13V, a new<br>charge cycle is triggered. |           |                  |          |