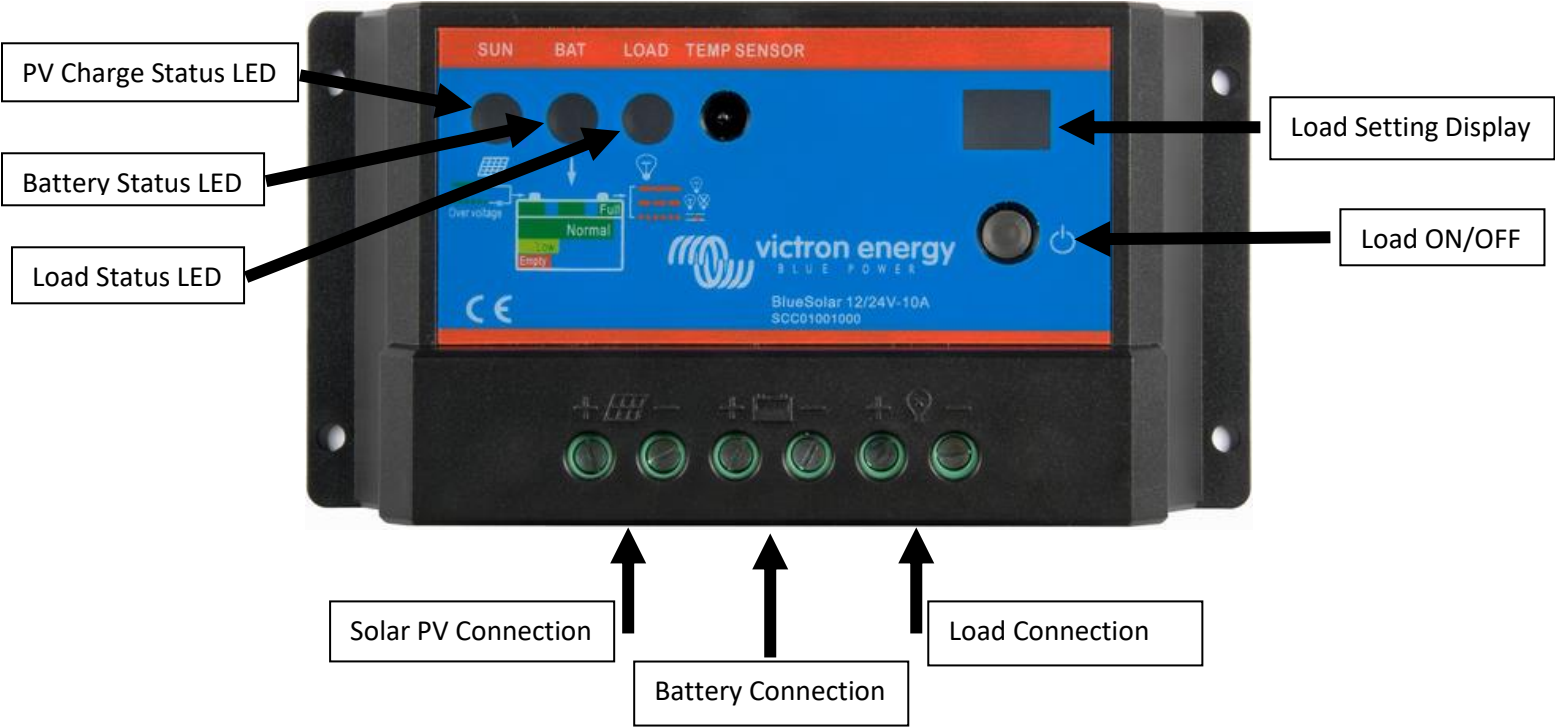


**Victron BlueSolar PWM-Light 10A (12/24V)**



**1 - Features**

- Suitable for 12V or 24V solar panels with a current rating up to 10A. Automatic battery voltage detection.
- High efficiency Pulse Width Modulated charging. Boost, recovery and float charging modes keep your battery optimally charged.
- No moving hardware. Flash memory protects against temperature and vibration problems.
- High level of self-protection. Protection against overload, short circuit, reverse connection, lightning, overcharging, overdischarging and PV reverse current.
- LED condition indicators. LED indicators for charging status, battery status, short-circuit and overloading.
- Temperature Range: -20°C to +50°C; temperature compensating charging
- Low voltage disconnect feature for loads up to 10A

Weight: 130g	Self-consumption: < 10ma	Dimensions: 133 x 70 x 33.5mm
Regulation Point: 14.2V/28.4V	Low voltage disconnect: 11.2V/22.4V	Low voltage reconnect: 13.1V/26.2V
Float Charge: 13.8V/27.6V	Warranty: 5 Years	CE certified

## 2- Mounting

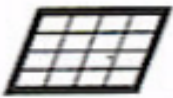
- The charge regulator should be fitted in a dry, ventilated environment as close as possible to the battery, to reduce voltage drop. The controller can be mounted using the four corner screw holes.
- Controller dimensions are 133 x 70 x 33.5mm

## 3 - Wiring

- Keep cable lengths as short as possible and use a multi-strand insulated copper wire
- *Ensure correct polarities throughout.*
- First connect the regulator to the battery, wiring into the screw terminals marked with a battery symbol and connecting to the battery with clamps or ring terminals. It is good practice to fit a fuse between the battery and regulator.
- Next, connect the cable from the solar panel into the screw terminals marked with a solar panel symbol on the regulator. If the connection is correct and the panel is in sunshine the charging LED will be either a solid or flashing green.
- Finally, if you are using the optional low voltage disconnect feature, connect a load to the load terminals on the controller (marked with a lightbulb symbol).



## 4- LED Indicators and troubleshooting



Green LED:

Off: No sunlight or not enough sunlight. Charger off.

Fast flashing: Bulk charge.

On: Absorption charge.

Slow flashing: Float charge.



LED=Green: battery fully charged (> 12,7V)

LED=Orange: battery ok (12,4V - 12,7V)

LED=Red: battery low (11,2V - 12,4V)

LED=Flashing Red: battery fully discharged (< 11,2V)  
(load output cut off level: 11,2V)



LED=ON: load output is on.

LED=OFF: load output is off.

LED=Slow flashing: Overload.

LED=Fast flashing: Short Circuit

### Please note:

1. The load output will cut off in case of over load or short circuit. The load output will attempt to restart after 30 seconds.
2. After over discharge, the load will reconnect automatically when the battery is recharged to 13,1V / 26,2V.
3. After over discharge, the load can be reconnected manually by pressing the on/off push button, if the battery voltage exceeds 12,6V / 25,2V.

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