



20 amp LED MPPT Regulator with Load Shed

The Green World MPPT REGULATOR is designed to interface between the SOLAR PANEL, the BATTERIES and the LOAD. The TRACKER will always find the optimum power point of the solar panel system to ensure that maximum power is extracted from the solar panel and put into the batteries. Using this system up to 30% more power can be extracted from the solar panel than using shunt or series pass regulators.

The Green World MPPT REGULATOR is also able to charge batteries of a lower voltage than the solar panel. By means of LEDs it will show the status of the system. It also incorporates various charge modes which will automatically increase the charge level to the batteries when first starting up or if the battery voltage falls below the minimum volts.

The Green World MPPT REGULATOR will read the nominal battery voltage. This unit is designed to run on a 12/24 volt battery set. It will then read the solar panel voltage and automatically find the optimum power point. The charging, battery values and boost modes are then automatically adjusted.

Via links the load voltage disconnect can be selected, whether the battery is lead acid or sealed, and whether the unit operates as a normal load shedder or as a day/night switch.



Features:

- . Automatically measures the battery voltage and then sets up the charge parameters (12v-24v)
- . Operates the Solar Panels at the maximum efficiency
- . Charges batteries by setting up the best power point of the solar panels
- . Can improve power extracted from the solar panels by 30% over normal shunt/series pass regulators
- . LED Display
- . Maximum Current 20 Amps.
- . 20 amp Load controller.
- . Temperature controlled Cooling Fan
- . Selectable low voltage disconnect.
- . 24 hour load or Street Light mode

Specifications:

Output Current Rating	20amp
Nominal Battery Voltage	Multi-Voltage 12-24vcd (Automatic selection of voltage)
PV Input Voltage	Absolute Maximum 50VDC
Charge Algorithm	2-stage Boost/Float
Boost Voltage	Charges to 14.8v for minimum of 3 hours (12v system) 29.6v (24v system)
Float Voltage	13.8v per battery (12v system) 27.6v (24v system)
Power Conversion	DC/DC Switch Mode
Output Efficiency	95% Typical @ 14 Volt 15 Amps Output
Voltage Step down Capability	Can charge a lower voltage battery from a higher voltage PV array.
Status display	6 LED Diaplay .Panel .Load .Boost .Full .Medium .Low
Features	1. Mppt Charge Controller 2. 20 amp Load Shed 3. 24 hour load shed or Street Light Controller 4. Programmable;Dusk to Dawn,½ hour 1hour or 1.5 hour delays. 5. Selectable battery low cutout .10.00v, 10.7v, 11.5v for 12 volt system 6. Selectable battery low cutout .20.00v, 21.4v, 23.0v for 24 volt system
Power Consumption	Less than 1 watt
Environmental Rating	0 – 40°C
Protection System	.Lightning Protection .Reverse polarity Panel/Battery .Internal Fuse

Cable Entry	Connector (Max Cable Size 16mm)
Dimensions	5kg 110mm (L) x 110mm (W) x 70mm (H)
PV Panel Range	12 – Max 240 watt PV Panel 24 – Max 480 watt PV Panels

All Green World products have a 3 year carry warranty