MICRO CARE

Manufacturers of Quality Solar MPPT Regulators, Pure Sine Wave Bi-Directional Inverters, Grid Tied Inverters & Limiter, Solar Pump Controllers, Battery Monitors, Combiner & Protection Units, Specialised Products and Solar Components & Solutions

Microcare 10-30 Amp LED MPPT Solar Regulator

The Microcare Maximum Power Point Tracker 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 PWM regulators. The Microcare MPPT Regulator is also able to charge batteries of a lower voltage than the solar panel. By means of LED 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.

- Automatically measures the battery voltage and then sets up the charge parameters (12 or 24V)
- Operates the Solar Panels at the maximum efficiency
- Can improve power extracted from the solar panels by 30% over normal shunt/series PWM regulators
- LED status notification
- Temperature controlled Cooling Fan
- Selectable low voltage disconnect
- 24 hour load shed or Day/Night mode
- Charges batteries by setting up the best power point of the solar panels

Output Current Rating	10A	20A	30A
Maximum Panel Size	12V–120W PV Max 24V-240W PV Max	12V – 240W PV Max 24V – 480W PV Max	12V – 360W PV Max 24V – 720W PV Max
Nominal Battery Voltage	Multi-Voltage 12-24V_{DC} (Automatic selection of voltage)		
PV Input Voltage	Absolute Maximum 50V_{DC}		
Charge Algorithm	2-stage Boost/Voltage		
Boost Voltage	Lead Acid battery: 14.8V (12V), 29.6V (24V) Gel battery: 14.2V (12V), 28.4V (24V)		
Float Voltage	Lead Acid battery: 13.8V (12V), 27.6V (24V) Gel battery: 13.6V (12V), 27.2V (24V)		
Power Conversion	DC/DC Switch Mode		
Output Efficiency	>95% Typical @ 14V 15A Output		
Voltage Step Down	Can charge a lower voltage battery from a higher voltage PV array		
Status Display	6 LED display: Panel, Load, Boost, Full, Medium, Low		
Power Consumption	Less than 1W		
Environmental rating	0-40 ºC		
Cable Entry	Connector (Max Cable size 16mm)		
Dimensions	0.5kg 110mm x 110mm x 70mm		

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