

MICRO CARE[®]

SOLAR COMPONENTS



MPPT Regulators, Pure Sine Wave Bi-Directional inverters, Grid Tied Inverters, and Grid Tied Limiters are designed, developed, and manufactured by J&J Electronics in Port Elizabeth, South Africa

Microcare Solar Regulator 20-100Amp MPPT



Microcare MPPT Solar Charge Controllers are proudly South African. The Microcare MPPT utilizes PWM and integrated technology to provide greater than 96% efficiency from your solar panels. The actual charge current increase you will see varies primarily with module temperature and battery voltage. In comfortable temperatures, current increase typically varies between 10 to 25%, with 30% or more easily achieved with a discharged battery and cooler temperatures.

What you can be sure of is that the Microcare MPPT charge controller will deliver the highest charge current possible for a given set of operating conditions. The ability to step down a high voltage solar array to a low voltage battery can save you money by reducing the size of the wire required and making the installation simpler and faster.

Features:

- Automatic selection of Battery voltage (12v-48v)
- Input panel voltage (20voc-150voc)
- Circuit Breaker protection - Full input and output protection
- Electronic current limiting.
- 4 Line LCD Display
 - Battery Voltage
 - Charge Mode (Equalize, Boost and Float.)
 - Charge Current
 - Panel Voltage
 - Output Power from Panels
 - State of charge
- Data Logger
 - 24hr Average
 - 60 day logger
- Programmable features
- Accessories. Battery/ Temperature Sensors, Daylight Switch, Relay Interface. Radio Link.
- Peak greater than 96% efficiency
- Customized Dealer's name and phone number.

Specifications:

Output Current Rating	20, 40, 60, and 100amp available
Nominal Battery Voltage	Multi-Voltage (Automatic/Manual selection of voltage - 12/24/36/48v battery set)
PV Input Voltage	Open Circuit Absolute Maximum 150VDC
Charge Algorithm	3-stage Equalize/Boost/Float
Equalize Voltage	>12v charges to 15v per battery + 1hr
Boost Voltage	Charges to 14.5v switches when charge current is < 10amps then 1hour
Float Voltage	13.8v per battery
Power Conversion	DC/DC Switch Mode
Output Efficiency	Peak greater than 96% efficiency
Voltage Step down Capability	Can charge a lower voltage battery from a higher voltage PV array.
Status display	4 Line LCD Screen with Backlight <ul style="list-style-type: none"> • Battery Voltage • Charge mode-charge current (Equalize/Boost/Float) and Charge Current. • Panel Voltage • Output Power • State of charge of battery
Data Logger	<ul style="list-style-type: none"> • 24hr Average • 31 day history
Power Consumption	Less than 1watt
Environmental Rating	0 – 40°C
Input	20, 40, 63, and 100amp DP Input Circuit Breaker
Output Connection	25, 50, 63, and 100amp DP Output Circuit Breaker
Protection System	<ul style="list-style-type: none"> • Lightning Protection • Reverse polarity Panel/Battery
Cabinet Dimension	20/40amp 210mm (L) x 220mm (W) x 110mm (H) 60amp 300mm (L) x 220mm (W) x 120mm (H) 100amp 350mm (L) x 220mm (W) x 130mm (H)
Weight	20amp and 40amp 3kgs / 60amp 4kg / 100amp 5kg

All Microcare products have a 3 year carry warranty