

20A | 40A | 60A | 100A LCD MPPTs

Microcare manufactures a range of MPPT Solar Charge Controllers often referred to as Solar Regulators. An MPPT or Maximum Power Point Tracker is an electronic DC to DC converter that optimizes the power output of the solar panels. Microcare manufactures two versions of the MPPT Solar Charger Controller: an entry level LED version & the Li-Ion compatible LCD unit.

Automatic Voltage Detection

When a Microcare MPPT is connected & switched on for the first time, the unit will automatically select the battery & panel voltage to find the optimum power point for charging giving the batteries the most efficient charge.

System Cost Saving

The Microcare MPPTs step down a high voltage solar array to a low voltage battery bank saving the installer money on the wire sizing required and on the installation time. The charge controller delivers the highest possible charge current for a given set of operating conditions.

LCD MPPT

- The LCD MPPT is Li-Ion compatible & available in four sizes: 20A, 40A, 60A & 100A.
- Units comes standard with Circuit Breaker protection, full input & output protection, and electronic current limiting.
- A four Line LCD Display indicates: 1. Battery Voltage, 2. Charge Mode 3. Panel Voltage 4. Output Power from the Panels.
- The recommended panel input voltage for the MPPT is 20–150Voc & operates with a peak efficiency greater than 96%.

Data Logging

The Microcare LCD MPPT comes standard with a built-in data logger. The unit stores the power generation data for 63 days which can be viewed on the LCD screen. Programmable Relay The Microcare system has the capability to switch a programmable relay based on battery voltages to either load shed specific high loads if the batteries are going to low or to auto start fuel generators that have the auto start functionality to assist in charging the batteries when solar power is low.



Surge Protection

By installing the Microcare Low Voltage Combiner Unit, you are able to protect your PV solar installation against any surges and lightning by the use of fusing and surge arrestors. The Microcare Low Voltage Combiner Unit range is available in 1 to 6 string configurations.

OUTPUT CURRENT RATING	20, 40, 60, and 100A available
NOMINAL BATTERY VOLTAGE	Multi-Voltage (Automatic/Manual selection of voltage – 24/36/48V)
PV INPUT VOLTAGE	Open Circuit Absolute Maximum 150VDC
CHARGE ALGORITHM	5-stage 3-level (Equalize/Boost/Float)
EQUALIZE VOLTAGE	Charges to 15V per battery (Timed or Full)
BOOST VOLTAGE	Default charges to 14.5V (Set capable)
FLOAT VOLTAGE	Default 13.8V per battery (Set capable)
POWER CONVERSION	DC/DC Switch Mode
VOLTAGE STEP DOWN	Can charge a lower voltage battery from a higher voltage PV array
POWER CONSUMPTION	Less than 1W
ENVIRONMENTAL RATING	0 to 40°C
INPUT	20, 40, 63, and 100A DP Input Circuit Breaker
OUTPUT CONNECTION	25, 50, 63, and 100A DP Output Circuit Breaker
DIMENSIONS (cm) (L X W X H)	20A: 17 x 21 x 11cm 40A: 20 x 22 x 13cm 60A: 30 x 22 x 12cm 100A: 42 x 22 x 12cm
WEIGHT	20/40A 3kgs / 60A 4kg / 100A 5kg