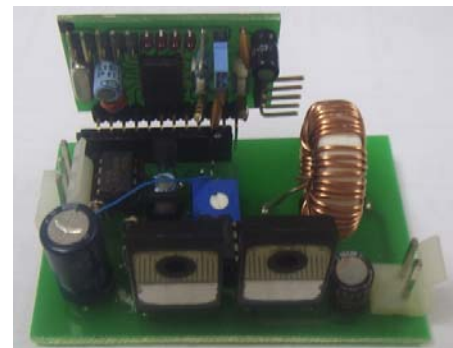
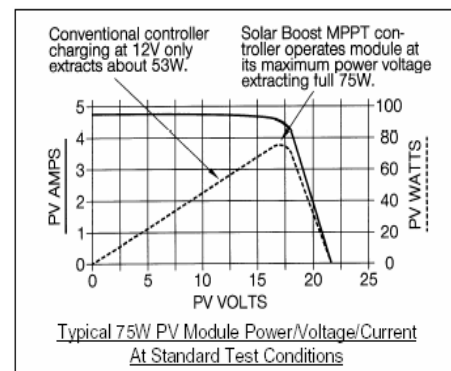


ESP series MPPT Solar regulator

The ESP series MPPT Solar regulator is a maximum power point tracker which employs a microprocessor controller DC to DC converter which optimizes the Matches between solar arrays (PV modules), battery banks and equipment load. The controller looks at the output of the solar panels and compare it to the battery voltage which then figure out what is the best power that the panel can put out to charge the battery, continually converting it to the best voltage to get maximum AMPS into the battery.

Features

- Simple microprocessor based design
- Intelligently calculates the voltage at which the module is able to produce maximum power
- High conversion efficiency of >90%
- High Reliability
- Field programmable to charge 12V, 24V or 48V batteries
- Low power consumption when in Standby or Sleep mode during low light conditions (dark cloudy or night)
- Charge controller functions for bulk and float charge
- Remote Interface using RS232



Technical specification

Solar regulator output Power	250W	500W	1000W	500W	1000W	2000W
Solar regulator output Current	20.5A			41A		
Solar regulator output Voltage	12V	24V	48V	12V	24V	48V
Conversion Efficiency	>90%	>90%	>90%	>90%	>90%	>90%
Solar module at range of output voltage	12V to 16.5V	24V to 33V	48V to 66V	12V to 16.5V	24V to 33V	48V to 66V
Output Voltage at battery bank, depending on state of charge of battery	10V to 15V	20V to 30V	40V to 60V	10V to 15V	20V to 30V	40V to 60V
Power consumption under Sleep mode	<1/4W	<1/4W	<1/4W	<1/4W	<1/4W	<1/4W
Controller function	Bulk and Float charge			Bulk and Float charge		
Remote interface	RS232			RS232		