



# 10 Amp Digital Solar Controller



INCREASES BATTERY LIFE BY PREVENTING OVERCHARGING



## Provides Superior Battery Protection

A Solar Controller is an essential component of your photovoltaic (PV) system. The Controller maintains the life of the battery by protecting it from overcharging. When your battery has reached a 100% state of charge, the Controller prevents overcharging by limiting the current flowing into the batteries from your solar array.

The GP-PWM-10 is a 12 volt surface mounted photovoltaic (PV) charge controller rated for a continuous solar current input of 10 amps.

- Regulates current flow from your solar modules to your batteries
- Temperature compensated pulse width modulation (PWM) charging
- 3 Battery charging profiles: Sealed/Gel, AGM and Flooded
- 4 stage charging: Bulk, Absorption, Float and Equalize
- Automatic Maximum Power Boost Technology™
- Back lit LCD digital screen displays charging current, battery voltage and battery state of charge
- Built-in USB charge port
- Heavy-duty terminals for low resistance connections
- Suitable for 12V solar systems up to 160 watts
- 5 year warranty

### SPECIFICATIONS

Nominal System Voltage	12V
Max Solar Array Current	10A
Battery Voltage Range	6V – 15.5V
Max. Solar panel input voltage	28V
Operating Consumption	6mA
Display Consumption	10mA
Temp. Compensation	-13mV/°F / - 24mV/°C
Operating Temperature	- 40 to 185°F / - 40 to 85°C
Humidity	99% N.C.
Dimensions (H x W x D):	3.94 x 4.02 x 1.14 in; 100 x 102 x 29 mm
Weight	6.3 oz; 178 grams
Maximum Wire Gauge:	#4 AWG
Warranty	5 year
Protection	Battery Reverse Polarity, Solar Array Reverse Polarity, Over temperature, Over Current

Charge voltages shown are at 77°F / 25°C. The total rated Maximum Power Current (I<sub>mp</sub>) of the PV input should not exceed 10 amps.

BATTERY SETTINGS	SEALED/ GEL	AGM	FLOODED
Bulk Charge Voltage Set Point	14.1V	14.4V	14.4V
Absorption Charge Voltage (30 min / day)			
<i>Automatic boost charge applied for 2hr if battery voltage drops below 12.3V</i>	14.1V	14.4V	14.4V
Float Charge Voltage	13.7V	13.7V	13.7V
Equalize Charge Voltage (2h / 28 days or after V < 12.1V)	Disabled	Disabled	14.9V

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