



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_{mp}) 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)			
Automatic boost charge applied for 2hr if battery voltage drops below 12.3V	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

Specifications may be subject to change. Product may not be exactly as shown. Specifications subject to local environmental conditions. "Go Power!" and Go Power! logo are trademarks of Carmanah Technologies Corp. Carmanah is a Canadian public corporation - TSX-CMH

AUTHORIZED DEALER:



30 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-30 is a 12 volt flush mounted photovoltaic (PV) charge controller rated for a continuous solar current input of 30 amps and is capable of dual bank charging.

- 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
- Maximum Power Boost Technology™ for manual bulk charge at any stage of the charge cycle
- Dual-bank battery charging
- On-off control for the following Go Power! Inverters: GP-SW1000, GP-HS-1500, GP-SW2000, GP-SW3000
- Back lit LCD 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 488 watts
- 5 year warranty

SPECIFICATIONS

Nominal System Voltage	12V
Max Solar Array Current	30A
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):	4.25 x 7.48 x 1.38 in; 108 x 190 x 35 mm
Weight	10.6 oz; 300 g;
Maximum Wire Gauge:	#4 AWG
Warranty	5 years
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 (Imp) of the PV input should not exceed 30 amps.

BATTERY CHARGING PROFILE	SEALED/GEL	AGM	FLOODED
Bulk Charge Voltage Set Point	14.1V	14.4V	14.4V
Absorption Charge Voltage (30 min / day)	14.1V	14.4V	14.4V
Max. Power Boost Charge Voltage: Automatic (2h if V < 12.3V)	14.1V	14.4V	14.4V
Max. Power Boost Charge Voltage: Manual (2h if activated)	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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GP-PC-10/20 Amp Potted Solar Controllers



AN ECONOMICAL SERIES OF INDUSTRIAL CONTROLLERS



*GP-PC-20 shown above

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-PC Series potted controllers feature a weather resistant enclosure and provide an economical solution for industrial applications. These controllers are available in a 10A or 20A version and automatically detect between 12 and 24 volt battery banks.

- Regulates current flow from your solar modules to your batteries
- Temperature compensated pulse width modulation (PWM) charging
- Works with the following lead acid batteries: Gel, AGM and Flooded
- 3 stage charging: Main, Boost and Float
- Easy to read LED status indicators which report: Charge Status, Battery SOC and Load Status
- Industrial IP68 rated potted enclosure with IP21 terminals
- Meets UL 1741, CSA 22.2 NO. 1071-01
- 5 year warranty

SPECIFICATIONS	GP-PC-10	GP-PC-20
Nominal System Voltage	12/24V (Auto Detection)	
Max Solar Array Current	10A	20A
Battery Voltage Range	12V System: 10.5- 15.5 24V System: 21V - 31V	
Max. Solar Panel Input Voltage	12V System: 30V 24V System: 50V	
Max Peak Solar Panel Wattage	12V System: 175W 24V System: 350W	12V System: 350W 24V System: 700W
Operating Consumption	4mA	
Temp. Compensation	12V System: -13mV/°F (-24mV/°C) 24V System: -26mV/°F (-48mV/°C)	
Operating Temperature	- 40 to 140°F (- 40 to 60°C)	
Humidity	99% N.C.	
Dimensions (H x W x D):	3.94 x 2.4 x 0.79 in (100 x 61 x 20 mm)	
Weight	5.6 oz (160 grams)	
Maximum Wire Gauge:	#8 AWG	
Warranty	5 year	
Protection	IP68 (Enclosure), IP21 (Terminals)	
Certifications	CE, RoHS, UL1741, CSA 22.2 No. 1071-01	
Safety Features	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 (Imp) of the PV input should not exceed 10 amps for the GP-PC-10 or 20 amps for the GP-PC-20.

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