

MPPT SOLAR CONTROLLER

IDEAL FOR BRINGING SOLAR INPUT UP TO BATTERY VOLTAGE.



10 R-06 4641

MODEL NO: GP-BOOST-50/12



Maximum efficiency solar charge controller built for harsh industrial environments.

A Solar Controller (or Charge Controller / Regulator) is an essential component of your photovoltaic solar 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-BOOST-50/12 is a 24, 36, or 48-volt photovoltaic (PV) charge controller rated for a solar current input of 12 amps. The GP-BOOST-50/12 converts a lower solar input voltage into a higher battery charging voltage. The GP-BOOST-50/12 uses Maximum Power Point Tracking (MPPT) technology and a unique three stage charging system to charge and protect your battery bank. The GP-BOOST-50/12 features an LED display that shows system status.

The GP-BOOST-50/12 is only intended for use in systems where the solar voltage input is less than the battery voltage.

The GP-BOOST-50/12 will limit PV current above 12 Amps. Although the GP-BOOST-50/12 will accept PV current greater than 12 Amps for a short duration, damage may occur if the GP-BOOST-50/12 operates continuously with greater than 12 Amps of PV input.

Other features include:

- Accepts up to 400 watts of solar
- Auto-detected System Voltage
- Maximum Power Point (MPPT) Charging
- 3 Stage Charging
- RoHS Compliant, environmentally safe
- Industrial environmental protection, IP68

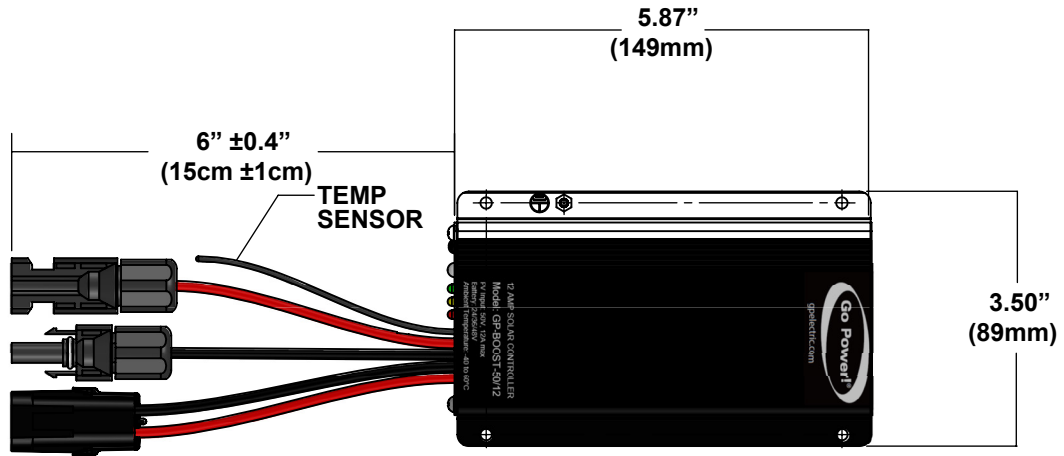
SPECIFICATIONS

Nominal System Voltage	24/36/48VDC
Max Solar Array Current	12A Amperage reduced above 50°C
Max. Solar Voltage Input	Must be less than battery voltage for charging protected up to 90V. Suggested values: 24V battery: up to 22Voc 36V battery: up to 33Voc 48V battery: up to 44Voc
Max. Solar Power Input	400W
Max. Series Fuse or Circuit Breaker Rating	20A
Operating Consumption	<6mA
Main Charge	28.8/44.2/57.6V (77°F, 25°C), 30min daily
Boost Charge (Overrides Main Charge)	28.8/44.2/57.6V (77°F, 25°C), 2h Activated when battery voltage <24.6/36.9/49.2V
Float Charge	27.6/41.4/55.2V (77°F, 25°C)
Connection Type	Battery: Male Delphi WeatherPack 2-connection Solar + : Male MC4 type connector Solar - : Female MC4 type connector
Battery Voltage Range	9V – 60V (12V system), 18 – 31V (24V system)
Temp. Compensation	-25mV / K (12V systems), -50mV/K (24V Systems)
Operating Temperature	-40 to 140°F (-40 to 60°C)
Dimensions (H x W x D):	3.50 x 5.87 x 1.65 in (89 x 149 x 42 mm)
Weight	26.8 oz (750g)
Warranty	5 years
Protection	Battery Reverse Polarity, Solar Array Reverse Polarity, Over temperature, Over Current, PV Short Circuit, Battery Short Circuit, Over Current

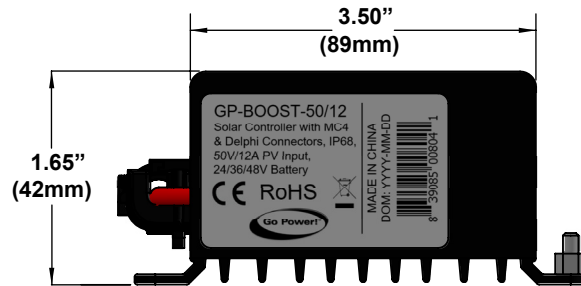
GP-CPV-BOOST-50/12 SPECIFICATIONS

Fleet Applications

Dimensions
Top View



Dimensions
Side View



The total rated Maximum Power Current (Imp) of the PV input should not exceed 12 amps.

The GP-CPV-BOOST-50/12 will limit PV current above 12 Amps. Although the GP-CPV-BOOST-50/12 will accept PV current greater than 12 Amps for a short duration, damage may occur if the GP-BOOST-50/12 operates continuously with greater than 12 Amps of PV input.