GV-4-PB-12V : 4A MPPT Solar Charge Controller by Genasun

Price: CAD $109.99 - CAD $165.00

Product Categories: MPPT : 4A-9A, Charge Controllers, Shop
Product Tags: 4a solar charge controller, canada, custom, cv, genasun, genasun gv-4, genasun gv-4-pb-12v, genasun gv4, gv-4, gv-4-pb-12v, gv-4-pb-12v canada, gv4, small
Product Page: https://www.modernoutpost.com/product/gv-4-pb-12v-4a-mppt-solar-charge-controller-by-genasun/

Product Variants

- GV-4-PB-12V : 4A MPPT Solar Charge Controller by Genasun - Standard 12V ()

- GV-4-PB-12V : 4A MPPT Solar Charge Controller by Genasun - Custom Voltage ()

Product Summary

Small, critically efficient, and cost effective, the GV-4 gets more from every panel. The GV-4-PB-12V is 4A MPPT Solar Charge Controller by Genasun provides the performance & durability you are looking for.

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GV-4-PB-12V Features... - 99.85% peak efficiency - High-speed MPPT - Advanced electronic protection - Tiny self-consumption (0.12mA)

Surviving the Storm with Low Power Burn
Every controller uses power. While a typical PWM controller burns 9mA, the Genasun GV-4 burns a scant 0.125mA. That slow burn is perfect for waiting out a snow-covered panel, or a few bad weeks of clouds.
Partial Shade – In-City Applications
Genasun controllers shine in partial shade. The 50% power increase from Genasun's advanced MPPT is often enough to prevent system downtime from partial shade. From street signs and tree branches, to coffee cups and stickers placed on panels by pedestrians, Genasun MPPT keeps partially shaded solar panels generating more power than any other controller.
Steady Power Source
Life is unpredictable. PWM controllers amplify that unpredictability. A small amount of shade can drop PWM power output to 2/3's of what a Genasun MPPT controller can draw from the same panel. By constantly adapting to changing light conditions, Genasun's advanced MPPT controllers provide a steadier source of power, keeping your system running in uncertain weather.

Radio Silence

Most MPPT solar charge controllers broadcast Radio Frequency noise from the DC/DC conversion circuit. Unfiltered inputs and outputs waste energy and interfere with nearby or attached electronics. Genasun worked to eliminated RF emissions from our line of charge controllers. During third-party testing for FCC compliance, the test engineer asked us, “Is it on?”. Mission accomplished.

No Fans. No Relays.

Fans get clogged with dust and dirt. Relays eventually stop switching. Genasun controllers use advanced electrical design that obsoletes these parts. With fewer moving parts to wear out, Genasun controllers outlast the competition.

Fault Tolerance

Electronic reverse-battery protection.

Electronic reverse-panel protection

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Mission-Critical Reliability

Genasun controllers are deployed to the most remote locations on earth. They endure years at sea, harsh Antarctic winters, freezing conditions in the upper atmosphere on solar powered airplanes, and in a few off-the-map locations. Made in the USA, each controller is put through complete electrical testing to ensure reliability. If you need mission-critical power, this is your controller.

High-Speed MPPT: Always on Target

Not all Maximum Power Point Tracking controllers were created equal. Most use a sweep and sleep method that scans the entire voltage range every 30-60 seconds. That's okay for a clear day, but traditional controllers are constantly off target during changing cloud conditions – exactly when power is scarce and is needed the most. Genasun controllers adapt to changing light conditions 20 times every second. They are always on target, capturing every bit of available sunshine. Simply put, other controllers can't keep up.

Custom Voltages Available

A custom charge profile for lead-acid batteries can be programmed at the factory to

match the exact specs of your lead-acid battery. To order a Custom Voltage controller, select the "GV-4-PB-CV" option.
Compact. Efficient. Tough as Nails. Lightweight and durable, the Genasun brand MPPT solar charge controllers are great for mobile, urban, or harsh environmental conditions. From the South Pacific to the Arctic Circle, they power your system through all conditions.

GV-4-PB-12V Specifications...

Maximum Recommended Panel Power : 50W
Rated Battery (Output) Current : 4A
Nominal Battery Voltage : 12V
Max Input Voltage : 27V
Recom. Max Panel Voc at STC : 22V
Minimum Battery Voltage for Operation : 7.2V
Input Voltage Range : 0-27V
Maximum Input Short Circuit Current : 4A
Maximum Input Current** : 7A
Charge Profile : Multi-Stage with Temperature Compensation
Absorption Voltage : 14.2V
Absorption Time : 2 Hours
Float Voltage : 13.8V
Charging Output Voltage Range : 7.2-18V
Charging Output Voltage Range : 7.2-18V
Battery Temperature Compensation : -28mV/°C
Operating Temperature : -40°C - 85°C
Maximum Full Power Ambient : 50°C
Electrical Efficiency : 96%-99.85% typical
Tracking Efficiency : 99% typical
MPPT Tracking Speed : 15Hz
Operating Consumption : 0.125mA(125uA)
Night Consumption : 0.09mA (90uA)
Environmental Protection : IP40 (Nickel-Plated Brass & Stainless Hardware)

Connection : 4-position terminal block for 12-30AWG wire
Weight : 2.8 oz., 80g
Dimensions : 4.3 x 2.2 x 0.9", 11 x 5.6 x 2.5 cm
Warranty : 5 years
*Panel Isc. Maximum input power and maximum input voltage requirements must also be respected.
**Maximum current that the controller could draw from an unlimited source. This specification is not intended for determining PV input.

Product Attributes

- Dimensions: 1 × 1 × 1 cm
- Weight: .3 kg
- Model: Standard 12V, Custom Voltage