

GV-10-Li Genasun MPPT Solar Charge Controller



Price: CAD \$215.00 - CAD \$299.00

SKU: GNGV10LI

Product Categories: [Charge Controllers](#), [HAM Radio](#), [In The Field](#), [MPPT : 10A-19A](#), [Shop](#)

Product Tags: [12v](#), [140w](#), [8 amp](#), [8A](#), [8amp](#), [boost](#), [boost charge controller](#), [canada](#), [charge controller](#), [genasun](#), [genasun gvb](#), [genasun gvb-8-pb](#), [gvb](#), [gvb-8-pb](#), [lead acid](#), [mttp](#), [solar](#), [solar controller](#)

Product Page:

<https://www.modernoutpost.com/product/gv-10-li-genasun-mppt-solar-charge-controller/>

Product Variants

- GV-10-Li Genasun MPPT Solar Charge Controller - 12.5V ()
- GV-10-Li Genasun MPPT Solar Charge Controller - 14.2V ()
- GV-10-Li Genasun MPPT Solar Charge Controller - 16.7V ()

- GV-10-Li Genasun MPPT Solar Charge Controller - CV ()

Product Summary

GV-10-Li is the Genasun MPPT Solar Charge Controller for 10A (120-160W) solar modules & Lithium batteries. Small, critically efficient, and cost-effective, the GV-10 gets more from every panel.

Product Description

GV-10-Li is the Genasun MPPT Solar Charge Controller for 10A (120-160W) solar modules & Lithium batteries. Small, critically efficient, and cost-effective, the GV-10 gets more from every panel.

10A MPPT Controller w/ LVD

- 98.3% Peak Efficiency - Electrolytic-Free, Ceramic Capacitors - Doesn't wear out from heat - High-Speed MPPT - IP40 - Advanced electronic protections - 10 Year Warranty - Compatible with lithium and lead-acid batteries

Product Brochure

Product Selection Guide

Genasun GV-10-Li :

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 equally. Most use a sweep and sleep method that scans the entire voltage range every 30-60 seconds. That's okay for a clear day, with a stationary panel. But moving vehicles and changing cloud cover require a faster, more advanced controller. Genasun controllers adapt to changing light conditions 15 times every second. They are always on target, capturing every bit of available sunshine. Simply put, other controllers can't keep up.

A Perfect Match for your 140W Panel

The GV-10 was designed to maximize the usable energy from a 140W panel. With Continuous Maximum Power Point Tracking, and night consumption of only 0.9mA, the GV-10 delivers results. In fact, the GV-10 is so effective at increasing panel output, it lowers your system cost (\$/W) compared to a PWM controller and larger panel.

Advanced Lithium Charging Algorithms

Our Lithium charging algorithms draw from nine years of experience building Lithium battery packs for harsh environments. We've worked with every chemistry, and have tailored charge profiles to help you get more capacity and cycle life from your battery pack.

Custom Voltages Available

Genasun stocks the GV-10 in a variety of charge profiles for the most common Lithium chemistries and cell configurations. Custom voltages can be programmed at the factory to match the Float Voltage (CV voltage) of your battery. For ordering a Custom Voltage controller, select the "CV" option on the order form.

Made in the USA GVB-10-Li Features...]

Surviving the Storm with Low Power Burn

Every controller uses power. While a typical PWM controller burns 9mA, the Genasun GV-10 burns a scant 0.125mA. That slow burn is perfect for waiting out a snow-covered panel, or a few bad weeks of clouds.

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 eliminate 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.

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.

Complete Power Management.

The GV-10 does it all. Plug in the solar panel, connect the battery, and connect the load. The GV-10 will automatically maximize the solar power collected. The advanced battery charging algorithm will maximize the lifetime and capacity of your battery system. The load output will provide smooth, filtered power without the AC chatter found in lesser controllers. This little black box does it all, efficiently and consistently.

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.

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.

Plug and Play, with Advanced Error Protections

We all make mistakes. People plug panels in backwards. Rodents chew through cables and cause short circuits. Stuff happens. But don't worry, we've got you covered. Advanced built-in electronic protections will instantly cut power to a short circuit. The controller will automatically test to see when the short is removed. Once it's clear, normal operation will resume.

Fault Tolerance

Electronic reverse-battery protection.

Electronic reverse-panel protection

Load protected from reversed battery.

...

GV-10-Li Specifications...

Maximum Recommended Panel Power...

GV-10-Li-12.5V : 120W

GV-10-Li-14.2V : 140W

GV-10-Li-16.7V : 160W

- Rated Battery (Output) Current : 10.5A - Nominal Battery Voltage : N/A - Max Input Voltage : 34V - Recom. Max Panel Voc at STC : 27V - Minimum Battery Voltage for Operation : 8.5V - Input Voltage Range : 0-34V - Maximum Input Short Circuit Current : 10.5A - Maximum Input Current : 19A*** - Charge Profile : CC-CV - Absorption Voltage - - Absorption Time -

Float Voltage...

GV-10-Li-12.5V : 12.5V (LiCoO2)

GV-10-Li-14.2V : 14.2V (LiFePO4)

GV-10-Li-16.7V : 16.7V (LiCoO2)

- Battery Temperature Compensation disabled - Operating Temperature -40°C - 85°C - Maximum Full Power Ambient 50° - Electrical Efficiency 96%-98% typical - Tracking Efficiency 99+% typical - MPPT Tracking Speed 15hz - Operating Consumption 0.150mA(150uA) - Night Consumption 0.125mA(125uA) - Environmental Protection IP40 (Terminals Nickel Plated) - Connection 6-position terminal block for 12-30AWG wire - Weight 6.5 oz., 185g - Dimensions 5.5x2.5x1.2", 14x6.5x3.1cm - 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..

*** Maximum current that the controller could draw from an unlimited source. This specification is not intended for determining PV input.

Product Attributes

- Dimensions: 8 × 6 × 4 cm
- Weight: .3 kg
- Battery Voltage: 12.5V, 14.2V, 16.7V, CV

Product Gallery

