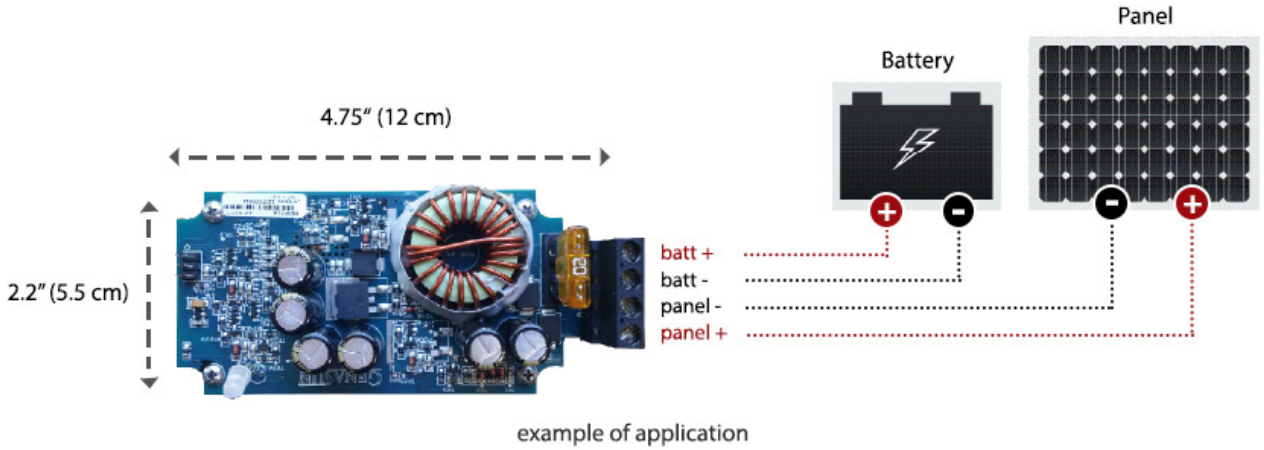
GENASUN

Reliability & efficiency down to a science.

Industrial | Military | Portable | Embedded | Off-Grid

A ready-to-go MPPT solar charge controller for OEM applications. The GV-10-PCB MPPT controller available as an easy-to-install PCB. The GV-10-PCB extracts more power from any given panel than a PWM controller. And though PWMs may offer a lower controller cost, Genasun MPPT controller delivers more power – reducing the cost per watt by 10-30% and giving you more bang for your buck. Available for Lead-Acid battery at 12 V, 4S $LiFePO_4$, 3S or 4S Li-ion, or custom voltages. Packaged in bulk (multiple of 50 units) for OEM applcations.



example of application

GV-10-PCB | 10.5 A @ 12 V MPPT

- 98% peak efficiency
- Ultra-fast Boost MPPT technology
- Built-in fuse
- Excellent low-light performance
- PCB board for easy installation
- Great for lithium batteries

Take advantage MPPT technology and enjoy more reliable power from smaller panels.

+10% additional power in the summer No panel is too hot to handle.

+30% more power on those shorter, colder winter days.

+50% increase in energy harvest from partially shaded panels.

Typical power gains from Genasun MPPT controllers vs the best PWM controllers available.

MADE IN USA · Intertek · CE · FC · RoHS COMPLIANT

Specifications:

MODEL (GV-10-**)	Pb-12V-PCB		Li-12.5V-PCB	Li-14.2V-PCB	Li-16.7V-PCB	Li-CV-PCB
Maximum Recommended Panel Power:	140 W		120 W	140 W	160 W	(See specs for closest CC/CV voltage.)
Rated Battery (Output) Current:	10.5 A					
Max Input Voltage:	34 V					
Recommended Max Voc at STC:	27 V					
Minimum Battery Voltage for Operation:	8.5 V					
Input Voltage Range:	0 - 34 V					
Maximum Input Short Circuit Current:[1]	10.5 A					
Maximum Input Current:[2]	19 A					
Charge Profile:	Multi-Stage with Temperature Compensation		CC/CV			CC/CV or Multi-Stage
Battery Type:	Lead-Acid FLOODED (jumper in place)	Lead-Acid SEALED (no jumper)	3S Li-ion	4S $LiFePO_4$	4S Li-ion	Lithium
Equalization Voltage:	15.0 V	–	–			
Equalization Time:	2 Hours	–	–			
Equalization Interval:	30 Days	–	–			
Bulk Voltage:	14.6 V	14.3 V	–			
Absorption Voltage:	14.4 V	14.1 V	–			
Absorption Time:	2.5 Hours		–			
Float Voltage (Pb models) or CV Voltage (Li models):	13.5 V	13.7 V	12.5 V	14.2 V	16.7 V	Custom Voltage
Re-Absorb (Re-Bulk):[3]	12.5 V	12.5 V	–			
Battery Temperature Compensation:	-28 mV/°C (referred to 25 °C)		Disabled			
Operating Temperature:	-40 °C – 85 °C					
Maximum Full Power Ambient:	70 °C					
Electrical Efficiency:	96% - 98% typical					
Tracking Efficiency:	99+% typical					
MPPT Tracking Speed:	15 Hz					
Night Consumption:	0.9 mA (900 uA)					
Environmental Protection:	IP00, Nickel-Plated Brass & Stainless Hardware					
Connection:	4-position terminal block for 10-30 AWG wire					
Certifications:	cETLus, CE, FCC, RoHS					
Weight:	3.4 oz. (96 g)					
Dimensions:	4.75 x 2.2 x 1.0" (12 x 5.5 x 2.5 cm)					
Warranty:	5 years					

(1) Panel Isc. Maximum input power and maximum input voltage requirements must also be respected.
(2) Maximum current that the controller could draw from an unlimited source. This specification is not intended for determining PV input.
(3) If the battery voltage drops below this point, the controller will attempt to run an absorption cycle. Otherwise, it will charge to the float voltage.