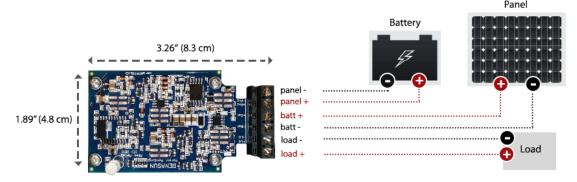


# Reliability & efficiency down to a science.

#### Parkmeters | Military | Portable | Embedded | Off-Grid

A ready-to-go MPPT solar charge controller for OEM applications. The GV-5-PCB is the first MPPT controller available as an easy-to-install PCB. It is light, compact, and packs advanced MPPT tracking technology. Compatible for PV panels up to 65 W for charging 12 V battery (Pb or Lithium) up to 5 A with 99.85% peak efficiency. It will extract 10-30% more power from a panel than a PWM controller, giving you more bang for your buck. The GV-5-PCB can handle a 5 A DC Output with low voltage disconnection (LVD). Its ceramic capacitors will never wear out, and it ships with an industry-leading 10 year warranty. Available for LiFePO<sub>4</sub> (3S or 4S), LiCoO<sub>2</sub> (3S or 4S), or custom Li-ion battery voltages. Packaged in bulk (multiple of 50 units) for OEM applications.



example of application

#### GV-5-PCB

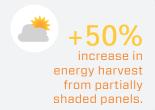
### 5 A @ 12 V MPPT 65 W

- 99.85% peak efficiency •
- Electrolytic-free, ceramic capacitors
  - Ultra-fast true MPP Tracking •
  - 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.







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



## **Specifications:**

	GV-5-Pb-12V-PCB	GV-5-Li-10.7V-PCB	GV-5-Li-12.5V-PCB	GV-5-Li-14.2V-PCB	GV-5-Li-16.7V-PCB	GV-5-Li-CV-PCE
SKU:	930-0106-01	930-0125-01	930-0100-01	930-0113-01	930-0121-01	930-0107-01
Battery Type:	12V Lead-Acid	3S LiFePO4	3S Li-ion	4S LiFePO4	4S Li-ion	Lithium
Maximum Recommended Panel Power:	65 W	50W	55W	65W	75W	See specs for closest -Li equivalent
Maximum Input Voltage:	27 V					
Recommended Max Panel Voc at STC:	22 V					
Minimum Battery Voltage for Normal Operation:	7.2 V					
Trickle Charge to Recover Dead (0 V) Battery:	Yes					
Rated Charging Current:	5 A					
Continuous Rated Load Current:	5 A					
Naximum Input Short Circuit Current <sup>1</sup> :	8 A					
Maximum Input Current²:	8 A					
Electrical Efficiency:	96% - 99.85% typical					
Operating Consumption:	0.150 mA (150 uA)					
light Consumption:	0.125 mA (125 uA)					
Charge Profile:	Multi-Stage with Temperature Compensation	CC-CV				CC-CV or Multi-Stage
Bulk Voltage	14.4 V	-				
Absorption Voltage:	14.2 V	-				
Absorption Time:	2 hours	-				
Float Voltage (Pb models) or CV Voltage (Li models):	13.8 V	10.7 V	12.5 V	14.2 V	16.7 V	See specs for closest -Li equivalent
Load (LVD) Disconnect/Reconnect /oltage:	11.4/12.5 V	8.2/9.0 V	9.3/10.5 V	11.0/12.0 V	12.4/14.0 V	
Battery Temperature Compensation:	-28 mV/°C Disabled					
perating Temperature:	-40°C − 85°C					
Maximum Full Power Ambient³:	45°C					
racking Efficiency:	99+% typical					
ЛРРТ Tracking Speed:	15 Hz					
Invironmental Protection:	IP00, Conformal Coating, Nickel-Plated Brass & Stainless Hardware					
Connection:	6-position terminal block for 12-30 AWG wire					
Veight:	0.8 oz (23 g)					
Dimensions:	3.3" x 1.9" x 0.9" (8.3 cm x 4.8 cm x 2.3 cm)					
Varranty:	10 years					
Certifications:	CE, FCC, RoHS					

<sup>(1)</sup> Panel Isc. The GV-5-PCB can be used with panels whose Isc exceeds this rated maximum.



<sup>(2)</sup> Maximum current that the controller could draw from an unlimited source. This specification is not intended for determining PV input.

<sup>(3)</sup> Max ambient temperature for full operating power. Test conditions: 16 V input, 13 V output, GV-5-PCB vertically (wall) mounted.