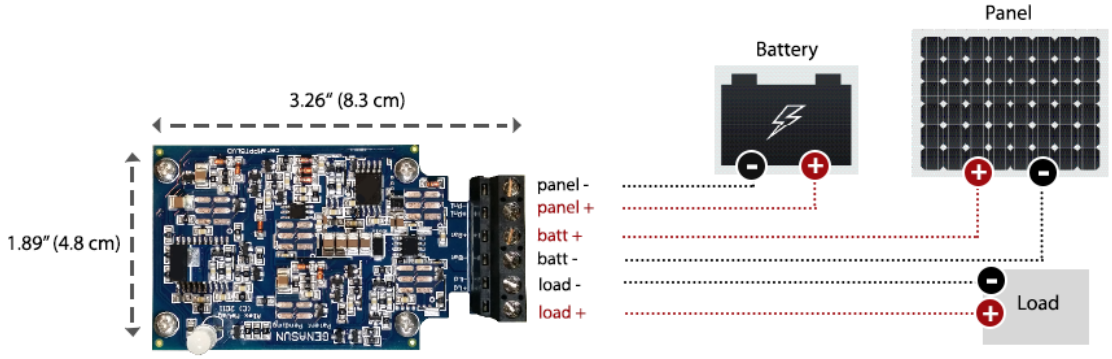
GENASUN

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** (SKU 930-0100-01) 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 $LiFePO_4$ (3S or 4S), $LiCoO_2$ (3S or 4S), or custom Li-ion battery voltages. Packaged in bulk (multiple of 50 units) for OEM applcations.



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.

+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.

CE FC RoHS COMPLIANT

Specifications:

	GV-5-PCB-Pb-12V	GV-5-PCB-Li-**.*V	
Maximum Recommended Panel Power:	65 W	GV-5-Li-10.7V	50 W
		GV-5-Li-10.7V-SP	20 W
		GV-5-Li-12.5V	55 W
		GV5-Li-14.2V	65 W
		GV5-Li-16.7V	75 W
Rated Battery (Output) Current:	5 A	5 A (-SP model: 2 A)	
Nominal Battery Voltage:	12 V	N/A	
Maximum Input Voltage:	27 V	27 V	
Recommended Max Panel Voc at STC:	22 V	22 V	
Minimum Battery Voltage for Normal Operation:	7.2 V	7.2 V	
Trickle Charge to Recover Dead (0 V) Battery:	Yes	Yes	
Maximum Input Short Circuit Current[1]:	5 A	5 A (-SP model: 2 A)	
Continuous Rated Load Current:	5 A	5 A	
Maximum Input Current[2]:	9 A	9 A	
Electrical Efficiency:	96% - 99.85% typical	94% - 99.85% typical	
Operating Consumption:	0.150 mA (150 uA)		
Night Consumption:	0.125 mA (125 uA)		
Charge Profile:	Multi-Stage with Temperature Compensation	CC-CV	
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	GV-5-Li-10.7V (-SP)	10.7 V
		GV-5-Li-12.5V	12.5 V
		GV5-Li-14.2V	14.2 V
		GV5-Li-16.7V	16.7 V
Load (LVD) Disconnect/Reconnect Voltage:	11.4/12.5 V	GV-5-Li-10.7V (-SP)	8.2/9.0 V
		GV-5-Li-12.5V	9.3/10.5 V
		GV5-Li-14.2V	11.0/12.0 V
		GV5-Li-16.7V	12.4/14.0 V
Battery Temperature Compensation:	-28 mV/°C	Disabled	
Operating Temperature:	-40°C – 85°C		
Maximum Full Power Ambient[1,2]:	45°C		
Peak-Shaving/PV-Heavy[1]:	Yes		
Tracking Efficiency:	99+% typical		
MPPT Tracking Speed:	15 Hz		
Environmental Protection:	IP40, Nickel-Plated Brass & Stainless Hardware		
Connection:	6-position terminal block for 12-30 AWG wire		
Weight:	2.8 oz. (80 g)		
Dimensions:	4.3 x 2.2 x 0.9" (11 x 5.6 x 2.5 cm)		
Warranty:	10 years		
Certifications:	CE, FCC, RoHS		

(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.