

# Reliability & efficiency down to a science.

## Marine | RV | Portable | Military | Off-Grid



#### You paid for 140 Watts. Get your money's worth with Genasun.

With the Genasun GV-10 MPPT controller, continuous power is yours for the taking. The GV-10 extracts more power from any given panel than a PWM controller or other MPPT controllers. 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 LiFePO4, 3S or 4S Li-ion, or custom voltages.

# GV-10 | 10.5 A @ 12 V MPPT 140 W

- 98% peak efficiency
  - Built-in fuse •
- Excellent low-light performance
  - Ultra-fast true MPP Tracking
  - Compact for easy installation
    - No fans. No relays

Take advantage of Genasun's advanced MPPT technology and enjoy more reliable power from smaller panels.







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



GENASUN GV-10 DATA SHEET, REVISION 1.0 | 2021

## **Specifications:**

•	GV-10-Pb-12V		GV-10-Li-12.5V	GV-10-Li-14.2V	GV-10-Li-16.7V	GV-10-Li-CV
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: <sup>1</sup>	10.5 A					
Maximum Input Current: <sup>2</sup>	19 A					
Charge Profile:	Multi-Sta Temperature C	ge with ompensation	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 <sub>4</sub>	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): <sup>3</sup>	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 ℃					
Electrical Efficiency:	96% - 98% typical					
Tracking Efficiency:	99+% typical					
MPPT Tracking Speed:	15 Hz					
Night Consumption:	0.9 mA (900 uA)					
Environmental Protection:	IP40, Nickel-Plated Brass & Stainless Hardware					
Connection:	4-position terminal block for 10-30 AWG wire					
Certifications:	cETLus, CE, FCC, RoHS					
Weight:	6.5 oz. (185 g)					
Dimensions:	5.4" x 2.4" x 1.3″ (13.7 cm x 6.2 cm x 3.3 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.

