

# Reliability & efficiency down to a science.

Marine | RV | Industrial | Military | Street Lighting | Off-Grid

Get your money's worth with Genasun. This 50W 4A 12V MPPT controller is small, critically efficient, and cost-effective. The GV-4 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. Its extremely low self-consumption makes it perfect for waiting out a few bad weeks of clouds.



**GV-4**

**4A @ 12V MPPT 50W**

- 99.85% peak efficiency
- No radio frequency noise
- Ultra-fast true MPP Tracking
- Excellent low-light performance
- Compact for easy installation

Take advantage of Genasun's advanced 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.



[www.genasun.com](http://www.genasun.com) Sold through Blue Sky Energy  
(760) 597-1642 [sales@blueskyenergyinc.com](mailto:sales@blueskyenergyinc.com)

# Specifications:

GV-4-Pb-12V

Maximum Recommended Panel Power:	50W
Rated Battery (Output) Current:	4A
Nominal Battery Voltage:	12V
Max Input Voltage:	27V
Recommended Max Voc at STC:	22V
Minimum Battery Voltage for Operation:	7.2V
Input Voltage Range:	0-27V
Maximum Input Short Circuit Current*:	4A
Maximum Input Current**:	7A
Charge Profile:	Multi-Stage with Temperature Compensation
Absorption Voltage:	14.2V
Absorption Time:	2 Hours
Float Voltage:	13.8V
Charging Output Voltage Range:	7.2-18V
Battery Temperature Compensation:	-28mV/°C
Operating Temperature:	-40°C – 85°C
Maximum Full Power Ambient:	50°C
Electrical Efficiency:	96% - 99.85% typical
Tracking Efficiency:	99% typical
MPPT Tracking Speed:	15Hz
Operating Consumption:	0.125mA (125uA)
Night Consumption:	0.09mA (90uA)
Environmental Protection:	IP40, Nickel-Plated Brass & Stainless Hardware
Connection:	4-position terminal block for 12-30AWG 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:	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.

# Certifications:

