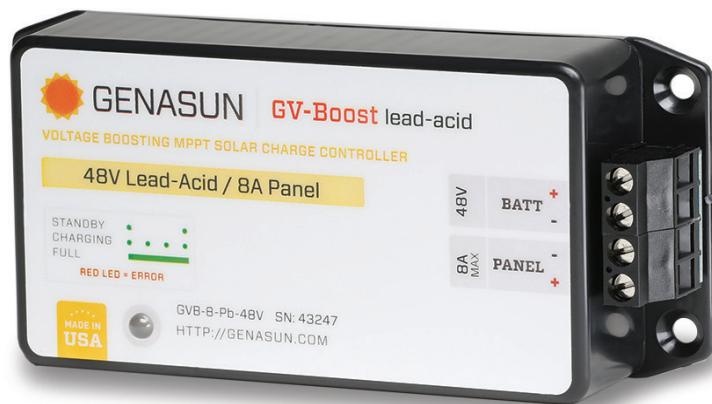


# Reliability & efficiency down to a science.

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Get your money's worth with Genasun. A true problem-solver, the unique GVB charge controller with MPPT allows a lower-voltage solar panel to charge higher-voltage batteries. Want to charge a 24V battery with a 48-cell solar panel? No problem. A 48V battery from a 12V panel? We've got you covered. With 99% peak efficiency and the ability to charge with as little as 5V of input, they are the industry's most efficient voltage-boosting controllers.



## GVB-8

## 8A MPPT @ 12-48V

Built-in fuse •

99% peak efficiency •

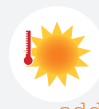
Ultra-fast true MPP Tracking •

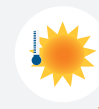
Excellent low-light performance •


Compact for easy installation •

Available for lithium batteries •

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.



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(760) 597-1642 [sales@blueskyenergyinc.com](mailto:sales@blueskyenergyinc.com)

# Specifications:

## GVB-8, All Models

Rated Panel (Input) Current:	8A*
Minimum Panel Voltage for Charging:	5V
Minimum Battery Voltage for Operation:	9.5V
Maximum Input Panel:	60V
Recommended Max Panel Voc at STC:	50V
Input Voltage Range:	0-60V
Maximum Input Short Circuit Current**:	8A*
Maximum Input Current***:	15A
Tracking Efficiency:	99+% typical
MPPT Tracking Speed:	15Hz
Operating Temperature:	-40°C - 85°C
Maximum Full Power Ambient:	70°C
Environmental Protection:	IP40, Nickel-Plated Brass & Stainless Hardware
Connection:	4-position terminal block for 10-30AWG wire
Certifications:	cETLus Safety, Recognized Component cETLus HazLoc (C1D2), CE, FCC, RoHS
Weight:	6.5oz., 185g
Dimensions:	5.5x2.5x1.2", 14x6.5x3.1cm
Warranty:	5 years

### GVB-8-Pb-12V    GVB-8-Pb-24V    GVB-8-Pb-36V    GVB-8-Pb-48V    GVB-8-Pb-CV

Charge Profile:	Multi-Stage with Temperature Compensation				
Nominal Battery Voltage:	12V	24V	36V	48V	(See specs for closest -Pb equivalent.)
Maximum Recommended Panel Vmp:	13V	26V	41V	43V	
Maximum Recommended Panel Power (8A Panel w/-155mm cells):	105W	210W	325W	350W	
Bulk Voltage:	14.4V	28.8V	43.2V	57.6V	
Absorption Voltage:	14.2V	28.4V	42.6V	56.8V	
Absorption Time:	2 Hours				
Float Voltage:	13.8V	27.6V	41.4V	55.2V	
Battery Temperature Compensation (referred to 25°C):	-28mV/°C	-56mV/°C	-84mV/°C	-112mV/°C	
Electrical Efficiency:	95% - 97% typical	96% - 98% typical	96% - 98% typical	96% - 99% typical	
Night Consumption:	7mA	6mA	6mA	5mA	

### GVB-8-Li-14.2V    GVB-8-Li-28.4V    GVB-8-Li-41.7V    GVB-8-Li-56.8V    GVB-8-Li-CV

Battery type:	4S LiFePO <sub>4</sub>	8S LiFePO <sub>4</sub>	10S Li-ion	16S LiFePO <sub>4</sub>	Lithium
Charge Profile:	CC/CV				CC/CV or Multi-Stage
CV Voltage:	14.2V	28.4V	41.7V	56.8V	Custom
Battery Temperature Compensation:	Disabled				
Maximum Recommended Panel Vmp:	13V	26V	39V	43V	(See specs for closest CC/CV voltage)
Maximum Recommended Panel Power:	105W	210W	325W	350	
Electrical Efficiency:	95% - 97% typical	96% - 98% typical	96% - 98% typical	96% - 99% typical	
Night Consumption:	7mA	6mA	6mA	5mA	

\*Panel ratings have increased since we designed the GVB. Although we don't believe in changing specifications without a corresponding engineering change, based on both our customers' experiences over the years as well as the headroom we designed into the GVB, we feel comfortable recommending the GVB for panels with Imp up to 9A. \*\*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. This specification is not intended for determining PV input.