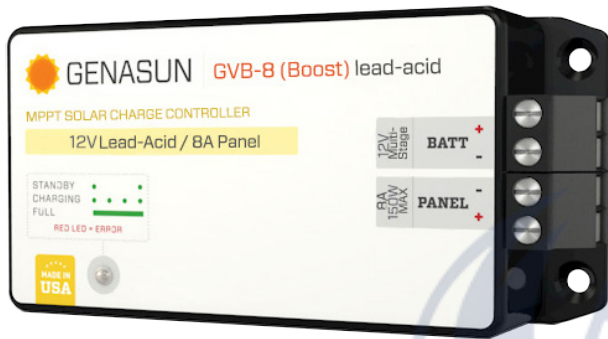


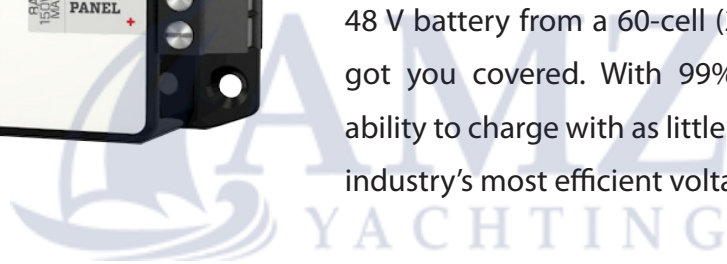


# Reliability & efficiency down to a science.

Marine | RV | Portable | Military | Micro-Mobility | Off-Grid



**Get your money's worth with Genasun.** A true problem-solver, the unique GVB-8 Boost charge controller with MPPT allows a lower-voltage solar panel to charge higher-voltage batteries. Want to charge a 24 V battery with a 36-cell (12V-nominal) solar panel? No problem. A 48 V battery from a 60-cell (20V-nominal) panel? We've got you covered. With 99% peak efficiency and the ability to charge with as little as 5 V of input, they are the industry's most efficient voltage-boosting controllers.





## GVB-8


## 8 A MPPT @ 12-48 V

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

- Built-in fuse
- 99% peak efficiency
- Ultra-fast true MPP Tracking
- Excellent low-light performance
- Compact for easy installation
- Available for lithium batteries

 **+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.



# Specifications:

## GVB-8, All Models

Rated Panel (Input) Current: <sup>1</sup>	8 A
Minimum Panel Voltage for Charging:	5 V
Minimum Battery Voltage for Operation:	9.5 V
Trickle Charge to Recover Dead (0V) Battery:	Yes
Maximum Input Panel:	60 V
Recommended Max Panel Voc at STC:	50 V
Input Voltage Range:	0-60 V
Maximum Input Short Circuit Current: <sup>1,2</sup>	8 A
Maximum Input Current: <sup>3</sup>	15 A
Tracking Efficiency:	99+% typical
MPPT Tracking Speed:	15 Hz
Operating Temperature:	-40 °C – 85 °C
Maximum Full Power Ambient: <sup>4</sup>	70 °C
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:	5.5" x 2.5" x 1.2" (14 cm x 6.5 cm x 3.1 cm)
Warranty:	5 years

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

Charge Profile:	Multi-Stage with Temperature Compensation				
Nominal Battery Voltage:	12 V	24 V	36 V	48 V	
Maximum Recommended Panel Vmp:	13 V	26 V	41 V	43 V	
Maximum Recommended Panel Power (8A Panel w/~155mm cells):	105 W	210 W	325 W	350 W	
Bulk Voltage:	14.4 V	28.8 V	43.2 V	57.6 V	
Absorption Voltage:	14.2 V	28.4 V	42.6 V	56.8 V	
Absorption Time:	2 Hours				
Float Voltage:	13.8 V	27.6 V	41.4 V	55.2 V	
Re-Absorb (Re-Bulk): <sup>5</sup>	12.5 V	25 V	37.5 V	50 V	
Battery Temperature Compensation (referred to 25 °C):	-28 mV/°C	-56 mV/°C	-84 mV/°C	-112 mV/°C	
Electrical Efficiency:	95% - 97% typical	96% - 98% typical	96% - 98% typical	96% - 99% typical	
Night Consumption:	7 mA	6 mA	6 mA	5 mA	

(See specs for closest -Pb equivalent.)

### GVB-8-Li-14.2V    GVB-8-Li-25.0V    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>	6S Li-ion	8S LiFePO <sub>4</sub>	10S Li-ion	16S LiFePO <sub>4</sub>	Lithium
Maximum Recommended Panel Power:	105 W	210 W	210 W	325 W	350 W	(See specs for closest CC/CV voltage)
Maximum Recommended Panel Vmp:	13 V	20 V	26 V	39 V	43 V	
Charge Profile:	CC/CV					CC/CV or Multi-Stage
CV Voltage:	14.2 V	25.0 V	28.4 V	41.7 V	56.8 V	Custom
Battery Temperature Compensation:	Disabled					
Electrical Efficiency:	95% - 97% typical	96% - 98% typical	96% - 98% typical	96% - 98% typical	96% - 99% typical	(See specs for closest CC/CV voltage)
Night Consumption:	7 mA	6 mA	6 mA	6 mA	5 mA	

(1) Panel ratings have increased since we designed the GVB-8. 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-8, we feel comfortable recommending the GVB-8 for panels with Imp up to 9 A.

(2) Panel Isc, Max input power and maximum input voltage requirements must also be respected.

(3) Max current that the controller could draw from an unlimited source. This specification is not intended for determining PV input.

(4) Max ambient temperature for full operating power.

(5) 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.