

SolarAmp^{BG}

Waterproof and Dustproof Solar Charge Controller



*Tested in water at a depth of 5m for 1 hour.

High Weather Resistance

SolarAmp BG is fully encapsulated in a special plastic case and meets waterproof and dustproof IP68*. The operating temperature range is -40°C to $+70^{\circ}\text{C}$, which is for use in harsh environments.

High Toughness

The housing by impact resistant special plastic and fully encapsulated structure prevent mechanical failure from in breaking of foreign body. Outdoor rated, connecting wires prevent terminals from rusting.

Multicolor LED Indicator

Green, yellow, and red, three-colors LED indicates charging status, warning or error.

Cutting-edge Technology

SolarAmp BG utilizes the most advanced materials and components in Japan; achieving excellent durability and reliability.

Slim and compact design

The size is as small as a business card. Thanks to no terminals, the thickness is only 8.5 mm.

Easy to Install and Use

No installation settings are required. Automatically start after connecting the battery, photovoltaic module and DC load.

Low Self-Consumption

The low self-consumption current brings long-term stabilization and increases system performance.

Made in Japan

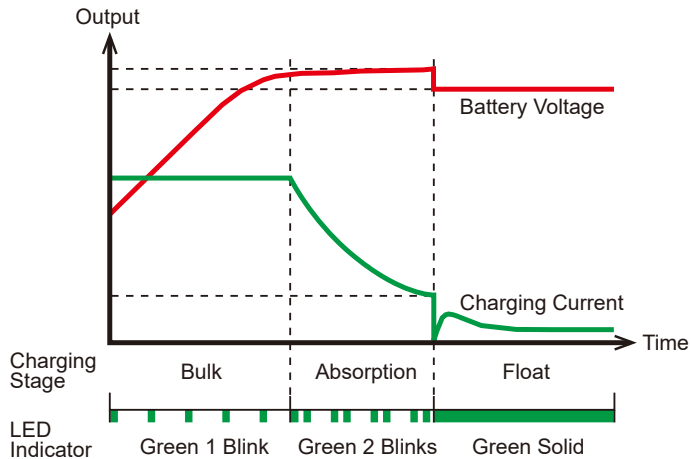
Both software and hardware are designed and manufactured in Japan.

Adequate Protection Circuit

- High / Low Voltage Protection
- Over Discharge Protection
- High Temperature Protection
- Reverse Polarity Protection
- Over Load Protection
- Short Circuit Protection
- Surge Protection

3-Stage Charge

SolarAmp BG detects battery voltage and runs 3-stage charging of bulk, absorption, and float charge automatically. The charging stage can be confirmed from the LED.



Over Discharged Battery Recovery

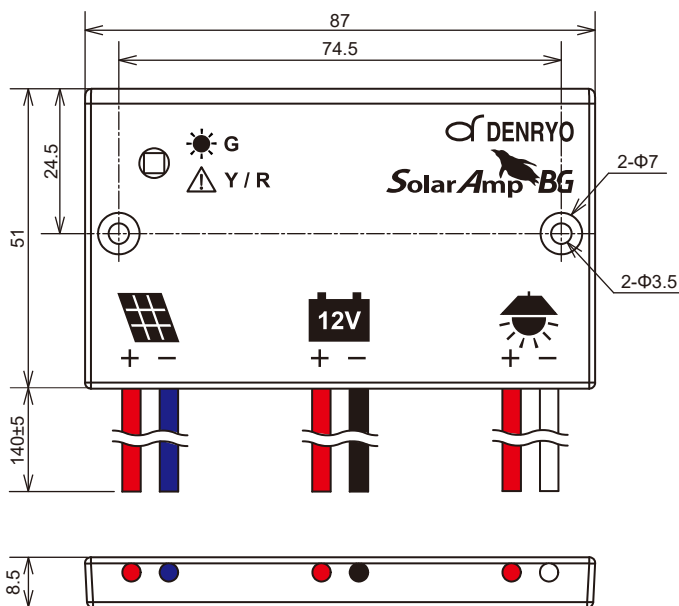
SolarAmp BG has the battery recovery function. This is convenient for the system in areas where systems are difficult to maintain on a regular basis.

Applications

SolarAmp BG is widely used in stand-alone PV systems such as solar home system in remote area, solar street light and measuring system.



Dimensions



UNIT: mm

Specification

Model No.	SA-BGA10	SA-BGB10
System Voltage	12Vdc	24Vdc
Max. Input Voltage	25Vdc	50Vdc
Min. Input Battery Voltage	6Vdc	8Vdc
Max. Input Current	10A	
Max. Load Current	10A	
Self-consumption Current	2mA (Typical)	
Charging Algorithm	3-stage (Bulk, Absorption, Float)	
Charging Voltage	14.4Vdc	28.8Vdc
Float Charging Voltage	13.7Vdc	27.4Vdc
High Voltage Protection	18Vdc	36Vdc
Over Discharge Protection	Warning 11.8Vdc Error 11.5Vdc Recovery 12.5Vdc	Warning 23.6Vdc Error 23Vdc Recovery 25Vdc
High Temperature Protection	Warning 60°C, Error 80°C, Recovery 60°C	
Battery Type	Lead Acid Battery	
Wire Size	#16AWG, 1.25sq	
Grounding	Positive Ground	
Temperature Coefficient	-30mV/°C	-60mV/°C
Operation & Storage Temperature	-40°C ~ +70°C	
Humidity	100%RH	
Dimensions (W x H x D)	87×51×8.5mm	
Weight	65g	

◆Specifications and appearance are subject to change without prior notice.

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