

WATER RESISTANT PV CHARGE CONTROLLER

SBC-2108

Description

This water resistant PV charge controller has a LED to indicate the battery is being charged (flashing) or full (solid) or no charging (off). If the LED is not on under sunlight, it indicates there is a loose connection or a over-discharged battery in the solar system. It is ideal for portable solar panel because it can be permanently connected to the solar panel even without connection to battery during transit. So only two wires to be connected to the battery on site and the LED shows if system is working. Three Stage Charging is controlled by a micro-processor programmed for 3 stage charging with PWM in absorption & float stage and bundled with self recoverable protections.



Features

- LED indicator for charging, battery full and no charging.
- Pre-installed on solar panel possible, ideal for portable solar system.
- Micro-processor control 3 stage charge with PWM for Absorption and Float.
- Self- recoverable protections:
over temperature, over voltage, over load, short circuit, battery reverse polarity.
- Electronic blocking of battery current back to solar panel.
- Ultra low stand-by current <3mA.
- Selection for Wet and Sealed type battery.
- Water resistant and -40°C to +60°C operating temperature.

Specifications

| Models | SBC-2108 |
|---|--|
| Battery System Voltage | 12VDC |
| Maximum PV Open Circuit Voltage | 26VDC |
| Rated PV Input Current | 8A |
| Maximum PV Input Current (5 minutes) | ≤10A |
| Minimum Operating Charging Voltage (from Battery) | 7VDC |
| Standby Current (Battery Voltage 13.0V) | ≤9mA |
| Absorption Voltage | |
| Sealed type battery setting | 14.2V ±0.2V |
| Wet type battery setting | 14.5V ±0.2V |
| Float Voltage | 13.8V ±0.2V |
| Voltage drop across PV to Battery Terminals | 0.5V at 8A |
| LED Indicator | Flashing - Bulk or Absorption Charging Solid - Battery full (Float Charging) Off - No Charging |
| Protections | |
| Over Temperature Protection to shut down unit | Yes and Self recoverable |
| Over Voltage Protection for Battery | >16VDC ±0.5V Self recoverable |
| Over Charging Current Protection | >12A ±1A |
| Battery Terminal Reverse Polarity Protection | Yes and Self recoverable |
| Battery Terminal Short Circuit Protection | Yes and Self recoverable |
| Back Current to PV Panel Protection | Yes and Self recoverable |
| Ambient Temperature Range | -40°C to +60°C |
| Relative Humidity | 100% |
| Approvals | CE EN 55014 ; IP65 |
| Dimensions (WxHxD) | 97x46x25.5 mm 3.8x1.8x1 inch |
| Weight | 125 g 4.4 oz |

* All values are based on the Standard ambient Temperature 25°C and Pressure 0.1Mpa.

* SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE