Solar Charger Controller Micro Controller Based - EBSCP11UP



A solar charge controller is a device used in solar power systems to manage the charging and discharging of the battery. It regulates the voltage and current coming from the solar panels to ensure the batteries are not overcharged during the day and that power is not discharged excessively at night. Modern solar charge controllers often come with features like overcharge protection, temperature compensation, and various load control options, enhancing the overall efficiency and lifespan of the solar power system. They are essential for maintaining the stability and performance of off-grid solar installations.



DUSK TO DAWN: Switch is kept ON then dusk to dawn mode is selected. With this mode turned ON Load is connected when sunlight is not present and load is turned OFF when solar is present. **Normal Mode**: Switch is kept OFF than Normal mode is selected.

Connecting the Charge Controller

- 1. Mount the charge controller on a dry indoor surface using 4 mounting holes.
- 2. Connect wires for battery to the terminals marked BATT (+) & BATT (-). Connect the wires to Controller & then to battery. Make sure the Terminals are connected.
- 3. Connect wires for Solar Modules to the terminals marked LOAD (+) & LOAD (-).

Specification

Current: Input Charge

(Solar charge current) : Maximum 10 Ampere (Max. module wattage 120 Wp)

Current Rating: Output : Maximum 10 Ampere

Over load : 11 Ampere

Battery Voltage (Nominal) : Automatic recognition: 12/24VDC: 11 Ampere

PV Voltage (Nominal) : Automatic recognition:12/24VDC PV Open Circuit Voltage : Maximum 21/42VDC wattage

Standby Power Consumption (no load): Less than 5mA

Charge Algorithm : 2 stage charge PWM

Voltage Boost : 14.5/29 V DC

Voltage Equalization : 14.8/29.6 V DC

Voltage Float : 13.7/27.4 V DC

LVD : 11.0/22.0 V DC

LVR : 12.2/22.4 V DC

HVD : 14.8/29.6 V DC

USB Charger (maximum current limit) : 0.5 Ampere (max.)

Protection : Deep Discharge, Overload Protection, Short Circuit protection

Dimension : 130x125x40(all in mm)

Protection class : IP20

Weight : 200gm (Max)

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