



AUTOCON INSTRUMENTS

1ST FLOOR, VORA BUILDING, RADHANPURI BAZAR, BHAVNAGAR-364001
GUJARAT, INDIA. PHONE- 0278 - 2511054.

E-MAIL – autocon@autocon.in , Website- www.autocon.in
www.autocon.biz

PWM Range – 10Amps/12V

Su-kam's Solar Charger Controller is a system with advanced MOSFET based PWM technology. The term "charge controller" refers to a device that charges the battery from solar panel.

Working Principle

The controller is for off-grid solar systems. This protects the battery from getting over charged using the solar module and over discharged by the loads. The charging process has been optimized for long battery life and improved system performance.

The comprehensive self-diagnostics and electronic protection functions prevent damage from installation mistakes or system faults.

Features

- Excellent EMC design
- Nominal system voltage automatic recognition
- Highly efficient Series PWM charging increases battery life and improves the solar system performance
- Use MOSFET as an electronic switch, without any mechanical switch.
- Humanized design of browser interface, for convenience of operation.
- Full control parameters setting and modification, diversified load control mode.
- Gel, Sealed and Flooded battery type options.
- Adopt temperature compensation, correction algorithm for charging and discharging parameters.
- Automatically and improve battery life.
- Electronic protection from overheating, overcharging, over discharging, over load, and short circuit.
- Reverse protection any combination of solar module and battery.

Electronic Protection Updates

- Over current
- Battery over charge protection
- PV/Battery Reverse Polarity
- Reverse Current flow

- High Temperature

Indicators

- Low battery indication
- Low battery Reconnect indication
- Battery high charging cutoff
- Charging cutoff reconnect
- Over current Shutdown

Operations/ Options

- Maximum Charging Current: 10-45 A
- Single and Dual solar array
- Start time: 25sec \pm 5 sec
- Maximum PV I/P Voltage: 25v per 36 cell Solar Module
- Adjustable Bulk Voltage
- Equalization through Auto/Manual Mode

Convenience

- Installation with ease
- Increases the Battery life
- Protects the battery from Overcharging
- Compatible with any HUPS/Inverter

Applications:

- Certifications and Approvals:
- IEC 62093
- IP 20 Rating
- Approved by MNRE Govt. Of India
- Approved by Solar Energy Center, Govt. Of India.

TECHNICAL SPECIFICATIONS

Model	LVD_SCC10:12V
Technology	MOSFET based series regulator (Common Positive)
Precise control	Through microcontroller
Voltage Rating	12 volt Battery (PV < 25V)
Charging Current	10A
Bulk voltage	14.2V (13.4 – 15 volts)
Float to bulk Transition	Below float setting level for a cumulative period of 1 hour
Absorption Period	For a cumulative period of 1 hour at Max. Bulk level
Float voltage	13.6v
Low voltage load disconnect	11.4v/Battery
Low voltage load disconnect Recovery	12.8V /Battery
Battery deep discharger cut-off	<=7V /Battery
Battery deep discharger cut-off Recovery	>8V/Battery
High battery charger OFF	15.5V
High battery Recovery Charger ON	14.5V
PV High cut	30V
PV high cut recovery	25V
Automatic load/charger restart time after high current	3.5 minutes
<u>Protections</u>	
Over Current	>120% system will shutdown
Output Over voltage	provided
Battery over charge/Deep discharge protection	Provided
PV/ Battery Reverse	Provided
Reverse Current Flow from battery to solar array	Provided
<u>General</u>	
Operating Temp	0° to 40° C
Storage Temp	0° to 55° C
Wire terminals	Suitable for 8mm ²
Relative Humidity	0-95% (NC)
Dimensions (WxDxH) in mm	134x131x38
Weight (approx.)	275 gm