

Solar Charge Controller

PWM Range



RS 232 interface Software for power management.



PWM Range - 40A/240 V

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

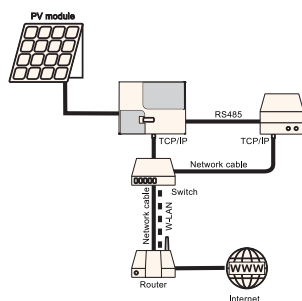
Working Principle

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.

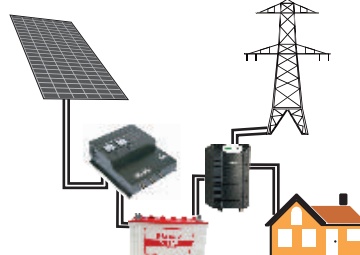
The comprehensive self-diagnostics and electronic protection functions prevent damage from installation mistakes or system faults.

Features

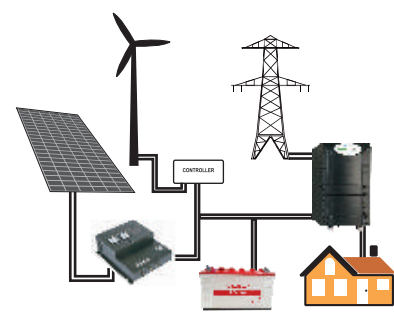
- Excellent EMC design
- Nominal system voltage automatic recognition
- High efficient Series PWM charging, increases battery life and improves the solar system performance
- Use MOSFET as an electronic switch, without any mechanical switch
- Widely used, automatically recognizes day/night
- Humanized 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



Solar Net Monitoring System for Charge Controller



For Household Application



Customization for Household Application

Solar Charge Controller

PWM Range

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: 10-45A
- Single and Dual Solar Array
- Start time: 25 Sec± 5 Sec
- Maximum PV I/P Voltage : 25V per 36Cell Solar Module
- Adjustable Bulk Voltage
- Equalization through Auto/Manual Mode

Applications

- Standalone DC system
- Home Lighting System
- Street Light System
- Stand Alone Solar System
- Off-grid and Micro grid
- Telecom Grid Solar System

Convenience

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

Certifications & Approvals

- IEC 62093
- IP 20 Rating
- Approved by MNRE, Govt.Of India
- Approved by Solar Energy Center, Govt of India.

TECHNICAL SPECIFICATIONS

| | |
|---------------------------------|---|
| MODEL | SCC240CN |
| Type | Series Regulator Common Negative |
| Technology | Microcontroller Based Control |
| System Voltage | 240V |
| ELECTRICAL PARAMETERS | |
| Charging current | 40Amp |
| Solar Array | Single Array |
| Bulk Voltage | 282 ± 2V |
| | Adjustable 270-290V |
| Absorption period | Hold battery voltage at bulk setting for a cumulative period of 1 hour |
| Float voltage | 270V ± 2V |
| INDICATIONS | LED Indications for Bulk Mode, Float Mode, High Temperature, High Current, Low Battery, High Battery, Array/Battery Reverse Polarity. |
| | Analog type voltmeter and ammeter with a selector switch for monitoring voltage of solar array/battery and charging current. |
| ENVIRONMENTAL PARAMETERS | |
| Operating Temperature | 0°C to + 40°C |
| Storage Temperature | 0°C to + 55°C |
| Relative Humidity | 0-95% Non-Condensing |
| Dimensions WxDxH (in mm) | 400 x 475 x 151 |
| Weight (in Kgs) | 9.5kg |

NOTE: Specifications are subject to change without prior notice.