



# SUNWAY P☀ER

Green and Creative  
HEFEI SUNWAY POWER



## PV SYSTEM

MPPT SOLAR CHARGE CONTROLLER



# MPPT

## SMART SERIES

As a SME manufacture of solar controller, Sunway power using the most advanced **MPPT** technology to rise the efficiency of solar charging to the optimum level. This controller is for off-grid PV system to control the charging and discharging of the battery, especially suitable for street light system. The controller features a smart tracking algorithm inside that maximizes the energy from the solar PV module(s) and charge the battery. At the same time, the low voltage disconnect function (LVD) will prevent the battery from over discharging. Charging process has been optimized for long battery life and improved system performance.

### FEATURES

- 12V/24V system auto detection
- USB ports (5V, 1A) Output
- Peak conversion efficiency of 95%, high Tracking efficiency of 97%
- Very fast sweeping of the entire I-V curve, several seconds tracking speed
- Be suitable for Sealed, Gel and Li-Fe battery various kinds of batteries
- Adopting temperature compensation and correcting the charging and discharging parameters automatically, improving the battery lifetime
- With multi-functions of perfect protection.
- The metal housing case cooling

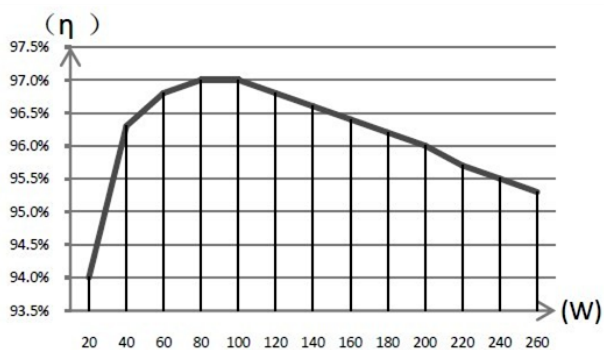


<http://www.sunway-power.com> please click for more details

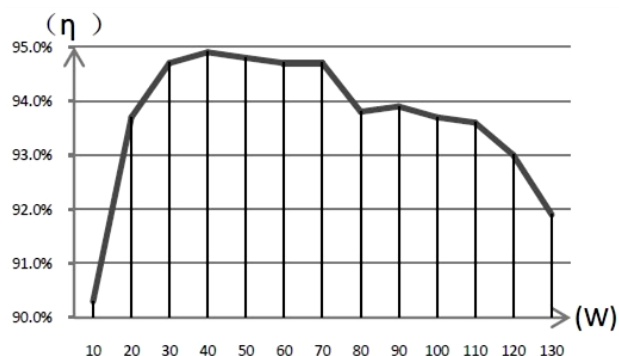
### Protect function

- Battery over charge、over discharge protection
- Over flow protection
- Overload protection
- Short circuit protection
- Anti - counter function in night

Voc of solar panel(36V) in 24V system

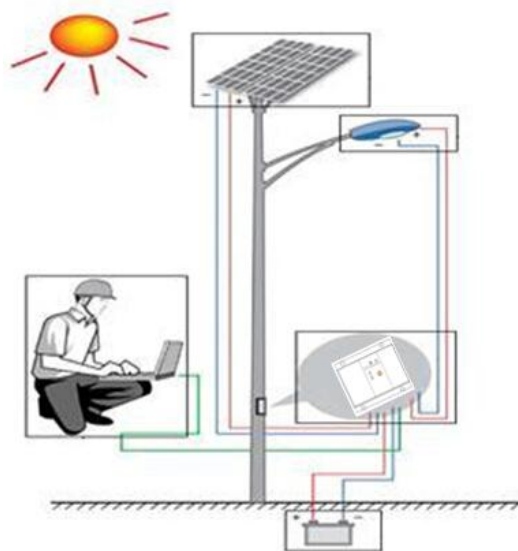
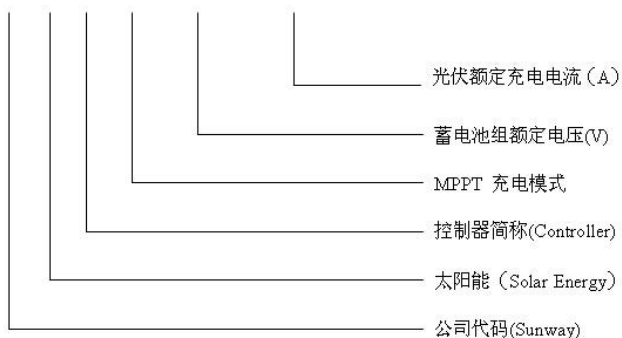


Voc of solar panel(17V) in 12V system



### MODEL

S S C M-XX-XXA



## TECH-DATA



system	Vmp	Vmp (suggestion)	Vmp
12V	15V	18V	25V
24V	30V	36V	45V



system	Over-discharge	Over-discharge recovery	floating	Over-charge	Over-charge recovery
12V	10.5 V	12.0 V	14.0 V	13.5 V	15.0 V
24V	20.0 V	24.0 V	28.0 V	27.0 V	30.0 V



output functions	
Each line rated current	1-5A
Each line rated power (5V/12V/24V)	5W/ 60W / 100W
MODE: lighting	Lighting on/off
MODE: lighting+ city-electric supply switch	Lighting on/off
MODE: home	Output constantly
MODE: home+ city-electric supply switch	Output constantly

performance	
Voc of solar Max. [V]	≤60
Battery condition	>9V (12V system) ; >18V (24V system)
Rated charging current [A]	□5-20
Self-consumption [mA]	≤20
Charging efficiency	≥95%
Temperature-compensation coefficient	-35mV/°C (25°C ref.)
cooling	Casing cooling
Ambient temp. range	-30°C to +55°C
Humidity range	10% - 90% (NC)
Protection class	IP55
Altitude work [m]	≤2000
Net weight [kg]	0.85
Size [mm]	120*140*50