# **User's Manual**

### SC-Series IP66 Solar Charge Controller

Introduction : The SC-Series solar charge controller applies a microchip for intelligent control. The charging efficiency can be highly increased by using dual-mos charging circuit , compared to normal diode for reserve current protection. The controller can extend the battery life with build-in 4-stage PWM charging program. It is equipped with various of protection function such as over-charge protection, over discharge protection , over-load protection, reverse current protection.

#### - . LED indicator and connection



LED display message

	Green(charge )	Red ( discharge )	
off	Solar panel disconnect /it is at night	Load output is off	
on	Under PWM charge	Load output is on	
Slow-flashing	Under float charge	Over load	
Fast-flashing	Under buck charge	N/C	

#### $\equiv$ . Installation

Connect the individual components to the symbols provided.

Observe the following connection sequence during commissioning:

1.Connect the battery to the charge controller - plus and minus

2.Connect the photovoltaic module to the charge controller - plus and minus

3.Connect the consumer to the charge regular - plus and minus

The reverse order applies when deinstalling!

An improper sequence order can damage the controller!

\*\*\*\*\*\*\*\*Both LED will be flashing for 5 times when you first connect battery to the

controller, this can be as a system start signal. Controller is broken if you can't see

this.

#### **ATTENTION!**

Controller will be broken if you don't follow the connection sequency
Please use big cable to reduce voltage drop on wire.
This controller is without short-circuit protection. Therefore, we strongly recommended to connect a fuse to the circuit.

#### $\equiv$ . Daily maintenance

The controller is builded to be fully automatic.Please keep the controller out of water and dust after installation.No maintenance is necessary in normal condition.If the voltage is too low and not enough to start the controller(in some extreme weather),please disconnect the solar controllers and active the battery manually ,after that,connect the system again..

## 四. Specification

Model	SC1201	SC1203	SC1205	
Max charge current	1A	3A	5A	
Max discharge current	1A	3A	5A	
Over load	About 2A	About 4A	About 6A	
Rated battery voltage	12V(Only for Lead-acid battery)			
Max solar panel input voltage	21V			
Equalize voltage	14.8V			
Constant voltage	14.2V			
Float voltage	13.8V			
LVD	11.2V			
Discharge return	12.6V			
Charging control	PWM 3 stage			
Standby lost	2.8mA@12V			
Min start voltage	4.5V			
wire	20AWG*10cm			
Size/weight	60x25x18mm/50g			

Attn : 1.All voltage are for 12V system, pls time 2 if you are using 24V system 2.voltage tolerance 1%

3. Product specifications are subject to change without prior notice