

## SCF-30A 40A MPPT Solar Charge Controller



### Feature

12V/24V/46V/48V Auto work, parallel design  
 Multi-stage charging optimizes battery performance  
 MPPT efficiency >99.5%, Peak conversion efficiency 97.5%  
 Compatible with Gel, AGM, Flooded, Sealed lead acid and Lithium battery  
 Comprehensive protection  
 Dual fan cooling design  
 Comfortable installation and commissioning  
 Monitoring your solar harvest on line via RS485 communication, Ethernet/RS232 communication Optional

12V/24V/36/48V 系统适用，自动识别系统电压，可并联设计，可拓展系统容量  
 四段式充电，提高充电效率，提升电池组性能表现  
 MPPT 追踪效率可达99.5%，充电效率97.5%。  
 适用于各种铅酸电池，胶体电池及最新科技的锂电池充电  
 完善的保护功能，使控制器不易损坏  
 双风扇散热，结构设计经济实惠，降低成本惠及更多消费者  
 简易的安装连接方式，节省安装时间及步骤  
 电脑监控软件可对各类参数进行设置，监控系统实时运行情况并进行数据存储，可选端口RS485/232,以太网

### Introduction

At least 30% higher solar harvest for power compare with PWM controller  
 Wide range Solar PV voltage input 18V~100Vdc  
 LCD+LED display, you can see each second solar harvest status  
 Economic fan cooling design to bring more benefit for customer  
 Battery type and voltage can be set by LCD screen Easily

有效提升发电效率，比传统PWM太阳能充电器高30%以上，有效延长电池使用寿命  
 宽电压输入范围，更方便你的太阳能板接线方式 18~100Vdc  
 液晶屏跟LED指示灯显示，可实时查看设置任何参数及运行状况  
 经济实惠的风扇散热结构，高功率输出高温不降载，可整天足功率输出  
 电池种类及电压通过显示屏简易可调可选

## Data sheet

Feature	Model	SMK-SCF-30A	SMK-SCF-40A
Solar system voltage		12V/24V/36V/48V Auto work	
<b>Electrical</b>			
PV operating voltage		18~100Vdc@12V 35~100Vdc@24V 50~100Vdc@36V 60~100Vdc@48V	
Max, PV open circuit voltage		100Vdc	
Max, PV input power		12V 400W	12V 600W
		24V 800W	24V 1200W
		36V 1300W	36V 1700W
		48V 1700W	48V 2300W
Max, Charging current		30A	40A
Max. DC load current		40A	
Self consumption		2W	
Conversion Efficiency		97.5%	
Protection		PV array short circuit, over charging, battery reverse polarity, output short circuit	
<b>Battery charging</b>			
Battery type		Sealed Gel AGM Flooded Lithium Battery	
Charging algorithm		4 stage: Bulk, Absorption, Float, Equalize charging	
Bulk charge voltage		Sealed: 14.4V AGM 14.2V Gel: 14.2V Flooded: 14.6V User defined: 10-15V	
Float charge voltage		Sealed/Gel/AGM: 13.8V Flooded: 13.7V User defined: 10-15V	
Equalize charge voltage		Sealed 14.6V AGM: 14.8V Flooded: 14.9V	
Low voltage reconnect voltage		10.5V ~ 12V Adjustable	
Low voltage disconnect voltage		12.5V	
Temperature compensation		5MV/°C/2V with BTS	
<b>Communication</b>			
Communication port		RS485(Standard) Ethernet RS232 Optional with On line monitoring system	
<b>Physical</b>			
Net weight		2kg	
Gross weight		2.2kg	
Dimension		410*220*62MM	
Cooling		Dual fan cooling	
Enclosure		IP20	
<b>Environment</b>			
Ambient operating temperature		-25°C~600°C	
Storage temperature		-40°C~+80°C	
Humidity		100% non-condensing	
Warranty		Two Years	

## Application Diagram

