



Products Manual

Solar

太阳能选型手册

Vol.11





To create products
that deliver happiness to everyone

—— 铸造充满幸福的产品 ——

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关于赛普 SAIP ELEC.

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Us.

赛普电气集团（简称赛普）是一家专业从事电气产品及新能源的研发、制造及营销的专业化电气有限公司。赛普集团已引进国外资深管理与经验丰富的专业人事，以严谨的管理，有创意的研发团队，先进的营销理念，在传统产品的基础上创造和发展了新的更适用的且具有良好性价比的产品。Saip 产品已获得 CE、ROHS、IP66 等国内国际认证。产品已得到机关行业的认证认可，并远销东南亚、中东、东欧及美洲等地域。赛普现在有全球 28 家代理、三个直销公司。赛普已与多家国际化公司建立了良好的长期合作伙伴关系。赛普一如既往地坚持“合作发展，共同提高”的服务宗旨，以真诚的合作态度来最大程度地满足客户的需求。赛普电气—您成功的合作伙伴！

Saip Electric Group Co., Ltd ("Saip" for short) is an enterprise specialized in the design, production and sales of all kinds of electric equipments. Our head office is in Liushi town, the largest manufacturing base of electric equipments of Wenzhou, China. It's very near to Shanghai and Ningbo ports.

Saip has five specialized branches and more than 300 specialized cooperative partners all over the world. As an ISO9001 certificated enterprise, Saip owns modern production lines, advanced quality controlling equipment with scientific administration, professional engineers, highly trained teams technicians and skilled workers.

Now Saip has five design and production bases in Hong Kong, Taiwan, Singapore, Turkey and Shanghai (China Mainland), 28 sales organizations in the world and more than 50 holding member enterprises. Saip products range covers wind energy, solar energy, low voltage apparatus, welding machines, instruments and meters, photoelectron, electrical products for construction, automobile apparatus and industrial automation. The products are sold to over 100 countries and regions. All exported products have passed through CE, ROHS, EMC, LVD, IP66, KEMA certificates.

Saip always insists on "high quality and sincere service". Saip—your successful cooperative partner.

Meaning.

赛普的意义 +

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成为一家持续发展超出 103 年的企业

成为一家超出 20000 名销售员工和 2000 名设计工程师的企业

成为全球电气品牌管理专家

一家环球的高质量的电气组织

为了达到最高的质量水准

所有产品均按照 IEC 国际电工委员会的标准生产。

to be an enterprise lasting 103 years and beyond

To be an enterprise with a network of 20000 sales personnel and 2000 design engineers

To be the choice brand manager of major worldwide electrical brands

A global quality electric organization

In order to obtain the highest quality all of

Products according to international iec normatives.



铸造充满幸福的产品

To create products that deliver happiness to everyone





Concept.

赛普的理念 

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商业原则
BUSINESS
PRINCIPLE

做简单的生意 简单地做生意
To conduct business in a simple
straightforward manner.

企业精神
CORPORATE
SPIRIT

耐心 细心
Patience Dedication

人生观
HUMAN
PRINCIPLE

客户至上 员工第一 股东第二
Customers are our topmost priority,
followed by our employees and stakeholders

工作观
WORKING
PRINCIPLE

快乐工作 幸福生活
To work and live happily

产品观
PRODUCT
PRINCIPLE

文化电气 / 幸福电气 / 品质电气 / 信息电气 / 便捷电气
To manufacture quality, innovative products that bring
convenience to its users

Value

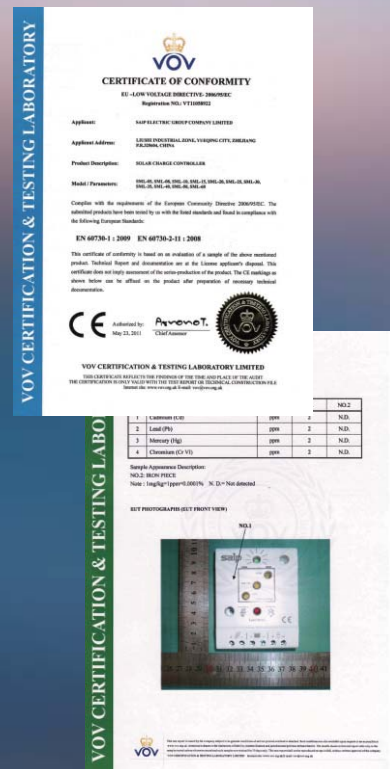
赛普的价值观

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人人平等—充分尊重，处理问题，对事不对人
相互信任—敢于担当深知彼此信任的力量
奉献—乐于付出，以司为家
坚持—专业执着，完善自我，不断进步。
创新—承接变化，勇于创新

- Equality— Fully respect, and focus on the issue rather than the person.
- Trust— Believe in the power of trust and be brave in trusting others.
- Dedication— Be willing to sacrifice and take the company as home.
- Persistence— Never say never.
- Innovation— Accept changes, and be bold to innovate.

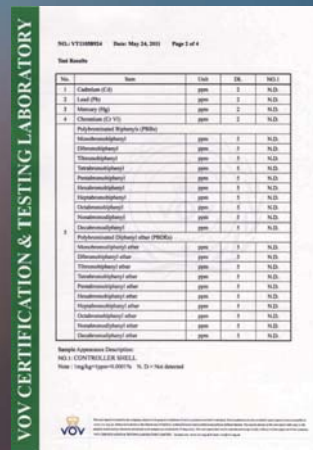


Honor

赛普的证书 +

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铸造充满幸福的产品

To create products
that deliver happiness to everyone

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S1206

SOLAR GENERATOR

太阳能发电机



S1206

技术参数 TECHNICAL DATA

型号Model	S1206	
电池容量Battery Capacity	4AH	
额定充电电流Rated Charging Current	1A	太阳能板功率Solar Panel Pmax
额定工作电压Rated Working Voltage	12V	太阳能板电压Solar Panel Voltage
浮充电压Floating Charge Voltage	14V	空载损耗No-load Loss
低压切断点Low Voltage Disconnecting Point	10.5V	低压重连接点Low Voltage Reconnecting Point
USB 端口电流USB Port Current	≤500mA	储存温度Storage Temperature
工作温度Working Temperature	-10℃~50℃	湿度要求Humidity Requirement
额定放电电流Rated Discharge Current	2A	尺寸Dimension

S1207

技术参数 TECHNICAL DATA



型号Model	S1207	
电池容量Battery Capacity	7AH	
额定充电电流Rated Charging Current	2A	太阳能板功率Solar Panel Pmax
额定工作电压Rated Working Voltage	12V	太阳能板电压Solar Panel Voltage
浮充电压Floating Charge Voltage	14V	空载损耗No-load Loss
低压切断点Low Voltage Disconnecting Point	10.5V	低压重连接点Low Voltage Reconnecting Point
USB 端口电流USB Port Current	≤500mA	储存温度Storage Temperature
工作温度Working Temperature	-10℃~50℃	湿度要求Humidity Requirement
额定放电电流Rated Discharge Current	2A	尺寸Dimension

S1212

技术参数 TECHNICAL DATA



型号Model	S1212	
电池容量Battery Capacity	12AH	
额定充电电流Rated Charging Current	2A	太阳能板功率Solar Panel Pmax
额定工作电压Rated Working Voltage	12V	太阳能板电压Solar Panel Voltage
浮充电压Floating Charge Voltage	14V	空载损耗No-load Loss
低压切断点Low Voltage Disconnecting Point	10.5V	低压重连接点Low Voltage Reconnecting Point
USB 端口电流USB Port Current	≤500mA	储存温度Storage Temperature
工作温度Working Temperature	-10℃~50℃	湿度要求Humidity Requirement
额定放电电流Rated Discharge Current	2A	尺寸Dimension

S1217

技术参数 TECHNICAL DATA



型号Model	S1217	
电池容量Battery Capacity	17AH	
额定充电电流Rated Charging Current	2A	额定放电电流Rated Discharge Current 2A
额定工作电压Rated Working Voltage	12V	太阳能板电压Solar Panel Voltage ≤ 25
浮充电压Floating Charge Voltage	14V	太阳能板功率Solar Panel Pmax 30W/1
低压切断点Low Voltage Disconnecting Point	10.5V	空载损耗No-load Loss $\leq 8mA$
USB 端口电流USB Port Current	$\leq 500mA$	低压重连接点Low Voltage Reconnecting Point 11.5V
工作温度Working Temperature	$-10^{\circ}C \sim 50^{\circ}C$	储存温度Storage Temperature $-15^{\circ}C \sim 40^{\circ}C$
尺寸Dimension	260mm $\times$ 155mm $\times$ 228mm	湿度要求Humidity Requirement $\leq 90\%$, 无冷凝 No Condensation

S1224

技术参数 TECHNICAL DATA



型号Model	S1224	
电池容量Battery Capacity	24AH	
额定充电电流Rated Charging Current	2A	额定放电电流Rated Discharge Current 2A
额定工作电压Rated Working Voltage	12V	太阳能板电压Solar Panel Voltage ≤ 25
浮充电压Floating Charge Voltage	14V	太阳能板功率Solar Panel Pmax 40W/1
低压切断点Low Voltage Disconnecting Point	10.5V	空载损耗No-load Loss $\leq 8mA$
USB 端口电流USB Port Current	$\leq 500mA$	低压重连接点Low Voltage Reconnecting Point 11.5V
工作温度Working Temperature	$-10^{\circ}C \sim 50^{\circ}C$	储存温度Storage Temperature $-15^{\circ}C \sim 40^{\circ}C$
尺寸Dimension	260mm $\times$ 155mm $\times$ 228mm	湿度要求Humidity Requirement $\leq 90\%$, 无冷凝 No Condensation

SP-20/SP-60

技术参数 TECHNICAL DATA



型号Model	SP-20	SP-60
功率Capacity	20VA	60VA
系统电压System Voltage	12VDC	12VDC
输出电压Output Voltage	12VDC	12VDC
最大功率Pmax	10W	20W
太阳能板 Solar Panel	电压Vmp 17.5V 电流Imp 0.6A	17.5V 1.1A
电池Battery	容量Capacity 12V17AH	12V33AH

ES-1206

SOLAR GENERATOR

太阳能发电机



ES-1206/1207/1212

概述 GENERAL DESCRIPTION

ES系列太阳能电力系统采用先进技术而开发设计的新一代太阳能光伏系统，其具有新颖的外观，合理的结构，可靠的性能及简易的安装。该太阳能发电系统可以向缺电或无电地区提供稳定可靠的电力。

SN series Solar Power System adopts advanced technique from , develop and design new generation Solar PV System: Simplified structure, reliable performance, easy operation. This Solar Power System can offer stable and reliable electricity to those regions where are short of power or even without power.

技术参数 TECHNICAL DATA



型号 Model	ES-1206
光伏组件 Photovoltaic component	18V/6W
蓄电池 Battery	12V/4AH
输出电压 Output voltage	DC12V × 4 ; USB5V × 2
最大工作电流 (A) Maximum working current (A)	2
光伏组件充电时间 (h) Photovoltaic component charging time (H)	14
使用时间 (h) Time of use (H)	5
主机尺寸 (mm) Size (mm)	主机 Host 210 × 110 × 135mm(W × D × H)
太阳能板尺寸 (mm) Size (mm)	太阳能板 Solar panels 285 × 180 × 18mm
重量 (Kg) Weight (Kg)	主机 Host 2.87kg 太阳能板 Solar panels 0.73kg
防护等级 Protection grade	Power box : IP20
工作温度 Working temperature	-10℃~40℃
相对湿度 Relative humidity	<90%RH

型号 Model	ES-1207
光伏组件 Photovoltaic component	18V/12W
蓄电池 Battery	12V/7AH
输出电压 Output voltage	DC12V × 4 ; USB5V × 2
最大工作电流 (A) Maximum working current (A)	2
光伏组件充电时间 (h) Photovoltaic component charging time (H)	13
使用时间 (h) Time of use (H)	5
主机尺寸 (mm) Size (mm)	主机 Host 210 × 110 × 135mm(W × D × H)
太阳能板尺寸 (mm) Size (mm)	太阳能板 Solar panels 285 × 360 × 18mm
重量 (Kg) Weight (Kg)	主机 Host 3.65kg 太阳能板 Solar panels 1.55kg
防护等级 Protection grade	Power box : IP20
工作温度 Working temperature	-10℃~40℃
相对湿度 Relative humidity	<90%RH

型号 Model	ES-1212
光伏组件 Photovoltaic component	18V/16W
蓄电池 Battery	12V/12AH
输出电压 Output voltage	DC12V × 4 ; USB5V × 2
最大工作电流 (A) Maximum working current (A)	2
光伏组件充电时间 (h) Photovoltaic component charging time (H)	16
使用时间 (h) Time of use (H)	8
主机尺寸 (mm) Size (mm)	主机 Host 210 × 110 × 135mm(W × D × H)
太阳能板尺寸 (mm) Size (mm)	太阳能板 Solar panels 400 × 360 × 18mm
重量 (Kg) Weight (Kg)	主机 Host 5.15kg 太阳能板 Solar panels 2.05kg
防护等级 Protection grade	Power box : IP20
工作温度 Working temperature	-10℃~40℃
相对湿度 Relative humidity	<90%RH

SN-200

概述 GENERAL DESCRIPTION



SN系列太阳能电力系统采用德国先进技术而开发设计的新一代太阳能光伏系统，其具有新颖的外观，合理的结构，可靠的性能及简易的安装。该太阳能发电系统可以向缺电或无电地区提供稳定可靠的电力。

SN series Solar Power System adopts advanced technique from Germany, develop and design new generation Solar PV System: Simplified structure, reliable performance, easy operation. This Solar Power System can offer stable and reliable electricity to those regions where are short of power or even without power.

特点 FEATURES DESCRIPTION

- A. 高效太阳能控制器：双闭环控制器（电压与电流控制）。可确保太阳能电池板对电池板进行最大程度的充电。经验告诉我们，在相同的环境以及相同的负载条件下，该太阳能发电系统可以节省15%的太阳能板。
- B. 逆变器驱动：主电路采用最先进的日本三菱、东芝智能功率模块(IPM) IGBT及德国艾赛斯 (IXYS) 二极管，为各种终端设备提供稳定、准确的输出电压和高质量、高可靠性的电力。
- C. 成熟的保护功能：具有一系列保护措施，包括过电压与欠电压DC输入保护，极性接反DC输入保护，过载与短路AC输出保护，过热保护，以保证系统的安全、可靠和性能。

A. High Efficiency: Solar controller: Double Close-loop Controller (both voltage & current control). It ensures the solar panel charges the battery farthest. Experiment tells us, under the same environment and same load condition, this Solar Power System can save 15% solar panel.

B. Driver of inverter: main circuit adopts latest advanced Intelligent Power Module (IPM) IGBT of Japan Mitsubishi & Toshiba and Germany IXYS MOSFET, to provide a stable, accurate output voltage, offer high-quality, high reliability Power for a variety of terminal equipments.

C. Mature protective function: There is a series of protective measures, including over-voltage & under-voltage DC input protection, against inversion of polarity DC input protection, over load & short-circuit AC output protection, overheating protection to assure the system is safe and reliable and excellent in performance.

技术参数 TECHNICAL DATA

SN-200	输出功率 Output Power	200W
	电压 System voltage	12V DC
	每天最佳输出功率 Best use of electricity a day	160WH
	输入电压 Input voltage	DC 12V
	空载电流 No-load current	DC 12V 0.02A
	输出波形 Output waveform	正弦波 sine wave
	交流输出 AC output	AC 220V $\pm$ 2%
	直流输出 DC output	DC 12V 2A
	USB直流输出 USB DC output	DC 5V 500mA
	输出频率 Output frequency	50HZ $\pm$ 1%
	过载能力 Allowable overload	110%, 30 seconds 110%, 30秒
	逆变器效率 The efficiency of the inverter	90%
	精度 Frequency range	$\pm$ 3%
	低压切断点 Low voltage disconnecting point	10.5V
	低压重链接点 Low voltage reconnecting point	11.5V
太阳能电池板 Solar panel	输出功率 Output power	50W
	工作电压 Operating voltage	17.8V
	工作电流 Operating current	2.8A
蓄电池 Battery	容量 Capacity	12V24H

SP-150L

SOLAR GENERATOR

太阳能发电机



SP-150L

SP-150L/SP-150H

□ 技术参数 TECHNICAL DATA

型号Model	SP-150L	SP-150H
功率Capacity	150VA	150VA
系统电压System Voltage	12VDC	12VDC
每天最佳的输出功率Best Output Power Everyday	173WH	346WH
逆变器Inverter	输出波形Output Wave	纯正弦波Pure Sine Wave
	输出电压Output Voltage	AC110V or 220V,DC12V
	输出频率Output Frequency	50Hz/60Hz
	输出频率精度Exact Output Current	± 6%
太阳能板Solar Panel	最大功率Pmax	50W
	电压Vmp	17.5V
	电流Imp	2.9A
电池Battery	容量Capacity	12V75AH

□ 包装尺寸 PACKAGE DATA

型号Model	SP-20		SP-60	
部件Part	尺寸Size (L × W × H mm)	重量Weight (Kg)	尺寸Size (L × W × H mm)	重量Weight (Kg)
电源箱Power Box	475 × 295 × 255	46	475 × 295 × 255	60
太阳能板Solar Panel	850 × 610 × 60	7	1250 × 740 × 75	12
太阳能板支架Solar Panel Bracket	825 × 760 × 55	9	1460 × 85 × 75	13
电池Battery	259 × 169 × 208	22	406 × 174 × 208	37

SP-300L/SP-300H

□ 技术参数 TECHNICAL DATA



SP-300L

型号Model	SP-300L	SP-300H
功率Capacity	300VA	300VA
系统电压System Voltage	12VDC	24VDC
每天最佳的输出功率Best Output Power Everyday	350WH	700WH
逆变器Inverter	输出波形Output Wave	纯正弦波Pure Sine Wave
	输出电压Output Voltage	AC110V or 220V,DC12V
	输出频率Output Frequency	50Hz/60Hz
	输出电流Output Current	1.09A(220V)/2.18A(110V)
	精确输出电压Exact Output Voltage	± 3%
	精确输出电流Exact Output Current	± 0.1%
	交流输出波形偏差False Output Wave Of AC	<3%
	过载能力Overload Ability	120%,30秒Seconds
	逆变效率Invert Efficiency	>85%
太阳能板Solar Panel	最大功率Pmax	100W
	最佳工作电压Vmp	17.5V
	最佳工作电流 Imp	2.9A
电池Battery	容量Capacity	12V100AH

包装尺寸 PACKAGE DATA

型号Model	SP-300L		SP-300H	
部件Part	尺寸Size (L × W × H mm)	重量Weight (Kg)	尺寸Size (L × W × H mm)	重量Weight (Kg)
电源箱Power Box	450 × 380 × 655	53	450 × 380 × 655	65
太阳板Solar Panel	1200 × 850 × 45	12	1200 × 850 × 85	23
太阳能板支架Solar Panel Bracket	1460 × 85 × 75	13	1660 × 85 × 75	14
电池Battery	328 × 172 × 214	22	406 × 174 × 208	43

SP-300F/500F

产品特性 FEATURES



SP-300F

- 结构简单、维修方便；
 - 纯正弦波输出；
 - 微电脑芯片控制，PWM调节、自动温度补偿；
 - 用电子保险管替代保险丝，且具有浪涌及过流保护功能；
 - 防护：带过压、欠压，过载、短路保护等功能；
 - 采用高性能配置，特别适用于家庭；
 - 双充电功能：太阳能充电与市电充电一体化设计。
- Simple structure, easy maintenance;
 - Output for pure sine wave;
 - Micro-computer chip control, PWM regulate, automatic temperature compensation;
 - Electronic insurance tube is replaced of fuse, surge and over-current protection;
 - Protection is wide, with over-voltage, under-voltage, overload, short-circuit and so on;
 - High performance, especially used at home;
 - Charge fuction: Solar and city power.



SP-500F

技术参数 TECHNICAL DATA

型号Model		SP-300F	SP-500F
功率Power		300VA	500VA
系统电压System Voltage		12VDC	12VDC
逆变器Inverter	输出波型Output Wave	纯正弦波Pure Sine Wave	纯正弦波Pure Sine Wave
	输出电压Output Voltage	AC110V or 220V, DC12V	AC110V or 220V, DC12V
	输出频率Output Frequency	50Hz/60Hz	50Hz/60Hz
太阳能板Solar Panel	最大功率Pmax	100W	160W
	电压Vmp	17.5V	17.5V
	电流Imp	5.7A	9.1A
充电器Charger	充电器电压、电流Charger Voltage & Current	12V10A	12V15A
电池Battery	容量Capacity	12V100AH	12V240AH

SP-500L

SOLAR GENERATOR

太阳能发电机


☐ 包装尺寸 PACKAGE DATA

型号Model	SP-300F		SP-500F	
部件Part	尺寸Size (L × W × H mm)	重量Weight (Kg)	尺寸Size (L × W × H mm)	重量Weight (Kg)
电源箱Power Box	450 × 380 × 655	68	450 × 380 × 655	73
太阳能板Solar Panel	850 × 610 × 60	6.5	1200 × 850 × 45	12
太阳能板支架Solar Panel Bracket	825 × 760 × 55	9.2	1460 × 85 × 75	13
电池Battery	406 × 174 × 208	37	406 × 174 × 208	43

SP-500L/SP-500H

☐ 技术参数 TECHNICAL DATA


SP-500L

型号Model	SP-500L	SP-500H
功率Capacity	500VA	500VA
系统电压System Voltage	12VDC	24VDC
每天最佳的输出功率Best Output Power Everyday	700WH	1400WH
逆变器 Inverter	输出波型Output Wave	纯正弦波Pure Sine Wave
	输出电压Output Voltage	AC110V/220V, DC12V
	输出频率Output Frequency	50Hz/60Hz
	精确输出电压Exact Output Voltage	± 3%
	精确输出电流Exact Output Current	± 0.1%
	交流输出波形偏差False Output Wave Of AC	<3%
	过载能力Overload Ability	120%,30秒Seconds
太阳能板 Solar Panel	逆变效率Invert Efficiency	>85%
	最大功率Pmax	160W
	最佳工作电压Vmp	17.5V
电池Battery	最佳工作电流Imp	9.1A
	容量Capacity	12V120AH



SP-500H

☐ 包装尺寸 PACKAGE DATA

型号Model	SP-500L		SP-500H	
部件Part	尺寸Size (L × W × H mm)	重量Weight(Kg)	尺寸Size (L × W × H mm)	重量Weight(Kg)
电源箱Power Box	450 × 380 × 655	72	550 × 430 × 750	85
太阳能板Solar Panel	1200 × 850 × 85	23	1200 × 850 × 170	45
太阳能板支架 Solar Panel Bracket	1660 × 85 × 75	14	1660 × 85 × 150	28
电池Battery	406 × 174 × 208	43	500 × 208 × 212	56

SP-1000L/SP-1000H

□ 技术参数 TECHNICAL DATA



SP-1000L



SP-1000H

型号Model	SP-1000L	SP-1000H
功率Capacity	1000VA	1000VA
系统电压System Voltage	24VDC	48VDC
每天最佳的输出功率Best Output Power Everyday	1460WH	2920WH
输出波型Output Wave	纯正弦波Pure Sine Wave	纯正弦波Pure Sine Wave
输出电压Output Voltage	AC110V/220V, DC12V	AC110V/220V, DC12V
输出频率Output Frequency	50Hz/60Hz	50Hz/60Hz
逆变器Inverter		
精确输出电压Exact Output Voltage	± 3%	± 3%
精确输出电流Exact Output Current	± 0.1%	± 0.1%
交流输出波形偏差False Output Wave Of AC	<3%	<3%
过载能力Overload Ability	120%,30S	120%,30S
逆变效率Invert Efficiency	>85%	>85%
最大功率Pmax	400W	800W
最佳工作电压Vmp	35V	70V
最佳工作电流Imp	11.4A	11.4A
电池Battery		
容量Capacity	24V120AH	48V240AH

□ 包装尺寸 PACKAGE DATA

型号Model	SP-1000L		SP-1000H	
部件Part	尺寸Size (L × W × H mm)	重量Weight(Kg)	尺寸Size (L × W × H mm)	重量Weight(Kg)
电源箱Power Box	500 × 430 × 700	115	570 × 440 × 750	161
太阳能板Solar Panel	1200 × 850 × 170	45	1200 × 850 × 340	90
太阳能板支架 Solar Panel Bracket	1660 × 85 × 150	28	1600 × 85 × 300	56
电池Battery	425 × 760 × 269	132	850 × 755 × 269	263
电池支架Battery Bracker	830 × 100 × 85	12	1660 × 100 × 85	23

SP-2000

SOLAR GENERATOR

太阳能发电机



SP-2000L/SP-2000H

□ 技术参数 TECHNICAL DATA



SP-2000L

型号Model	SP-2000L	SP-2000H
功率Capacity	2000VA	2000VA
系统电压System Voltage	110VDC	110VDC
每天最佳的输出功率Best Output Power Everyday	3378WH	6756WH
逆变器 Inverter	输出波型Output Wave	纯正弦波Pure Sine Wave
	输出电压Output Voltage	AC110V/220V, DC12V
	输出频率Output Frequency	50Hz/60Hz
	输出电流Output Current	7.2A(220V)/14.5A(110V)
	精确输出电压Exact Output Voltage	± 3%
	精确输出电流Exact Output Current	± 0.1%
	交流输出波形偏差False Output Wave Of AC	<3%
	过载能力Overload Ability	120%,30秒Seconds
	逆变效率Invert Efficiency	>85%
太阳能板 Solar Panel	最大功率Pmax	900W
	最佳工作电压Vmp	157.5V
	最佳工作电流Imp	5.7A
电池Battery	容量Capacity	108V100AH

□ 包装尺寸 PACKAGE DATA

型号Model	SP-2000L		SP-2000H	
部件Part	尺寸Size (L × W × H mm)	重量Weight(Kg)	尺寸Size (L × W × H mm)	重量Weight(Kg)
电源箱Power Box	550 × 575 × 320	45	550 × 575 × 320	45
太阳能板Solar Panel	1200 × 850 × 425	102	1200 × 850 × 765	203
太阳能板支架 Solar Panel Bracket	2270 × 85 × 225	56	2270 × 85 × 450	113
电池Battery	1108 × 630 × 275	260	1615 × 754 × 255	509
电池支架Battery Bracker	2270 × 85 × 75	35	2270 × 85 × 75	35

SP-3000L/SP-3000H

□ 技术参数 TECHNICAL DATA



SP-3000L

型号Model	SP-3000L	SP-3000H
功率Capacity	3000VA	3000VA
系统电压System Voltage	110VDC	110VDC
每天最佳的输出功率Best Output Power Everyday	6000WH	10134WH
逆变器 Inverter	输出波型Output Wave	纯正弦波Pure Sine Wave
	输出电压Output Voltage	AC110V/220V, DC12V
	输出频率Output Frequency	50Hz/60Hz
	输出电流Output Current	10.9A(220V)/21.8A(110V)
	精确输出电压Exact Output Voltage	± 3%
	精确输出电流Exact Output Current	± 0.1%
	交流输出波形偏差False Output Wave Of AC	<3%
	过载能力Overload Ability	120%,30秒Seconds
	逆变效率Invert Efficiency	>85%
太阳能板 Solar Panel	最大功率Pmax	1600W
	最佳工作电压Vmp	160V
	最佳工作电流Imp	10A
电池Battery	容量Capacity	108V150AH

包装尺寸 PACKAGE DATA



SP-3000H

型号Model	SP-3000L		SP-3000H	
部件Part	尺寸Size (L × W × H mm)	重量Weight(Kg)	尺寸Size (L × W × H mm)	重量Weight(Kg)
电源箱Power Box	500 × 640 × 930	65	500 × 640 × 930	65
太阳能板Solar Panel	1200 × 850 × 680	180	1200 × 850 × 1190	304
太阳能板支架 Solar Panel Bracket	1660 × 85 × 600	111	2270 × 85 × 675	169
电池Battery	490 × 540 × 880	375	985 × 540 × 870	750
电池支架Battery Bracker	2270 × 85 × 75	35	2270 × 85 × 150	65

SP-5000L/SP-5000H

技术参数 TECHNICAL DATA



SP-5000L

型号Model	SP-5000L	SP-5000H
功率Capacity	5000VA	5000VA
系统电压System Voltage	220VDC	220VDC
每天最佳的输出功率Best Output Power Everyday	6756WH	13512WH
逆变器Inverter		
输出波型Output Wave	纯正弦波Pure Sine Wave	纯正弦波Pure Sine Wave
输出电压Output Voltage	AC110V/220V, DC12V	AC110V/220V, DC12V
输出频率Output Frequency	50Hz/60Hz	50Hz/60Hz
输出电流Output Current	18.2A(220V)/36.4A(110V)	18.2A(220V)/36.4A(110V)
精确输出电压Exact Output Voltage	± 3%	± 3%
精确输出电流Exact Output Current	± 0.1%	± 0.1%
交流输出波形偏差False Output Wave Of AC	<3%	<3%
过载能力Overload Ability	120%,30秒Seconds	120%,30秒Seconds
逆变效率Invert Efficiency	>85%	>85%
太阳能板Solar Panel		
最大功率Pmax	1800W	3600W
最佳工作电压Vmp	315V	315V
最佳工作电流Imp	5.7A	11.4A
电池Battery 容量Capacity	216V, 100AH	216V, 200AH

包装尺寸 PACKAGE DATA



SP-5000H

型号Model	SP-5000L		SP-5000H	
部件Part	尺寸Size (L × W × H mm)	重量Weight(Kg)	尺寸Size (L × W × H mm)	重量Weight(Kg)
电源箱Power Box	500 × 640 × 930	65	500 × 640 × 930	65
太阳能板Solar Panel	1200 × 850 × 765	203	1200 × 850 × 1530	405
太阳能板支架 Solar Panel Bracket	2270 × 85 × 450	113	1660 × 85 × 900	226
电池Battery	740 × 625 × 835	520	1070 × 744 × 765	1017
电池支架Battery Bracker	2270 × 85 × 150	65	2270 × 85 × 150	65

PS-300

PORTABLE SOLAR POWER GENERATOR

可移动太阳能发电机



PS-300

□ 技术参数 TECHNICAL DATA



型号Model	PS-300
功率Capacity	300W
系统电压System Voltage	12VDC
逆变器Inverter	输出波型Output Wave 纯正弦波Pure Sine Wave
	输出电压Output Voltage AC220V, DC12V
	最大功率Pmax 80W
太阳能板Solar Panel	电压Voltage 17.5V
	电流Current 4.57A
电池Battery	容量Capacity 12V, 55AH

□ 包装尺寸 PACKAGE DATA

型号Model	PS-300	
部件Part	尺寸Size (L × W × H mm)	重量Weight(Kg)
电源箱Power Box	320 × 320 × 280	30.9
太阳能板Solar Panel	1175 × 527 × 35	6

□ 负载使用说明 Load Reference

负载名称Name of Load	数量 QTY (PCS)	使用时间 Working Time
21寸电视机 21 Inch TV	1	6-7H (AC220V)
直流LED节能灯DC LED Light	1	150H (DC12V)
电脑Computer	1	6H (AC220V)
80W落地风扇 80W Fan	1	7H (AC220V)
40W日光灯 40W Sunlight Lamp	1	10H (AC220V)

SS-03B

□ 技术参数 TECHNICAL DATA



型号Model	SS-03B
电池片Type Of Cell	多晶硅电池片Pole Cell 14W × 2(块)Pcs
型号Model	SS-03B
负载功率Load Power	200W
太阳能电池功率Solar Power	28W
专用免维护铅酸蓄电池 Maintenance-Free Lead-Acid Batteries	12V/12AH × 2(块)Pcs
逆变器Inverter	300W
控制器Controller	12V 5A
工作时间及工作模式 Work Time And Work Way	4h/Day
用途Usage	野外工作队用, 可供交直流用电电器用电 Fieldwork, army using, provide AC and DC power
特点Feature	输出电压: 4.5V, 6V, 9V, 12V, 220V, 太阳能及市网电都可以充电 Output Voltage: 4.5V, 6V, 9V, 12V, 220V, solar power and network charge.
箱子尺寸Size (L × W × H)	500 × 320 × 240 mm
20"20尺的柜 20'Foot	500(件)Pcs
箱子材质Materials Of Box	金属箱体Metal Box
质量Quality	实时监测蓄电池电压、电流、充放电率, 对过充过放进行控制, 使系统具有极高的稳定性、环境适应性可靠性; Real time monitoring battery voltage, current, charging rate and controlling over-charging and over-releasing make the system high stable, reliable and adjustable.



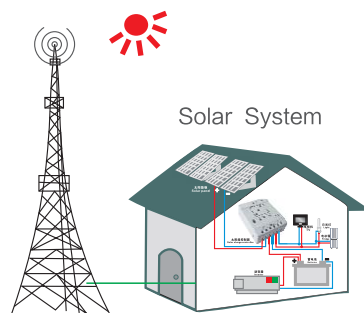
SS-03B

SML05/08/10/15/20/25

功能 FUNCTION



- 三个LED全面显示蓄电池的不同充电状态;
- 切断负载前的声音预警提示;
- PWM脉冲宽度调节(串接调节方式);
- 三阶段充电方式, 强充-均衡充-浮充;
- 12V或24V自动识别;
- 内置温度补偿;
- 大口径接线端子(最大为16平方毫米);
- SOC和电压, 不同的蓄电池放电保护模式;
- 全电子保护。
- Battery State-of-Charge display with 3 LEDs;
- Acoustic load disconnect pre-warning;
- PWM-regulation (series type);
- Boost, Equalize and Float charging, also for VRLA;
- Automatic 12/24 Volt detection;
- Integrated temperature compensation;
- Large terminals (up to 16mm² wire size);
- SOC and voltage controlled LVD;
- Fully electronically protected.



SML系列产品是新一代多功能低成本的太阳充放电控制器。其电子线路配备了性能优良的单片机微处理芯片, 具有高效率充电、三个LED全功能显示及蜂鸣器声音预警等功能。即使在恶劣的环境下, SML也可在长期、安全及低成本地维护蓄电池组的正常运转。SML系列控制器带自动温度补偿的三阶段的充电方式(强充电-均衡充电-浮充电), 由脉冲宽度调节PWM, 可应用于给全密封或不密封的铅酸蓄电池充电。新一代的SML, 允许使用者选择, 放电保护功能时由SOC控制还是低电压模式。三个LED可清晰地显示蓄电池的不同工作及充放电状态。作为业内同价位产品中的领先者, SML是第一款在切断负载前由蜂鸣器进行低电压声音预警的控制器。

The SML series is a sophisticated solar charge controller family for low cost applications. The electronic circuit is equipped with a microcontroller that provides high-efficiency charging technology together with a number of outstanding status display, warning and safety functions. The temperature-compensated three-stage PWM charging method (boost-equalizationfloat) is now adjustable to sealed and vented lead-acid batteries. The new version also allows an either SOC or voltage controlled low voltage disconnect function. The battery status is clearly indicated by three LEDs. As the first controller on the market in this price range it comes with an acoustic low voltage load disconnect pre-warning feature.

技术参数 TECHNICAL DATA

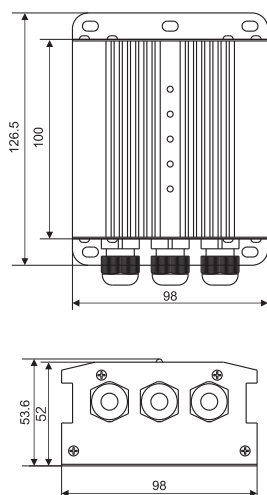
型号Model	SML05	SML08	SML10	SML15	SML20	SML25
最大太阳能板电流Max. Module Current	5A	8A	10A	15A	20A	25A
最大负载电流Max. Load Current	5A	8A	10A	15A	20A	25A
额定电压System Voltage	12/24V				12V	
自消耗电流Self Power Consumption	<4mA					
尺寸(长×宽×高)Dimensions(W×H×D)	80×100×32mm					
额定电压Nominal Voltage	12/24V, 自动识别Automatic Recognition					
强充电电压Boost Voltage	14.5/29.0V(25℃), 2小时 2H					
均衡充电电压Equalization Voltage	14.8/29.6V(25℃), 2小时 2H					
浮充电压Float Voltage	13.7/27.4V(25℃)					
负载低压切断电压Low Voltage Disconnect Function	11.4~11.9/22.8~23.8V, 蓄电池剩余容量控制; Controlled By State Of Charge 11.0/22.0V, 电压控制Controlled By Voltage					
负载再连接电压Load Reconnect Voltage	12.8/25.6V					
温度补偿系数Temperature Compensation	-4mV/cell*K					
最大充电电流(50℃时)Max.Solar Panel Current	5/8/10/15/20A/25A, 与型号有关 According to model number					
最大负载电流(50℃时)Max.Load Current	5/8/10/15/20A/25A, 与型号有关 According to model number					
尺寸Dimensions	120×90×50(宽×长×高)(W×H×D)					
重量Weight	180克0.38Kg					
最大接线直径Max.Wrie Size	24mm ² (AWG#6)					
空载电流Self Consumption	4毫安 4mA					
工作温度范围Ambient Temperature Range	-40到+50℃ -40 to +50℃					
防护等级Case Protection	IP22					



SMG10-50A

功能 FUNCTION

- 三个LED全面显示蓄电池的不同充电状态;
- 切断负载前的声音预警提示;
- PWM脉冲宽度调节(串接调节方式);
- 三阶段充电方式, 强充-均衡充-浮充;
- 12V或24V自动识别;
- 内置温度补偿;
- 大口径接线端子(最大为16平方毫米);
- SOC和电压, 不同的蓄电池放电保护模式;
- 全电子保护。
- Battery State-of-Charge display with 3 LEDs;
- Acoustic load disconnect pre-warning;
- PWM-regulation (series type);
- Boost, Equalize and Float charging, also for VRLA;
- Automatic 12/24 Volt detection;
- Integrated temperature compensation;
- Large terminals (up to 16mm² wire size);
- SOC and voltage controlled LVD;
- Fully electronically protected.



SMG系列产品是新一代多功能低成本的太阳充放电控制器。其电子线路配备了性能优良的单片机微处理芯片, 具有高效率充电、三个LED全功能显示及蜂鸣器声音预警等功能。即使在恶劣的环境条件下, SMG也可在长期、安全及低成本地维护蓄电池组的正常运转。SMG系列控制器带自动温度补偿的三阶段的充电方式(强充电-均衡充电-浮充电), 由脉冲宽度调节PWM, 可应用于给全密封或不密封的铅酸蓄电池充电。新一代的SMG, 允许使用者选择, 放电保护功能时由SOC控制还是低电压模式。三个LED可清晰地显示蓄电池的不同工作及充放电状态。作为业内同价位产品中的领先者, SMG是第一款在切断负载前由蜂鸣器进行低电压声音预警的控制器。

The SMG series is a sophisticated solar charge controller family for low cost applications. The electronic circuit is equipped with a microcontroller that provides high-efficiency charging technology together with a number of outstanding status display, warning and safety functions.

The temperature-compensated three-stage PWM charging method (boost-equalizationfloat) is now adjustable to sealed and vented lead-acid batteries.

The new version also allows an either SOC or voltage controlled low voltage disconnect function. The battery status is clearly indicated by three LEDs.

As the first controller on the market in this price range it comes with an acoustic low voltage load disconnect pre-warning feature.

技术参数 TECHNICAL DATA

型号Model	SMG30	SMG35	SMG40	SMG45	SMG50
标称电压Nominal Voltage	自动识别Automatic Recognition 12/24V, 48V				
50℃的最大充电电流Max. Solar Panel Current	30A	35A	40A	45A	50A
50℃的最大负载电流Max. Load Panel Current	30A	35A	40A	45A	50A
25℃时的强充电电压Boost Voltage	14.8V/29.6V				
25℃时的均衡充电电压Equalization Voltage	14.5V/29.0V				
25℃时的浮充电电压Folat Voltage	13.7V/27.4V				
深度放电保护电压 Deep Discharge Protection	11.4-11.9V/22.8-23.8V Controlled By Statc Of Charge根据电池容量控制 11.0/22.0V Controlled By Voltage根据电池电压控制				
负载再次接通的电压Load Reconnect Voltage	12.8V/25.6V				
温度补偿系数Temperature Compensation	-4mV/cell × K				
空载电流Self Consumption	<4mA				
最大连接线尺寸Max. Wire Size	16mm ² (AWG#6)				
尺寸Dimensions(W × H × D)	98 × 122 × 49mm(W × H × D)				
重量Weight	400g				
温度范围Temperature Range	-20℃ to +50℃				
防护等级Type Of Protection	IP44				

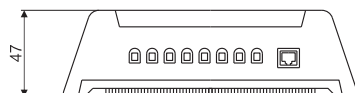
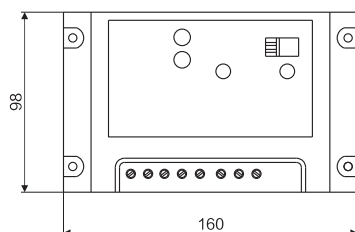


TRP-10/20/40

主要特点 FEATURES

新一代MPPT控制器是一款根据最新技术开发，代表最新太阳能光伏技术发展水平的产品。

- 创新性的最大功率点跟踪技术，可显著提高太阳能系统能量利用率；
- 12/24V自动识别，额定充放电电流；
- 具有广泛的适用性，自动识别白天和黑夜；
- 路灯的定时时段1~15小时可调；
- 双负载输出可以单独控制，增强了系统的灵活性；
- 密封、开口式、胶体三种类型蓄电池充电程序可选；
- 采用温度补偿，自动调整充放电参数，提高蓄电池使用寿命；
- 控制器对过充、过放、过载、短路、光电池及蓄电池反接性进行自动保护；
- RJ45接口与MT2显示单元进行通信，方便查看控制器的运行参数。



Our MPPT controller adopts newest technology and represents the developing level of solar PV products.

- Advanced maximum power point tracking technology to optimize using the solar system;
- 12/24V auto recognized, 10A rated charging current;
- Widely used, automatic recognize day/night;
- Timer function with 1~15 hours option for street light;
- Two load outputs. Each load can be individually controlled, and enhance the flexibility of the system;
- Sealed, Gel, and Flooded battery option;
- Adopting temperature compensation and correcting the charging and discharging parameters automatically, improving the battery lifetime;
- Electronic protection: Over charging, over discharging, overload, short circuit, and reverse polarity of battery;
- RJ45 interface with remote meter MT-2, convenient to check operating parameters of controllers.

技术参数 TECHNICAL DATA

型号Model	TRP-10	TRP-20	TRP-40
额定系统电压System Voltage	自动识别 Auto Recognizing 12V/24V		
额定蓄电池电流Max. Battery Current	10A	20A	40A
蓄电池电压范围Battery Voltage Range	9~36V		
最大PV输入功率Rated Input Power	12V 120W 24V 240W		
自损耗Self-Demagnetization Loss	≤16mA		
通信接口RJ45 Communicating Connection RJ45	8针 8Needle		
负载端浪涌保护Load Surge Protection	35A		

阈值电压 THRESHOLD VOLTAGE

阈值电压参数描述Description	具体参数Parameters
夜晚时间阈值电压NTTV(Night Time Threshold Voltage)	5V; x2/24V
白天时间阈值电压DTTV(Day Time Threshold Voltage)	6V; x2/24V

☐ 蓄电池电压设置表 BATTERY VOLTAGE SETTING TABLE

蓄电池充电设定值 Battery Charging Setting	充电参数 Charging Parameter		
测试温度 25℃ Testing Temperature: 25℃	胶体 Gel	密封 Sealed	开口式 Flooded
超压断开电压 High Volt Disconnect	16V; x2/24V	16V; x2/24V	16V; x2/24V
充电限制电压 Charging limits Voltage	15.5V; x2/24V	15.5V; x2/24V	15.5V; x2/24V
均衡电压 Balance Voltage	--	14.6V; x2/24V	14.8V; x2/24V
提升电压 Booster Voltage	14.2V; x2/24V	14.4V; x2/24V	14.6V; x2/24V
浮充电压 Float Voltage	13.8V; x2/24V	13.8V; x2/24V	13.8V; x2/24V
提升恢复电压 Booster Return Voltage	13.2V; x2/24V	13.2V; x2/24V	13.2V; x2/24V
低压断开恢复电压 Low Voltage Voltage Recover	12.6V; x2/24V	12.6V; x2/24V	12.6V; x2/24V
欠压恢复电压 Under Voltage Recover	12.2V; x2/24V	12.2V; x2/24V	12.2V; x2/24V
欠压电压 Under Voltage Warning	12V; x2/24V	12V; x2/24V	12V; x2/24V
低压断开电压 Low-Voltage Disconnect	11.1V; x2/24V	11.1V; x2/24V	11.1V; x2/24V
提升持续时间 Boost Duration	2小时 2h	2小时 2h	2小时 2h
均衡持续时间 Equalize Duration	--	2小时 2h	2小时 2h

☐ 环境参数 ENVIRONMENT SPECIFICATION

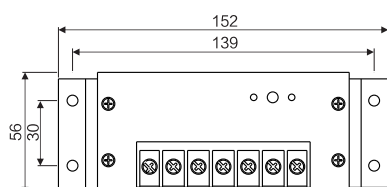
工作温度 Working Temp.	-35℃ 到 +55℃ -35℃ to +55℃
储存温度 Storage Temp.	-35℃ 到 +80℃ -35℃ to +80℃
湿度 Humidity	-10%~90% 无凝结 -10%~90% Non-Condensing
防护等级 Protection	IP30 (室内可用) IP30 (Indoor)
海拔高度 Altitude	3000米以下 Max.3000m

☐ 机械参数 Mechanical

外形尺寸 Dimension	160mm × 97mm × 47mm
安装尺寸 Mounting Holes	150mm × 70mm
重量 Weight	0.45Kg

WPL-6/10/15/20

主要特点 FEATURES



- PWM 电池充电技术;
- 低电压断开;
- 100% 固态;
- 设定点精确度 35mV;
- 额定值能承受 25% 的过载;
- 环氧树脂封装;
- 绿色充电和红色低电压断开指示灯;
- 到60℃仍能保持全额功率;
- 先进的雷击与过电压保护功能;
- 防夜间逆充功能;
- 数字旋钮设计提供安全防护;
- 3年质保;
- 标准配备温度补偿计;
- 标准配备密封电池/加水电池选择开关;
- 准确至毫伏等级。
- Eight versions available;
- 100% solid state;
- Series design (not shunt);
- True 0 to 100% PWM duty cycle;
- Setpoint accuracy to 35 mV;
- Rated for 25% overloads;
- Fully encapsulated in epoxy potting;
- Marine rated terminals / anodized case;
- Temperature compensation;
- Sealed / Flooded battery select;
- No need to derate;
- Parallel for 40 amps or more;
- Green charging / Red LVD indicators;
- Certifications: CE, ROHS;
- 3 Year Warranty.

赛普控制器是世界领先的小型太阳能控制器，适用于专业领域及客户个人使用。赛普控制器功能完备，具有其他小型光伏控制器未有功能。

Saip's Controller is the world's leading small solar controller for both professional and consumer applications including standard features and capabilities not found in any other small PV controller.

技术参数 TECHNICAL DATA

型号Model	WPL-6	WPL-10	WPL-15	WPL-20
额定充电电流Rated Charge Current	6.0A	10A	15A	20A
额定负载电流Rated Load Current	6.0A	10A	15A	20A
系统电压System Voltage	12V	12V/24V	12V/24V	12V/24V
选项Options				
低电压断开Low Voltage Disconnect	Yes	Yes	Yes	Yes

12V 20A控制器具有低压断开功能。当蓄电池电压低于11.5V(或23.0V)，负载从蓄电池断开避免深放电的造成的损害。2秒的延迟，防止从瞬变负载断开。当电池电压恢复到12.6(或25.2)伏负载自动重新连接。

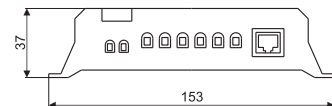
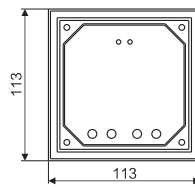
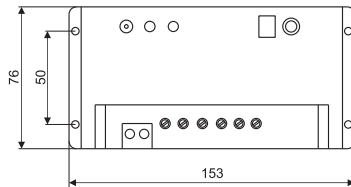
12V 20amp controller with (LVD) Low Voltage Disconnect. If the battery falls below 11.5 (or 23.0) volts, the load is disconnected from the battery to protect against harmful deep discharges. A 2-second delay prevents load disconnects from transients. The load is automatically reconnected when the battery voltage recovers to 12.6 (or 25.2) volts. Click on links on the bottom lefthand side for more information.

TCOM-D10/20

主要特点 FEATURES



- PWM充电方式，可选充电频率；
 - 充电比率可选(0~100%)；
 - 远程监控表头MT-1可选；
 - 充电电池可选(胶体电池，密封或者开口电池)；
 - 双电池充电，减少了单独的系统所增加的成本；
 - 温度补偿(远程温度传感器或者外置温度传感器)；
 - 过充、过放、过热、短路、过载保护和完善的防反接保护；
 - 直观的系统工作状态LED指示。
-
- Pwm charging, optional charging frequency;
 - Optional charging rate (0~100%);
 - Long-distance monitoring gauge outfit MT-1 for option;
 - Options for charging battery: gel battery, sealed battery or open type battery;
 - Dual battery charging which decrease the single system cost;
 - Temperature compensation (long-distance temperature sensor or external temperature sensor);
 - Protection against over-charge, over-discharge, over-heat, short circuit and reverse connection;
 - Direct led display of system running data.

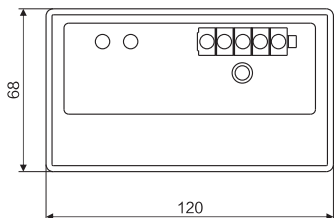


技术参数 TECHNICAL DATA

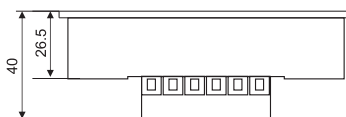
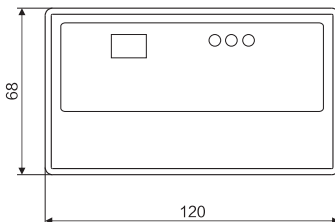
型号Model	TCOM-D10		TCOM-D20	
额定充放电电流Rated Current	10A		20A	
系统电压System Voltage	自动识别 Auto Recognizing 12V/24V			
电池类型Battery Type	密封铅酸电池 Sealed Lead-acid Battery	开口电池 Open Type Battery	胶体电池 Gel Battery	
均衡充电电压Average Charge Voltage	14.2V	14.4V	14.6V	
提升充电电压Promote Charge Voltage	14.4V	14.6V	14.8V	
浮充充电电压Boosting Charge Voltag	13.7V	13.7V	13.7V	
最大充电电压Max Charging Voltage	30V/55V			
电池电压范围Battery Voltage Range	1-15V			
提充维持时间Remain Period	30分钟30m			
自损耗Self Loss	充电时10mA，夜里4mA 10ma Charging, 4ma At Night			
通讯口Communicating Connection	8-Pin RJ-45			
温度补偿Temperature Compensatio	-30mV/℃/12V			
接线端子Connecting Terminal	6mm²			
工作温度范围Working Temperature Range	-35℃ to +55℃			



PSS-1



PSS-2



PSS10/15/20

主要特点 FEATURES

- 采用了基于专家控制系统的专用软件，实现了智能优化SOC控制，更先进、更可靠、更高效，有效保证并延长了系统部件的使用寿命；
- 高效串联式PWM充电方式；
- 温度补偿采用了外置温度传感器，较内置温度传感器控制精度更高；
- 外壳采用防火阻燃材料；
- 过充、过放、过热、短路、过载保护和完善的防反接保护；
- 铅酸蓄电池类型可选(免维护、胶体或者开口电池)；
- 采用大口径、大间隔接线端子，增强了绝缘性能及安装可靠性，不易滑丝；
- 接线端子后置，安装更方便；
- 直观的系统工作状态LED指示。

- Intelligent System Optimum Control;
- High efficient Series PWM charging with temperature compensation;
- Use MOSFET as electronic switch, without any mechanical switch;
- Compact size;
- LED indicator shows battery level, intuitive and convenient;
- Gel, Sealed and Flooded battery type option;
- Big terminals and big distance between terminals;
- Electronic protection: Overheating, over charging, over discharging, overload, and short circuit;
- Reverse polarity protection of any combination of solar module and battery;
- All the terminals backwards, easy installation.

技术参数 TECHNICAL DATA

型号Model	PSS10	PSS15	PSS20
额定充、放电电流Rated Current	10A	15A	20A
系统电压System Voltage	12V/24V Auto		
过载、短路保护 Over Load Protection	1.25倍额定电流60秒. 1.5倍额定电流5秒时过载保护动作 1.25 Times Of Rated Current For 60 Seconds, Or 1.5 Times For 5 Seconds		
空载损耗Self-Consumption	≤6mA		
工作温度Working Temperature	-35℃~+55℃		
均衡充电电压Equalize Charging Voltage	14.6V; × 2/24V		
提升充电电压Boost Charging Voltage	14.4V; × 2/24V		
浮充充电电压Float Charging Voltage	13.8V; × 2/24V		
充电返回电压Boost Reconnect Charging Voltage	13.2V; × 2/24V		
温度补偿Temperature Compensatio	-30mV/℃/12V		
欠压电压Under Voltage Warning Voltage	12.0V; × 2/24V		
过放电压Low Voltage Disconnect Voltage	11.1V; × 2/24V		
过放返回电压Low Voltage Reconnect Voltage	12.6V; × 2/24V		
端子接线规格Terminals	6mm ²		

*以上默认参数电池类型为铅酸免维护蓄电池。

*Default battery type is sealed lead acid battery.

*Technical data at 25℃

SMLNL05/08/10/15/20

☐ 主要特点 FEATURES



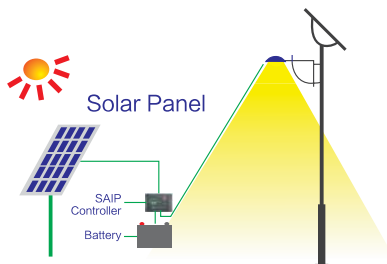
- 两种夜间照明模式，其中一种可编程。
- 负载打开时，时间的设定以1小时为单位，最长可达一整夜；
- PWM脉冲宽度调制(串接调节方式)；
- 内置温度补偿；
- 三阶段充电方式：强度-均衡充-浮充；
- 可蓄电池容量(SOC)或者蓄电池电压来控制深度放电保护功能；
- 固态电路及负载保护；
- 极性反接保护，全电子保护。
- One programmable nightlight function;
- PWM regulation (series type);
- Integrated temperature compensation;
- Three-state charging method;
- SOC and voltage controlled LVD;
- Solid-state circuit and load protection;
- Reverse polarity protection;
- Fully electronically protected;

SMLNL系列产品是新一代多功能低成本的太阳能充放电控制器。其电子线路配备了性能优良的单片机微处理器芯片，具有高效率充电、五个LED全功能显示、蜂鸣器声音预警及可编程的路灯控制模式等功能。

SMLNL系列控制器带自动温度补偿的三阶段的充电方式(强充电-均衡充电-浮充电)，由脉冲宽度调制(PWM)控制充电方式，可应用于给全密封或不密封的铅酸蓄电池充电。

用户可以自己选择，由蓄电池容量(SOC)还是蓄电池电压来控制深度放电保护功能。五个LED可清晰地显示蓄电池的不同工作及充放电状态。

SMLNL控制器具有一组可编程的路灯控制模式，当黄昏来临，在一定延时后，负载端自动打开。用户可自定义夜间负载打开的时间，设定时长以1小时为单位，最长可达一整夜。



The SMLNL series is a sophisticated solar charge controller family for low cost applications. The electronic circuit is equipped with a microcontroller that provides high-efficiency charging technology together with a number of outstanding status display, warning and safety functions.

The SMLNL series comes with two nightlight function mode. One of them is programmable that switch on the load output for a adjustable number of hours from dusk.

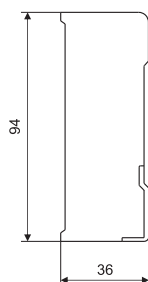
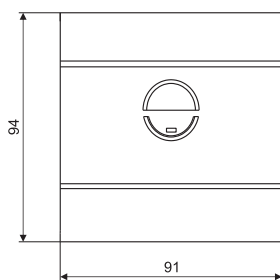
The nightlight function is overridden by a battery deep discharge protection to avoid excessive discharge and damage of the battery. The temperature-compensated three-state PWM charging method (boost-equalize-float) is now adjustable to sealed and vented lead-acid batteries. The low voltage disconnect function can be controlled either by SOC or by voltage. The battery status, charging status and load status are clearly indicated by 5 LEDs.

☐ 技术参数 TECHNICAL DATA

型号Model	SMLNL05	SMLNL08	SMLNL10	SMLNL15	SMLNL20
标称电压Nominal Voltage	12/24V 自动识别Automatic Recognition				
50℃的最大充电电流Max. Solar Panel Current	5A	8A	10A	15A	20A
50℃的最大负载电流Max. Load Panel Current	5A	8A	10A	15A	20A
25℃时的强充电电压Boost Voltage	14.5V/29.0V				
25℃时的均衡充电电压Equalization Voltage	14.8V/29.6V				
25℃时的浮充电电压Equalization Voltage	13.7/27.4V				
深度放电保护电压 Deep Discharge Protection	11.4-11.9V/22.8-23.8V Controlled By Statc Of Charge根据电池容量控制 11.0/22.0V Controlled By Voltage根据电池电压控制				
负载再次接通的电压Load Reconnect Voltage	12.8/25.6V				
温度补偿系数Temperature Compensation	-4mV/cell × K				
空载电流Self Consumption	<4mA				
最大连接线尺寸Max. Wire Size	16mm ² (AWG#6)				
尺寸(长×宽×高)Dimensions(W×H×D)	80×100×32mm(W×H×D)				
重量Weight	183g				
温度范围Temperature Range	-20to+50℃				
防护等级Type Of Protection	IP22				

SX10, SX20, SX40

主要特点 FEATURES



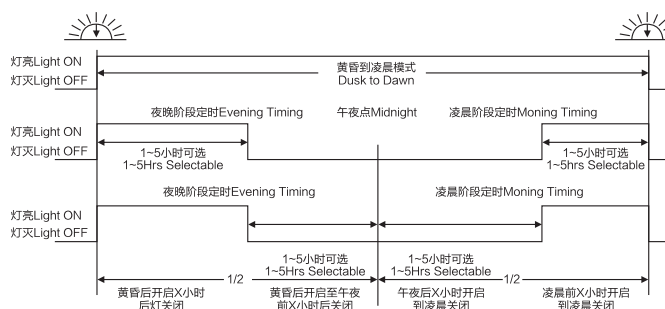
- SX/SXN系列产品是一款多功能太阳能充电控制器和太阳能路灯控制器。与同价位产品相比，具有许多独特的功能；
- SX/SXN系列产品除了具有温度补偿、PWM调节外，还拥有了非常特别的特点：LCD显示、夜间功能时间可编程和自适应负载切断保护功能；
- SX/SXN的扇形显示屏可以显示蓄电池容量、充电状态、放电状态以及负载状态(例如过载、短路)等；过放保护有三种不同的模式：蓄电池电压控制，蓄电池电量SOC控制，自适应控制(模糊逻辑)；
- SX/SXN系列控制器内置声音报警并具有可编程的夜间功能，能自动识别季节、白昼；
- SX/SXN系列控制器具有多余能量管理的功能，多余能量可应用于直流冰箱/冷柜等应用设备；
- SX/SXN紧凑的结构适用于DIN标准导轨安装(导轨安装板作为附件可供用户选择)；
- SX为正极接地，SXN为负极接地。

- SX/SXN Series is a Sophisticated Solar Charge Controller Which Offers Exceptional Features at an Extremely Competitive Price;
- Data Logging The SX/SXN charge controller stores system data for one year;
- High Reliability Design Superior design ensures high degree of reliability through PCB conformal coating and anti-corrosive screws and terminals. Full electronic protection against short circuits, overload, overcurrent, reverse flow, wrong polarity and over-temperature;
- Multifunctional LCD Display
- The SOC bar indicates the exact state of charge(available energy)as a percentage through the battery gauge symbol. Load status and nightlight function are displayed symbolically;
- Negative Grounding(SXN); Positive Grounding (SX);
- Various Optional System Accessories; Overcharge Protection;
- Overdischarge Protection Selectable LCD Modes.

夜间照明功能 Flexible Nightlight Function

自动识别白天/夜晚； 可自定义白天/夜晚的起始时间； 两种夜间照明模式可选择；黄昏至凌晨方式；夜晚/清晨方式。

Automatically detects day/night; Programmable day/night threshold(light on/off point); Lighting timing modes include dusk to dawn and ON/OFF/ON; (Eventng/Morning).



技术参数 TECHNICAL DATA

型号Model	SX/SXN10	SX/SXN20	SX/SXN40
额定电压Nominal Voltage	自动识别Automatic Recognition 12/24V		
最大充电电流Max. Solar Panel Current	10A	20A	40A
最大负载电流Max.Load Current	10A	20A	40A
过充保护Overcharge Protection	强充/吸收充/浮充三段式PWM调节充电方式 Constant Voltage PWM Series Regulation:Boost Charge, Float Charge And Optional Equalization Charge.		
过放电保护Selectable LVD Modes	蓄电池电压及电量控制自适应控制(模糊逻辑)Adaptive control (fuzzy logic) of battery voltage and power control		
工作环境温度Ambient Temperature Range	-25℃ to +50℃		
最大接线尺寸Max.Wire Size	16mm ² #6		
空载电流Self Consumption	4mA		
重量Weight	166/170g	166/170g	176/180g

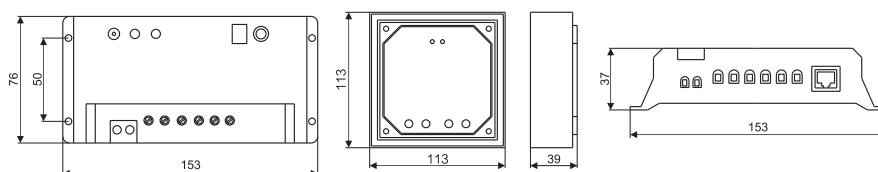
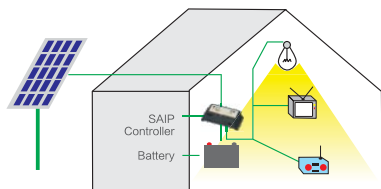
TCOM10/20

□ 主要特点 FEATURES

- 采用了基于专家控制系统的专用软件，实现了智能优化SOC控制，更先进、更可靠、更高效，有效保证并延长了系统部件的使用寿命；
 - 高效串联式PWM充电方式；
 - 温度补偿采用了外置温度传感器，较内置温度传感器控制精度更高；
 - 利用先进电源技术，大大提高单位面积的有效功率，结构更紧凑；
 - 过充、过放、过热、短路、过载保护和完善的防反接保护；
 - 配置显示单元(METER MT-2可选件)，可显示所有工作参数和状态，即插即用；
 - 直观的系统工作状态LED指示。
- Two battery charging eliminates the added cost of two separate solar charging systems;
 - With battery type selection;
 - With charging priority setting;
 - Temperature compensation(option:Remote temperature sensor & Local temperature sensor);
 - Remote meter MT-2(option);
 - Electronic protections:over discharging, short-circuit, over load, and battery reverse polarity assembly etc;
 - PWM charging, different frequency option.



Solar Panel

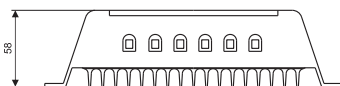
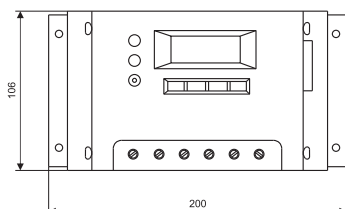


□ 技术参数 TECHNICAL DATA

型号Model	TCOM10	TCOM20
额定充放电电流Rated Current	10A	20A
系统电压System Voltage	12V; 24V/12V Auto	
过载、短路保护 Over Load Protection	1.25倍额定电流60秒.1.5倍额定电流5秒时过载保护动作 1.25 Times Of Rated Current For 60 Seconds, Or 1.5 Times For 5 Seconds	
空载损耗Self-Consumption	控制器≤5mA; 表头≤3mA; 表头背光≤20mA Controller≤5ma; Gauge Outfit≤3ma Backlight Of Gauge Outfit ≤20ma	
工作温度Work Temperature	-35℃~+55℃	
均衡充电电压Equalize Charging Voltage	14.8V; × 2/24V	
提升充电电压Boost Charging Voltage	14.4V; × 2/24V	
浮充充电电压Float Charging Voltage	13.7V; × 2/24V	
充电返回电压Charge Return Voltage	13.2V; × 2/24V	
温度补偿Temperature Compensation	-30mV/℃/12V	
欠压电压Under Voltage Warning Voltage	12.0V; × 2/24V	
过放电压Low Voltage Disconnect Voltage	11.1V; × 2/24V	
过放返回电压Low Voltage Reconnect Voltage	13.1V; × 2/24V	
端子接线规格Terminals	6mm ²	

LCS10/20

主要特点 FEATURES



- 采用了基于专家控制系统的专用软件，实现了智能优化SOC控制，更先进、更可靠、更高效，有效保证并延长了系统部件的使用寿命；
- 高效串联式PWM充电方式；
- 温度补偿采用了外置温度传感器，较内置温度传感器控制精度更高；
- 采用带有实时时钟的控制芯片，实时时钟显示；
- 后备电池，掉电不丢失时间设置；
- 过充、过放、过热、短路、过载保护和完善的防反接保护；
- 采用大口径、大间隔接线端子，增强了绝缘性能及安装可靠性；
- 使用图形点阵液晶显示系统状态及参数，多级菜单操作，人机界面更友好；
- 具有TTL-232通讯接口，可连接远程显示表头。
- Intelligent System Optimum Control;
- High efficient Series PWM charging with external temperature compensation;
- Real time clock display;
- Back up battery, no need to reset the time after power failure;
- Using a graphical dot matrix LCD display system status and parameters, multi-level menu operation, friendly interface;
- TTL-232 communication interface for remote meter;
- Compact size;
- Big terminals and big distance between terminals;
- Electronic protection: Overheating, over charging, over discharging, overload, and short circuit;
- Reverse polarity of any combination of solar module and battery;
- Load work mode: ON/OFF, Dusk to Dawn, Light ON+Timer, Clock (exact timer, singular timer and dual timer option).

多样化负载控制方式 Multiply Load Control

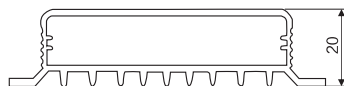
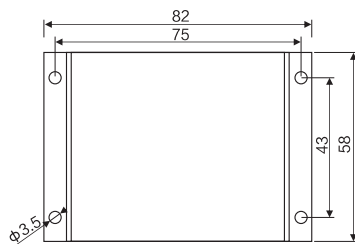
- 通用模式；
- 纯光控；
- 光控+定时；
- 真实时钟定时控制，单双时段任选。
- Universal model;
- Pure light control;
- Light control + timing;
- Real-time timing control, optional single period or dual period.

技术参数 TECHNICAL DATA

型号Model	LCS10	LCS20
额定充、放电电流Rated Current	10A	20A
系统电压System Voltage	12V/24V Auto	
过载、短路保护 Over Load Protection	1.25倍额定电流60秒, 1.5倍额定电流5秒时过载保护动作 1.25 Times Of Rated Current For 60 Seconds, Or 1.5 Times For 5 Seconds	
空载损耗Self-Consumption	控制电路≤6mA 显示电路≤15mA Controlling Circuit ≤6mA Display Circuit ≤15mA	
工作温度Work Temperature	-20℃~+55℃	
均衡充电电压Equalize Charging Voltage	14.8V; × 2/24V	
提升充电电压Boost Charging Voltage	14.4V; × 2/24V	
浮充充电电压Float Charging Voltage	13.7V; × 2/24V	
充电返回电压Charge Return voltage	13.2V; × 2/24V	
温度补偿Temperature Compensation	-30mV/℃/12V	
欠压电压Under Voltage Warning Voltage	12.0V; × 2/24V	
过放电压Low Voltage Disconnect Voltage	11.1V; × 2/24V	
过放返回电压Low Voltage Reconnect Voltage	12.6V; × 2/24V	
端子接线规格Terminals	6mm ²	10mm ²

PR-SL05/10

□ 主要特点 FEATURES



PR-SL系列为新一代防水太阳能智能控制器，采用高速MCU和专用控制算法设计，使控制更加先进和智能。同时采用先进工艺生产，具防水性好、体积小、功率密度高等特点。独具创新的调试方式为用户提供更加简单快捷的使用方式。PR-SL系列控制器具有短路、过载、防反接保护，充满、过放自动关断、恢复等全功能保护措施，详细的充电指示、蓄电池状态、负载及各种故障指示。对于具有自动识别的型号，系统上电时将检测系统电压，如果是12V系统数码管显示“0”；如果是24V系统数码管将显“1”。

- IP68防水等级，铝制外壳设计，能有效的防止各种腐蚀；
- 12V/24V系统电压自动识别；
- LED数字显示和防水按键操作，使用简单快捷；
- 改进三段式充电算法，每周对蓄电池进行一次均衡充电，有效防止蓄电池不均衡和硫化现象，提高蓄电池使用寿命；
- 五种负载工作模式，方便使用在各种路灯及监控设备上；
- 外置温度传感器，具有高精度温度补偿；
- 参数设置掉电保存功能，无需重复设置，使用方便快捷；
- 各种状态指示；
- 具有过充、过放、过载保护以及电子短路保护与防反接保护；
- TVS防雷保护。

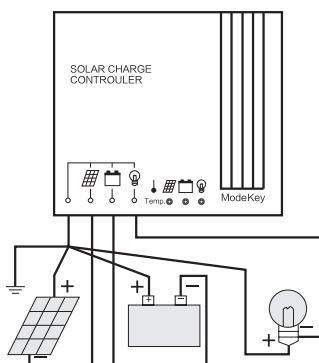
PR-SL series controller is new type waterproof intelligent solar controller, use high-speed MCU and special control arithmetic to design, to make it more advance and intelligent. Its waterproofness is good, volume is small, power density is high and with easy operation. It has protective measures including short-circuit, overload, reverse connection protection, overcharge and overdischarge protection etc., and detailed state of charge, load and failure indication. For automatically recognize models, system will test the voltage, if the voltage is 12V, display “0”, if the voltage is 24V, display “1”.

- Waterproof Rating: IP68, Aluminum casing, Prevent corrosion;
- 12V/24V auto recognize;
- LED Digital display and waterproof button, easy to use;
- Use advanced technology, one time equalizing charge every week, extend the service life of the system components;
- Five work modes, it's convenience to use in various street lamp and monitoring equipment;
- Use external temperature sensor, high precision temperature compensation;
- With power fail auto-save function. No reset need. Easy to use;
- Various state indication;
- It has overcharge, overdischarge, overload, short-circuit and reverse connection protection;
- TVS lightning protection.

- 外形尺寸：82×58×20(mm) 安装尺寸：43×75(mm) 安装孔径：3.5(mm)；
- PR-SL系列控制器可以在12V或24V系统电压下工作，使用时请先接蓄电池，控制器会自动识别，蓄电池电压后开始工作。如果是12V系统数码管显示“0.”；如果是24V系统数码管将显示“1.”；
- 连接“+”极：控制器为共正极设计，将蓄电池、光电板和负载的正极分别与控制器的正极端(红线)连接在一起；
- 连接蓄电池“-”极：如果连接正确，控制器指示灯会闪烁，否则，请检查连接是否正确；
- 连接太阳能板“-”极：如果有阳光，太阳能板指示灯会亮，否则，请检查连接是否正确；
- 连接负载“-”极：将负载连接线接入控制器负载输出端，电流不能超过控制器额定电流。

- Contour size: 82×58×20(mm) installation size: 43×75(mm) mounting hole: 3.5(mm);
- PR-SL series controller can use in 12V or 24V system, please connect battery first, then controller can recognize automatically. if the voltage is 12V, display “0”, if the voltage is 24V, display “1”;
- Connect to “+” pole: controller is common anode, connect the anode pole of battery, solar panel and load to anode pole of controller (red cable);
- Connect to cathode of battery: if it's correct, the indicate lamp is twinkling, otherwise please recheck the connection;
- Connect to cathode of solar panel, if there is sunny, indicate lamp of solar panel will be on, otherwise, please recheck the connection;
- Connect to cathode of load: put the wire of laod connect to the output of controller load, the max. current can't be more than rated current.

□ 接线图 Wiring Diagram



□ 技术参数 TECHNICAL DATA

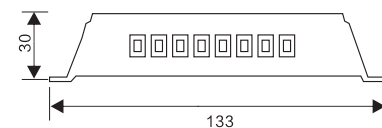
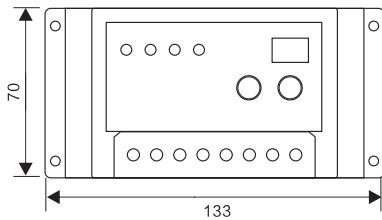
型号Model	PR-SL05	PR-SL10
标称电压Nominal Voltage	自动识别Automatic Recognition 12/24V	
50℃的最大充电电流Max. Solar Panel Current	5A	10A
50℃的最大负载电流Max. Load Panel Current	5A	10A
25℃时的强充电电压Boost Voltage	14.5V/29.0V	
25℃时的均衡充电电压Equalization Voltage	14.6; × 2/24V(25℃), 维持时间: 1小时Maintain Time: 1 Hour	
25℃时的浮充电电压Folat Voltage	13.8; × 2/24V(25℃)	
负载再次接通的电压Load Reconnect Voltage	12.8V/25.6V	
温度补偿系数Temperature Compensation	-4.0mV/℃/2V	
空载电流Self Consumption	<4mA	
最大连接线尺寸Max. Wire Size	16mm ² (AWG#6)	
尺寸Dimensions(W × H × D)	82 × 58 × 20mm(W × H × D)	
重量Weight	140g	
温度范围Temperature Range	-35℃ to +65℃	
防护等级Type of Protection	IP68	

□ 状态指示 Status Indication

LED灯 LED Lamp	指示内容 Instructions	状态 State Of LED Lamp	功能Function
	充电指示 Charging Instructions	常亮ON	电池板有电压Solar Panels Have Voltage
		长灭OFF	电池板无电压Solar Panels Have No Voltage
		慢闪Slow Flash	正在充电Charging
		快闪Fast Flash	系统超压System Overvoltage
	蓄电池指示 Battery Instructions	常亮ON	蓄电池工作正常Battery Is Normal
		长灭OFF	蓄电池没有连接No Connect To Battery
		慢闪Slow Flash	蓄电池欠压Battery Undervoltage
		快闪Fast Flash	蓄电池过放Battery Overdischarge
	负载指示 Load Instructions	常亮ON	负载打开Load is ON
		长灭OFF	负载关闭Load is OFF
		慢闪Slow Flash	过载保护Overload Protection
		快闪Fast Flash	短路保护Short-Circuit Protection

PSRD-T 05/10/15/20

主要特点 FEATURES



- 电池选择功能，支持铅酸电池、胶体电池、锂电池等电池的使用，用户可以根据自己所选蓄电池类型，调节到对应模式；
- 双路输出设计，每路可单设置工作时间；
- 双时段功能，时间自由设置；
- 丰富的参数可编程选项，光控启动点电压、光控判断时间、光控延时开启时间、每晚强制亮灯、蓄电池类型选择；
- 智能自学习功能，能够自动识别夜晚长度使亮灯时间更加精确；
- 具有温度补偿功能；
- 每7天进行一次提升充电，防止蓄电池硫化；
- 具有过充、过放、过载保护及独特电子短路保护与防反接保护；
- 双位数字LED显示，双按键操作，使用极其方便直观；
- 采用工业级芯片和精密元件，能在寒冷、高温、潮湿环境下运行；

- Supporting Battery types: lead acid cell, gel battery, Li-Fe battery. User can adjust the working mode according to their battery;
- Dual output design, independent time setting for each light;
- Dual time interval: time setting as user's wish;
- Some items could be programmed by lots of parameter----Light control starts point voltage, estimates time, delays opening time, forces lighting on, and chooses the battery;
- Intelligent self-taught function, automatic identification of night length to light on more exact time;
- Temperature compensation;
- Boost charging every 7days to prevent battery vulcanizing;
- Electronic protection: over charging, over discharging, overload, and short circuit;
- Double digits LED display, dual keys to operate, easy to use and recognise;
- All controllers adopt industrial chip and high precision components, so they could work in cold, high-temperature and wet places.

技术参数 TECHNICAL DATA

型号Model	PSRD-T 05	PSRD-T 10	PSRD-T 15	PSRD-T 20
额定充电电流Rated Charging Current	5A	10A	15A	20A
额定放电电流Rated Discharging Current	5A	10A	15A	20A
系统电压System Voltage	□12V; □24V; □12V/24V Auto			
空载损耗Self-Consumption	<5mA;			
温度补偿Temperature Compensation	-4.0mv/°C/2V(提升、直充、浮充、充电返回电压补偿) Boost, Direct, Float Reconnect Charging Voltage Compensation			
控制方式Control Mode	充电: PWM脉宽调制Charge: PWM			
工作温度Working Temperature	-35°C~+65°C			
过载、短路保护 Overload Short Circuit Protection	1.25倍额定电流30秒; 1.5倍额定电流5秒过载保护动作; ≥3倍额定电流短路保护 1.25 times of rated current for 30 seconds; 1.5 times of rated current for 5 seconds overload protection; ≥3 times rated current, short circuit protection			
保护电路Guard Circuit	过充、过放、过载和短路保护 Overcharge, overdischarge, overload, and short circuit protection 太阳能电池、蓄电池反接保护 Solar cell and battery reverse polarity protection 所有保护均不损害任何部件，不烧保险；保险丝只做终极保护作用 All the protection won't damage any assembly or fuse. Fuse function as the ultimate protection.			

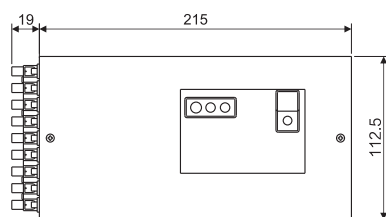
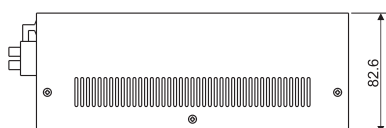
SCHY

主要特点 FEATURES

- 专为太阳能-市电互补照明系统设计；
- 采用了基于专家控制系统的专用软件，实现了智能优化SOX控制，更先进、更可靠、更高效，有效保证并延长了系统部件的使用寿命；
- 高效串联式PWM充电方式；
- 蓄电池优先，实现了蓄电池或市电无负载冲击的不停电软切换；
- 可附加市电补充充电模块；
- 不仅节能且具有极高的供电保障率。

- The controller provides the load power from solar or grid, solar power supply first, and grid feed will be the supplement of the system.

- Specially designed for solar/grid hybrid system;
- Battery backup supply power first, provide continuous power supply;
- Intelligent SOC control;
- Microcontroller digital accuracy;
- PWM charge mode & SOC;
- Temperature compensation;
- Electronic protections;
- Detects day & nights, using the PV array, timer setting.



技术参数 TECHNICAL DATA

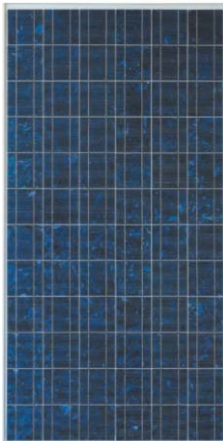
型号Model	SCHY
持续输出功率Continuous Power Output	50W~350W
最大输出功率Max. Output Power	60W~400W
最大冲击功率Maximum Impact Power	100W~550W
额定充电电流Rated Charging Current	10A~20A
额定工作电压Rated Working Voltage	12V or 24V
交流输入电压范围AC Input Voltage Range	170V ~ 265V
均衡充电电压Equalize Charging Voltage	14.8V; × 2/24V
提升充电电压Boost Charging Voltage	14.4V; × 2/24V
浮充充电电压Float Charging Voltage	13.7V; × 2/24V
充电返回电压Charge Return Voltage	13.2V; × 2/24V
温度补偿Temperature Compensatio	-30mV/°C/12V
欠压电压Under Voltage Warning Voltage	12.0V; × 2/24V
切换市电供电电压 Switching The Commerical City Electricity Supply Voltage	11.1V; × 2/24V
切换光电供电电压 Switching Solar Electricity Supply Voltage	12.6V; × 2/24V
工作环境温度 Working Environment Temperature	-20°C~+50°C

技术参数

TECHNICAL PARAMETERS



型号Model		SS-200-72	SS-210-72	SS-210-72
最大输出功率Max Output Power	Pm(W)	200	210	220
功率误差Tolerance	± (%)	5	5	5
最佳工作电压Max Power Voltage	Vpm(V)	34.2	34.5	34.9
最佳工作电流Max Power Current	Ipm(A)	5385	6.09	6.31
开路电压Operating Circuit Voltage	Voc(V)	43.2	43.6	44.2
短路电流Short Circuit Current	Isc(A)	6.52	6.69	6.82
最大系统电压Max System Voltage	(VDC)		1000	
电池片转换效率Cell Efficiency	(%)	13.7	14.38	15.06
组件转换效率Component Conversion Efficiency	(%)	12.44	13.06	13.68
电池片数量、各类和排列方式 Cells Quantity & Connect Method		72片单晶硅电池片(6×12) 72Pcs Mono Cells(6×12)		
组件尺寸Module Size		1637mm×982mm×46mm		



型号Model		SS-160-72	SS-170-72	SS-180-72
最大输出功率Max Output Power	Pm(W)	160	170	180
功率误差Tolerance	± (%)	5	5	5
最佳工作电压Max Power Voltage	Vpm(V)	34.2	34.5	34.9
最佳工作电流Max Power Current	Ipm(A)	4.68	4.93	5.16
开路电压Operating Circuit Voltage	Voc(V)	43.2	43.6	44.2
短路电流Short Circuit Current	Isc(A)	5.22	5.42	5.58
最大系统电压Max System Voltage	(VDC)		1000	
电池片转换效率Cell Efficiency	(%)	14.22	15.11	16.01
组件转换效率Component Conversion Efficiency	(%)	12.53	13.32	14.09
电池片数量、各类和排列方式 Cells Quantity & Connect Method		72片单晶硅电池片(6×12) 72Pcs Mono Cells(6×12)		
组件尺寸Module Size		1580mm×808mm×46mm		



型号Model		SS-120-36	SS-130-36	SS-140-36
最大输出功率Max Output Power	Pm(W)	120	130	140
功率误差Tolerance	± (%)	5	5	5
最佳工作电压Max Power Voltage	Vpm(V)	17.2	17.4	17.6
最佳工作电流Max Power Current	Ipm(A)	6.97	7.47	7.95
开路电压Operating Circuit Voltage	Voc(V)	21.6	21.8	22.1
短路电流Short Circuit Current	Isc(A)	7.82	8.82	8.56
最大系统电压Max System Voltage	(VDC)		1000	
电池片转换效率Cell Efficiency	(%)	13.71	14.84	15.97
组件转换效率Pdiele Effocoemcy	(%)	12.34	13.37	14.39
电池片数量、各类和排列方式 Cells Quantity & Connect Method		36片单晶硅电池片(4×9) 36Pcs Mono Cells(4×9)		
组件尺寸Module Size		1445mm×673mm×40mm		

□ 技术参数 TECHNICAL PARAMETERS



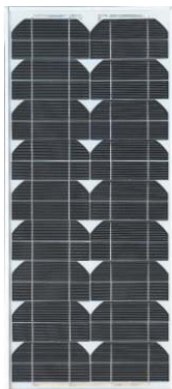
型号Model		SS-100-36	SS-110-36	SS-120-36
最大输出功率Max Output Power	Pm(W)	100	110	120
功率误差Tolerance	± (%)	5	5	5
最佳工作电压Max Power Voltage	Vpm(V)	16.92	17.2	17.4
最佳工作电流Max Power Current	Ipm(A)	5.91	6.39	6.89
开路电压Operating Circuit Voltage	Voc(V)	21.2	21.8	22.1
短路电流Short Circuit Current	Isc(A)	6.74	7.01	7.44
最大系统电压Max System Voltage	(VDC)		1000	
电池片转换效率Cell Efficiency	(%)	13.19	14.51	15.26
组件转换效率Component Conversion Efficiency	(%)	11.33	12.44	13.57
电池片数量、各类和排列方式 Cells Quantity & Connect Method		36片单晶硅电池片(4×9) 36Pcs Mono Cells(4×9)		
组件尺寸Module Size		1314mm×673mm×40mm		



型号Model		SS-160-72	SS-170-72	SS-180-72
最大输出功率Max Output Power	Pm(W)	160	170	180
功率误差Tolerance	± (%)	5	5	5
最佳工作电压Max Power Voltage	Vpm(V)	34.2	34.5	34.9
最佳工作电流Max Power Current	Ipm(A)	4.68	4.93	5.16
开路电压Operating Circuit Voltage	Voc(V)	43.2	43.6	44.2
短路电流Short Circuit Current	Isc(A)	5.22	5.42	5.58
最大系统电压Max System Voltage	(VDC)		1000	
电池片转换效率Cell Efficiency	(%)	14.95	15.88	16.81
组件转换效率Component Conversion Efficiency	(%)	12.53	13.32	14.09
电池片数量、各类和排列方式 Cells Quantity & Connect Method		72片单晶硅电池片(6×12) 72Pcs Mono Cells(6×12)		
组件尺寸Module Size		1580mm×808mm×46mm		



型号Model		SS-110-108	SS-120-108	SS-130-108
最大输出功率Max Output Power	Pm(W)	110	120	130
功率误差Tolerance	± (%)	5	5	5
最佳工作电压Max Power Voltage	Vpm(V)	17.02	17.14	17.26
最佳工作电流Max Power Current	Ipm(A)	6.46	7.01	7.53
开路电压Operating Circuit Voltage	Voc(V)	21.4	21.6	21.8
短路电流Short Circuit Current	Isc(A)	7.34	7.82	8.28
最大系统电压Max System Voltage	(VDC)		1000	
电池片转换效率Cell Efficiency	(%)	13.7	14.94	16.19
组件转换效率Component Conversion Efficiency	(%)	11.39	12.42	13.46
电池片数量、各类和排列方式 Cells Quantity & Connect Method		108片单晶硅电池片(6×18) 108Pcs Mono Cells(6×18)		
组件尺寸Module Size		1195mm×808mm×46mm		

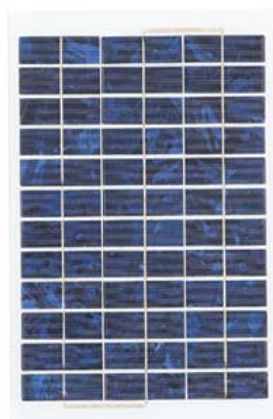


技术参数 TECHNICAL PARAMETERS

型号Model		SS-15-36	SS-18-36	SS-20-36
最大输出功率Max Output Power	Pm(W)	15	18	20
功率误差Tolerance	± (%)	5	5	5
最佳工作电压Max Power Voltage	Vpm(V)	17.2	17.4	17.6
最佳工作电流Max Power Current	Ipm(A)	0.87	1.03	1.14
开路电压Operating Circuit Voltage	Voc(V)	21.6	21.8	22.1
短路电流Short Circuit Current	Isc(A)	0.99	1.16	1.26
最大系统电压Max System Voltage	(VDC)		1000	
电池片转换效率Cell Efficiency	(%)	12.49	13.9	15.33
组件转换效率Component Conversion Efficiency	(%)	8.7	10.52	11.69
电池片数量、各类和排列方式 Cells Quantity & Connect Method		36片单晶硅电池片(2×18) 36Pcs Mono Cells(2×18)		
组件尺寸Module Size		624mm×274mm×28mm		



型号Model		SS-18-36	SS-20-36	SS-22-36
最大输出功率Max Output Power	Pm(W)	18	20	22
功率误差Tolerance	± (%)	5	5	5
最佳工作电压Max Power Voltage	Vpm(V)	17.1	17.2	17.4
最佳工作电流Max Power Current	Ipm(A)	1.05	1.16	1.26
开路电压Operating Circuit Voltage	Voc(V)	21.4	21.6	21.8
短路电流Short Circuit Current	Isc(A)	1.21	1.37	1.42
最大系统电压Max System Voltage	(VDC)		1000	
电池片转换效率Cell Efficiency	(%)	13.35	14.83	16.32
组件转换效率Component Conversion Efficiency	(%)	10.09	11.22	12.34
电池片数量、各类和排列方式 Cells Quantity & Connect Method		36片单晶硅电池片(2×18) 36Pcs Mono Cells(2×18)		
组件尺寸Module Size		505mm×353mm×28mm		



型号Model		SS-10-36	SS-11-36	SS-12-36
最大输出功率Max Output Power	Pm(W)	10	11	12
功率误差Tolerance	± (%)	5	5	5
最佳工作电压Max Power Voltage	Vpm(V)	17.1	17.2	17.4
最佳工作电流Max Power Current	Ipm(A)	0.58	0.64	0.69
开路电压Operating Circuit Voltage	Voc(V)	21.4	21.6	21.8
短路电流Short Circuit Current	Isc(A)	0.67	0.73	0.77
最大系统电压Max System Voltage	(VDC)		1000	
电池片转换效率Cell Efficiency	(%)	12.71	13.9	15.26
组件转换效率Component Conversion Efficiency	(%)	9.5	10.45	11.4
电池片数量、各类和排列方式 Cells Quantity & Connect Method		36片单晶硅电池片(3×12) 36Pcs Mono Cells(3×12)		
组件尺寸Module Size		394mm×267mm×28mm		

□ 技术参数 TECHNICAL PARAMETERS

型号Model	最大输出功率 Max Output Power Pm(W)	最佳工作电压 Max Power Voltage Vpm(V)	最佳工作电流 Max Power Current Lpm(A)	开路电压 Operating Circuit Voltage Voc(V)	短路电流 Short Circuit Current Lsc(A)	组件尺寸 Module Size (mm)
SS-220-72	220	34.9	6.31	44.2	6.82	1637 × 982 × 46
SS-210-72	210	34.5	6.09	43.6	6.69	1637 × 982 × 46
SS-200-72	200	34.2	5.85	43.2	6.52	1637 × 982 × 46
SS-180-72	180	34.9	5.16	44.2	5.58	1580 × 808 × 46
SS-170-72	170	34.5	4.93	43.6	5.42	1580 × 808 × 46
SS-160-72	160	34.2	4.68	43.2	5.22	1580 × 808 × 46
SS-140-72	140	17.6	7.95	22.1	8.56	1445 × 673 × 40
SS-130-72	130	17.4	7.47	21.8	8.82	1445 × 673 × 40
SS-130-108	130	17.26	7.53	21.8	7.28	1195 × 808 × 46
SS-120-36	120	17.4	6.89	22.1	7.44	1314 × 673 × 40
SS-120-72	120	17.2	6.97	21.6	7.82	1445 × 673 × 40
SS-120-108	120	17.14	7.01	21.6	7.82	1195 × 808 × 46
SS-110-36	110	17.2	6.39	21.8	7.01	1314 × 673 × 40
SS-110-36	110	17.4	5.16	22.1	6.91	1166 × 673 × 40
SS-110-108	110	17.02	6.46	21.4	7.34	1195 × 808 × 46
SS-100-36	100	16.92	5.91	21.2	6.74	1314 × 673 × 40
SS-100-36	100	17.2	5.81	21.8	6.37	1166 × 673 × 40
SS-90-36	90	17.02	5.29	21.4	6.04	1166 × 673 × 40
SS-85-36	85	17.4	4.89	22.1	5.26	1175 × 527 × 35
SS-75-36	75	17.2	4.36	21.8	4.78	1175 × 527 × 35
SS-65-36	65	17.1	3.8	21.6	4.24	1175 × 527 × 35
SS-22-36	22	17.4	1.26	21.8	1.42	505 × 353 × 28
SS-20-36	20	17.6	1.14	22.1	1.26	624 × 274 × 28
SS-20-36	20	17.2	1.16	21.6	1.37	505 × 353 × 28
SS-18-36	18	17.4	1.03	21.8	1.16	624 × 274 × 28
SS-18-36	18	17.1	1.05	21.4	1.21	505 × 353 × 28
SS-15-36	15	17.2	0.87	21.6	0.99	624 × 274 × 28
SS-12-36	12	17.4	0.69	21.8	0.77	394 × 267 × 28
SS-11-36	11	17.2	0.64	21.6	0.73	394 × 267 × 28
SS-10-36	10	17.1	0.58	21.4	0.67	394 × 267 × 28
SS-4.5-36	4.5	17.4	0.26	21.8	0.29	304 × 189 × 20
SS-4-18	4	8.74	0.46	11.08	0.51	244 × 164 × 20
SS-4-36	4	17.2	0.23	21.6	0.26	304 × 189 × 20
SS-3.5-18	3.5	8.68	0.41	10.98	0.45	244 × 164 × 20
SS-3.5-36	3.5	17.1	0.21	21.4	0.23	304 × 189 × 20
SS-3-18	3	8.46	0.35	10.8	0.39	244 × 164 × 20
SS-3-18	3	8.74	0.34	11.08	0.38	184 × 188 × 20
SS-2.5-18	2.5	8.68	0.29	10.98	0.33	184 × 188 × 20
SS-2-18	2	8.46	0.24	10.8	0.26	184 × 188 × 20
SS-1.5-18	1.5	8.74	0.17	11.08	0.19	174 × 98 × 20
SS-1-18	1	8.68	0.12	10.98	0.13	174 × 98 × 20

主要特点 FEATURES

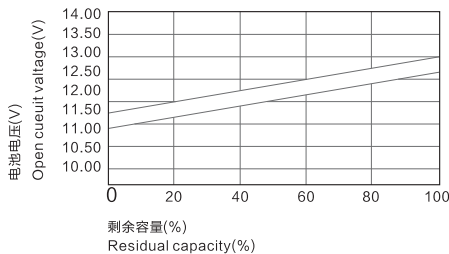
- 容量大，寿命长；
- 耐腐蚀、耐长时间浮充；
- 先进的AGM隔板；
- ABS工程塑料外壳,经久耐用；
- SF橡胶密封安全盖:安全、防爆炸、无腐蚀，防止空气腐蚀或液体泄露；
- 铜和银电镀接线端：小接触电阻、不易生锈；



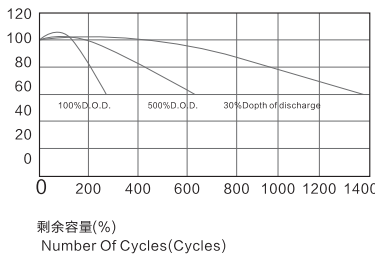
- Large capacity, long life span;
- Resistance to corrosion, endure through long time floating charge;
- Advanced AGM septum;
- ABS engineering plastics housing, durable;
- SF rubber airproof security cover: safe, explosion prevention, no corrosion air or liquid leak;
- Cu with silver plating terminal: small contact resistance, difficult for rusty;

电池特性 BATTERY CHARACTERISTICS

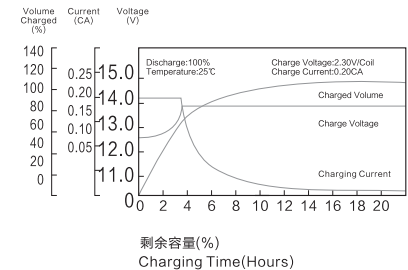
电池的开路电压和剩余容量 (25℃)
The Relation Ship For Opencircuit Voltage
And Residual Capacity(25℃)



循环寿命(25℃)
Cycle Life(25℃)



充电特性(25℃)
Charging Characteristics(25℃)



技术参数 TECHNICAL DATA

型号Model	电压(V) Voltage	额定容量(Ah)Rated Capacity					尺寸(mm) Size			总高 Total Height	重量 Weight
		15Min Rate	1 Hour Rate	5 Hour Rate	10 Hour Rate	20 Hour Rate	长Length	宽Width	高Height		
SBT20-12	12	9.2Ah	12.6Ah	17.0Ah	18.5Ah	20.0Ah	181	77	167	167	6.00kg
SBT24-12	12	11.1Ah	15.1Ah	20.4Ah	22.2Ah	24Ah	166	175	125	125	7.32kg
SBT35-12	12	14.7Ah	21.1Ah	31.5Ah	35Ah	35.6Ah	195	130	155	180	10.80kg
SBT55-12	12	22Ah	33.6Ah	49.5Ah	55.0Ah	58Ah	229	138	208	230	18.0kg
SBT65-12	12	26.8Ah	39.8Ah	57.5Ah	65Ah	69Ah	350	167	179	186	21.50kg
SBT80-12	12	32.8Ah	50.4Ah	72Ah	80Ah	84.6Ah	260	168	211	233	23.50kg
SBT100-12	12	42.5Ah	63Ah	91Ah	100Ah	107Ah	330	171	214	224	31kg
SBT120-12	12	51Ah	75.6Ah	108Ah	120Ah	127Ah	409	176	225	225	36kg
SBT150-12	12	65.5Ah	94.5Ah	137.5Ah	150Ah	158Ah	485	172	240	242	44.5kg
SBT200-12	12	89.8Ah	126Ah	185Ah	200Ah	206Ah	522	238	218	238	65.00kg
SBT250-12	12	60Ah	153Ah	225Ah	250Ah	261Ah	521	269	220	245	74.5kg



主要特点 FEATURES

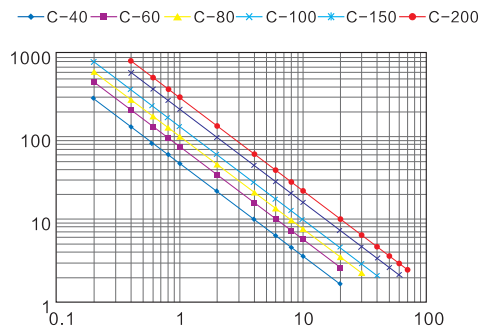
- 本产品专为蓄电池的储能应用而设计的，满足光伏系统，风能和风光互补系统的使用要求；
 - 本产品为胶体铜酸储能蓄电池；
 - 本产品胶体技术获国家发展专利(专利号：ZL2005 10060856.9)，通过浙江省科技厅科技成果鉴定，性能国内领先，重量比能量达到国际先进水平；
 - 蓄电池放电性能充分考虑了系统配置的特定需求，具备优秀的长时率和高低温放电特征；
 - 蓄电池充电性能是长寿命储能蓄电池的关键指标，本产品充分考虑了室外环境对充电容量效率和充电接受能力的影响，使电池具备良好的环境适应性，保证了电池循环使用的长寿命。
- Our products are specially designed for the stored energy function of the storage battery, it is satisfy with the operating requirement of Photovoltaic - PV System, wind energy and Scene complementary system;
 - Our products are GEL lead-acid battery;
 - Our product's gel technology have gained the national patent (the number of the patent is ZL2005 1 0060856.9), and have tested through the scientific research achievements of Zhejiang Science and Technology Bureau, and have the domestic leading performance, gravimetric specific energy has reached the intern-ational advanced level;
 - The discharge performance of the storage battery have a enough consideration to the special need of the System Configuration, possessing the features of excellent long efficiency and high or low temperature discharge;
 - The charge property of storage battery is the important index of long life stored energy battery. Our products have a enough consideration to the influence of charging capacity efficiency and the charging reception to outdoor environment. Thus makes the battery possess good adaptability to environment, and guarantee the long life of the battery's recycle.

CNF系列电池典型规格型号表 CNF SERIES BATTERY NORMALLY SPECIFICATION MODEL

型号Model	电压(V) Voltage	额定容量(Ah)Rated Capacity				尺寸(mm)Size			总高 Total Height	重量(Kg) Weight
		10hr	60hr	120hr	240hr	长Length	宽Width	高Height		
6-CNF-40	12	40	48	52	56	197	165	166	166	13.5
6-CNF-60	12	60	73	78	84	259	169	208	227	22
6-CNF-80	12	80	97	104	112	328	172	214	243	30
6-CNF-100	12	100	121	131	141	406	174	208	233	37
6-CNF-120	12	120	140	155	165	406	174	208	233	43
6-CNF-150	12	150	182	196	211	500	208	212	239	56
6-CNF-200	12	200	242	261	281	496	258	227	237	75
CNF-200	2	200	242	261	281	171	107	334	344	15.2
CNF-300	2	300	363	391.5	421.5	171	151	334	344	21.8
CNF-400	2	400	484	522	562	211	175	334	344	30.6
CNF-500	2	500	605	652.5	702.5	243	174	334	344	35.8
CNF-600	2	600	726	783	843	302	177	334	344	45.2
CNF-800	2	800	968	1044	1124	410	175	334	344	61.2
CNF-1000	2	1000	1210	1305	1405	478	175	334	344	72.5

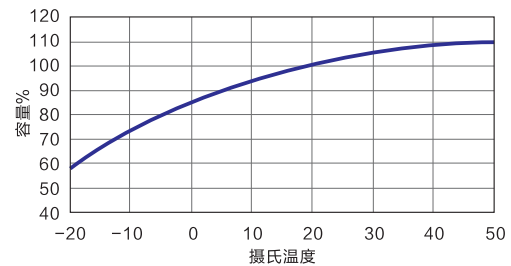
□ 常温下不同放电电流与放电时间关系

Relations Between Different Discharge Current And Discharge Time In The Normal Temperature



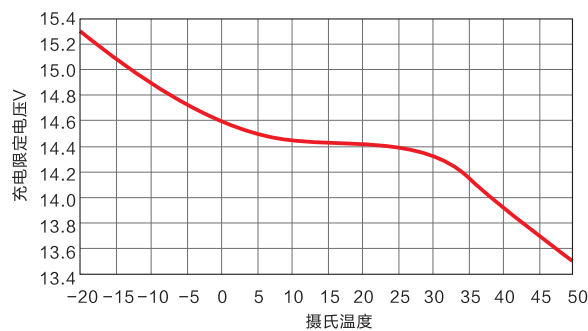
□ 放电容量与温度关系

Relations Between Discharge Capacity And Temperature



□ 12V系列储能电池充电限定电压与温度关系

Relations Between The Charge Rated Voltage And Temperature Of 12V Series Energy Storage Battery



□ 充电参数表 CHARGE PARAMETER

电池型号Model	最高电压(V) Max Voltage	浮充电压(V) Float Charge Voltage	充电电流(A) Charge Current	充电/浮充电转换电流(A) Charge/Float Charge Convert Current	温度系数(v/°C, 单格) Temperature Coefficient
6-CNF-40	14.4 ± 0.05	13.5 ± 0.05	4.00~8.00	0.60~0.70	-0.0025~-0.004
6-CNF-60	14.4 ± 0.05	13.5 ± 0.05	6.00~12.0	0.90~1.00	
6-CNF-80	14.4 ± 0.05	13.5 ± 0.05	8.00~16.0	1.00~1.20	
6-CNF-100	14.4 ± 0.05	13.5 ± 0.05	10.0~20.0	1.20~1.30	
6-CNF-120	14.4 ± 0.05	13.5 ± 0.05	10.0~20.0	1.20~1.30	
6-CNF-150	14.4 ± 0.05	13.5 ± 0.05	15.0~30.0	1.80~2.00	
6-CNF-200	14.4 ± 0.05	13.5 ± 0.05	20.0~40.0	2.40~2.60	
CNF-200	2.40 ± 0.01	2.25 ± 0.01	20.0~40.0	2.40~2.60	
CNF-300	2.40 ± 0.01	2.25 ± 0.01	30.0~60.0	3.60~3.90	
CNF-400	2.40 ± 0.01	2.25 ± 0.01	40.0~80.0	4.80~5.20	
CNF-500	2.40 ± 0.01	2.25 ± 0.01	50.0~100	6.00~6.50	
CNF-600	2.40 ± 0.01	2.25 ± 0.01	60.0~120	7.20~7.80	
CNF-800	2.40 ± 0.01	2.25 ± 0.01	80.0~160	9.60~10.4	
CNF-1000	2.40 ± 0.01	2.25 ± 0.01	100~200	12.0~13.0	

SGN4-002 1000V

□ 产品特性 FEATURES

SGN4-002直流隔离开关，系专门设计用于直流电压不超过1000V的开关。具有稳健的外形设计及开关性能，是适用于光伏系统的理想产品。根据IEC60364-7-712标准的要求，所有光伏装置都应配有直流开关，用于断开太阳能板上的直流/交流变频器，如图1所示。

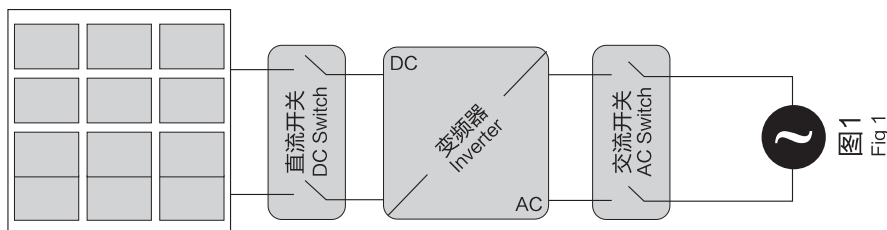
- 手柄带锁，可防止误操作
- 刀口式自清洁触头，可延长开关使用寿命
- 长灭弧室可加快灭弧
- 16mm² 升降式端子，使接线更加方便



The SGN4-002 DC Isolators have been specifically designed to switch direct(DC)at voltages up to 1000V. their robust design and ability to switch such voltages, at rated current, mean that are ideally suited to be used in the switching of photovoltaic(PV)systems. All photo voltaic installations must have a DC Switch to disconnect the DC/AC inverter from the photovoltaic panels in accordance with IEC 60364-7-712 as illustrated Fig1.

- Handle lock, can prevent wrong operation
- Knife edge self-cleaning contacts for increased switch life
- Long arc chambers to help rapid arc suppression
- 16mm² rising clamp term for easy wiring

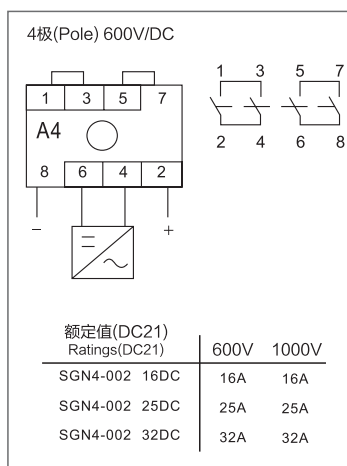
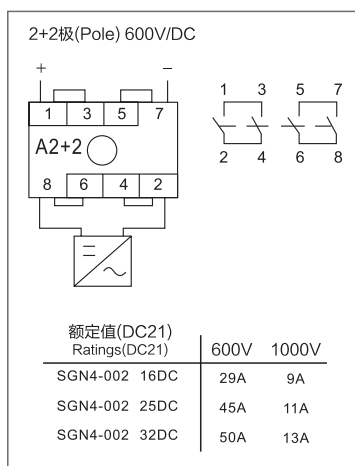
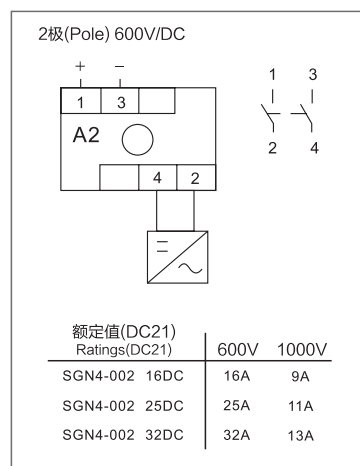
□ 太阳能电池板 SOLAR ARRAY



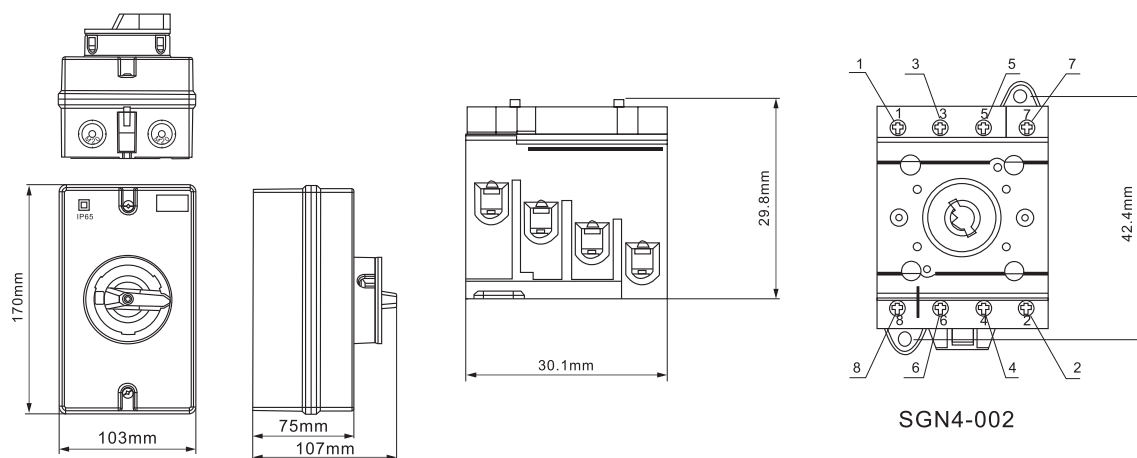
□ 技术参数 TECHNICAL DATA

型号 Model	SGN4-002	标准 Standard	IEC60947-3
极数 No.of Poles	2极、4极 2poles or 4poles	机械寿命 Mechanical Life	10000次
额定电压 Rated Current	16,25,32A	额定短时耐受电流 Rated Short-time Withstand Current	8KA
最高额定操作电压 Max Rated Operating Voltage	DC 1000V	外壳开孔尺寸 Enclosure Knockouts size	M20/25
最大电缆截面积(实心或绞线) Maximum cable cross sections solid or stranded	4-16 mm ²	最大环境温度 (户内) Maximum Ambient Temperature Operation Enclosed	-5 to +65℃
最大环境温度(户外) Maximum ambient temperature operation open	-5 to +65℃		

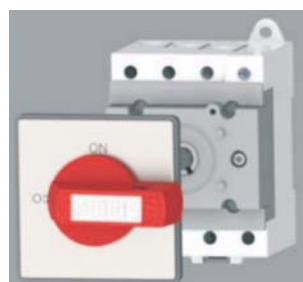
□ 接线图 WIRING DIAGRAM



□ 尺寸 DIMENSIONS



□ 装置类型 INSTALLATION VERSION



SGN4-003 1000V

产品特性 FEATURES



该隔离开关采用最新的对立式接线方式，与传统的同类产品(SGN4-002)采用的离位接线方式不同，是适用于光伏系统的理想产品。

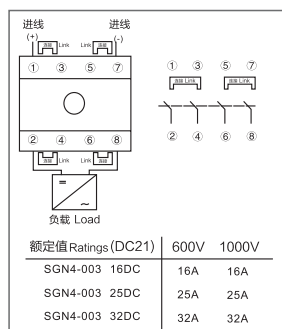
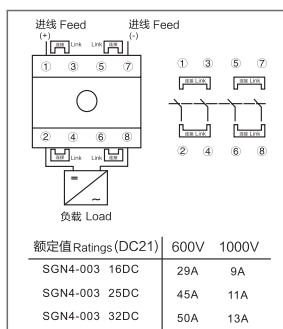
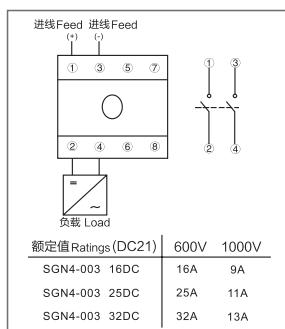
The isolator switch adopts the latest opposed wiring mode, which is different from the cross dislocated wiring of the previous similar products(SGN4-002gl). They are ideally suited to be used in the switching of photovoltaic (PV) systems.

- 手柄带锁，可防止误操作
- 反向接线方式
- 刀口式自清洁触点，可延长开关使用寿命
- 长灭弧室可加快灭弧
- 16mm² 升降式端子，使接线更加方便
- Handle lock, can prevent wrong operation
- Opposed wiring mode
- Knife edge self-cleaning contacts for increased switch life
- Long arc chambers to help rapid arc suppression
- 16mm² rising clamp terminals for easy wiring

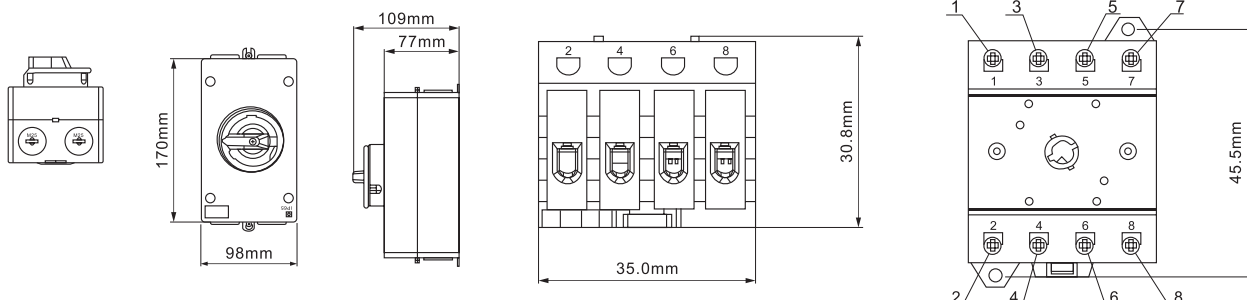
技术参数 TECHNICAL DATA

型号 Model	SGN4-003	标准 Standard	IEC60947-3
极数 No. of Poles	2极、4极 2poles or 4poles	机械寿命 Mechanical Life	10000次
额定电压 Rated Current	16,25,32A	额定短时耐受电流 Rated Short-time Withstand Current	8KA
最高额定操作电压 Max Rated Operating Voltage	DC 1000V	外壳开孔尺寸 Enclosure Knockouts size	M20/25
最大电缆截面积(实心或绞线) Maximum cable cross sections solid or stranded	4-16 mm ²	最大环境温度 (户内) Maximum Ambient Temperature Operation Enclosed	-5 to +65℃
最大环境温度(户外) Maximum ambient temperature operation open	-5 to +65℃		

接线图 WIRING DIAGRAM



尺寸 DIMENSIONS



SGN4-005 1000V

产品特性 FEATURES



该隔离开关采用最新的对立式接线方式，与传统的同类产品(SGN4-002)采用的离位接线方式不同，是适用于光伏系统的理想产品。

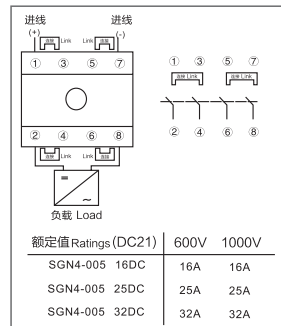
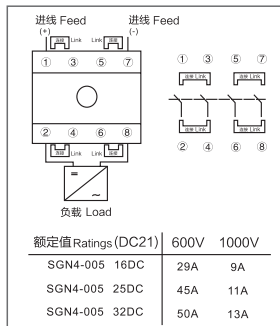
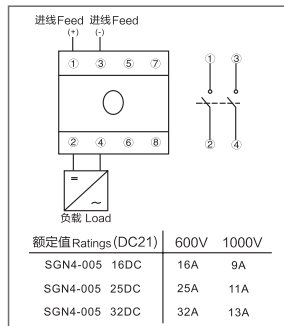
The isolator switch adopts the latest opposed wiring mode, which is different from the cross dislocated wiring of the previous similar products(SGN4-002gl). They are ideally suited to be used in the switching of photovoltaic (PV) systems.

- 手柄带锁，可防止误操作
- 反向接线方式
- 刀口式自清洁触头，可延长开关使用寿命
- 长灭弧室可加快灭弧
- 16mm² 升降式端子，使接线更加方便
- Handle lock, can prevent wrong operation
- Opposed wiring mode
- Knife edge self-cleaning contacts for increased switch life
- Long arc chambers to help rapid arc suppression
- 16mm² rising clamp terminals for easy wiring

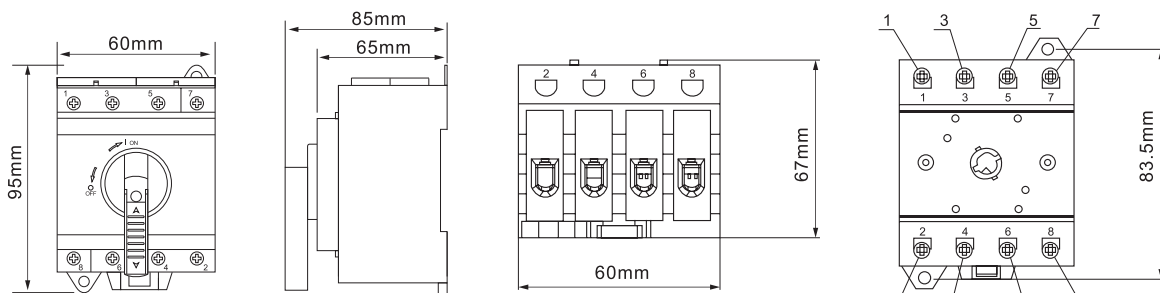
技术参数 TECHNICAL DATA

型号 Model	SGN4-005	标准 Standard	IEC60947-3
极数 No. of Poles	2极、4极 2poles or 4poles	机械寿命 Mechanical Life	10000次
额定电压 Rated Current	16,25,32A	额定短时耐受电流 Rated Short-time Withstand Current	8KA
最高额定操作电压 Max Rated Operating Voltage	DC 1000V	外壳开孔尺寸 Enclosure Knockouts size	M20/25
最大电缆截面积(实心或绞线) Maximum cable cross sections solid or stranded	4-16 mm ²	最大环境温度(户内) Maximum Ambient Temperature Operation Enclosed	-5 to +65℃
最大环境温度(户外) Maximum ambient temperature operation open	-5 to +65℃		

接线图 WIRING DIAGRAM



尺寸 DIMENSIONS



SGN4-006 1000V

产品特性 FEATURES



该隔离开关采用最新的对立式接线方式，与传统的同类产品(SGN4-002)采用的离位接线方式不同，是适用于光伏系统的理想产品。

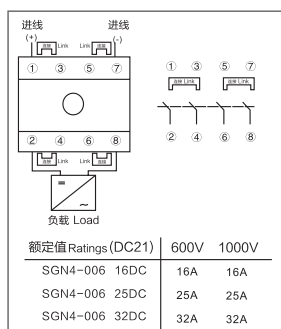
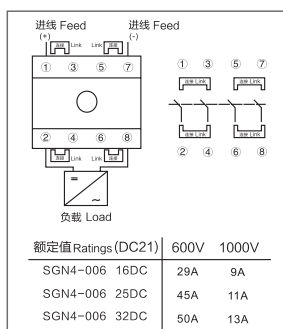
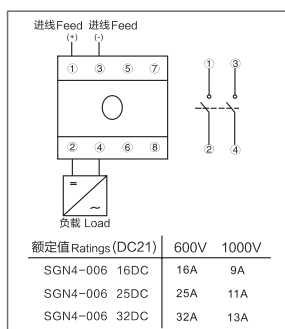
The isolator switch adopts the latest opposed wiring mode, which is different from the cross dislocated wiring of the previous similar products(SGN4-002gl). They are ideally suited to be used in the switching of photovoltaic (PV) systems.

- 手柄带锁，可防止误操作
- 反向接线方式
- 刀口式自清洁触头，可延长开关使用寿命
- 长灭弧室可加快灭弧
- 16mm² 升降式端子，使接线更加方便
- Handle lock, can prevent wrong operation
- Opposed wiring mode
- Knife edge self-cleaning contacts for increased switch life
- Long arc chambers to help rapid arc suppression
- 16mm² rising clamp terminals for easy wiring

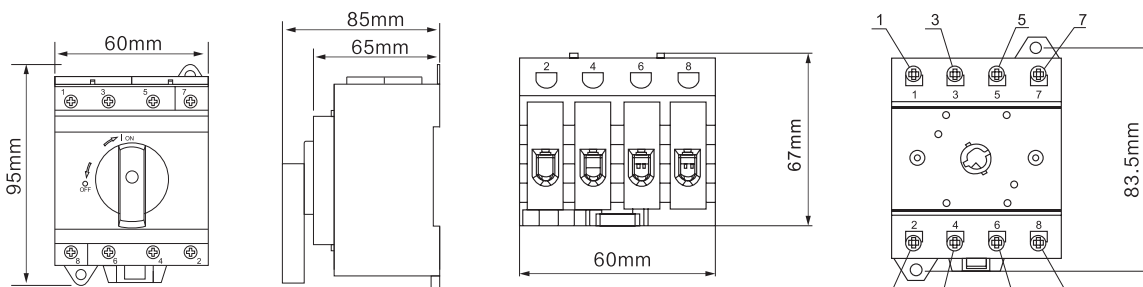
技术参数 TECHNICAL DATA

型号 Model	SGN4-006	标准 Standard	IEC60947-3
极数 No. of Poles	2极、4极 2poles or 4poles	机械寿命 Mechanical Life	10000次
额定电压 Rated Current	16,25,32A	额定短时耐受电流 Rated Short-time Withstand Current	8KA
最高额定操作电压 Max Rated Operating Voltage	DC 1000V	外壳开孔尺寸 Enclosure Knockouts size	M20/25
最大电缆截面积(实心或绞线) Maximum cable cross sections solid or stranded	4-16 mm ²	最大环境温度(户内) Maximum Ambient Temperature Operation Enclosed	-5 to +65℃
最大环境温度(户外) Maximum ambient temperature operation open	-5 to +65℃		

接线图 WIRING DIAGRAM



尺寸 DIMENSIONS



SGN4-007 1000V

产品特性 FEATURES

该隔离开关采用最新的对立式接线方式，与传统的同类产品(SGN4-002)采用的离位接线方式不同，是适用于光伏系统的理想产品。

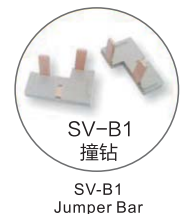
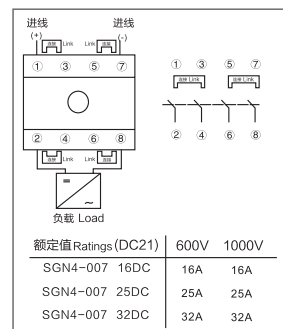
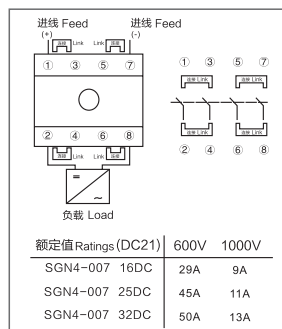
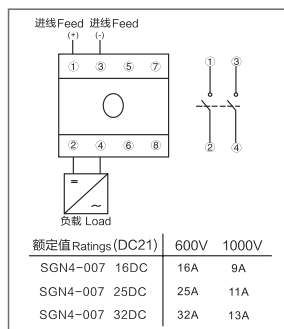
The isolator switch adopts the latest opposed wiring mode, which is different from the cross dislocated wiring of the previous similar products(SGN4-002gl). They are ideally suited to be used in the switching of photovoltaic (PV) systems.

- 手柄带锁，可防止误操作
- 反向接线方式
- 刀口式自清洁触头，可延长开关使用寿命
- 长灭弧室可加快灭弧
- 16mm² 升降式端子，使接线更加方便
- Handle lock, can prevent wrong operation
- Opposed wiring mode
- Knife edge self-cleaning contacts for increased switch life
- Long arc chambers to help rapid arc suppression
- 16mm² rising clamp terminals for easy wiring

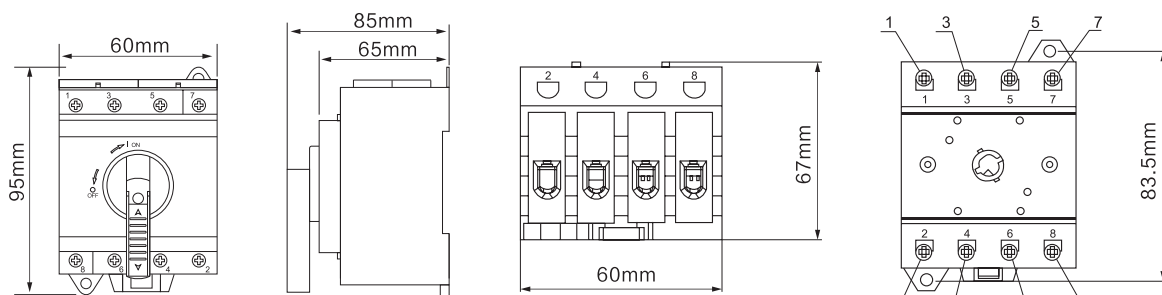
技术参数 TECHNICAL DATA

型号 Model	SGN4-007	标准 Standard	IEC60947-3
极数 No. of Poles	2极、4极 2poles or 4poles	机械寿命 Mechanical Life	10000次
额定电压 Rated Current	16,25,32A	额定短时耐受电流 Rated Short-time Withstand Current	8KA
最高额定操作电压 Max Rated Operating Voltage	DC 1000V	外壳开孔尺寸 Enclosure Knockouts size	M20/25
最大电缆截面积(实心或绞线) Maximum cable cross sections solid or stranded	4-16 mm ²	最大环境温度(户内) Maximum Ambient Temperature Operation Enclosed	-5 to +65℃
最大环境温度(户外) Maximum ambient temperature operation open	-5 to +65℃		

接线图 Wiring Diagram



尺寸 Dimensions



SGN4-008A and SGN4-008B

产品特性 FEATURES

该隔离开关采用最新的对立式接线方式，与传统的同类产品(SGN4-002)采用的离位接线方式不同，是适用于光伏系统的理想产品。

The isolator switch adopts the latest opposed wiring mode, which is different from the cross dislocated wiring of the previous similar products(SGN4-002gl). They are ideally suited to be used in the switching of photovoltaic (PV) systems.

- IP66等级外壳
- 反向接线方式
- 刀口式自清洁触头，可延长开关使用寿命
- 长灭弧室可加快灭弧
- 16mm² 升降式端子，使接线更加方便
- IP66 Rated enclosure
- Opposed wiring mode
- Knife edge self-cleaning contacts for increased switch life
- Long arc chambers to help rapid arc suppression
- 16mm² rising clamp terminals for easy wiring

技术参数 TECHNICAL DATA

型号 Model	SGN4-008A SGN4-008B	标准 Standard	IEC60947-3
极数 No. of Poles	2极、4极 2poles or 4poles	机械寿命 Mechanical Life	10000次
额定电压 Rated Current	16,25,32A	额定短时耐受电流 Rated Short-time Withstand Current	8KA
最高额定操作电压 Max Rated Operating Voltage	DC 1000V	外壳开孔尺寸 Enclosure Knockouts size	M20/25
最大电缆截面积(实心或绞线) Maximum cable cross sections solid or stranded	4-16 mm ²	最大环境温度(户内) Maximum Ambient Temperature Operation Enclosed	-5 to +65℃
最大环境温度(户外) Maximum ambient temperature operation open	-5 to +65℃		

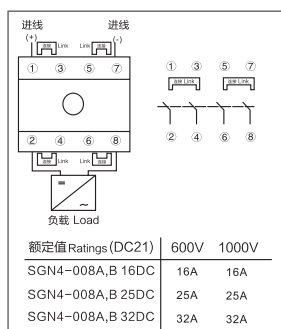
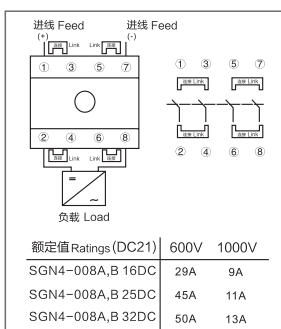
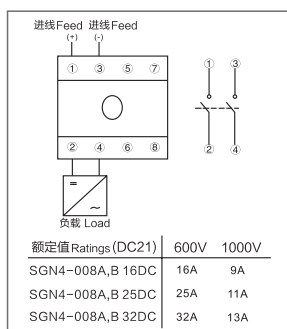


SGN4-008A

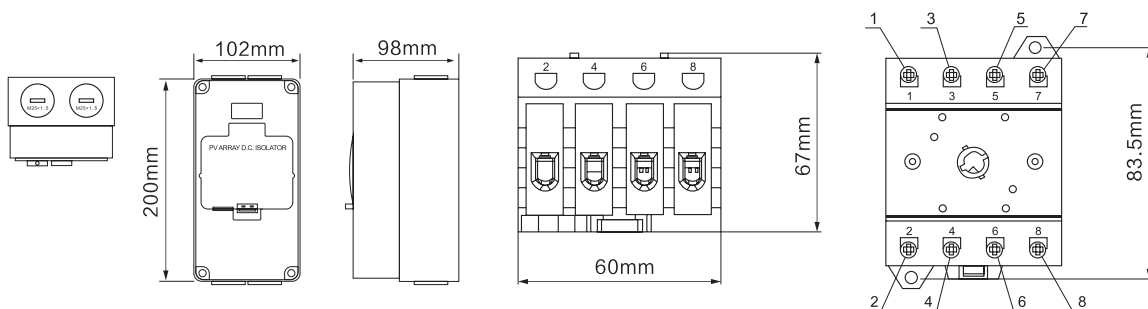


SGN4-008B

接线图 Wiring Diagram



尺寸 Dimensions



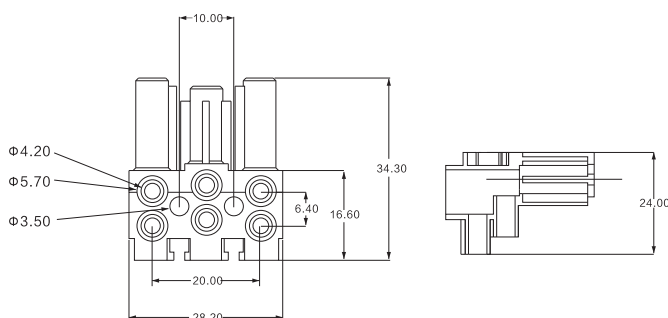


A16/30

□ 产品特点 PRODUCT FEATURES

- 双层接线设计
- 可分离式端子
- 阻燃等级达到V0
- Double Connection
- Separable Terminal
- Fireproof Grade:V0

□ 接线图 Wiring Diagram



□ 技术参数 TECHNICAL DATA

名称Name	A16/30连接器/端子连接器 A16/30 Connector/Terminal Connector	
型号Model	A16/30	
电流/电压Current/voltage	16A/380V	
有效级数Effective Series	3P	
外形尺寸Dimensions	51mmX28mmX24mm（长X宽X高） 51mmX28mmX24mm(length X Width X Height)	
接线范围Wiring Squared Range	0.5mm ² —4mm ²	
材料Material	外壳Shell	阻燃尼龙PA66 Flame Retardant Nylon Pa66
	金属件Metal Parts	紫铜 Red Copper
阻燃等级Fireproof Grade	V0	
使用范围Application	端子采用双层接线和可分离式的技术设计 The Terminal Adopt Double Connection And Can Separate Technology Design	
特征Characteristics	A16/30连接器广泛应用于电气设备、船舶、汽车、办公设备、装修等场地 A16/30 Connector Use for , Electrical Equipment, Ships, Automobiles, Office Equipment, Decoration, Etc	

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