

		型号/Our model: <u>SGR-PPS36041-1A</u>
		编号/Numbered: YF-GPPS113
		版本/Version: V1.0
		日期/Date: 2024-04-09

承认书

SPECIFICATION FOR APPROVAL

Home Power Storage System/家庭储能电源

能电源

客户:

CUSTOMER: _____

产品描述:

DESCRIPTION: 3072Wh /3600W AC120V/DC12V /PD100W

机种型号:

OUR MODEL NO: SGR-PPS36041-1A

DATE: 2024-04-09

COLOR 颜色: Black 黑

AC OUTLET 插座: US 美规 Japanese 日规(PSE)

AC VOLTAGE 电压: 100V 120V 220V FREQ 频率: 50Hz 60Hz

Battery Capacity 电池: 3072Wh/960000mAh

APPROVAL SIGNATURE/客户确认		
核准/APPROVED BY	审核/CHECKED BY	检测/TESTED BY

Manufacturer/制造商		
制作/Make	检测/TESTED BY	核准/APPROVED BY

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I.SPECIFICATION (产品规格)	
Battery Power/电池容量	3072Wh±5% Lithium iron phosphate Batteries/磷酸铁锂电池
AC Input Charging /交流充电	AC102~132V/20A Bi-directional inverter charging power 2500W Max AC102~132V/20A 双向逆变最大充电功率 2500W
Solar Panel Input/太阳能充电	PV18~140V/25A 1600W Max
DC Output /直流输出	1x Cigarette Lighter/点烟器输出 13.8V/10A Max 2x DC Rated Output /额定输出 Total 10A Max, 单口 13.8V/5A
AC Output/交流电输出	Pure Sine Wave Output;纯正弦波输出; AC Continuous Output/输出额定功率: 3600W Max AC Max Output/峰值输出功率: 7200W@0.2 seconds (秒) AC Voltage/输出: 120VAC±5% Output Frequency/输出频率: 60Hz±5%
Split Phase Function Support/裂相功能支持	Split Phase is only used to combine two devices into a 240V power system, in order to double the output power and voltage, thereby achieving greater capacity, Additional dedicated socket needs to be connected for use. 裂相仅用于将两个设备组合成 240V 电力系统, 以使输出功率和电压翻倍, 从而实现更大的容量, 需要连接额外的专用插座才能使用。
Expansion Function Support/扩容功能支持	Expansion refers to combining host devices with multiple battery packs to form a larger capacity power system, thereby extending the service life of the devices (note: a host can support up to 4 battery packs for expansion) 扩容是指将主机设备与多个电池包组合, 形成一个更大容量的电力系统, 从而延长设备的使用时间 (注: 一台主机最多可支持 4 个电池包扩容)
AC Plug support/交流插座支持	3x 3-pin- 20A US outlet/20A 美规插座 2x 3-pin- 30A US outlet/30A 美规插座
USB Output/输出	USB-A1: Blue QC18W Max, 5V2.4A&9V2A&12V1.5A QC3.0 USB-A2: Blue QC18W Max, 5V2.4A&9V2A&12V1.5A QC3.0 USB-C1: PD100W Max, 5V3A&9V3A&12V3A&15V3A&20V5A PD3.0 USB-C2: PD27W Max, 5V3A&9V3A&12V2.25A&15V1.8A&20V1.35A
Operation temperature/工作温度	0℃~40℃
Life cycle/循环寿命	After 3500 cycles, Capacity retention ≥70% Initial Capacity (@25℃, +0.5C/-0.5C, 90%DOD)
Charge While Discharge/边充边放	Support 支持
Product Size/产品尺寸	489*360*407mm L*W*H
Product Weight/产品重量	暂定 About 30kgs, without package and accessories (单个产品裸机净重, 不含包装及配件重量)
MultiSafety Protections/产品保护	a. Short-circuit protection/短路保护 b. Over-current protection/过流保护 c. Over-voltage protection/过压保护 d. Low-voltage protection/欠压保护 e. Over-load Protection/过载保护 f. Over-temperature protection/过温保护
Certification/安规认证	ETL/FCC/UN38.3/MSDS/OCEAN/AIR shipment Report
Accessories/产品配件	1 x AC Power Cord-US Standard /20A 美规电源线 (按订单要求)

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	1 x XT60 to MC4 Conversion Cable XT60 TO MC4 转接线
	1 x User manual 说明书

II.DC OUTPUT PARAMETERS (DC 输出参数) 注: 测试环境温度 25°C ±3°C							
输出端口 Outputs 项目 Item	USB Outputs/输出				5521DC/DC 座输出		Cigarette Lighter 点烟器座
	USB-A1	USB-A2	USB-C1	USB-C2	DC1	DC2	
Output Voltage Range(V) 输出电压范围(V)	5V~12V AUTO	5V~12V AUTO	5V~20V AUTO	5V~20V AUTO	13.8V		
Ripple&Noise 纹波&噪音 (mV) Vp-p	<150 mV	<150 mV	<200 mV	<200 mV	<150 mV		
Output Current 输出电流	5V2.4A &9V2A &12V1.5A	5V2.4A &9V2A &12V1.5A	5V3A &9V3A &12V3A &15V3A &20V5A	5V3A &9V3A &12V2.25A &15V1.8A &20V1.35A	5A	5A	10A
Over Current point 输出过流点	>3.1A	>3.1A	>5.1A	>3.1A	11A ±0.5A		
Rated Power 额定功率	18W Max	18W Max	100W Max	27W Max	60W Max		138W Max
Over-Load Protection 过载保护方式	Recover when loads removed and re-connection 负载去除后重新插入恢复				Locked,need re-start 锁死, 需重启开关激活		
Short-Circuit Protection 短路保护方式	Recover when loads removed and re-connection 负载去除后重新插入恢复				Locked,need re-start 锁死, 需重启开关激活		
Remark 备注	<p>1.Ripple&Noise test method: Connect the unit and the loads by a 30cm long stranded wire. Load is connected with A 0.1uF ceramic disk capacitor & 10uF electrolytic (low ESR) capacitor. Test the load with 20M oscilloscope. 纹波测试用 30CM 长绞线连接电源和负载, 负载端并 0.1uF 和 10uF 电容, 用 20M 示波器于负载端测试。</p> <p>2. When DC and AC Output work at the same time, the maximum output power shall not be exceed 3600W DC 输出跟 AC 输出同时使用时, 最大输出功率不超过 3600W。</p> <p>3. When DC Output work at the same time, the maximum output power shall not be exceed 300W DC 输出同时使用时, 最大输出功率不超过 300W。</p> <p>4. DC1-DC2 and Cigarette port total output current do not exceed 10A. DC1-DC2 以及点烟器座合计最大输出电流 10A.</p>						

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III. INVERTER PARAMETERS (逆变输出参数) 注: 测试环境温度 25°C ± 3°C

范围 Range	Min 最小值	典型值 Typical	Max 最大值	Unit 单位	Remark 备注
Output Voltage Range 输出电压范围	115	120	125	V	In UPS Bypass Mode, the output voltage follows the mains voltage. UPS 模式下输出电压跟随市电电压
Output Frequency 输出电压频率	57-63Hz			Hz	In UPS Bypass Mode, the output frequency follows the mains frequency. UPS 模式下输出频率跟随市电频率
Output Waveform 输出波形	Sine wave 正弦波				
Rated Power 额定 输出功率	Resistive load/阻性负载	3600VA/3600W Max		W	负载 PF ≥ 0.8
	Inductive load/感性负载	≥ 2880W			
	Capacitive load/容性负载	≥ 2880W			
Output VA 输出伏安	120V/30A Max			VA	
Surge power (Resistive load) 峰值输出功率(阻性负载)	7200W@0.2s			W	
Standby power 待机功率	≤ 30W			W	
Efficiency (Resistive load) 转换效率(阻性负载)	> 87%			%	端口效率
Over-load power(Resistive load) 过载功率(阻性负载)	3950 ± 300W@持续工作			W	
UPS conversion time UPS 转换时间	≤ 10mS			mS	
Overload Protection Mode 过载保护方式	Locked, need re-start 锁死, 需重启开关激活				
short circuit protection Mode 短路保护方式(逆变模式)	Locked, need re-start 锁死, 需重启开关激活				
Over Temperature protection Mode 过温保护方式	Locked, need re-start 锁死, 需重启开关激活				
Heat-Dissipating Method 散热方式	Built-in Cooling Fan 内置主动散热风扇				
The conditions for cooling fan starting 启动散热风扇条件	<p>When the temperature inside the unit is ≥ 60 °C or the AC load power is ≥ 400W, the cooling fan will automatically start. 当采集温度 ≥ 60°C 或 AC 带载功率 ≥ 400W 时, 启动风扇。 The speed of cooling fan varies with the temperature value or AC load power. 风扇转速跟随采集温度值以及 AC 带载功率的大小而变化。</p>				

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IV.BATTERY PACK (电池组相关参数) 注: 测试环境温度 25℃±3℃						
项目 item	范围 Range	Min 最小值	Typical 典型值	Max 最大值	Unit 单位	Remark 备注
Battery Type/电池类型	Lithium iron phosphate Batteries/磷酸铁锂电池					
Battery Pack/电池包	16S3P/16 串 3 并					
Battery Capacity/电池容量	3072Wh±5% (60Ah/51.2V 或 Equivalent 等效 960000mAh /3.2V)				Wh	
Charge Voltage/充电电压	18	---	---	140	V	Product 产品输入端
Charge cut-off Voltage/充电截止电压	56.8	57.6	---	58.4	V	Battery 电池端
Under voltage/over voltage protection 欠压/过压保护	40.0	/	---	59.5	V	Battery 电池端
Capacity conversion efficiency/容量转换效率	83%	---	---	---	%	
充电时 长 Time of Chargin g	市电充 (静音模式) AC Charging (Silent Charging Mode)	6h00m	---	---	7h00m	
	市电充 (标准模式) AC Charging (Normal Charging Mode)	4h00m	---	---	5h00m	
	市电充 (快充模式) AC Charging (Quick Charging Mode)	1h30m	---	---	2h00m	
	太阳能充电 Solar Charging	<p>Affected by sunlight intensity, solar panel type and power, 3*36V 550W solar panel can be fully charged in about 3 hours under sufficient sunlight.</p> <p>受阳光强度、太阳能板类型及功率影响, 3*36V 550W 太阳能板在阳光充足情况下 3 小时左右充满。</p>				
V.ENVIRONMENT (环境)						
Work Temperature 工作温度	0℃~40℃					
Work Humidity 工作湿度	20%~85%RH					
Storage Temperature 存储温度	-20℃~60℃					
Storage Humidity 存储湿度	20%~85%RH					

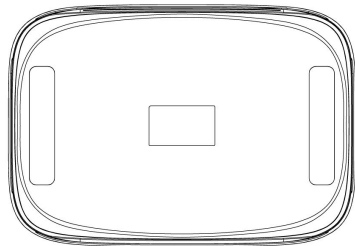
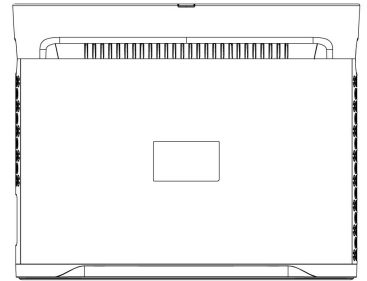
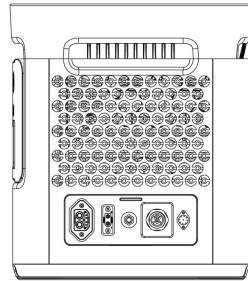
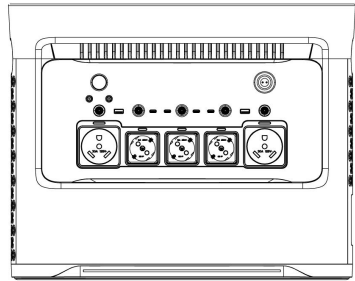
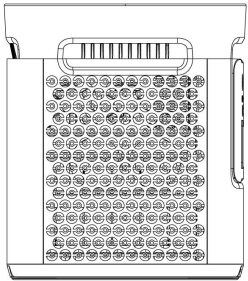
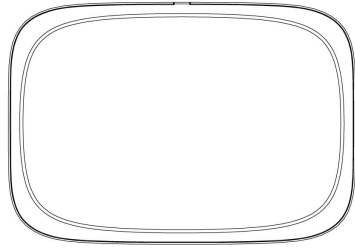
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外观图/OUTLOOKDRAWING

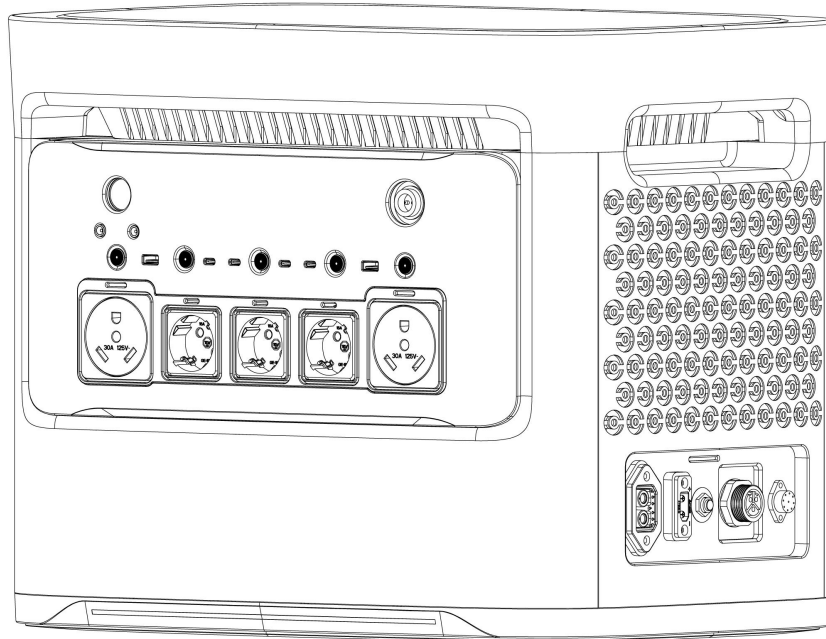


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Schematic diagram of balcony PV micro on- grid connection

(阳台光伏微逆连接示意图)

Schematic diagram of Split Phase connection

(裂相连接示意图)

Schematic diagram of Expansion connection

(扩容连接示意图)

Package Information

(包装信息)