

技术参数 (220V系列)

Technical Specification (220V Series)

型号 Type		EPC220-25	EPC220-50	EPC220-100
额定电压 (V) Rated Voltage (V)		DC220		
额定电流 (A) Rated Current (A)		25	50	100
最大光伏组件功率 (Kwp) Max.power of solar module (Kwp)		5.5	11	22
光伏阵列控制器输入路数 Solar Array Controller Input Terminals		1	2	4
每路光伏阵列最大电流 (A) Max current of each Solar array (A)		25		
蓄电池过放保护点 (可设置V) Storage Battery Over-discharge Protection (V)		189		
蓄电池过放恢复点 (可设置V) Storage Battery Over-discharge Recovery (V)		220		
蓄电池过充保护点 (可设置V) Storage Battery Over-charge Protection (V)		252		
负载过压保护点 (可设置V) Load Over-voltage Protection (V)		270		
负载过压恢复点 (可设置V) Load Over-voltage Recovery (V)		260		
空载电流 (mA) Idle Current (mA)		<40		
电压降落 Voltage Drop	光伏阵列与蓄电池 Solar array and Storage Battery	MPPT精度99.9% 能量转换效率≥98% MPPT accuracy 99.9% Energy conversion efficiency≥98%		
	蓄电池与负载 (V) Storage Battery and Load(V)	0.1		
显示 Display		LCD显示运行参数, LED显示工作状态 LCD Display operating parameters;LED working status indication		
告警 Alarm Mode		蜂鸣器 Buzzer Alarm		
温度补偿系数 (mV/°C) Temperature compensation coefficient (mV/°C)		0~5 (可调 Adjustable)		
使用环境温度 (°C) Operation Temperature		-10 ~ +50		
相对湿度 Humidity		10% ~ 90% (无凝结 No condensation)		
使用海拔高度 (m) Operating Altitude		≤5000 (海拔超过2000米需按照GB/T3859.2规定降容使用) ≤5000m (Derating operation when altitude over 2000m Reference GB/T3859.2)		
防护等级 Protection Degree		IP20		
机架 (宽×深×高mm) Frame structure (Width×Depth×Height mm)		482×350×133mm (3U)	482×400×178mm (4U)	482×450×267 (6U)

Single phase Off Grid PV Inverter with integrated charge controller

离网控制逆变一体机

性能特点

- (1) 可靠性: 用于新能源发电的电源往往安装于无电山区、牧区、边防、海岛等交通不便地区, 一旦电源故障修复就较为困难, 因此对电源的可靠性提出较严格的要求, 如日夜温差大、高海拔地区空气稀薄而引起的散热、绝缘、以及长途运输问题;
- (2) 高效率: DC/DC、DC/AC两级变换效率高达94.5%目前新能源发电的每度电成本偏高, 太阳能电池板的价格昂贵, 提高逆变电源的效率可降低太阳能电池板的容量, 从而减少投资;
- (4) 内置带MPPT的太阳能电池或风力发电充电控制器, 精度达99.9%, 从而方便地构成高效的新能源发电系统;
- (5) 使用方便: 完善的设计具有可操作性, 良好的拆装性, 便于维护;
- (6) 微电脑芯片智能控制, 充放电各参数点可设定, 适应不同场合的需求;
- (7) 控制电路与主回路完全隔离, 具有极高的抗干扰能力;
- (8) 采用LCD液晶显示屏, 中英文菜单显示;
- (9) 保护功能齐全, 具有多种保护及告警功能;
- (10) 具有RS485/232通讯接口, 便于远程通信、遥控;
- (11) 具有多种故障报警无源输出接点功能;
- (12) 具有时钟显示功能;
- (13) 具有温度补偿功能。

Performance characteristics:

- (1) Reliability: power for new energy power generation is often installed in mountainous and pasturing areas, borders and islands that have no access to grid or convenient transportation. Once the power cut occurs, the repair work will be very difficult. Therefore, there are strict requirements for the power reliability, avoiding cooling, insulation and long-distance issues caused by huge temperature gap between day and night, as well as the thin air of high altitudes.
- (2) DC/DC, DC/AC the two conversion efficiency is up to 94.5%. The current cost for one KWH is still high, and the solar panels are expensive. Improving the efficiency of the power inverter can reduce the capacity of the solar panels, thereby reducing the investment cost.
- (3) Built-in solar MPPT or wind power charge controller, accuracy of 99.9%, thus easily constitute a new and efficient energy generation systems;
- (4) Easy to use: the perfect design is easy to operate, disassemble and maintain;
- (5) Microcomputer intelligent control chip is able to set up parameters of charge and discharge to meet the needs from different occasions;
- (6) Control circuit and main circuit are completely isolated to achieve high anti-jamming capability;
- (7) LCD display in Chinese and English menu;
- (8) Protection function: a variety of protections and alarm function;
- (9) With RS485/232 communication interfaces that are convenient for remote communications and remote control.
- (10) With multiple alarm functions
- (11) Clock display function
- (12) Temperature compensation function



一体机技术参数

型号	EPA12-0.5K	EPA24-1K	EPA24-2k	EPA48-3K
额定容量	500W	1KW	2KW	3KW
电压等级 (VDC)	12	24		48
光伏控制				
光伏电压范围 (VDC)	10-30	20-60		40-120
MPPT范围 (VDC)	12-28	24-56		48-112
最大充放电电流(A)	25	50	100	75
均充浮充电压 (VDC)	14.1/13.8	28.2/27.6		56.4/55.2
欠压保护/恢复 (VDC)	10.5/12.5	21/25		42/50
交流输出				
额定电压 (Vac)	220Vac±2% 50Hz			
动态特性	< 20ms			
波形失真率 (THD)	< 3% (线性负载)			
最大效率	91.5%			94.2%
欧洲效率	90%			93%
过载能力	120%1min, 150%10s, > 150% 300ms			
旁路转换时间 (ms)	< 4ms			
噪音 (dB)	< 50dB			
波峰因数	3:1			
市电旁路				
输入电压范围 (VAC)	220VAC±15%			
频率 (Hz)	50Hz±5			
市电补充 (选配)				
充电电流 (A)	5			
保护功能				
输入	过压、欠压、过流、反接保护, 缓启动			
过温度	机内温度≥85°C时自动转换到旁路			
故障	关断或者自动转换到旁路			
告警	蜂鸣器告警	蜂鸣器告警 LCD显示故障信息		
LCD/LED				
LCD显示	—	运行参数显示		
LED指示	工作状态指示			
环境				
温度	-10°C ~ 50°C			
相对湿度	10% ~ 90% (无凝结)			
绝缘强度	1500VAC, 1分钟, 漏电流 < 3mA			
使用海拔	5000米 (海拔高于2000米按照GB/T3859.2规定降容使用)			
壁挂 (宽×深×高mm)	250×400×135	300×470×135	—	—
机架 (宽×深×高mm)	—	—	482×460×133(3U)	482×500×178(4U)

Single phase on & off grid auto switch PV inverter Technical Specification

Type	EPA12-0.5K	EPA24-1K	EPA24-2k	EPA48-3K
Rated Power (W)	500W	1KW	2KW	3KW
Rated Voltage (DC)	12	24		48
PV Control				
Solar Voltage Range (VDC)	10-30	20-60		40-120
MPPT Range (VDC)	12-28	24-56		48-112
Max.charge/discharge current (A)	25	50	100	75
Average/ float voltage (VDC)	14.1/13.8	28.2/27.6		56.4/55.2
Low-voltage protection /Recovery voltage (VDC)	10.5/12.5	21/25		42/50
AC Output				
Output Voltage (VDC)	220Vac±2% 50Hz			
Dynamic Response (ms)	< 20ms			
Harmonious wave content (THD)	< 3% (Linearity loads)			
Max. Conversion Efficiency (%)	91.5%			94.2%
European efficiency (%)	90%			93%
Overload Capability	120%1min, 150%10s, > 150% 300ms			
Bypass switching time (ms)	< 4ms			
Noise (dB)	< 50dB			
Crest Factor	3:1			
Grid Bypass				
Input Voltage range(VDC)	220VAC±15%			
Frequency Range (Hz)	50Hz±5			
Grid Compensate (Optional)				
Charge Current (A)	5			
Protection				
Input Protection	Over-voltage protection, Low-voltage protection, Input reverse connection protection, Over-current Protection, Slow start			
Over-temperature Protection	Automatically switch to bypass if the internal temperature is higher than 85 ° C			
Fault Mode	Shutdown or automatic switch to bypass			
Alarm Mode	Buzzer alarm	Buzzer alarm/LCD Display fault information		
LCD/LED				
LCD display	—	Operating parameters		
LED indication	LED working status indication			
Environment				
Operation Temperature	-10°C ~ 50°C			
Relative humidity	10% ~ 90% (No condensation)			
Insulating Strength	1500VAC,1min,Leakage Current < 3mA			
Operating Altitude	5000m (Derating operation when altitude over 2000m, according to GB/T3859.2)			
Wall hanging structure (Width×Depth×Height mm)	250×400×135	300×470×135	—	—
Frame structure (Width×Depth×Height mm)	—	—	482×460×133(3U)	482×500×178(4U)