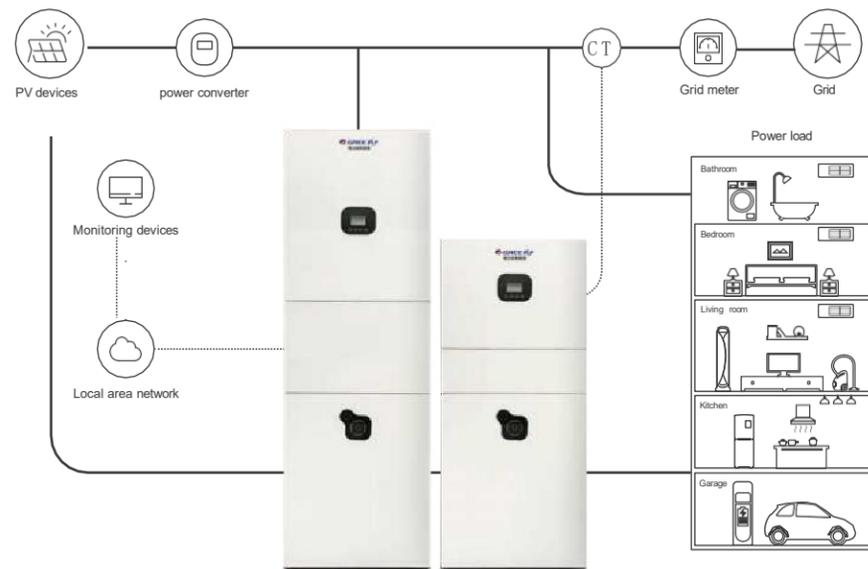


HOUSEHOLD ENERGY SOLUTIONS

Safe & green electricity,
Unlocking a sunny life



Family, as the cellular unit of the city, will become an important participant in its energy transformation. GREE Altairano's household energy storage system can convert photovoltaic energy into electricity for use and storage, achieving self use of household generated energy, and creating a clean, safe, reliable, intelligent, and efficient living working environment.



Household energy storage system

Opening a new era of household electricity utilization
Redefining Safe Energy Life



Safe LTO electricity
multiple protection,
real-time monitoring



Self use of home generated electricity
not affected by city power grid,
reliable power supply



Green and low-carbon
interlinked with PV,
manage the energy



Wide temperature operation
not fear of severe cold,
operate stably



HOUSEHOLD ENERGY STORAGE SYSTEM

Gree Altairano home energy storage system adopts an integrated design of energy storage inverters, PDUs, and energy storage batteries. It has flexible configuration of 5-20kWh energy, multiple safety protections, and supports multiple installation and usage modes. It can monitor household electricity in real-time according to household needs, achieving safe electricity use, economical management, and reliable power transformation. It can create a clean, safe, reliable, and efficient living and working environment.



Security

Use LTO battery, more stable and safer.



Simplification

Can be carried and installed by one person. Plug and play, quick installation in 30 minutes.



Intelligence

Global cloud platforms and mobile apps, open API anytime anywhere.

Product model		GreeA3-Ph BluE Residential ESS	GreeA Residential ESS
系统参数 Physical Parameters		运行参数 Operation Parameters	
电池类型 Battery Type	LTO	最大充电/放电电流 (A) Max. Charge/discharge Current (A)	88/88
成组方式 Grouping	1P22S	额定直流功率 (W) Rated DC Power (W)	4452
重量 (kg) System Weight (kg)	≤120	最大充电/放电功率 (W) Max. Charge/discharge Power (W)	4452/4452
尺寸 (宽 x 高 x 深) (mm) Dimension (W x H x D) (mm)	540 x 690 x 240	操作温度范围 (°C) Operating Temperature Range (°C)	-20~55
防护等级 IPGrade	IP65	湿度 Humidity	0~95% (无凝露) 0~95% (No condensation)
电气参数 Electrical Parameters		BMS BMS	
电能容量 (kWh) Energy Capacity (kWh)	5.6	模组连接 Modules Connection	8 4
放电深度 (DoD) Depth of Discharge (DoD)	90%	容量 (Ah) Capacity (Ah)	220/440/660/880 220-440
额定电压 (V) Rated Voltage (V)	50.6	功率损耗 (W) Power Consumption (W)	<2
直流断路器 (A) Max. Short-circuit Current (Fuse) (A)	125	通讯方式 Communication	CAN & RS485
工作电压范围 (V) Operating Voltage Range (V)	40~60	监控参数 Monitoring Parameters	系统电压, 电流, 电池电压, 电池温度 PCBA 测温 System voltage, current, battery voltage, battery temperature, PCBA temperature measurement
内阻 (mΩ) Internal Resistance (mΩ)	<20	认证 Certificate	Pack: IEC/EN 62619; UN38.3 Cell: IEC/EN 62619; UN38.3; UL1973
循环寿命 (time) Cycle Life (time)	16000次循环, 80%EOL 16,000 cycles, 80%EOL	产品包含的设备 Equipment Included In The Product	钛酸锂电池系统、BMS 电池管理系统、PCS 储能逆变系统等系统器件组成 Consist of system components such as LTO battery system, BMS battery management system, PCS power conversion system, etc
电池型号 Battery Model	LTOE-PACK 5.6		

逆变器型号	Hybrid Inverter Model	GreeA-E10KT		GreeA-S 5000D-M1	
PV 组串输入	PV String Input				
最大直流电压 (V)	Max. DC Voltage (V)	1100	580		
标称直流电压 (V)	Nominal Voltage (V)	720	400		
MPPT 电压范围 (V)	MPPT Voltage Range (V)	140-1000	80-560		
启动电压 (V)	Start Voltage (V)	200	150		
MPPT 跟踪器数量	Number of MPPT Tracker	2	2		
MPPT 跟踪器组串数	Strings Per MPPT Tracker	1	1		
每路MPPT 最大输入电流 (A)	Max. Input Current Per MPPT (A)	15	15		
每路MPPT 最大短路电流 (A)	Max. Short-circuit Current Per MPPT (A)	20	18		
电网侧交流输出		AC Output (Grid)			
标称交流输出功率 (W)	Nominal AC Output Power (W)	10000	5000		
最大交流视在功率 (VA)	Max. AC Apparent Power (VA)	11000	7360 (电网输入)	7360VA (from grid)	
最大交流输出功率 (W)	Max. AC Output Power (W)	10000	5000		
标称交流电压 (Vac)	Nominal AC Voltage (Vac)	400	230		
交流电网频率范围 (Hz)	AC Grid Frequency Range (Hz)	50 / 60±5	50 / 60±5		
最大输出电流 (A)	Max. Output Current (A)	16	22		
最大输入电流 (A)	Max. Input Current (A)	25	32		
功率因数 (cosΦ)	Power Factor (cosΦ)	0.8超前-0.8滞后*	0.8leading-0.8lagging *	0.8超前-0.8滞后	0.8leading-0.8lagging *
电流总谐波失真	THDi	<3%	<3%		
电池输入		Battery Input			
电池类型	Battery Type	LTO	LTO		
标称电池电压 (V)	Nominal Battery Voltage (V)	50.6	50.6		
充电电压范围 (V)	Max. Charging Voltage Range (V)	40-60	40-60		
最大充电电流 (A)	Max. Charging Current (A)	160	100		
最大放电电流 (A)	Max. Discharging Current (A)	200	100		
电池容量 (Ah)	Battery Capacity (Ah)	220/440/660/880	220-440		
锂电池充电策略	Charging Strategy for Li-Ion Battery	取决于 BMS	Depend on the BMS	取决于 BMS	Depend on the BMS
交流输出 (离网端)		AC Output (Offgrid)			
最大输出视在功率 (VA)	Max. Output Apparent Power (VA)	10000	5000		
输出视在功率峰值 (VA)	Peak Output Apparent Power (VA)	11000	6900 10秒		
最大输出电流 (A)	Max. Output Current (A)	14.5	20		
标称输出电压 (V)	Nominal Output Voltage (V)	400	230±0.2%		
标称输出频率 (Hz)	Nominal Output Frequency (Hz)	50/60	50/60±0.2%		
输出电压谐波 (@线性负载)	Output THDv (@Linear Load)	<2% (线性负载)	<2% (Linear Load)	<2% (线性负载)	<2% (Linear Load)
效率		Efficiency			
最大效率	Max. PV Efficiency	97.60%	97.60%		
欧洲效率	Euro. PV Efficiency	97.00%	97.00%		
保护		Protection			
直流开关	DC Switch	双极直流开关 (125A/极)	Bipolar DC Switch (125A/Pole)	双极直流开关 (125A/极)	Bipolar DC Switch (125A/Pole)
防孤岛保护	Anti-islanding Protection	Yes	Yes		
输出过流保护	Output Over Current Protection	Yes	Yes		
直流反接保护	DC Reverse Polarity Protection	Yes	Yes		
组串故障检测	String Fault Detection	Yes	Yes		
交流/直流浪涌保护	AC/DC Surge Protection	DC Type II; AC Type III	DC Type II; AC Type III		
绝缘阻抗检测	Insulation Detection	Yes	Yes		
交流短路保护	AC Short Circuit Protection	Yes	Yes		
常规参数		General Specifications			
尺寸 (宽 x 高 x 厚) (mm)	Dimensions W x H x D (mm)	540*980*240	540*590*240		
重量 (kg)	Weight (kg)	49	32		
操作温度范围 (°C)	Operating Temperature Range (°C)	-25~+60	-25~+60		
冷却方式	Cooling Type	自然对流	Natural Convection	自然对流	Natural Convection
最高工作海拔	Max. Operation Altitude	2000m	2000m		
最高工作湿度	Max. Operation Humidity	0~95% (无凝露)	0~95% (No Condensation)	0~95% (无凝露)	0~95% (No Condensation)
防护等级	IPClass	IP65	IP65		
电路拓扑	Topology	电池隔离	Battery Isolation	电池隔离	Battery Isolation
通讯	Communication	RS485/CAN2.0/WIFI/4G	RS485/CAN2.0/WIFI/4G		
显示	Display	LCD/APP	LCD/APP		
认证与标准	Certification & Standard	IEC/EN 62109-1&2; IEC/EN61000-6-1; IEC/EN61000-6-2; EN61000-6-3; IEC/EN61000-6-4; IEC/EN61000-3-11; IEC60529; IEC 60068; IEC61683; IEC62116; IEC61727; EN50549-1; EN61000-3-12; AS 4777.2; NRS 097; VDE-AR-N-4105; CEI10-21; G98; G99; C10/C11			

Remark: Data is for reference only. Please refer to the product specifications for final confirmation.