



Integrated design

- Home style, fashionable appearance
- Plug and play interface, quick installation
- Stackable battery packs, flexible capacity extension



High performance battery

- LiFePO4 prismatic battery cell, safe and reliable
- 24 hours backup to ensure power supply without outage
- 5.12kWh per pack, scalable to 6 packs maximum 30.7kWh



Energy savings & Eco-friendly

- Clean energy generation for self-use and reduce carbon emissions
- Charge in daytime and discharge at night peak hours, reduce electricity bill cost
- · APP monitoring, manage and control household energy in real-time



Data Sheet

The process of the	ESS Model No.	FAIRY-SL5					
Ana. PV input power T000W 10.2kWh-30.7kWh 10.2kWh 20.4kWh 20.4k	Rated output power	5000VA					
The process of the	Max. PV input power	7000W					
		10.2kWh~30.7kWh					
Narranty Syears	Battery type	LiFePO4					
AC Output	Warranty						
AC Output Activation model No. FAIRY-HB1-5L Rated output current 21.7A Advax. input voltage 550V Rated output voltage 230VAC Activation model No. FAIRY-HB1-5L Rated output voltage 230VAC Activation model No. Rated output voltage 230VAC ± 10% Activation model No. Rated output voltage 230VAC ± 10% Activation model No. Rated output current 24A (12/12) THDi	Inverter Specifications						
Adam							
Rated input voltage/MPPT range 360V/125~500V AC voltage range 230VAC±10% MPPT tracker/strings 2/1 Grid frequency 50/60Hz Max. input current 24A (12/12) THDi < 3 % (at rated power)	Hybrid model No.	FAIRY-HB1-5L		Rated output current	21.7A		
MPPT tracker/strings 2/1 Grid frequency 50/60Hz Max. input current 24A (12/12) THDi < 3 % (at rated power) Adax. input current 24A (14/14) Power Factor > 0.99 (at rated power) Matched Battery Requirements General Specifications Battery type LIFePO4 or Lead-acid Max. efficiency 97.5% Voltage range 40~58V Ingress protection rating IP65 Max. charge/discharge current 50A Cooling method Natural cooling Bernergency Power Supply (EPS) Noise level < 35dB Rated output power 3000W Display LCD Rated output voltage 220/230V Communication RS485, CAN, Ethernet, Wi-Fi (Optional) Rated output frequency 50/60Hz Dimensions (L×W×H) 678×575×309 mm Rated output current 13A Weight 30kg Battery Specifications Stackable capacity 10.2kWh 15.3kWh 20.4kWh 25.6kWh 30.7kWh Battery quantity 2 pcs 3 pcs 4 pcs 5 pcs 6 pcs	Max. input voltage	550V		Rated output voltage	230VAC		
Adax. input current 24A (12/12) THDi < 3 % (at rated power) Schort-circuit max. input current 28A (14/14) Power Factor > 0.99 (at rated power) Matched Battery Requirements General Specifications Battery type LiFePO4 or Lead-acid Max. efficiency 97.5% Voltage range 40~58V Ingress protection rating IP65 Max. charge/discharge current 50A Cooling method Natural cooling Bernergency Power Supply (EPS) Noise level < 35dB Batted output power 3000W Display LCD Batted output voltage 220/230V Communication RS485, CAN, Ethernet, Wi-Fi (Optional) Battery Specifications 30Kg Dimensions (L×W×H) 678×575×309 mm Battery Specifications 30kg 30kg Battery Specifications 30kg 30kg 30kg Battery Specifications 30kg 30kg 30kg 30kg Battery Specifications 30kg 30kg 30kg 30kg 30kg 30kg 30kg 30kg 30kg	Rated input voltage/MPPT range	360V/125~500V		AC voltage range	230VAC ±10%		
Askery Specifications Stated output requency Stated output frequency Stated output frequency Stated output frequency Stated output prement Stated output prement Stated output prement Stated output prement Stated output frequency Stated	MPPT tracker/strings	2/1		Grid frequency	50/60Hz		
General Specifications Statery type LiFePO4 or Lead-acid Max. efficiency 97.5% /oltage range 40~58V Ingress protection rating IP65 Max. charge/discharge current 50A Cooling method Natural cooling General Specifications Notise level <35dB	Max. input current	24A (12/12)		THDi	< 3 % (at rated power)		
Sattery type LiFePO4 or Lead-acid Max. efficiency 97.5% //oltage range 40~58V Ingress protection rating IP65 Max. charge/discharge current 50A Cooling method Natural cooling Max. charge/discharge current 50A Cooling method Natural cooling Max. charge/discharge current 50A Cooling method Natural cooling Max. charge/discharge current 3000W Display LCD Mated output power 3000W Display LCD Mated output voltage 220/230V Communication RS485, CAN, Ethernet, Wi-Fi (Optional) Max. etal output current 13A Weight 30kg Max. etal output current 13A Weight 25.6kWh 30.7kWh Max. etal output current 13A Weight 26.6kWh 30.7kWh Max. etal output current 15A Max. etal output current 15A Max. etal output current 25.6kWh 30.7kWh Max. etal output current 26.6kWh 26.6kWh 26.6kWh 30.7kWh Max. etal output current 26.6kWh 26.6kWh 26.6kWh 26.6kWh 26.6kWh 26.6kWh 26.6kWh 26.6kWh 26.	Short-circuit max. input current			Power Factor			
A0~58V	Matched Battery Requirements		81 6 89				
Max. charge/discharge current 50A Cooling method Natural cooling Simergency Power Supply (EPS) Noise level 3000W Display LCD Stated output voltage 220/230V Communication RS485, CAN, Ethernet, Wi-Fi (Optional) Rated output frequency 50/60Hz Dimensions (L×W×H) 678×575×309 mm Rated output current 13A Weight 30kg Stated output current 13A Weight 30kg Stated output current 13A Weight 30kg Stated output current 13A Stated output current 13A Weight 30kg Stated output current 30kg Stated output current 13A Weight 30kg Stated output current 50A Stated output current 13A Weight 25.6kWh 30.7kWh 30.7kWh 20.4kWh 25.6kWh 30.7kWh 30.7kWh 678×310×1586 678×310×1084 678×310×1335 678×310×1586 Stated output current 108kg 157kg 206kg 255kg 304kg Stated output current Stated output current 108kg 157kg 206kg 255kg 304kg Stated output current Stated output current Stated output current Stated output current 50A Cycle life 26000*	Battery type	LiFePO4 or Lead-acid		Max. efficiency	97.5%		
Noise level 35dB 300W Display LCD	Voltage range	40~58V		Ingress protection rating	IP65		
Rated output power 3000W Display LCD Rated output voltage 220/230V Communication RS485, CAN, Ethernet, Wi-Fi (Optional) Rated output frequency 50/60Hz Dimensions (L×W×H) 678×575×309 mm Rated output current 13A Weight 30kg Sattery Specifications Stackable capacity 10.2kWh 15.3kWh 20.4kWh 25.6kWh 30.7kWh Sattery quantity 2 pcs 3 pcs 4 pcs 5 pcs 6 pcs Dimensions (L×W×H mm) 678×310×582 678×310×833 678×310×1084 678×310×1335 678×310×1586 Stackable weight 108kg 157kg 206kg 255kg 304kg Battery model No. iBAT-R-5.1L Weight 49kg Nominal capacity 5.12kWh Dimensions (L×W×H) 678×310×291mm Depth of discharge (DOD) 90% (settable) Communication CAN, 485 Rated voltage 51.2V Working temperature -10°C~55°C Voltage range 43.2~57.6V Protection rating	Max. charge/discharge current	50A		Cooling method	Natural cooling		
Rated output voltage 220/230V Communication RS485, CAN, Ethernet, Wi-Fi (Optional) Rated output frequency 50/60Hz Dimensions (L×W×H) 678×575×309 mm Rated output current 13A Weight 30kg Stackable capacity 10.2kWh 15.3kWh 20.4kWh 25.6kWh 30.7kWh Sattery quantity 2 pcs 3 pcs 4 pcs 5 pcs 6 pcs Dimensions (L×W×H mm) 678×310×582 678×310×833 678×310×1084 678×310×1335 678×310×1586 Stackable weight 108kg 157kg 206kg 255kg 304kg Battery model No. iBAT-R-5.1L Weight 49kg Wominal capacity 5.12kWh Dimensions (L×W×H) 678×310×291 mm Depth of discharge (DOD) 90% (settable) Communication CAN, 485 Rated voltage 51.2V Working temperature -10°C~55°C Voltage range 43.2~57.6V Protection rating IP20 Max. charge current 50A Cycle life ≥6000*	Emergency Power Supply (EPS)		Noise level	<35dB			
Rated output frequency 50/60Hz Dimensions (L×W×H) 678×575×309 mm Rated output current 13A Weight 30kg Battery Specifications Stackable capacity 10.2kWh 15.3kWh 20.4kWh 25.6kWh 30.7kWh Battery quantity 2 pcs 3 pcs 4 pcs 5 pcs 6 pcs Dimensions (L×W×H mm) 678×310×582 678×310×833 678×310×1084 678×310×1335 678×310×1586 Stackable weight 108kg 157kg 206kg 255kg 304kg Stattery model No. iBAT-R-5.1L Weight 49kg Nominal capacity 5.12kWh Dimensions (L×W×H) 678×310×291mm Depth of discharge (DOD) 90% (settable) Communication CAN, 485 Rated voltage 51.2V Working temperature -10°C~55°C Voltage range 43.2~57.6V Protection rating IP20 Max. charge current 50A Cycle life ≥6000*	Rated output power	3000W		Display	LCD		
Rated output current 13A Weight 30kg Battery Specifications Stackable capacity 10.2kWh 15.3kWh 20.4kWh 25.6kWh 30.7kWh Battery quantity 2 pcs 3 pcs 4 pcs 5 pcs 6 pcs Dimensions (L×W×H mm) 678×310×582 678×310×833 678×310×1084 678×310×1335 678×310×1586 Stackable weight 108kg 157kg 206kg 255kg 304kg Battery model No. iBAT-R-5.1L Weight 49kg Nominal capacity 5.12kWh Dimensions (L×W×H) 678×310×291mm Depth of discharge (DOD) 90% (settable) Communication CAN, 485 Rated voltage 51.2V Working temperature -10°C~55°C Voltage range 43.2~57.6V Protection rating IP20 Max. charge current 50A Cycle life ≥6000*	Rated output voltage	220/230V		Communication	RS485, CAN, Ethernet, Wi-Fi (Optional)		
Battery Specifications Stackable capacity 10.2kWh 15.3kWh 20.4kWh 25.6kWh 30.7kWh Battery quantity 2 pcs 3 pcs 4 pcs 5 pcs 6 pcs Dimensions (L×W×H mm) 678×310×582 678×310×833 678×310×1084 678×310×1335 678×310×1586 Stackable weight 108kg 157kg 206kg 255kg 304kg Battery model No. iBAT-R-5.1L Weight 49kg Nominal capacity 5.12kWh Dimensions (L×W×H) 678×310×291mm Depth of discharge (DOD) 90% (settable) Communication CAN, 485 Cated voltage 51.2V Working temperature -10°C~55°C Voltage range 43.2~57.6V Protection rating IP20 Max. charge current 50A Cycle life ≥6000*	Rated output frequency	50/60Hz		Dimensions (L×W×H)	678×575×309 mm		
Stackable capacity 10.2kWh 15.3kWh 20.4kWh 25.6kWh 30.7kWh Battery quantity 2 pcs 3 pcs 4 pcs 5 pcs 6 pcs Dimensions (L×W×H mm) 678×310×582 678×310×833 678×310×1084 678×310×1335 678×310×1586 Stackable weight 108kg 157kg 206kg 255kg 304kg Battery model No. iBAT-R-5.1L Weight 49kg Nominal capacity 5.12kWh Dimensions (L×W×H) 678×310×291mm Depth of discharge (DOD) 90% (settable) Communication CAN, 485 Rated voltage 51.2V Working temperature -10°C~55°C Voltage range 43.2~57.6V Protection rating IP20 Max. charge current 50A Cycle life ≥6000*	Rated output current	13A		Weight	30kg		
Battery quantity 2 pcs 3 pcs 4 pcs 5 pcs 6 pcs Dimensions (L×W×H mm) 678×310×582 678×310×833 678×310×1084 678×310×1335 678×310×1586 Stackable weight 108kg 157kg 206kg 255kg 304kg Battery model No. iBAT-R-5.1L Weight 49kg Nominal capacity 5.12kWh Dimensions (L×W×H) 678×310×291mm Depth of discharge (DOD) 90% (settable) Communication CAN, 485 Rated voltage 51.2V Working temperature -10°C~55°C Voltage range 43.2~57.6V Protection rating IP20 Max. charge current 50A Cycle life ≥6000*	Battery Specifications						
Dimensions (L×W×H mm) 678×310×582 678×310×833 678×310×1084 678×310×1335 678×310×1586 Stackable weight 108kg 157kg 206kg 255kg 304kg Battery model No. iBAT-R-5.1L Weight 49kg Nominal capacity 5.12kWh Dimensions (L×W×H) 678×310×291mm Depth of discharge (DOD) 90% (settable) Communication CAN, 485 Rated voltage 51.2V Working temperature -10°C~55°C Voltage range 43.2~57.6V Protection rating IP20 Max. charge current 50A Cycle life ≥6000*	Stackable capacity	10.2kWh	15.3kWh	20.4kWh	25.6kWh	30.7kWh	
Stackable weight 108kg 157kg 206kg 255kg 304kg 304kg 8attery model No. Nominal capacity 5.12kWh Dimensions (L×W×H) 678×310×291mm Depth of discharge (DOD) 90% (settable) Communication CAN, 485 8ated voltage 751.2V Working temperature 7-10°C~55°C Voltage range 43.2~57.6V Protection rating IP20 Max. charge current For a solution in the protection rating IP20 Cycle life ≥6000*	Battery quantity	2 pcs	3 pcs	4 pcs	5 pcs	6 pcs	
Battery model No. iBAT-R-5.1L Weight 49kg Nominal capacity 5.12kWh Dimensions (L×W×H) 678×310×291mm Depth of discharge (DOD) 90% (settable) Communication CAN, 485 Rated voltage 51.2V Working temperature -10°C~55°C Voltage range 43.2~57.6V Protection rating IP20 Max. charge current 50A Cycle life ≥6000*	Dimensions (L×W×H mm)	678×310×582	678×310×833	678×310×1084	678×310×1335	678×310×1586	
Nominal capacity 5.12kWh Dimensions (L×W×H) $678 \times 310 \times 291 \text{mm}$ Depth of discharge (DOD) 90% (settable) Communication CAN, 485 Rated voltage 51.2V Working temperature $-10^{\circ}\text{C} \sim 55^{\circ}\text{C}$ Voltage range $43.2 \sim 57.6 \text{V}$ Protection rating IP20 Max. charge current $50A$ Cycle life $\geq 6000^{\circ}$	Stackable weight	108kg	157kg	206kg	255kg	304kg	
Depth of discharge (DOD) 90% (settable) Communication CAN, 485 Rated voltage 51.2V Working temperature -10°C~55°C Voltage range 43.2~57.6V Protection rating IP20 Max. charge current 50A Cycle life ≥6000*	Battery model No.	iBAT-R-5.1L		Weight	49kg		
Rated voltage 51.2V Working temperature $-10^{\circ}\text{C} \sim 55^{\circ}\text{C}$ /oltage range 43.2~57.6V Protection rating IP20 Max. charge current 50A Cycle life $\geq 6000^{\circ}$	Nominal capacity	5.12kWh		Dimensions (L×W×H)	678×310×291mm		
/oltage range 43.2~57.6V Protection rating IP20 Max. charge current 50A Cycle life ≥6000*	Depth of discharge (DOD)	90% (settable)		Communication	CAN, 485		
Max. charge current 50A Cycle life ≥6000*	Rated voltage	51.2V		Working temperature	-10℃~55℃		
	Voltage range	43.2~57.6V		Protection rating	IP20		
	Max. charge current	50A		Cycle life	≥6000*		
Aax. discharge current 70A Standard conformity CE, UN38.3, MSDS	Max. discharge current	70A S		Standard conformity	CE, UN38.3, MSDS		

Cycles@25°C,0.25C discharge and charge current, 80%DOD