ALL-IN-ONE BATTERY ESS

Features

- One-person installation
- Easy power output expansion
- Without cable connection, plug in & out
- High cycle stability and long lifespan
- Whole system warranty
- Auto under-voltage wakeup
- With WiFi module, Bluetooth module
- Featuring a four-wheel design, equipped with AC output, suitable for both home and outdoor use.

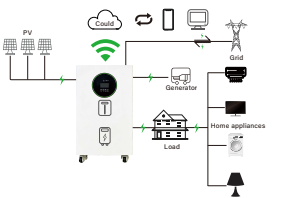


Pure sine wave | Lithium Battery Activation | WiFi optional | High Efficiency | MPPT | Anti-shock design terminal | Output Multiple Priority | Smart battery charging design

Side view



System Diagram



TECHNICAL PARAMETER

Mode		A24V314PU-3.9KW	A48V314PU-5.9KW
Main Parameter			
Battery Chemistry		$LiFePO_4$	$LiFePO_4$
Capacity (Ah)		314Ah	314Ah
Nominal Voltage (V)		25.6V	51.2V
Operating Voltage (V)		21.6~28.8V	43.2~57.6V
Energy (KWh)		8KWh	16KWh
Charge/ Discharge Current (A)	Recommend	80A	100A
	Max.	150A	200A
	Peak	160A (30S,25°C)	220A (30S,25°C)
Master LCD Indicator		LCD (Power,Voltage,Current,Battery bar display) /LED (working, charge, fault)	LCD (Power,Voltage,Current,Battery bar display) /LED (working, charge, fault)
IP Rating of Enclosure		IP21	IP21
Operating Temperature		Charge:0~55°C/Discharge:-20°C~+55°C	Charge:0~55°C/Discharge:-20°C~+55°C
Storage Temperature		0°C~+35°C	0°C~+35°C
Humidity		5%~95%	5%~95%
Altitude		≤2000m	≤2000m
Cycle Life		>6000 (25°Ca2°C,0.2C/0.2C,70%EOL) (DOD80%)	>6000 (25°Ca2°C,0.2C/0.2C,70%EOL) (DOD80%)
Installation		Floor standing	Floor standing
Communication Port		RS485,RS232	RS485,RS232
Certification		UN38.3,CE	UN38.3,CE
Inverter Specification			
AC Input			
Nominal Input Voltage		208/220/230/240VAC; L+N+PE	208/220/230/240VAC; L+N+PE
Voltage Range (VAC)		90~280V Settable (Appliance/Generator mode) 170~264V Settable (UPS mode)	90~280V (WPP MODE) / 90~280V (GEN MODE) / 170~264V (UPS MODE)
Frequency		40~70Hz (Adaptive)	40~70Hz (Adaptive)
AC Output			
Rated Capacity		3600W	6500W
Peak Power		6000VA	10000VA
Nominal Output Voltage		208/220/230/240VAC; L+N+PE	208/220/230/240VAC; L+N+PE
Voltage Range (Settable)		90~280V (Appliance/Generator mode) 170~264V (UPS mode)	90~280V (Appliance/Generator mode) 170~264V (UPS mode)
Power Factor		1	1
Frequency		Line mode: Follow line mode frequency; Battery mode: 50 / 60 Hz ± 0.1%	Line mode: Follow line mode frequency; Battery mode: 50 / 60 Hz ± 0.1%
Switch Time (Line Mode to Battery Mode)		UPS mode: 10ms (Typical) Appliance mode: 10ms (Typical) Generator mode: 40ms (Typical)	UPS mode: 10ms (Typical) Appliance mode: 10ms (Typical) Generator mode: 20ms (Typical)
Wave Form		Pure Sine Wave	Pure Sine Wave
Overload Capacity (Battery Mode)		1min@102%~110% Load; 10s@110%~130% Load; 3s@130%~150% Load; 0.2s@>150% Load	1min@102%~120%Load 10s@ > 120%Load
Max Efficiency (Battery Mode)		92.7%@24VDC	94%@48VDC
Parallel Quantity		—	—
Charger (PV / AC)			
PV Charging method		MPPT	MPPT
MPPT Voltage		40~450VDC	60~450VDC
Max PV Input Current / Input Power		18A /5000W	27A/9KW
Max PV Open Circuit Voltage		500VDC	500VDC
Max PV Charge Current		100A	120A
AC Charge Current		2~100A Settable	2~120A Settable
Max Charge Current (AC + PV)		100A	120A
Interface			
HMI		LCD, 4 buttons + 4 LED lights, can display running / input / output / load mode	
Port		RS232: SPIN / Pitch2.0mm, Baud 9600	
Expansion Interface		2× USB, Type-C, DC 5521, 3 - pin plug	2× USB, Type-C, DC 5521, 3 - pin plug
Parallel Interface		—	—
Monitoring		WiFi (Optional)	
General Data			
Ingress Protection		IP21	
Operating Temperature		-10~60 °C (Reduce output power to 80% above 40 °C)	
Environment Humidity		20%~85% (No condensing)	
Storage Temperature		+5~50°C (Battery, 0~40°C)	
Operating Altitude		Should not exceed 1000m, up to 4000m. Refer to IEC62040 - 3	
Noise		≤50db	
product size / packing size (mm)		720*485*346mm / —	760*420*255mm / —
Net / Gross Weight (kg)		~71kg	~80kg