

Single Phase All-in-one ESS

6.0kW Off-grid Inverter&16.07kWh Battery



INVERTER FEATURES

Built-in 120A Solar Charge
Wide MPPT Range 60~500V
28A Max PV Input
Dual AC In&Dual AC-Out
9 Inverters in parallel
Noise Control Algorithm
Feed-in to Grid
WiFi Monitoring

BATTERY FEATURES



>8000
Cycle Life@25°C



Voltage Wake-up
Under off-grid System Environment



Remote Monitoring
Real time monitoring of
power usage and
battery pack operation



**Multiple Safety
Protection**
Mos, DC Breaker



Smart BMS
Intelligent management &
maintenance of battery systems



Voltage Balancing
Voltage Balancing between
Battery Cells&Battery Pack

● Technical Specifications

Inverter Image	
Product Name	6kW Single Phase Inverter
AC Input	
Rated Input Voltage	208/220/230/240V;L+N+PE
Voltage Range	90~280±3V (normal mode); 170~280±3V (UPS mode)
Frequency	50/60Hz(Auto Adaptive)
AC Output	
Rated Capacity	6kW
Surge Power	12kVA
Voltage	208/220/230/240V
Power Factor (PF)	1
Frequency	50/60Hz±0.1%
Switch Time	10ms(normal mode), 10ms(UPS mode)
Wave Form	Pure Sine Wave
Overload Capacity (Batter Mode)	10min@102%~120%Load, 1min@120%~150%Load; 10S@150%~200%Load, 5s@>200%Load
Max. Efficiency (Batter Mode)	93%@48VDC
Parallel Quantity	9
Charger (PV / AC)	
Solar Charger Type	MPPT
Max. PV input Current / Input Power	28A/9000W
MPPT Range@Operating Voltage	60~450V
Max. PV Open Circuit Voltage	500V
Max. PV Charge Current	120A
Max. AC Charge Current	120A
Max. Charge Current (PV + AC)	120A
Battery	
Rated Voltage (VDC)	48
Floating Charge Voltage (VDC)	54
Overcharge Protection (VDC)	61
Battery Type	Lithium and Lead-acid

● Technical Specifications

Inverter Image	
Product Name	6kW Single Phase Inverter
Interface	
HMI	LCD
Interface	RS485/USB/DrContact/CT/Meter
Monitoring	WiFi(Optional)
Capable of Connecting Generator	Yes
General Data	
Ingress Protection	IP20
Operating Temperature	-10℃~50℃
Relative Humidity	5%~95% (Non-condensing)
Storage Temperature	-15℃~60℃
Net Weight	28kg
Dimensions (H*W*D)	500*435*226mm
Max. Operating Altitude	4000m(Derating above 1000m)
Warranty	2 years*
Testing conditions based on temperature 25℃ at the beginning of life. *Total Energy/Usable Energy measured under specific conditions by Welson 0.2C CC-CV and based on recommended DOD(93%); Information may be subject to change without notice during product improvement.	

● Technical Specifications

Battery Module Image		
Model		LFP 16kWh
Battery Type		LiFePO4 Prismatic
Nominal Energy		16.076kWh
Usable Energy*		14.95kWh
Nominal Capacity		314Ah
Nominal Voltage		51.2V
Operating Voltage		48~56V
Under Lead-acid Mode	Recommended Current	100A
	Recommended Voltage	48~55.2V
Recommended Charge&Discharge Current		150A/150A
Max Charge/Discharge Current		150A/150 A
Peak Discharge Current		240A(10S)
Peak Discharge Power		12kW(10S)
Recommended Depth of Discharge (DOD)		93%
Charging Temp. Range		From 0~55℃
Discharging Temp. Range		From -10~55℃
Cycle Life		≥8000@25℃
WIFI Module		Uhome
Fire Protection		Built-in aerosol(optional)
Communication		CAN/ RS485
IP Rating		IP20
Recommended Humidity		5%~95%(No condensed water)
Cooling Type		Natural cooling
Installation		White(Optional)
Color		Floor-mounting
Net Weight		116kg
Dimension(L*W*D)		500*750*226mm
Protection		Over-current/Over-voltage/Short circuit/ Under-voltage/Over temperature
Warranty		5 years*
Certification		UN38.3/CE/IEC 62619(Cell)

Testing conditions based on temperature 25℃ at the beginning of life.

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