

Residential Energy Storage System

PowerAll 3-5kW

5.1~20kWh

PowerAll 3-5kW | 5.1~20kWh is an All in One single phase Inverter + Energy Storage solution suitable for AC-Coupled, DC Coupled and Retrofit Applications, can pair with up to four 5.1kWh built-in battery for an extended storage capacity up to 20kWh.



Safe

- 10000 Cycles Longlife Span LFP Battery
- Physical and electrical dual isolation
- IP65 outdoor installation

Simple

- All-in-One Modular design
- Single person can carry and install it
- Plug and play quick installation
- Space saving; 0.15 sq. m foot print

Smart

- Real time control of energy consumption
- Global cloud platform & Mobile APP
- Open API, support power internet applications

Technical Specifications

Hybrid Inverter Model	PowerAll - 3680	PowerAll - 5000
PV String Input		
MPPT Voltage Range	80V-560V	
Start Voltage	130V	
Number of MPP Tracker	2	
Max. Input Current Per MPPT	15A	
Max. Short-circuit Current Per MPPT	18A	
AC Output (Grid)		
Nominal AC Output Power	3680W	4999W ¹
Max. AC Apparent Power	7360VA (From Grid)	
Max. AC Output Power	3680W	4999W
Nominal AC Voltage	230VAC	
AC Grid Frequency Range	50/60Hz ±5Hz	
Max. Output Current	16A	22A ¹
Max. Input Current	32A	32A
Power Factor (cosΦ)	0.8 Leading - 0.8 Lagging	
THDi	<3%	
Battery Input		
Battery Type	LFP (LiFePO4)	
Nominal Battery Voltage	48V	
Max. Charging Voltage Range	40-60V	
Max. Charging Current	50A	100A
Max. Discharging Current	80A	100A
AC Output (Backup)		
Max. Output Apparent Power	4000VA	5000VA
Peak Output Apparent Power	6900VA 10sec	
Max. Output Current	16A	20A
Nominal Output Voltage	230V ±0.2%	
Nominal Output Frequency	50/60Hz ±0.2%	
Output THDv (@Linear Load)	<2% (Linear Load)	
Efficiency		
Max. PV Efficiency	97.6%	
Euro. PV Efficiency	97.0%	
Protection		
	DC switch, Anti islanding, output over current etc.	
General Specifications		
Dimensions WxHxD	540x590x240mm	
Weight	32kg	
Operating Temperature Range	-25°C ~ +60°C	
Noise (dB)	<25	
Cooling Type	Natural Convection	
Max. Operation Altitude	2000m	
Max. Operation Humidity	0~95% (No Condensation)	
IP Class	IP65	
Communication	RS485/CAN2.0/WIFI/4G	
Display	LCD/APP	
Certification & Standard	IEC/EN 62109-1&2, IEC/EN 61000-6-1, IEC/EN 61000-6-2, EN 61000-6-3, IEC/EN 61000-6-4, IEC/EN 61000-3-11, EN 61000-3-12, IEC 60329, IEC 60088, IEC 61683, IEC 62116, IEC 61727, EN 50549-1, AS 4777.2, NRS 097, VDE-AR-N14105, CE0-21, GB8699, C10/C11	

*1. Nominal AC output power is 4999W for Australia and 4600W for Germany and South Africa.

*2. Maximum output current is 21.7A for Australia and 20A for Germany and South Africa.

Highlights



SAFE AND RELIABLE



EASY INSTALLATION & MAINTENANCE



7/24 MONITORING



10000 CYCLES




VPP READY (VIRTUAL POWER PLANT)



UPS BACK UP

All-in-one Energy Storage System



**3.68 kW
5.1 kWh**

3KW HYBRID INVERTER MODULE:

- + Max. PV input 4.8kW DC
- + Nominal output 3680W AC
- + 80Amp Integrated Charger
- + Uninterrupted Power Supply port
- + IP65 (Outdoor)
- + 540x240x590 mm (WxDxH) / 32 kg.
- + UPS 4kW continuous for critical loads

CABLE BOX (always come together with inverter module):

- + A module integrated with Solar and Battery DC Isolators, and grid AC Isolators

5.1KWH BATTERY MODULE:

- + Safest and longest life battery chemistry LiFePO4
- + 0.5 C, 90% DoD/ 51.2V / 4.6kWh usable
- + 540x240x500 mm (WxDxH) / 58 kg
- + 4 Max. modules in parallel



**5 kW
10 kWh**

5KW HYBRID INVERTER MODULE:

- + Max. PV input 6.5kW DC
- + Nominal output 5kW AC
- + 100Amp Integrated Charger
- + Uninterrupted Power Supply port

CABLE BOX (always come together with inverter module):

- + A module integrated with Solar and Battery DC Isolators, and grid AC Isolators

5.1KWH BATTERY MODULE:

- + Safest and longest life battery chemistry LiFePO4
- + 0.5 C, 90% DoD/ 51.2V / 4.6kWh usable
- + 540x240x500 mm (WxDxH) / 58 kg
- + 4 Max. modules in parallel

Flexibility with Expandable Battery Modules



**POWERALL
3 - 5
Hybrid Inverter**

**+ POWERALL
BP5-5kWh
Expandable Battery
Module**

**+ 2x POWERALL
BP5-10kWh
Expandable Battery
Module**

**+ 4x POWERALL
BP5-20kWh
Expandable Battery
Module**

Battery Technical Specifications

PowerAll BP5 Battery Pack			
Physical		Operation	
Battery Type	LFP (LifePO4)	Max. Charge/Discharge Current	50A/80A
System Weight	58kg	Rated DC Power	4096W
Dimension (WxDxH)	540x500x240mm	Max. Charge/Discharge Power	2825W/4096W
IP Protection	IP65	Operation Temperature Range	0 to 50°C Charging -10 to 50°C Discharging
Warranty	5 Year Product Warranty, 10 Year Performance Warranty	Humidity	0~95% (No Condensation)
Electrical		BMS	
Energy Capacity	5.12kwh	Modules Connection	4
Usable Capacity	4.6kwh	Capacity	100-400Ah
Depth of Discharge (DoD)	90%	Power Consumption	<2W
Nominal Voltage	51.2V	Communication	CAN & RS485
Max. Short-Circuit Current (Fuse)	125A	Monitoring Parameters	System Voltage, Current, Cell Voltage, Cell Temperature, PCBA Temperature Measurement
Operating Voltage Range	44.8-56.5V	Certificate	
Internal Resistance	<20mΩ	Safety (Cell)	Pack: IEC/EN 62619; UN38.3 Cell: IEC/EN 62619; UN38.3; UL1973
Cycle Life	10000Cycle		

*Maximum 4 Battery Pack in Parallel