

Panda

Residential Single-phase Energy Storage System Panda Series

Panda 3680S~6000S-5HP~30HP



Panda 3680S~6000S-5HP~30HP
Technical parameters



Inverter

Battery



The Lithium Iron Phosphate (LFP) cell secures safe and reliable operation.



The automatic isolation of the faulty battery module secures smooth system operation.



The 5 kWh module adopted enables variable capacity range of 5-30 kWh.



The switching time between on-off grid less than 10 ms secures Uninterruptable Power Supply for the load.



The APP-based remote monitoring offers easy maintenance and unlimited function expansion.



The built-in Smart Grid Management module enables power grid dispatching.



The Degree of Protection at IP66 makes it suitable for various harsh environments for application.

Residential Energy Storage Application Scenarios: Energy Storage + X

- The residential energy storage system addresses stable power demand and offers functions such as leveraging price differentials between peak and off-peak hours to reduce electricity costs and enhance the self-consumption rate of photovoltaic power generation. It serves as an integrated solution tailored for household scenarios.
- The core of the residential energy storage system is the battery pack, BMS, and energy storage inverter, which is paired with household PV to form a residential photovoltaic energy storage system, mainly including the battery pack, BMS, hybrid PCS, and PV modules.
- Residential energy storage is developing rapidly in the European market. Europe's higher level of electricity prices combined with peak and valley price differentials, as well as the incentive policy and declining energy storage cell prices, contribute to the favorable economic viability of residential energy storage.



Residential Energy Storage



Residential Photovoltaic Energy Storage



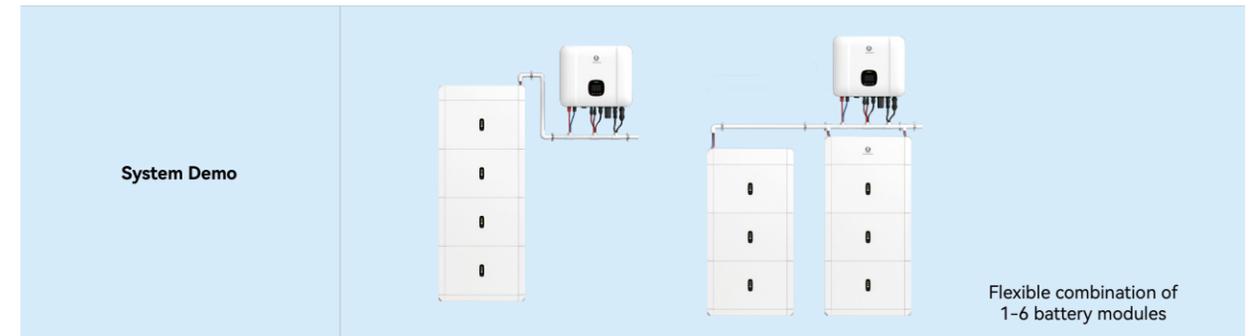
Residential Photovoltaic Energy Storage and Charging



Residential Photovoltaic Energy Savings



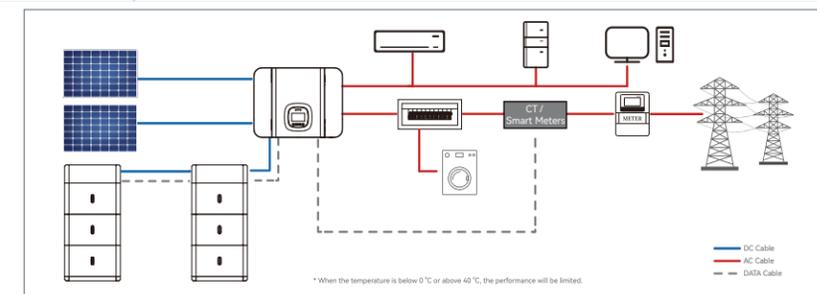
Residential Photovoltaic Energy Storage Heat Pump



System Specification							
Nominal Output Power	3680 W	4000 W	4600 W	5000 W	6000 W	3680 W	4000 W
Capacity Range	5.12~30.72 kWh						
Usable Capacity Range	4.6~27.65 kWh						
Battery Chemistry	LFP (LiFePO4)						
IP Protection	IP66 (Outdoor)						

Inverter Technical Specification							
Model	Venus 3680-S1	Venus 4000-S1	Venus 4600-S1	Venus 5000-S1	Venus 6000-S1	Venus 3680-S2	Venus 4000-S2
Phase	Single Phase						
Max. PV Input Voltage	600 V						
MPPT Voltage Range	100 V~550 V						
Max. PV Input Current			16 A / 16 A			16A	
Max. PV Input Power	8000 W	9000 W	9000 W	9000 W	9000 W	4500 W	4500 W
Max. MPPT Short-circuit Current	20 A / 20 A						
Number of Independent MPPT	2			1			
Start-up Voltage Range	120 V						
Max. Charging/Discharging Current	100 A						
Max. Charging/Discharging Power	5000 W						
Nominal Output Voltage on Grid	220 V, 230 V, 240 V (comply with local regulations)						
Output Voltage Range on Grid	180 ~ 276 V						
Rated Grid Output Frequency on Grid	50 Hz/60 Hz						
Max.AC output Power	3680 W	4000 W	4600 W	5000 W	6000 W	3680 W	4000 W
Nominal AC Output Voltage	230 V						
Communication	CAN2.0/RS485, WIFI/4G(optional)						
Display	LCD & APP						
Dimension(W*H*D) mm	540 x 450 x185						
Certification	EN IEC62109-1, EN IEC62109-2, IEC61683, IEC61727, IEC62116, IEC60068, EN IEC61000-6-1, EN IEC61000-6-3, IEC60529 IP66, EN50549-1, EN50530, Italy CEI 0-21, Germany VDE4105, UK G98, G99, Spain UNE217001, UNE217002, NTS 2.1, RoHS(2011/65/EU+2015/863), WEEE(2012/19/EU), ISTA, UKCA						

Battery Technical Specification						
Module Model	Limestone 5H-P	Limestone 10H-P	Limestone 15H-P	Limestone 20H-P	Limestone 25H-P	Limestone 30H-P
Module Capacity	5.12 kWh	10.24 kWh	15.35 kWh	20.48 kWh	25.64 kWh	30.72 kWh
Usable Capacity	4.6 kWh	9.21 kWh	13.81 kWh	18.43 kWh	23.04 kWh	27.65 kWh
Nominal Voltage	51.2 V					
Max. Charging/Discharging Power	2.5 kW	5 kW	5 kW	5 kW	5 kW	5 kW
Operating Temperature Range	-20 ~ +50 °C					
Dimension(W*H*D) mm	650 x 620 x 180	650 x 980 x 180	650 x 1340 x 180	650 x 1700 x 180	650 x 1340 x 180 650 x 980 x 180	650 x 1340 x 180 650 x 1340 x 180
Certification	IEC62619, IEC63056, EN IEC61000-6-1, IEC61000-6-3, EN IEC62040-1, EN IEC62477-1, IEC60730-1 Annex H, IEC60529 IP66, UN38.3, MSDS, RoHS(2011/65/EU+2015/863), WEEE(2012/19/EU), ISTA					



* When the temperature is below 0°C or above 40°C, the performance will be limited.