

Residential ESS BluE-S Series All in One

Single Phase / All-in-one Hybrid System / 3.68-6 kW

Save Your Energy Bill

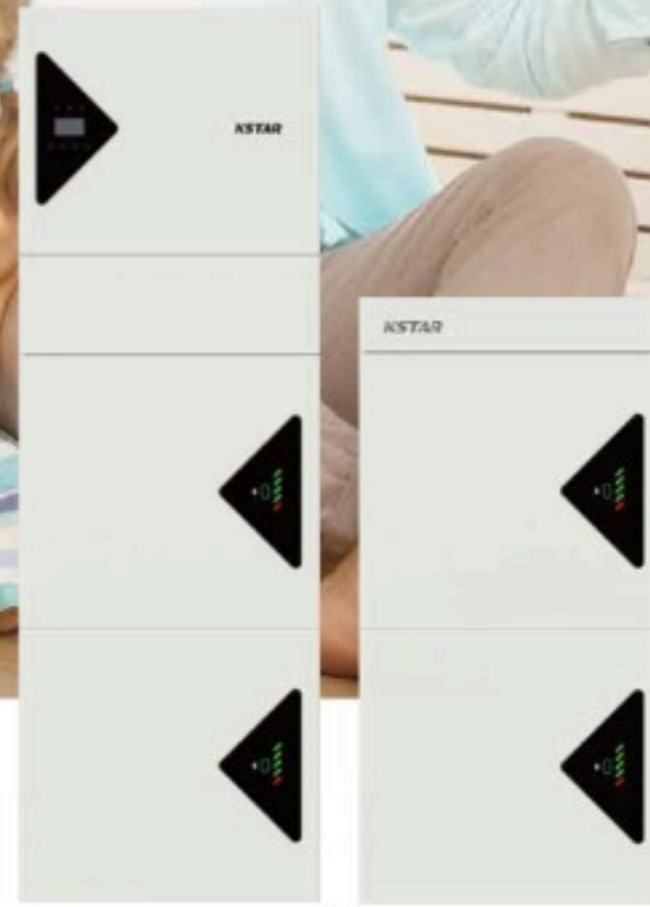
- ▶ Optimized Time-of-use Profile
- ▶ 10000 Cycles Lifespan
- ▶ VPP Ready

Whole Home Energy Solution

- ▶ Support On-grid and Off-grid Switching
- ▶ AC-coupling or DC-coupling System
- ▶ Backup Power Support

Comprehensive Safety

- ▶ Alarm and Protection
- ▶ Online Monitoring
- ▶ Compliant with Global Grid Standards



Battery Model		BluE-PACK 5.1	
Physical		Operation	
Battery Type	LFP (LiFePO4)	Max. Charge/Discharge Current	50 A / 80 A
Weight	54 kg	Rated DC power	4096 W
Dimensions (W x H x D)	540 x 490 x 240 mm	Max. Charge/Discharge Power	2825 W / 4096 W
IP Protection	IP 65	Operating Temperature Range	-10 to 50°C (Charging); -10 to 50°C (Discharging) ¹
Warranty	5 Year Product Warranty 10 Year Performance Warranty	Humidity	0 - 95% (No condensation)
Electrical		BMS	
Energy Capacity	5.12 kWh	Modules Connection	Max. 4
Usable Capacity	4.6 kWh	Capacity	100 - 400 Ah
Depth of Discharge (DoD)	90%	Power Consumption	< 2 W
Nominal Voltage	51.2 V	Communication	CAN & RS-485
DC Circuit Breaker	125 A	Monitoring Parameters	System voltage, current, cell voltage, cell temperature, PCBA temperature measurement
Operating Voltage Range	44.8 - 56.5 V	Certificate	
Internal Resistance	< 20 mΩ	Safety(Cell)	Pack: IEC/EN 62619; UN 38.3 Cell: IEC/EN 62619; UN 38.3; UL 1973
Cycle Life	10000 cycle		

¹Maximum 4 battery pack in parallel.



Hybrid Inverter Model	BluE-S 3680D-M1	BluE-S 5000D-M1	BluE-S 6000D-M1
PV Input			
Recommended Max. PV Array Input Power @STC	5.5 kWp	7.5 kWp	9 kWp
Max. DC Voltage	580 V		
Nominal Voltage	400 V		
MPPT Voltage Range	80 V ~ 560 V		
Start Voltage ²⁾	150 V		
Number of MPPT Tracker	2		
Strings per MPPT Tracker	1		
Max. Input Current per MPPT	15 A		
Max. Short-circuit Current per MPPT	18 A		
AC Output (Grid)			
Nominal AC Output Power	3680 W	5000 W ³⁾	6000 W
Max. AC Apparent Power	7360 VA ⁴⁾	7360 VA ⁵⁾	7360 VA
Max. AC Output Power	3680 W	5000 W ³⁾	6000 W
Nominal AC Voltage	230 Vac		
AC Grid Frequency Range	50 / 60 Hz ±5Hz		
Max. Output Current	16 A	22 A ⁶⁾	25 A
Max. Input Current	32 A		
Power Factor (cosΦ)	0.8 leading - 0.8 lagging		
THDi	< 3%		
Battery Input			
Battery Type	LFP (LiFePO4)		
Nominal Battery Voltage	48 V		
Charging Voltage Range	40 - 60 V		
Max. Charging Current	50 A	100 A	100 A
Max. Discharging Current	80 A	100 A	100 A
Battery Capacity	100 - 400 Ah		
Charging Strategy for Li-ion Battery	Depend on the BMS		
AC Output (Backup)			
Max. Output Apparent Power	4000 VA	5000 VA	5000 VA
Peak Output Apparent Power	6900 VA 10sec		
Max. Output Current	16 A	20 A	20 A
Nominal Output Voltage	230 V		
Nominal Output Frequency	50 / 60Hz		
Output THDv (@Linear Load)	< 3% (Linear Load)		
Efficiency			
Max. PV Efficiency	97.6%		
Euro. PV Efficiency	97.0%		
Protection			
DC Switch	Bipolar DC Switch (125 A / Pole)		
Anti-islanding Protection	Yes		
Output Over Current Protection	Yes		
DC Reverse Polarity Protection	Yes		
String Fault Detection	Yes		
AC / DC Surge Protection	DC Type II; AC Type III		
Insulation Detection	Yes		
AC Short Circuit Protection	Yes		
General Specifications			
Dimensions (W x H x D)	540 x 590 x 240 mm		
Weight	32 kg		
Operating Temperature Range	-25°C ~+ 60°C		
Noise (dB)	< 25		
Cooling Type	Natural Convection		
Max. Operating Altitude	2000 m		
Operating Humidity	0 - 95% (No Condensation)		
IP Class	IP65		
Topology	Battery Isolation		
Communication	RS-485 / CAN 2.0 / 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 60529; IEC 60068; IEC 61683; IEC 62116; IEC 61727; EN 50549-1; AS 4777.2; NRS 097; VDE-AR-N-4105; CEI 0-21; G98/G99; C10/11		