

BluE Residential ESS

All In One Energy Storage System



All in One Design
CATL Battery inside



Safety



Simple



Interconnection

Hybrid Inverter Model	BluE-S 3680D	BluE-S 5000D
PV String Input		
Max. recommended PV power	4800	6500
Max. DC voltage	580	580
Nominal voltage	400	400
MPPT voltage range	120V-550V	120V-550V
Start voltage	130V	130V
MPPT voltage range	184~550V	230~550V
Number of MPP tracker	2	2
Strings per MPP tracker	1	1
Max. input current per MPPT	15A	15A
Max. short-circuit current per MPPT	18A	18A
AC Output (Grid)		
Nominal AC output power	3680W	4999W
Max. AC apparent power	7360VA (from grid)	7360VA (from grid)
Maximum AC output power	3680W	4999W
Nominal AC voltage	230Vac	230Vac
AC grid frequency range	50 / 60Hz±5Hz	50 / 60Hz±5Hz
Max. output current	16A	22A
Max. input current	32A	32A
Power factor (coΦ)	0.8leading-0.8lagging	0.8leading-0.8lagging
THDi	<3%	<3%
Battery Input		
Battery type	LFP (LiFePO4)	LFP (LiFePO4)
Nominal Battery Voltage	51.2V	51.2V
Max. Charging Voltage	57.6V	57.6V
Max. Charging Current	50A	100A
Max. Discharging Current	80A	100A
Battery Capacity	100-400Ah	100-400Ah
Charging Strategy for Li-Ion Battery	Depend on the BMS	Depend on the BMS
AC Output (Backup)		
Max. Output Apparent Power	4000VA	5000VA
Peak Output Apparent Power	6900VA 10sec	6900VA 10sec
Max. Output Current	16A	20A
Nominal Output Voltage	230±0.2%	230±0.2%
Nominal Output Frequency	50/60Hz±0.2%	50/60Hz±0.2%
Output THDv (@Linear Load)	<2% (Linear load)	<2% (Linear load)
Efficiency		
Max. PV Efficiency	97.6%	97.6%
Euro. PV efficiency	97.0%	97.0%
Max. Battery to Load Efficiency	94.0%	94.0%
Battery charged by PV Max. Efficiency	98.0%	98.0%
Protection		
DC switch	Bipolar DC Switch (125A/Pole)	Bipolar DC Switch (125A/Pole)
Anti-islanding protection	Yes	Yes
Output over current	Yes	Yes
DC reverse polarity protection	Yes	Yes
String fault Detection	Yes	Yes
AC/DC surge protection	DC Type II;AC Type III	DC Type II;AC Type III
Insulation detection	Yes	Yes
AC short circuit protection	Yes	Yes
General Specifications		
Dimensions W x H x D (mm)	540*590*240	
Weight(kg)	32	
Operating temperature range	0°C~+55°C(Charging)/-20°C~+55°C(DisCharging)	
Noise (dB)	<25	
Cooling type	Natural Convection	
Max. operation altitude	2000m	
Max. operation humidity	0~95% (No condensation)	
IP class	IP65	
Topology	Battery Isolation	
Communication	RS485/CAN2.0/WIFI/4G	
Display	LCD/APP	
Certification & Standard	IEC/EN 62109-1&2;IEC/EN61000-6-1;IEC/EN61000-6-2;EN61000-6-3; IEC/EN61000-6-4;IEC/EN61000-3-11; EN61000-3-12;IEC60529;IEC 60068;IEC61683;IEC62116;IEC61727;EN50549-1; AS 4777.2;NRS 097;VDE-AR-N-4105;CEI-21;G98;G99;C10/C11	

Battery Model	BluE-PACK5.1		
Physical			
Battery type	LFP (LiFePO4)	Operation	
System Weight	58KG	Max. Charge / Discharge Current	
Dimension (W x D x H)	540*500*240	50A/80A	
IP Protection	IP65	Rated DC power	
Warranty	5 Year Product Warranty, 10 Year Performance Warranty	4096W	
Electrical			
Energy Capacity	5.12kwh	Max. Charge / Discharge Power	
Usable Capacity	4.6kwh	2825W/4096W	
Depth of Discharge (DoD)	90%	Operating Temperature Range	
Nominal Voltage	51.2V	0 to 50°C charging -10 to 50°C discharging	
Max. Short-circuit Current (Fuse)	125A	Humidity	
Operating Voltage Range	44.8-56.5V	0~95% (No condensation)	
Internal Resistance	<20mΩ	BMS	
Cycle Life	10000cycle	Modules Connection	4
		Capacity	100-400Ah
		Power Consumption	<2W
		Communication	CAN & RS485
		Monitoring Parameters	System voltage, current, cell voltage, cell temperature, PCB temperature measurement
		Certificate	
		Safety(Cell)	Pack: IEC/EN 62619;UN38.3 Cell: IEC/EN 62619;UN38.3;UL1973

*Maximum 4 battery pack in parallel.