3-Ph BluE Residential ESS

All In One Energy Storage System
CATL Battery Solutions

Safety
CATL LFP Battery, Stable and safe
Module, pack, system, triple protection

Adaptable
Adjustable power in each phase
Support diesel generator control(DI/DO)

Simple
Modular design, Plug and play
Mobile APP Monitoring

Efficient
Supporting 200% oversized PV power
On&OFF Grid parallel system

Battery Model	BluE-PACK5.1
Physical	
Battery type	LFP (LiFePO4)
Weight	54KG
Dimension (W x H x D)	540*490*240mm
IP Protection	IP65
Warranty	5 Year Product Warranty, 10 Year Performance Warranty
Electrical	
Energy Capacity	5.12kwh
Usable Capacity	4.6kwh
Depth of Discharge (DoD)	90%
Nominal Voltage	51.2V
DC Circuit Breaker	125A
Operating Voltage Range	44.8-56.5V
Internal Resistance	<20mΩ
Cycle Life	10000cycle

Operation	
Max. Charge/Discharge Current	50A/80A
Rated DC power	4096W
Max. Charge/Discharge Power	2825W/4096W
Operating Temperature Range	0 to 50°C charging -10 to 50°C discharging
Humidity	0~95% (No condensation)
BMS	
Modules Connection	Max.8
Capacity	200/400/600/800Ah
Power Consumption	<2W
Communication	CAN & RS485
Monitoring Parameters	System voltage, current, cell voltage, cell temperature, PCBA temperature measurement
Certificate	
Safety(Cell)	Pack: IEC/EN 62619;UN38.3 Cell: IEC/EN 62619;UN38.3;UL1973

Hybrid Inverter Model	E8KT	E10KT	E12KT
PV String Input			
Max. Continuous PV Input Power	16kW	20kW	20kW
Max. DC Voltage	1100V		
Nominal Voltage	720V		
MPPT Voltage Range	140V-1000V		
MPPT Voltage Range (Full Load)	380V-850V	420V-850V	480V-850V
Start Voltage [1]	200V		
Number of MPPT	2		
Strings Per MPPT	1		
Max. Input Current Per MPPT	15A		
Max. Short-circuit Current Per MPPT	20A		
AC Output (Grid)			
Nominal AC Output Power	8kW	10kW	12kW
Max. AC Apparent Power	8.8kVA	11kVA [2]	13.2kVA
Nominal AC Voltage	400Vac		
AC Grid Frequency Range	50 / 60Hz±5Hz		
Nominal Output Current	11.6A	14.5A	17.4A
Max. Output Current	12.8A	16A	19.2A
Power Factor (cosΦ)	0.8leading-0.8lagging [3]		
THDi	< 3%		
Battery Input			
Battery Type	LFP (LiFePO4)		
Nominal Battery Voltage	51.2V	51.2V	51.2V
Charging Voltage Range	44-58V		
Max. Charging Current	160A	160A	160A
Max. Discharging Current	160A	200A	200A
Battery Capacity	200/400/600/800Ah		
AC Output (Backup)			
Nominal AC Output Power	7.36kW	9.2kW	9.2kW
Max. AC Output Power	8kVA	10kVA	10kVA
Nominal Output Current	10.7A	13.3A	13.3A
Max. Output Current	11.6A	14.5A	14.5A
Nominal Output Voltage	400V		
Nominal Output Frequency	50/60Hz		
Output THDv (@Linear Load)	<2% (Linear Load)		
Efficiency			
Max. PV Efficiency	97.60%		
Euro. PV Efficiency	97.00%		
Protection			
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*980*240mm		
Weight	49kg		
Operating Temperature Range	-25℃~+60℃		
Cooling Type	Natural Convection		
Max. Operation Altitude	2000m		
Operation Humidity	0~95% (No Condensation)		
IP Class	IP65		
Topology	Battery Isolation		
Communication	RS485/CAN2.0/WIFI/4G		
Display	LCD/APP		

* 1. Minimum voltage for inverter to start power output.
2. Max apparent power for the Belgian market is 10KVA.
3. 0.95leading-0.95lagging for Germany.

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