

3-Ph BluE Residential ESS

All In One Energy Storage System CATL Battery Solutions



-  Safety
-  Simple
-  Adaptable
-  Efficient

Hybrid Inverter Model	BluE-S 10KT
PV String Input	
Max. Continuous PV Input Power	20kW
Max. DC Voltage	1100V
Nominal Voltage	720V
MPPT Voltage Range	140V-1000V
MPPT Range (Full Load)	420V-850V
Start Voltage	130V
MPPT Tracker / Strings	2/2
Max. Input Current Per MPPT	15A
Max. Short-circuit Current Per MPPT	20A
AC Output (Grid)	
Nominal AC Output Power	10kW
Max. AC Apparent Power	11kVA
Nominal AC Voltage	400Vac 3W+N+PE
AC Grid Frequency Range	50 / 60Hz
Max. Output Current	14.5A
Max. Input Current	16A
Power Factor (cosΦ)	0.8leading-0.8lagging *
Battery Input	
Battery Type	LFP (LiFePO4)
Nominal Battery Voltage	48V
Charging Voltage Range	40-60V
Max. Charging Current	200A
Max. Discharging Current	200A
AC Output (Backup)	
Max. Output Apparent Power	10kVA
Rated Output Power	9.2kW
Rated/Max. Output Current	14.5A/16A
Nominal Output Voltage	400V
Nominal Output Frequency	50/60Hz (±2%)
Output THDv (@Linear Load)	<3% (Linear Load)
Efficiency	
Max. PV Efficiency	98.6%
Euro. PV Efficiency	98.1%
Protection	
Anti-islanding Protection	Yes
Output Over Current	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	42kg
Operating Temperature Range	-25°C~+60°C (Derating > 45°C)
Noise (dB)	<25
Cooling Type	Natural Convection
Max. Operation Altitude	3000m (Derating > 2000m)
Operation Humidity	0~95% (No Condensation)
IP Class	IP65
Topology	Battery Isolation
Communication	RS485/CAN2.0/WIFI/4G
Display	LCD/APP

* 0.95leading-0.95lagging for Germany

Battery Model		BluE-PACK5.1	
Physical		Operation	
Battery type	LFP (LiFePO4)	Max. Charge/Discharge Current	50A/80A
System Weight	54KG	Rated DC power	4096W
Dimension (W x H x D)	540*490*240	Max. Charge/Discharge Power	2825W/4096W
IP Protection	IP65	Operating 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	Capacity	200-800Ah
Usable Capacity	4.6kwh	Power Consumption	<2W
Depth of Discharge (DoD)	90%	Communication	CAN & RS485
Rated Voltage	51.2V	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 8 battery pack in parallel.