BSLBATT®
Best Solution Lithium Battery

ESS-GRID C109

The Ultimate ESS Solution for C&I Applications

C109
50kW / 108.8kWh

The ESS-GRiD Cabinet integrated system is engineered to meet the vast energy demands of industrial and commercial enterprises. From remote communities in Africa to industrial parks in Europe, the demand for stable and cost-effective energy solutions is growing. The ESS-GRID C109 outdoor battery cabinet is designed to address challenges such as grid instability, high electricity costs, and the integration of renewable energy.

- High degree of integration
- Excellent protection
- Multifunctional
- Space-saving
- Efficient and flexible
- Intelligent management

Item	General Parameter
Model	ESS-GRID C109
System Parameter	50kW / 108.8kWh
Cooling Method	Air-cooled
Battery Parameters	
Rated Battery Capacity	108.86kWh
Rated System Voltage	DC 806.4V
Battery Type	Lithium Iron Phosphate Battery (LFP)
Cell Capacity	135Ah
Recommended Max. Charge/Discharge Current	68A
Battery Series-parallel Connection Method	18S1P*14=252S1P
Charge temp./Discharge temp.Method	0~55℃ / -20~55℃
PV Parameters	
Max. PV Input Voltage	900V
Max. PV Power	55kW
MPPT Quantity	1
MPPT Voltage Range	250-620V
MPPT Full Load Open Circuit Voltage Range (Recommended)*	345-620V
AC Parameters	
Rated AC Power	50kW
Nominal AC Current Rating	72A
Max. AC Current Rating	79A
Rated AC Voltage	400Vac/230Vac ,3W+N+PE /3W+PE
DC Side Voltage Range	600~1000V (3P3W) / 680~1000V (3P4W)
DC Side Full Load Voltage Range	625~950V (3P3W) / 680~950V (3P4W)
Rated Frequency	50Hz/60Hz(±5Hz)
Total Current Harmonic Distortion (THD)	<3% (Rated Power)
Power Factor Adjustable Range	1 Ahead ~ +1 Behind
General Parameters	
Protection Level	IP55
Fire Protection System	Aerosols / Perfluorohexanone / Heptafluoropropane
Isolation Method	Non-isolated (Optional Transformer)
Operating Temperature	-25℃~55℃ (>45℃ derating)
Altitude	3000m(>3000m Derating)
Communication Interface	RS485 / CAN2.0 / Ethernet / Dry contact
Dimension (W*D*H)	1100*1272*2200mm (±5mm)
Weight (With Batteries Approx.)	1540kg±3%
PCS Certification	
Electric Safety	IEC62619/IEC62477/EN62477
EMC (Electromagnetic Compatibility)	IEC61000/EN61000/CE
Grid-connected And Islanded	IEC62116
Energy Efficiency And The Environment	IEC61683/IEC60068

Note: The above models are typical configurations, and can also be used for micro-grid and other scenarios with optional photovoltaic charging modules, switching modules, industrial frequency transformers and other components, integrated optical storage, and integrated system cabinets.