

ST101/106/111/115/120/ 124/129CP-50HV

Battery Outdoor Cabinet / AC Outdoor Cabinet

Preliminary



SCALABLE CONFIGURATION

- Support the parallel use of multiple systems, covering wide power range from 50 KW to 1 MW
- 2-5 hours for a variety of configuration options

SMART AND FRIENDLY

- Cloud technology enables remote maintenance and monitoring
- Built-in EMS, multiple operation mode selection increasing revenue

EASY INSTALLATION

- Outdoor cabinet design, easy for transportation and on-site installation
- C5 anti-corrosion grade to meet off-shore scenarios

ECONOMIC AND RELIABLE

- 100% DOD, 15 years performance life under standard conditions
- Efficient thermal management design, hierarchical linkage protection to ensure system safety

Type designation	ST101CP-50HV	ST106CP-50HV	ST111CP-50HV	ST115CP-50HV	ST120CP-50HV	ST124CP-50HV	ST129CP-50HV
Battery outdoor cabinet data							
Battery type	LiFePO4 Prismatic Cell						
Battery module	4.6 kWh, 40 kg						
Battery module number	22 modules	23 modules	24 modules	25 modules	26 modules	27 modules	28 modules
Nominal energy	101.3 kWh	105.9 kWh	110.5 kWh	115.2 kWh	119.8 kWh	124.4 kWh	129.0 kWh
Nominal voltage	844.8 V	883.2 V	921.6 V	960.0 V	998.4 V	1036.8 V	1075.2 V
Operating voltage	712.8 – 963.6 V	745.2 – 1007.4 V	777.6 – 1051.2 V	810.0 – 1095.0 V	842.4 – 1138.8 V	874.8 – 1182.6 V	907.2 – 1226.4 V
Max. charging/discharging rate	≤0.5C						
Depth of discharge	100 %						
Dimensions (W*H*D)	1300*2400*1000 mm						
Weight	1760 kg	1800 kg	1840 kg	1880 kg	1920 kg	1960 kg	2000 kg
Installation location	Outdoor						
Degree of protection	IP54						
Anticorrosion grade	Standard C5 (optional: C4)						
Allowable relative humidity range	0% to 95% (non-condensing)						
Operating temperature range	-30 °C to 50 °C (> 45 °C derating)						
Max. operating altitude	3000 m (> 2000 m derating)						
Communication interfaces	CAN2.0B						
Cooling concept	Heating, ventilation and air conditioning						
Certificates	IEC63056, IEC62619, IEC62477, IEC62040, IEC61000, UN38.3						
Ac outdoor cabinet data							
Nominal AC power	50 kVA						
Max. THD of current	< 3 % (at nominal power)						
DC component	< 0.5 % (at nominal power)						
Nominal grid voltage	400 V						
Grid voltage range	360 – 440 V						
Nominal grid frequency	50 Hz						
Grid frequency range	45 – 55 Hz						
Isolation method	Transformer*						
Dimensions (W*H*D)	1000*2400*1000 mm						
Weight	1000 kg						
Degree of protection	IP54						
Anticorrosion grade	Standard C5 (optional: C4)						
Allowable relative humidity range	0% to 95% (non-condensing)						
Operating temperature range	-30 °C to 50 °C (> 45 °C derating)						
Operating altitude	3000 m (> 2000 m derating)						
Communication interfaces	RS485, Ethernet						
Communication protocols	Modbus RTU, Modbus TCP						
Certificates	IEC61000, IEC62477, AS4777.2, NRS 097-2-1						

*: This transformer can be optional for non-off-grid use scenarios.

CIRCUIT DIAGRAM

