

CLIENT-SIDE

* Grid-connection * Islanding protection only * No PV

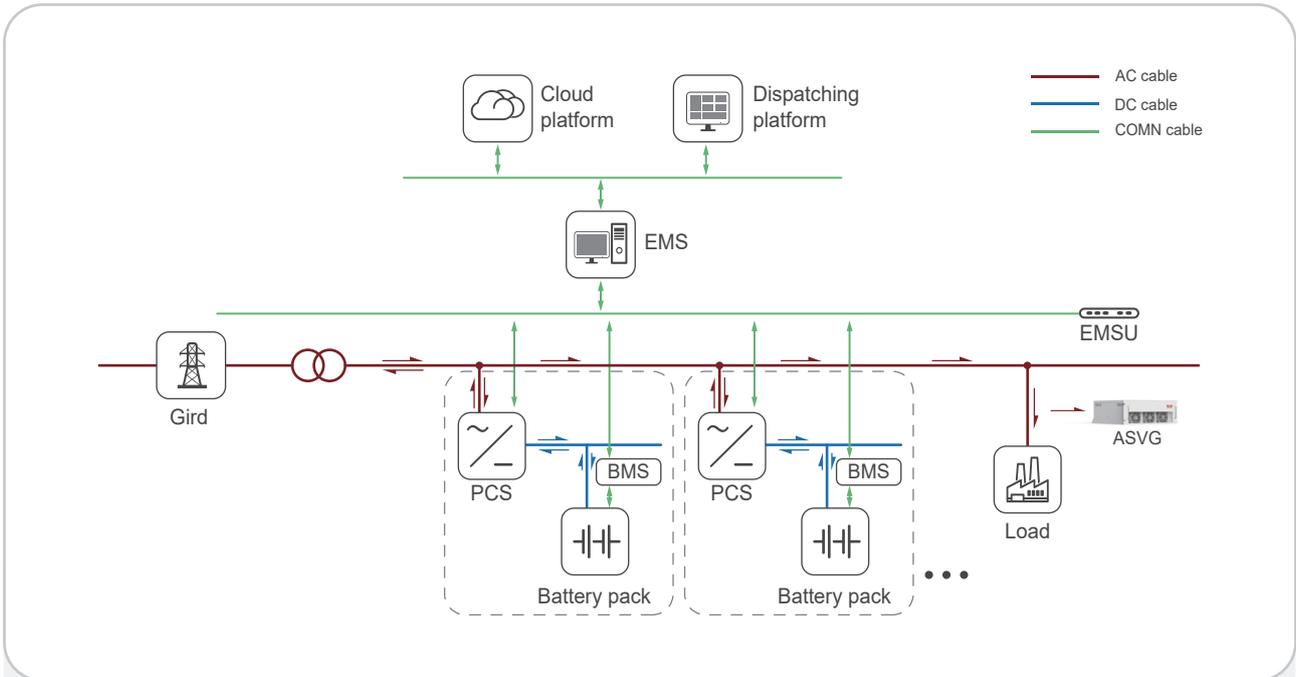


• Overview

Client-side energy storage systems are the core platform enabling users to transition from "energy consumers" to "energy prosumers." Their core value lies in generating threefold benefits: economic benefits, achieved by significantly reducing electricity costs through "peak shaving, valley filling" and demand management; market benefits, realized by participating in electricity trading and demand response through intelligent dispatch, converting flexible regulation capabilities into additional revenue; and system benefits, particularly through flexible adaptation to existing and new distributed photovoltaic systems via AC coupling, enabling efficient photovoltaic-storage synergy and intelligent management, thereby comprehensively enhancing energy reliability and autonomy.

This system transforms users from passive electricity consumers into active energy managers, truly achieving controllable electricity costs, reliable power supply security, and predictable energy revenue.

• System Topology

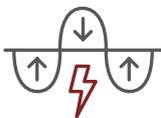


Applicable Equipment:

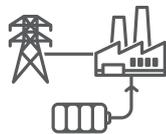


On-grid
All-in-one Energy Storage System

• Applications



Peak shaving



Power scheduling



Renewable
energy integration



Electricity trading

PCS

Industrial & Commercial Energy Storage Converter Sic PCS



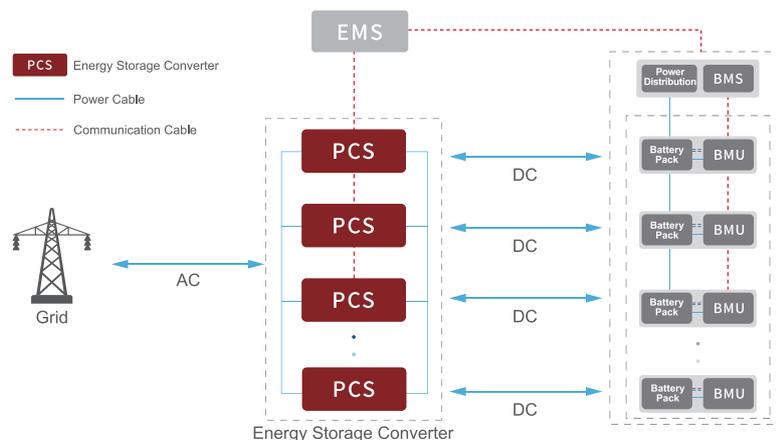
• Features

- High-efficiency bidirectional AC/DC conversion (up to 99.1%) with full potting and strong reliability.
- 100% three-phase unbalanced load capability and excellent grid adaptability.
- Compact 3U design with low standby loss and easy installation.
- Supports AC parallel expansion, hot-swap maintenance, and 3P3W/3P4W operation.
- Wide voltage range compatible with 280Ah–300+Ah battery cells.

• Product Introduction

The PCS energy storage converter is a bidirectional power module for AC-Dc power conversion that supports both grid-connected mode and off-grid mode. It can control the battery charging and discharging according to EMS instructions, perform intelligent mode switching, and adapt to large capacity cells such as 280Ah, 314Ah, and 320Ah. PCS has the functions such as overvoltage protection, overcurrent protection, overload protection, short circuit protection, over temperature protection, high/low voltage crossing, and island protection. When combined with STS, it can achieve seamless switching between grid connection and off-grid, which is suitable for peak shaving and valley filling in commercial and industrial parks, responding to demand, and building microgrids with wind and photovoltaic power generation equipment and diesel generators.

• System Topology



• Technical Parameter

PCS Energy Storage Converter		
Model	PCS950-125KCBMG	PCS950-105KCBMG
DC Parameters		
Rated Power	125KVA	105KVA
Voltage Range	600~950VDC(625~950VDC full-load operation)v	
Stabilized Voltage Predision	±1%±	
Stabilized Current Predision	±1%	
Maximum Current	210A	175A
AC On-grid Parameters		
Rated Power	125KVA	105KVA
Maximum Power	137.5KVA(continuous)	115.5KVA(continuous)
Wiring Mode	3P3W+PE/3P4W+PE	
Rated Voltage	400VAC	
Voltage Range	340~460VAC,340~400VAC linear derating	
Maximum Current	198.5A	167A
Voltage Frequency	50/60±5Hz	
Power Factor	[-1 , 1]	
THDi	≤3%	
Maximum Efficiency	≥99.1%	
AC Off-grid Parameters		
Rated Power	125KVA	105KVA
Maximum Power	137.5KVA(continuous)	115.5KVA(continuous)
Rated Voltage	400VAC	
Wiring Mode	3P3W+PE/3P4W+PE	
Rated Output Frequency	50/60Hz	
THDu	≤3%	
System Parameters		
Overload Capability	110% (long-term)	
Dimensions(W*D*H)	440mm*130mm*600mm (without hanging ears)	
Weight(kg)	≤40kg	
Level Of Protection	IP20	
Noise	≤75dB	
Working Temperature Range	-30°C~+65°C (>50°C derating)	
Storage Temperature Range	-40°C~+70°C	
Humidity Range	0~98% (no condensation)	
Heat-dissipating Method	Intelligent air cooling	
Altitude	4000m (>2000m derating)	
Safety Regulations & Standards	CE (IEC 62477-1)	
EMC Standards	CE (IEC 61000-6-2/4)	
Grid Connection Standards	European EN50549-1/-10;Germany VDE4105;UK G99	
Parameter Communication		
PC Terminal	Ethernet (Modbus-TCP);RS485(Modbus-RTU);CAN 2.0	
BMS	RS485;CAN 2.0B	

BESS-T

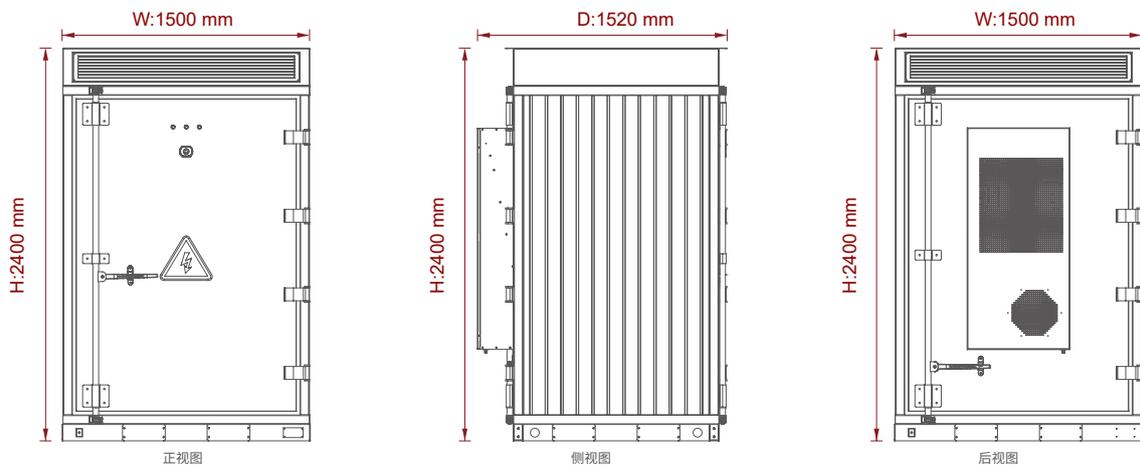
On-grid All-in-one Energy Storage System BESS-T 125-271

• Features

- Two level BMS built-in.
- Intelligent thermal management system
- IP55 fire and explosion proof cabinet.
- Fire proof devices in each modular and in the cabinet.
- Easy for on site installation



• Product Dimensions




• Technical Parameter

BESS-T 125-271		
Battery Parameters		
Battery Module	Voltage	57.6V
	Capacity	314 Ah
	Energy	18 kWh
	Cooling method	Intelligent constant temperature system
Battery Cluster	Rated voltage	864V
	Grouping method	1P 270 S
	Rated capacity	314 Ah
	Output voltage range	756V~950V
	Rated energy	271kWh
	Max continuous charging current	157 A
	Max continuous discharge current	157 A
PCS Parameters		
PCS Parameter	Rated current	181A
	PCS overload capacity	x1.1 continuous;x1.25(30ms)
	PCS output power	125kW
	Maximum continuous output power	137.5kW
	Total THDi	≤3%
	Maximum efficiency	≥98.5%
	AC-side voltage of PCS	3P3W+PE/3P4W+PE, 400 V
	Frequency	50Hz/60Hz
	Power factor	-1~1
	Battery side voltage	600V-950 VA
System Parameters		
System Parameters	Dimension(W*D*H)	1500*1520*2400mm
	Weight(kg)	/
	Display	7-inch Resistive Touch Screen
	Fire protection systems	Aerosol Fire Module
	Degree of protection	IP55
	Certification	CE;IEC62619;UN38.3
	Working temperaturerange	-30~60°C(> 45°C derating)
	Cooling	Intelligent Thermal Management System
	Relative humidity	5~95%(No Condensing)
	Storage temperature(<6month)	0~35°C
	Short-term storage temperature(<1month)	-20~55°C
	Highest altitude	4000m(>2000m derating)