

C&I ESS

50KW PCS With 100/114KWH LiFePO4
All-in-one Cabinet



Product Features:



Higher Safe Performance and Longer Cycle Life
With breaker and fuse



ECONOMIC
Zero power loss through efficient temperature control and frequency variation.



Wide Compatibility
Compatible with most of the leading inverter brands



Advanced Battery Management System
Smart BMS from famous brands, to monitor the battery's temperature, current, prevent over-current and etc. Take good control of the charging and discharging of battery to max. the lifespan



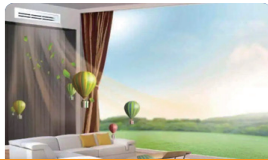
Environmentally Friendly
From reduced carbon emissions to increased energy savings, we've got you covered. It will help reduce your carbon footprint by storing energy from renewable sources like solar power and wind power

Model	PNG50kW—100kWh	PNG50kW—114kWh
Battery Data		
Nominal Energy	100.3kWh	114.6kWh
Nominal Voltage	358.4V	409.6V
Battery Chemistry	Lithium Iron Phosphate (LiFePO4)	
Cycle Life	≥8000 cycles (@25°C/0.5P)	
Cell Specification	3.2V 280Ah	
Battery Pack Energy	14.336kWh	
Number of Racks	1	
String Configuration	1P112S	1P128S
Operation Voltage	313.6V~408.8V	358.4V~467.2V
Rated Charging Power	0.5P	
Rated Discharging Power	0.5P	
Safety		
Fire Suppression System	Aerosol fire extinguishing	
Inverter Data		
Rated Power	50kW	
Please Refer To The Pcs Section For More Details.		
General		
Dimensions (W*D*H)	1050*1180*2250mm	
Weight	Approximately 1200kg	Approximately 1250kg
IP Rating	IP55	
Cooling Method	Liquid cooling	
Operation Temperature	-20°C ~+ 50°C	
Storage Temperature	-20°C~+ 45°C	
Relative Humidity	15%~90% (Non-condensing)	
Operating Altitude	≤3000m	
Communication Interfaces	LAN/CAN/RS485	
Compliance	IEC 62619, IEC/EN 61000, UN 38.3, MSDS	

Application Scenarios



Refrigerator



Air System



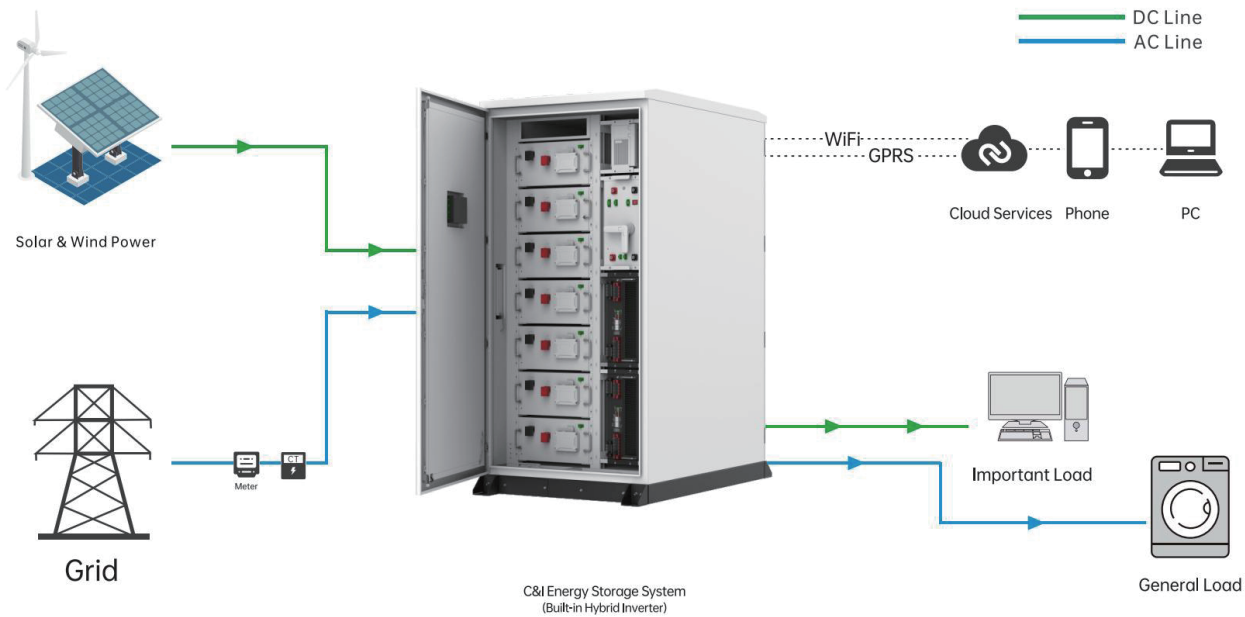
Lighting



Small Home Appliances



Product Features:



Model	S6-EH3P50K-H
Input DC (PV side)	
Recommended max. PV array size	100kW
Max. usable PV input power	96kW
Max. input voltage	1000V
Rated voltage	600V
Start-up voltage	180V
MPPT voltage range	150-850V
Max. input current	4×40A
Max. short circuit current	4×40A
MPPT number/ Max. input strings number	4/8
Battery	
Battery type	Li-ion
Battery voltage range	150-800V
Max. charge/ discharge power	55kW
Max. charge / discharge current	70A×2 ⁽¹⁾
Number of battery inputs	2
Max. charge / discharge power of each inputs	35kW
Communication	CAN/RS485
Output AC (Grid side)	
Rated output power	50kW
Max. apparent output power	50kVA
Rated grid voltage	3 / N / PE, 220V / 380V, 230V / 400V
Rated grid frequency	50Hz / 60Hz
Rated grid output current	76A / 72.2A
Max. output current	76A / 72.2A
Power factor	>0.99 (0.8lwading-0.8lagging)
THDI	<3%
Input AC (Grid side)	
Max. AC passthrough current	152A / 144.4A
Rated input voltage	3 / N / PE, 220V / 380V; 3 / N / PE, 230V / 400V
Rated input frequency	50Hz / 60Hz
Input Generator	
Max. input power	50kW
Rated input current	76A / 72.2A
Rated input voltage	3 / N / PE, 220V / 380V; 3 / N / PE, 230V / 400V
Rated input frequency	50Hz / 60Hz
Output AC (Back-up)	
Rated output power	30kW
Max. apparent output power	1.6 times of rated power, 2s



Model	S6-EH3P50K-H
Back-up switch time	<10ms
Rated output voltage	3 / N / PE, 220V / 380V; 3 / N / PE, 230V / 400V
Rated frequency	50Hz / 60Hz
Rated output current	45.6A / 43.3A
THDv (@linear load)	<2%
Efficiency	
Max. efficiency	97.8%
EU efficiency	97.4%
BAT charged/discharged to AC max. efficiency	98.5%
BAT charged/discharged to AC max. Efficiency	97.5%
Protection	
Anti-islanding protection	Yes
Output over current protection	Yes
Short circuit protection	Yes
Integrated DC switch	Yes
DC reverse-polarity protection	Yes
Surge protection	DC Type II / AC Type II
Integrated AFCI 2.0	Optional
General Data	
Dimensions (W x H x D)	530×880×290 mm
Weight	73 kg
Topology	Transformerless
Self-consumption (night)	<35W
Operating ambient temperature range	-25°C~ +60°C
Relative humidity	0-95%
Ingress protection	IP66
Cooling concept	Intelligent redundant fan-cooling
Max. operation altitude	4000 m
Grid connection standard	G99, VDE-AR-N 4105 / VDEVO124, EN 50549-1&2 / EN 50549-10, VDE0126 / UTEC15 / VFR:2019, NTS631 / RD 1699 / RD 244 / UNE206006 / UNE206007-1, CE10-21,C10/11.NRS097-2-1, TOR, EIFS2018.2, IEC62116, IEC61727, IEC60068, IEC61683, EN 50530, MEA, PEA, PORTARIA N° 140, DE 21 DE MARCO DE2022
Safety/ EMC standard	IEC/EN 62109-1/-2, IEC/EN 61000-6-2&4, EN 55011
Features	
PV connection	MC4 Quick connection plug
Battery connection	Terminal connector
AC connection	Terminal block
Display	7.0" LCDdisplay & Bluetooth + APP
Communication	CAN, RS485-115200, Ethernet, Optional: Wi-Fi, Cellular, LAN

(1) Supporting parallel 140A input.

