

High Voltage Mini C&I ESS

50kVA 80/100/120/130kWh



Solution for Fast Install

Fully integrated, pre-configured package system reduces on-site installation time; includes inverter(s), battery trays, racks, BMS, Microgrid Controller, HVAC, fire suppression, islanding switch, and outdoor rated enclosure.

Easy & Flexible to Scale

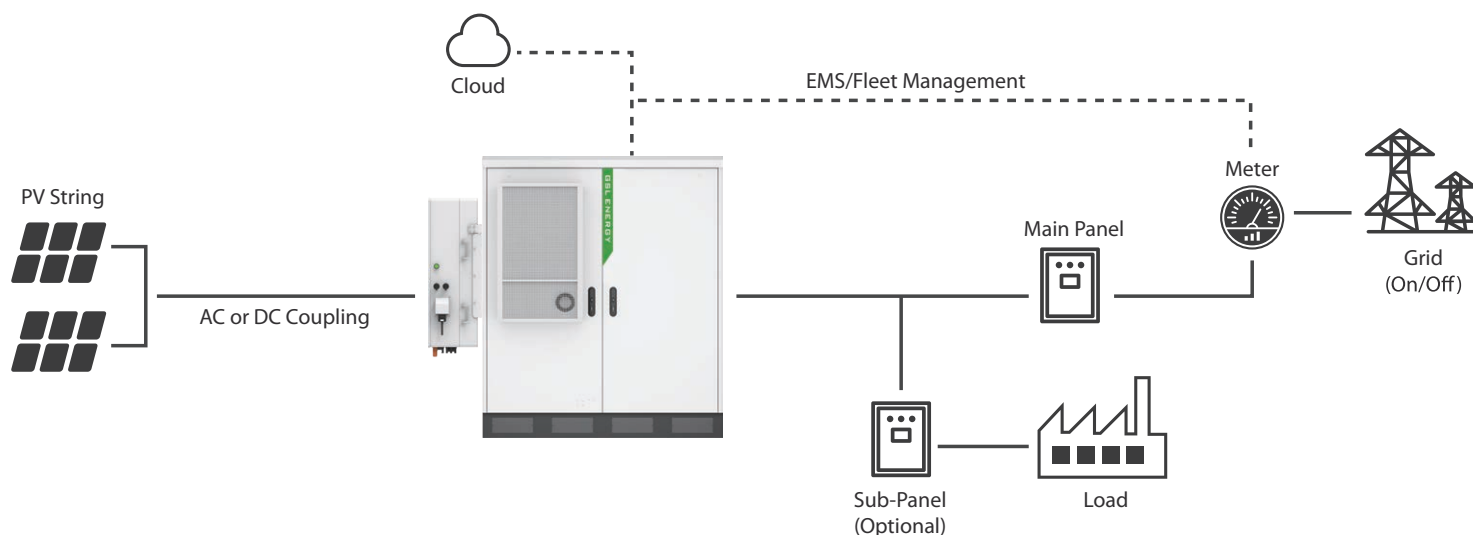
The modular design allows for easy capacity expansion. The rack-mounted design allows for installation in various settings. A single system can be expanded up to 130kWh.

Safe Technology & Multi-level Protection

Tier 1 LiFePO4 Phosphate chemistry for the highest level of safety, thermal stability, and reliability; An integrated, multi-level Battery Management System (BMS) monitors, optimizes, and balances the system.

Powerful Performance

Supports a rated DC power of 130kW. It can handle charge/discharge currents of 50A (recommended), 100A (nominal), and up to 125A peak discharge for 2 minutes at 25°C.



Model	GSL-BESS-50K80		GSL-BESS-50K100	GSL-BESS-50K120	GSL-BESS-50K130
System Specification					
Nominal Output Power/UPS Power (W)	50000				
AC Output Frequency and Voltage	50/60Hz; 3L/N/PE 220/380, 230/400Vac				
Grid Type	Three phase				
Energy Configuration (kWh)	81.92	102.4	122.88	133.12	
Dimension (W x D x H,mm)	1400x1100x1650 (no contain inverter)				
Weight Appr. (kg) (no contain inverter)	969.6	1172.0	1294.4	1375.6	
AC Output Rated Current (A)	100				
Battery Operating Voltage (V)	500 ~ 800				
Battery Chemistry	LiFePO4				
IP Rating of Enclosure	IP55				
System Certification	UN38.3, IEC62619, CE, CEI 0-21, VDE-AR-N 4105, IEC 62109				
Installation Style	Floor-Mounted				
Warranty	10 years				
Inverter Technical Specification					
Max. PV Input Power (W)	100000				
Max. PV Input Current (A)	36+36+36+36				
Rated PV Input Voltage (Vdc)	600				
Start Up DC Voltage (Vdc)	180				
MPPT Voltage Range (Vdc)	150-850				
Max. PV Short-circuit Current (A)	55+55+55+55				
Number of MPPT	4				
Peak Power (off grid)	1.5 time of rated power, 10s				
Power Factor	0.8 leading to 0.8 lagging				
THD	<3%				
DC injection current (mA)	<0.5In				
Display	LCD				
Operating Temperature Range (°C)	-40~60(>45°C derating)				
Relative Humidity	15% ~ 85% (No Condensing)				
Dimension (W x D x H, mm)	420x233x670				
Inverter Communication	CAN, RS485, WIFI, ETH				
Safety EMC / Standard	IEC/EN 62109-1, IEC/EN 62109-2, IEC/EN, 61000-6-1, IEC/EN 61000-6-2, IEC/EN61000-6-3, IEC/EN 61000-6-4				
Grid Regulation	VDE4105, IEC61727/62116, VDE0126, AS4777.2, CEI 0 21, EN50549-1, G98, G99, C10-11, UNE217002, NBR16149/NBR16150				
Max. Efficiency	97.6%				
Max. charging/discharging efficiency	91%				
Max Parallel connection sets	10				
Battery Technical Specification					
Battery Module Nominal Voltage (V)	409.6	512	614.4	665.6	
Battery Capacity (Ah)	200				
Battery Energy (kWh)	81.92	102.4	122.88	133.12	
BMS Communication	CAN				
BMS parallel support connection	3sets(Standard), 32 sets (Extra BAU module)				
Max Charge & Discharge Current (A)	100				
Operating Temperature Range	Charge: 0 ~ 55°C / Discharge: -20°C ~ 55°C				
Cycle Life	≥6500(@25°C±2°C,0.5C/0.5C,70%EOL)				
Short Circuit Protection	YES				
Over Current Protection	YES				
Over Charge Protection	YES				
Over Temperature Protection	YES				
Cell Over Voltage Protection	YES				
Cell Over Under Protection	YES				
Cell Discharge Protection	YES				