

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

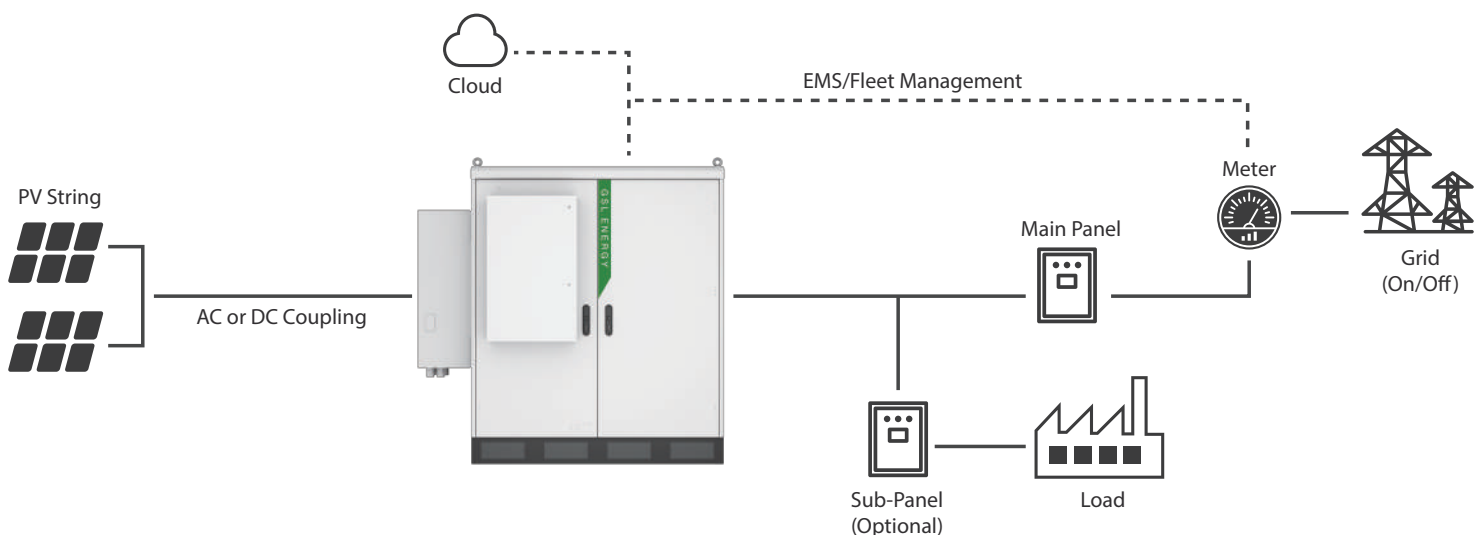
The modular design allows for easy capacity expansion. The rack-mounted design allows for installation in various settings. A single system can be expanded up to 130kWh.

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
Max Charge & Discharge 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)	65000			
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			