

High Voltage Mini C&I ESS

50kVA 186kWh



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

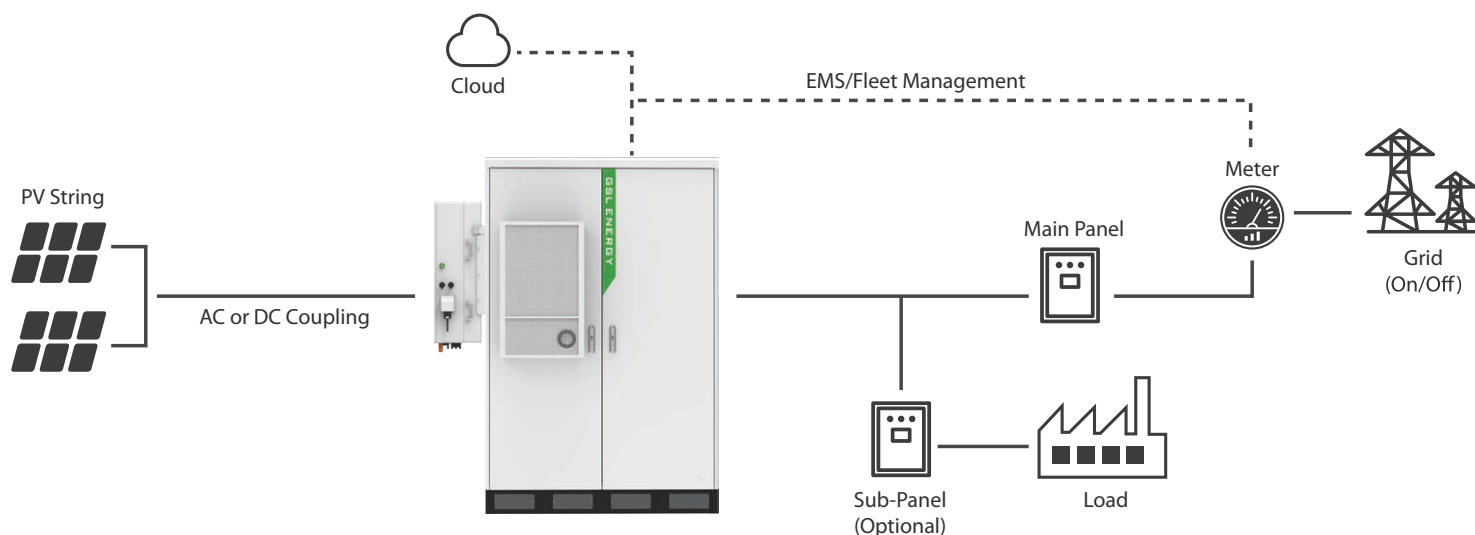
The modular design allows for easy capacity expansion. The rack-mounted design allows for installation in various settings. A single system can be expanded up to 180kWh.

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 180kW. 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-50K186
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)	186.42
Dimension (W x D x H,mm)	1400x1100x2150 (no contain inverter)
Weight Appr. (kg)	1864.00 (no contain inverter)
AC Output Rated Current (A)	75.8
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)	527x294x894
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)	665.6
Battery Capacity (Ah)	280
Battery Energy (kWh)	186.42
BMS Communication	CAN
BMS parallel support connection	3sets
Max Charge & Discharge Current (A)	100
Operating Temperature Range	Charge: 0 ~ 55°C / Discharge: -20°C ~ 55°C
Cycle Life	≥10000(@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