

# 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

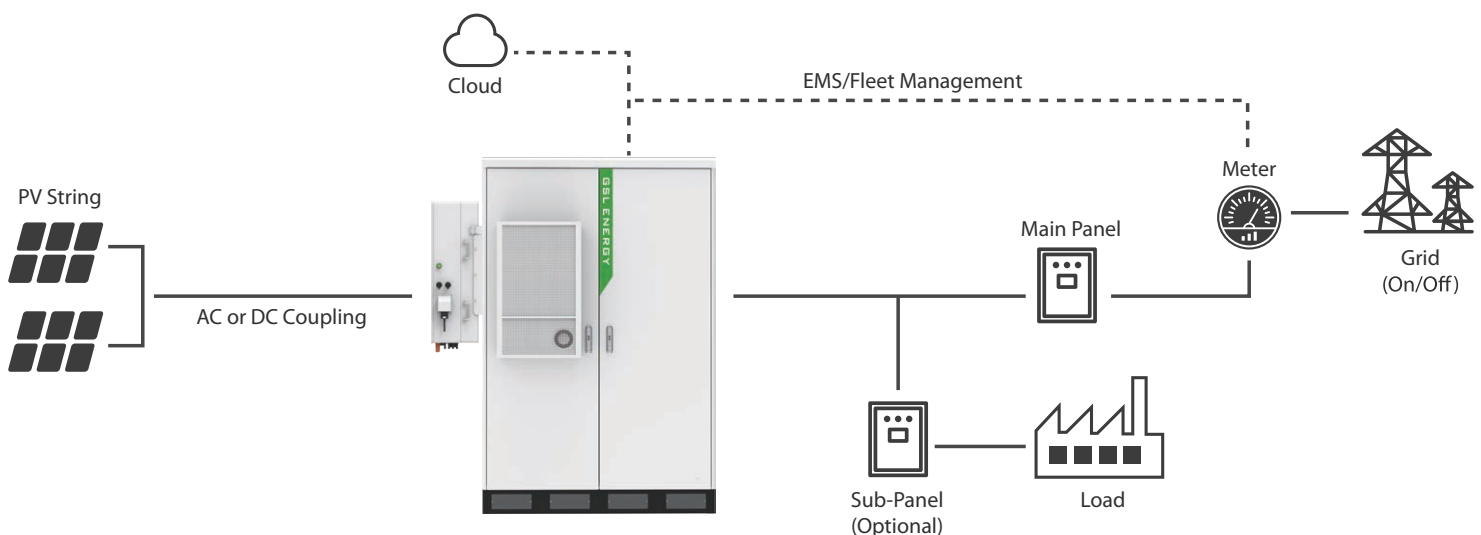
The modular design allows for easy capacity expansion. The rack-mounted design allows for installation in various settings. A single system can be expanded up to 180kWh.

## 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
<b>System Specification</b>	
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)	172
Dimension (W x D x H,mm)	1400x1100x2150 (no contain inverter)
Weight Appr. (kg)	2515.50 (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
<b>Inverter Technical Specification</b>	
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
<b>Battery Technical Specification</b>	
Battery Module Nominal Voltage (V)	665.6
Battery Capacity (Ah)	280
Battery Energy (kWh)	186
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