

PowerHub

High Voltage All-In-One Hybrid ESS

Introducing the PowerHub by Sunsynk Mobile.



Scalability

Fully modular and scalable for future capacity expansion up to 1.28 MWh.



Grid Compatibility

Supports both on-grid and off-grid installations.



System Type

Turnkey, all-in-one AC/DC coupled energy storage solution.



Temperature Controlled

Built-in HVAC system designed to always maintain optimum temperatures for most efficient operation.



Backup Generator Integration

Features a dedicated generator input for redundancy. During grid outages, the generator can automatically power critical loads and recharge the battery system—ensuring seamless, uninterrupted operation.



Smart AC Coupling

Seamlessly integrates with existing grid-tied systems using intelligent CTs (Current Transformers) to monitor and divert excess solar power for storage—maximising self-consumption and reducing grid reliance.



Model

SS-CS-GE-F120

System Specification

Max. Grid AC Input	50000W
Nominal Output Power/UPS Power	50000W
AC Output Frequency and Voltage	50/60Hz; 220/380, 230/400Vac
Grid Type	3L/N/PE
Energy Configuration	122.8kWh
Module Capacity	100Ah
Dimension (WxDxH)	1780x1056x2235mm
Weight Appr.	2090kg
AC Output Rated Current	75.8A
Battery Operating Voltage	500 ~ 700V
Charge/Discharge Current	100A
Max. Charging/Discharging Efficiency	91.0%
Battery Chemistry	LiFePO ₄
IP Rating of Enclosure	IP55
Installation Style	Floor-Mounted
Warranty	10 Years

Inverter Technical Specification

Max. PV Input Power	65000W
Max. PV Input Current	36+36+36+36A
Rated PV Input Voltage	600Vdc
Start Up DC Voltage	180Vdc
MPPT Voltage Range	150-850Vdc
Max. PV Short-Circuit Current	55+55+55+55A
Number of MPPT / Number of String	4/8
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	<0.5%In mA
Display	LCD
Operating Temperature Range	-40°C ~ 60°C (>45°C derating)
Relative Humidity	15% ~ 85% (no condensing)
Dimension (WxDxH)	527x294x894mm
Inverter Communication	CAN, RS485, WIFI, ETH
Grid Regulation	VDE4105, IEC61727/62116, VDE0126, AS4777.2, CEI 021, EN50549-1, G98, G99, C10-11, UNE217002, NBR16149/NBR16150
Max. Efficiency	97.6%
MPPT Efficiency	99.9%

Battery Technical Specification

Battery Module Nominal Voltage	51.2V
Battery Module Energy	5.12kWh
Battery Usable Energy	110.5kWh
Charge/Discharge Current	Recommended
	Nominal
	Peak Discharge (2min, 25 °C)
BMS Communication	CAN
Battery Module Dimension (WxDxH)	440x570x133mm
Battery Module Weight	44kg
Operating Temperature Range	Charge: 0~55°C / Discharge: -20°C~55°C
Storage Temperature	0~35°C
Cycle Life	≥6000(@25°C±2°C,0.5C/0.5C,70%EOL)
Battery Module Certification	UN38.3,IEC62619,IEC61000