



Residential Energy Storage System

SPH 192V Series (2~5kW)

- » All-in-one solution
- » Lower your electric bills
- » Maximize self-consumption
- » Help for energy independence

Intelligent Communication:

- Monitoring through WiFi
- Cloud-based Monitoring Service
- RS485 and USB communication ports

Smart Energy Management:

- Smart self EMS for all operating mode
- Daily/Monthly/Total energy generation logs
- Full protection function
- Maximize self-consumption, lower your bills

Lithium-ion Battery:

- 10 years plus lifetime
- Capacity modularly from 2 to 9.6kWh
- Accordant appearance for whole system
- Intelligent BMS

Backup Power:

- Load power back-up at grid interruption
- User-adjustable charging setting for different battery
- Battery DC/AC efficiency up to 94.8%



Value-added Services:

- Maximize self-consumption via internal sensing, can also add CT or Smart Meter to increase precision for option
- Lead-acid battery for option
- Power distribution cabinet

Technical Specification:

Items	SPH2000-B	SPH3000-B	SPH3600-B	SPH5000-B
PV Input				
Max. PV Input Power (W)	2200	3300	4000	5000
Max. PV Voltage (Vdc)	480			
DC Voltage Range (Vdc)	160~480			
Full-load MPPT Voltage Range (Vdc)	200~420			
MPPT Number	2			
String Max. Input Current (A)	10	10	10	10
Battery (Lithium-ion) & Charger				
Battery Capacity (Wh)	2kWh to 9.6kWh			
Max. Charging Current (A)	20			
Max. Discharging Power (W)	2200	3300	3600	
Rated Battery Voltage (V)	192			
Battery Voltage Range (V)	175~226			
On-grid Output				
Rated Output Power	2000	3000	3600	4600
Rated Grid Voltage (V)	220/230/240			
Grid Voltage Range (V)	187~264 (this may vary with grid standards)			
Max. Output Current (A)	9.1	13.6	16.3	20.9
THDi (Full Load)	<3%			
Rated Grid Frequency (Hz)	50/60			
Grid Frequency Range(Hz)	47.5-52.5 / 57.5-62.5 (this may vary with grid standards)			
PF	1/±0.8 (adjustable)			
Max. Efficiency	97.0%			
Off-grid Output				
Rated Output Power (W)	2000	3000	3600	3600
Rated Grid Voltage (V)	220/230/240			
Frequency (Hz)	50/60			
Over Load Capacity	105% continuity; 106-130% for 1min			
THDu	<3% (linear load)			
Max. Efficiency	94.8%			
Others				
Dimension (WxDxH)(mm)	480×438×144			
Weight (kg)	20	20	20	
Communication Interface	RS485 (PC)/RS485 (meter)/Wifi			
Relative Humidity	0 ~ 90% , No condensation			
Noise (dB)	<55			
Operating Temperature (°C)	-20 to 50 (>40 , power derating)			
IP Grade	IP20			
Altitude (m)	0 ~ 2000 (>2000, power derating)			
Certificate	VDE0126-1-1, VDE-AR-N4105, G83; IEC62109-1, IEC62109-2; EN61000-6-3, EN61000-6-2 AS4777.2:2015; AS62040.1.1:2003			
Topology	Transformerless			

• Specifications are subject to change without prior notice.