

97.6%

Max. Efficiency

15A

PV Input Current

30A

Charge/Discharge

10ms

UPS-level Switch

Residential

Single-Phase

HV Battery



SINGLE PHASE STORAGE INVERTER WITH TWO MPPT

SP_HYB-S_03K | SP_HYB-S_06K

SINGLE-PHASE



Optimal Power & Storage

- 97.6% Max. Efficiency
- 15A PV input current per string, 1-2 MPP trackers
- 30A charge/discharge current



Strong Load & Back-up

- 110% continuous AC output overloading
- 130% max. back-up output overloading @60s
- 160% DC oversizing



Convenient Installation & Operation

- Plug & Play terminals for easy wiring
- SheenPlus I-light, power and alarm indicator
- OLED display and App for setting and data management



Flexible Design & Use

- 85-450V wide battery voltage range
- IP65 for indoor and outdoor installation
- Compact size and elegant appearance

Model	SP_HYB-S_03K	SP_HYB-S_06K
PV INPUT		
Recommended Max. input power [kW]	4.80	9.60
Start-up Voltage [V]	80	80
Max. DC Input Voltage* [V]	600*	600*
Rated DC Input Voltage [V]	360	360
MPPT Voltage Range* [V]	100-550*	100-550*
No. of MPP Trackers	1	2
No. of DC Inputs per MPPT	1	1/1
Max. Input Current [A]	15	15/15
Max. Short-circuit Current [A]	20	20/20
BATTERY SIDE		
Battery Type	Lithium Battery (with BMS)	
Battery Voltage Range [V]	85-450	
Maximum charging/discharge current [A]	30/30	
GRID SIDE		
Rated Output Power [kW]	3.00	6.00
Max. Output Apparent Power [kVA]	3.30	6.60
Max. input apparent power** [kVA]	6.00	10.00
Max. charging power of battery [kW]	3.00	6.00
Rated AC Voltage	L/N/PE; 220/230/240V	
Rated AC Frequency [Hz]	50/60	50/60
Max. output current [A]	15.00	28.70
Power Factor	0.8 leading ...0.8 lagging	
Max. Total Harmonic Distortion	<3% @Rated output power	
DCI	<0.5%In	<0.5%In
BACK-UP SIDE		
Rated Output Power [kW]	3.00	6.00
Max. Output Apparent Power [kVA]	3.30	6.60
Max. output current [A]	15.00	28.70
UPS switching time	<10ms	<10ms
Rated output voltage	L/N/PE; 220/230/240V	
Rated output frequency [Hz]	50/60	50/60
Voltage harmonic distortion	<3% @Linear load	
EFFICIENCY		
Max. Efficiency	97.6%	97.6%
European Efficiency	97.0%	97.0%
PROTECTION		
DC Reverse Polarity Protection	Integrated	
Battery input reverse connection protection	Integrated	
Insulation Resistance Protection	Integrated	
Surge Protection	Integrated	
Over-temperature Protection	Integrated	
Residual Current Protection	Integrated	
Islanding Protection	Integrated	
AC Over-voltage Protection	Integrated	
Overload Protection	Integrated	
AC Short-circuit Protection	Integrated	
GENERAL DATA		
Over Voltage Category	PV: II Main: III	
Dimensions [W×H×D mm]	534×418×210	
Weight [KG]	27.0	
Protection Degree	IP65	
Self-Consumption at Night [W]	<15	
Topology	Transformerless	
Operating Temperature Range [°C]	-30~60	
Relative Humidity [%]	0~100	
Operating Altitude [m]	3000 (>3000m derating)	
Cooling	Natural Convection	
Noise Level [dB]	<25	
Display	OLED & LED	
Communication	CAN, RS485, WiFi/LAN (Optional)	

* PV Max. Input voltage is 550V without battery, or 500V with battery, otherwise inverter will be waiting;

** Max apparent power from the grid means the maximum power imported from the utility grid used to satisfy the backup loads and charge the battery;