

Hybrid Solar Storage Inverter

IP65

Single Phase

SH-S6K

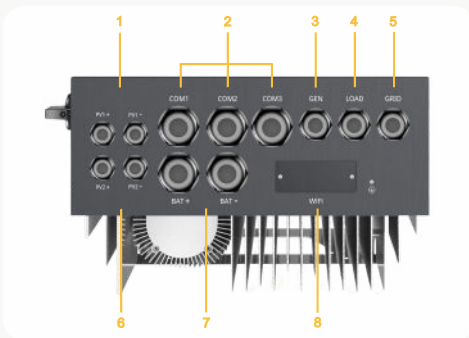


The Sunflx SH-S6K Series hybrid storage inverter is a new-generation 6 kW IP65 single-phase 220Vac hybrid inverter designed for residential photovoltaic energy storage applications.

With high 18A MPPT input current, it supports larger solar panel input. Equipped with intelligent BMS, it works with various low-voltage batteries.

The SH-S6K hybrid inverter operates in on-grid, hybrid, and off-grid modes. Support parallel connection to make a large single-phase or three-phase system, the maximum power of 96kW and UPS-level backup enables max green energy use and grid feedback.

The SH-S6K features a user-friendly and informative LCD touchscreen. It also work with Sunflx Cloud APP^[1], enabling remote real-time monitoring and configuration anytime, anywhere.



- 1.PV1 Terminal
- 2.Communication Port
- 3.Diesel Generator Input / Second Output
- 4.Main Output
- 5.Grid Connection
- 6.PV2 Terminal
- 7.Battery Terminal
- 8.WIFI Connection

- 2 MPPT trackers with 18A string current
- Dual AC outputs for smart load management
- Max. 16 pcs parallel on both the grid and backup port
- Compatible with lithium-ion, lead-acid, and gel low-voltage batteries
- Multiple working modes: TOU, Max. self-consumption, zero export, and fully feed to grid
- Support DC-coupled, AC-coupled and AC-retrofit applications
- Support diesel generator input
- Universal user-friendly color touchscreen

Model	SH-S6K
BATTERY	
Battery Type	Lithium LiFePO4/Lead-Acid/Flooded /User Defined
Rated Battery Voltage	40-60Vdc
Max. Battery Charge and Discharge Current	135Amp
Charging Curve	Three-Stage/ Equalizing Charge
PV INPUT	
Recommended Max. PV Power (for Module STC)	7800W
Max. PV Input Voltage	500Vdc
Min. PV Input Voltage / Startup Input Voltage	125Vdc
PV Array MPPT Voltage Range	150-425Vdc
Full Load PV Voltage Range / Rated PV Input Voltage	300-425Vdc /370Vdc
MPPT Input Current	18Amp+18Amp
Max. Short Circuit Current	27Amp+27Amp
Num. of Independent MPPT Tracker	2
Num.of PV Strings Per MPP Tracker	1+1
AC INPUT/OUTPUT	
Nominal AC Input Voltage / Frequency	220 /230 Vac / 50/60Hz (Auto Detection)
AC Input Range	180-270Vac
Max. Bypass Current	40Amp
Rated AC Output Power and UPS Power	6000W
Max. AC Output Active Power	6600W
Peak Power (Off-Grid)	12kW for 10 Second
AC Rated Input/Output Current	27.3/26.1Amp
Max. AC Input/Output Current	30/28.7Amp
Power Factor	0.8 Leading to 0.8 Lagging
Grid Type	Single Phase
Total Harmonic Distortion (THD)	<3% (of Rated Power)
No Load Power Consumption	100W
Grid DC Component	<0.5% In
EFFICIENCY	
Max. Efficiency	97.60%
European Efficiency	96.50%
MPPT Efficiency	>99%
GENERAL	
Protection	PV Arc Fault Detection ; Anti-Islanding Protection ; DC Reverse Polarity Protection ;Insulation Monitoring ; Residual Current Monitoring ; AC Overcurrent Protection ; AC Short Circuit Protection
Surge Protection	DC Type II / AC Type II
Operating Temperature Range	-40~+60°C, Derating when Above 45°C
Cooling Method	Smart Cooling (Heat Sink and Intelligent Fan)
Noise (dB)	<50 dB
BMS	RS485; CAN
Monitoring Mode	Wi-Fi + APP
Dimensions (W x H x D) / Weight	346*416*250 mm (Excluding Connectors and Brackets) / 19 KG
Protection Degree	IP65
Warranty	5 Years
Grid Certification	IEC62116/61727; EN50549-1
Safety/EMC Standards	IEC/EN 61000-6/2/4; IEC/EN 62109-1; IEC/EN 62109-2